

# *Australian Orchid Research*

Volume 1, 1989

## *Catalogue of Australian Orchidaceae*

**Mark A Clements**



*The Australian Orchid Foundation*





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## **Catalogue of Australian Orchidaceae**

by

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**Editor: David L. Jones**

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COVER PHOTO: Top LHS *Dendrobium phalaenopsis* Fitzg., McIlwraith Range, Qld; Top RHS *D. striaenopsis* M. Clements et D. Jones, Tanimbar Island, Indonesia; Bottom *D. bigibbum* Lindley, Horn Island, Torres Strait, Qld. photo M.A. Clements.



## Dr Mark A. Clements

Mark Clements is an Australian botanist born in 1949. His career spans four decades and in that time, he has discovered about 250 new species of Australian orchids and curated tens of thousands of specimens representing more than 1600 species of Australian native orchids. These specimens are housed in the Australian National Herbarium.

Mark grew up in Largs Bay in South Australia, on the Le Fevre Peninsula about 16 km northwest of Adelaide city centre. Mark's father was an analytical chemist who had extensive general knowledge, particularly in natural history. He was also a keen grower of native orchids. With this background, Mark developed his own interest in natural history, and orchids in particular, from 10 years old. Mark attended Urrbrae Agricultural High School in Adelaide. During his high school years, he completed a preliminary course in Wool Classing at the Adelaide Institute of Technology. On leaving school he undertook and completed the course and was awarded a Certificate in Wool Classing.



Between 1968 and 1974, Mark continued his training and development as a professional wool classer. Over this period, he worked with various shearing contractors, totalling 84 shearing sheds throughout South Australia, western New South Wales, Victoria and at the edge of the Nullarbor in Western Australia. On weekends, on mainly mostly remote sheep stations and properties, Mark spent much of his spare time studying birds, plants, the geology and searching for indigenous Australian artifacts. These interests led him to volunteer to undertake work at the South Australian Museum, Anthropology Department during the periods when wool classing work was not available. During this time he helped curate some of their natural history collections.

It was in this Museum environment that Mark's desire to expand his interest in natural history studies, and orchids in particular, became clear. His interest in orchids had also grown significantly during this period, firstly through association with a group of field naturalists and orchid growers with like interests, in particular Ray Nash, and secondarily through study of W.H. Nichols' book on Australian Native Orchids, co-incidentally co-edited by David Jones (see below). To pursue his interest in orchids and natural history, Mark decided to move to Canberra. Following a meeting with John Wrigley, who was the curator of the Australian National Botanic Gardens (ANBG), Mark was offered a job as a gardener. By this time, Mark had developed an interest in the symbiotic relationship between mycorrhiza and the germination of orchids, having observed the development of orchid protocorms following germination from seed in pots of terrestrial orchids he was growing at home.

After a couple of years working as a gardener, an opportunity to work with the research team at the Gardens became available. He also commenced study for a science degree at Canberra University. Mark took up the position in the research laboratory at the ANBG and immediately commenced work on trying to isolate mycorrhizal fungi from wild orchids, and then germinating seeds of those species in vitro. Fortuitously the first trials worked and in 1977 he achieved the successful germination of the threatened terrestrial orchid *Diuris fragrantissima* (or *D. punctata* var. *albo-violacea* as it was then called). Many other native orchids were successfully germinated during this

early phase. Soon after, wanting to learn more about the nature of the relationship between orchids and their mycorrhizal partners, at the invitation of Professor Denis Carr at the Australian National University, Mark started a collaboration looking at this aspect of orchid biology. He found that some cells harboured fungal growth while others didn't. Mark also found that most species studied had a preferred fungal partner.

In 1981, Mark attended the 10th World Orchid Conference in Durban, South Africa. He gave a presentation on his work entitled "Propagation and re-introduction of endangered orchids of Australia". While at the conference, Mark met Dr Phillip Cribb, Curator of Orchids at the Royal Botanic Gardens, Kew, England. Dr Cribb thought that Mark's methods might be able to solve some of the problems that scientists were facing with threatened orchids in the United Kingdom. Mark was invited (seconded) to the Royal Botanic Gardens, Kew as the Sainsbury Orchid Fellow to work on the propagation and re-introduction of five endangered United Kingdom orchids. After first completing an honours degree at the Australian National University, Mark started work at RBG, Kew in 1983. One of the first things he realised was that the laboratory protocols being used for the germination and propagation of orchids were not adequate. He changed the protocols and turned his attention to England's infamous lady slipper orchid *Cypripedium calceolus*.

*Cypripedium calceolus* had been harvested from the wild for flower markets since Victorian times until only a single plant remained in Yorkshire. Possibly hundreds of years old, this plant had held the title of last survivor for at least 30 years and was protected by security guards during its growing and flowering season. Despite concerted efforts, no-one had been able to propagate it. Mark used his knowledge of orchid biology and, in 1984, was able to finally initiate germination of the lady slipper beginning the process that would save the species from possible extinction. Mark also successfully germinated other European orchid species such as *Orchis militaris*, *Anacamptis morio* and *A. laxiflora* and instituted the protocols for their establishment and maintenance in cultivation with the aim of re-establishment in the wild.

During this visit to Kew, at the request of Dr. Cribb, Mark studied most of the original collections of Australian orchid species, and historical sketches of 'Lindley's herbarium collection', and visited the British Museum of Natural History which contained original specimens collected by Robert Brown and drawings by Ferdinand Bauer during Matthew Flinders circumnavigation expedition of Australia. Using this data, Mark was able to solve many taxonomic issues with Australian orchids.

Throughout his career, Mark contributed to many revisions of the classification of Australian orchids. He wrote the Checklist of Australian Orchids and then re-wrote another volume called the Catalogue of Australian Orchidaceae. On the basis of his studies at the RBG, Kew, he commenced research on *Dendrobium*. As a significant part of this research, he visited herbaria and museums in Europe to locate, study and photograph many of the type collections of Australian orchids and many *Dendrobium* species. It was during this period that his collaborative research partnership on Australian orchids with David Jones commenced. Together David and Mark have authored numerous papers, CDs, and reformed the interpretation of the biodiversity and extent of Australian orchids – and identified many new orchid species.

After returning to Australia, Mark began his PhD studies on the embryology of orchids. His thesis was entitled 'Reproductive Biology in relation to phylogeny of the Orchidaceae, especially the tribe Diurideae.' Mark was also a pioneer of molecular systematics of Australian orchids. He not only prepared classic samples for the Australian National Herbarium collection but had the foresight to store orchid specimens in silica gel, making them suitable for molecular analysis.

Aside from undertaking field work in Europe whilst at the RBG, Kew, to study European orchids, on returning to Australia, Mark participated in a series of expeditions to study species related to Australian orchids, in particular *Dendrobium* and *Pterostylis*, in Borneo, New Guinea, New Caledonia, Vanuatu and New Zealand. One of Mark's many career highlights was undertaking research on the translocation of three threatened species, including the Eastern Australian Underground orchid, *Rhizanthella slateri*, for the New South Wales government Bulahdelah Bypass, Pacific Highway project. This was one of a string of projects in which Mark's expertise on Australian orchids was sought on the conservation of threatened orchid species.

Mark has worked collaboratively with many scientists throughout his career, both overseas and in Australia. Since 2010, Mark worked in a strong partnership with Dr Katharina Nargar, at the Australian Tropical Herbarium in Cairns, as well as others in her team including Dr Lars Nauheimer and Dr Lalita Simpson. Together they have collaborated on major projects on the phylogenetics and systematics of Australian orchids, and others at a broader world-wide scale, specifically those in tribes Diurideae and Pterostylidinae and Dendrobieae (*Dendrobium* and *Bulbophyllum*).

In 2016, in recognition of his lifetime of achievements and enormous contributions to the Orchidaceae family, Mark was awarded the prestigious Westonbirt Orchid Medal from the Royal Horticulture Society in the United Kingdom. The Westonbirt Orchid Medal is awarded annually to individuals for "scientific, literary or any other outstanding personal achievement in connection with orchids".

Throughout his career, Mark has authored many scientific publications, and written and contributed to several books. He is a member of the IUCN Orchids Specialist Group and served as a member of The Australian Orchid Foundation, Research Committee for over 30 years (1985 – 2020). He has helped to develop a collection of hardy orchids for the horticultural industry, and has been successful in his work to re-introduce endangered orchids into areas of Australia and the UK. He has also been a lifelong mentor, inspiring many early career scientists, sharing his interest and passion with citizen scientists and demonstrating the value of herbarium collections.

Mark has progressed our understanding and knowledge of the Orchidaceae immeasurably, not just in Australia but in many countries in the world, including the UK. In early 2021, Mark retired from his position as Research Scientist at the Australian National Herbarium but continues his involvement in orchid research as an CSIRO Honorary Scientist.

## David L. Jones

David Lloyd Jones was born at Mont Albert in Victoria in 1944. Early days at Balwyn were spent in nearby Beckett Park and exploring the wonderful collection of native plants in the iconic Maranoa Gardens. School holidays were enjoyed with an elderly garden-loving aunt at The Basin in the Dandenong Ranges where first involvements with native orchids and bushfires were experienced. Knowledge gained at Burnley Horticultural College, where David met Barbara, the sunny lady who was to share his passion for plants and life, was expanded and diversified by a degree in agricultural science at the University of Melbourne which was supported by a cadetship gained from the Department of Agriculture.

After graduating from university in 1968, his research work at the Scoresby Horticultural Research Station in Victoria involved the introduction of fruit cultivars from overseas, introduction and establishment of miscellaneous fruit crops, including blueberries, Chinese gooseberries and feijoas, grafting and nutrition of ornamental plants and the identification and testing of alternative materials for nursery potting mixes with the late David Nicholls. In 1978 the family moved to Queensland opening Eugenia Park Nursery in the Currumbin Valley, growing hardy coastal plants and bringing many rainforest species into cultivation. This was followed by a stint as a horticultural research officer at the Australian National Botanic Gardens in Canberra and then as research scientist in the Orchid Research Group at the Centre for Plant Biodiversity Research established within CSIRO.

A challenge in his teens by a nurseryman that “native orchids are impossible to grow” stimulated him to pioneer cultivation techniques for native terrestrial orchids that are the basis of those in use today. A plentiful supply of displaced plants from Melbourne’s encroaching urban sprawl fuelled the early growing experiments and stimulated his natural botanical curiosity. Corresponding with like-minded enthusiasts in other areas revealed different morphological interpretations between species in different parts of the country. This led to a very successful research program involving a network of licensed collaborators forwarding fresh specimens and for the first time allowing direct comparison between taxa from different areas and habitats. A rewarding simple process that revealed large gaps in our knowledge of native orchids and also resulted in the recognition of numerous new species. Following his first new species, *Pterostylis aestiva* in 1972, David has described more than 370 species of native orchids that have come to his attention from his network of contacts or travels in the bush. He also prepares detailed botanical drawings of native orchids and writes prolifically, sharing his knowledge of plants through books and other publications.

In 1991, David was awarded the Victorian College of Agriculture & Horticulture medal in recognition of his outstanding contribution to the Australian ornamental horticultural industry. In 2001 he was presented with the Australian Orchid Foundation’s prestigious ‘Award of Honour’ in recognition of his enormous contribution to the study of orchids in Australia and internationally. David served as a member of The Australian Orchid Foundation, Research Committee from its inception in 1977 to 2009; and as its Chairman from 1981 to 2002. In 2004 his contribution to orchid taxonomic research, while at the Centre for Plant Biodiversity Research was recognised when he was a finalist in the Australian Museum’s esteemed Eureka Prize for Biodiversity Research.



David's contribution to orchid research and education through his many publications has been considerable. In 1988, he published *Native Orchids of Australia*: a comprehensive coverage of Australia's then known orchid flora. In 2006, he followed with the expanded *A Complete Guide to Native Orchids of Australia including the Territories* with colour photos of each species. And in 2021, David produced a third and comprehensive edition: *A Complete Guide to Native Orchids of Australia*.







# CATALOGUE OF AUSTRALIAN ORCHIDACEAE

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## Abstract

The status of all Australian Orchidaceae, including those found in the external territories, has been reviewed. The work is principally a new assessment of all Australian orchids based on my viewing of the types, coupled with knowledge of the taxa in the living state. All taxa and their synonyms are listed in their reviewed state. Information on the types, their location and the distribution of each taxon is presented here. *Dendrobium cacatua*, *D. capitisyork*, *D. dolichophyllum*, *D. melaleucaphilum*, *Pterostylis arenicola*, *P. aspera*, *P. calceolus*, *P. chaetophora*, *P. ciliata*, *P. cobarensis*, *P. concava*, *P. insectifera*, *P. leptochila*, *P. lingua*, *P. macrocalymma*, *P. maxima*, *P. picta*, *P. praetermissa*, *P. procera*, *P. roensis*, *P. sanguinea*, *P. spathulata*, *P. taurus*, *P. tunstallii*, *Trachoma speciosum* and *T. stellatum* are described as new. The status of forty-one taxa has been changed. These are listed in Appendix 4. The intergeneric hybrid X *Calassodia* is described as new for a natural cross between *Caladenia* and *Glossodia*.

## Introduction

In the two hundred years from the colonization of Australia by Europeans, a large proportion of the plant species native to this continent have been discovered and described. Joseph Banks collected many species from Botany Bay on Captain Cook's voyage of discovery to Australia, and amongst them were several orchids. Since that time hundreds of species belonging to the family Orchidaceae have been discovered and described.

The first detailed account of the orchids of Australia was published in 'Flora Australiensis' (Bentham, 1873). Bentham's work has served as a basis for all subsequent accounts of Australian orchids including treatments in State floras and popular books dealing with the subject. In the hundred years that followed Bentham's treatment, overall knowledge of the Australian orchids has increased significantly. There are a number of reasons for this. Firstly, there were more colonial botanists. Secondly, the exploration and rural development of many new areas away from the coast contributed to the increase in the number of species known. Thirdly, increase in the standard of living has led to more people pursuing the study of orchids as a hobby. Many species were described as new by a succession of resident botanists but in particular R. D. Fitzgerald, R.S. Rogers, W.H. Nicholls, H.M.R. Rupp and T.E. Hunt, culminating in the works by A.W. Dockrill (1969)

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\* M.A. Clements is the sole author of this paper. Where other authors are listed for new names or combinations of taxa, they should be cited exactly as they are recorded.

in which he dealt with the tropical terrestrials and the epiphytes and Nicholls (1969) which was published eighteen years after his death. This has resulted in a fragmented literature covering the subject. Despite the fragmentation the contribution by these authors was invaluable. Until the publication of 'Australian Native Orchids' (Jones, 1988), which used information from the manuscript of this work, there had been no comprehensive treatment of the Australian orchid flora.

In the course of conducting research on the symbiotic germination of Australian orchids (Clements & Ellyard, 1979, Clements, 1981, 1982a) it soon became apparent that there were problems associated with the taxonomy and classification of many species. The same species were known by different names in different States and there were clearly also anomalies in the generic classifications. In an attempt to address some of these problems and to assist many people searching for the correct names to apply to Australian orchids, the 'Preliminary Checklist of Australian Orchidaceae' was produced (Clements, 1982). It took twelve weeks to write and was merely a compilation of all the then accepted names of Australian orchids, taken from an assortment of literature, including popular accounts and treatments of State floras. At the time, little attempt was made to determine the correctness or otherwise of each name and its application. During the preparation of the 'Checklist' it became apparent that a more thorough account of the subject was needed.

In 1983 I was seconded to the Royal Botanic Gardens, Kew, England, as a Research Fellow under the patronage of the Sainsbury Trust (through the Bentham-Moxon Trust). My main task was to establish a research programme on the 'Micropropagation of rare European orchids'. The principle aim of the project was to introduce to Kew the techniques for the symbiotic germination of orchids that I had developed in Australia at the Australian National Botanic Gardens (ANBG). With the introduction and development of these techniques for the propagation of European orchids, it was anticipated that Britain's rarest orchids including *Cypripedium calceolus*, *Cephalanthera rubra*, *Epipogium aphyllum*, *Orchis militaris*, *O. simia*, *Himantoglossum hircinum*, *Ophrys sphegodes* and *O. holoserica* could be saved from extinction and re-introduced to the wild (Clements et al., 1984). This secondment had been arranged by Dr. Phillip Cribb, Curator of the Orchid Herbarium at Kew. In setting up this programme of research I was required to travel to Crete, Italy, northern Greece, France, Switzerland, Denmark, Sweden and Holland as well as various parts of Great Britain to collect material. In addition to the setting up of the necessary equipment in the laboratory, establishing techniques for these experiments, and providing advice on the propagation of Australian and many other orchids, much of the remaining time was spent in various Herbaria studying types of Australasian orchids. Of particular importance were visits to the herbaria of the British Museum (Natural History), the Linnaean Society and Edinburgh and the fact that I was stationed at Kew.

The British Museum is important because of its holdings of notes and diaries of early Australian explorers and botanists such as Robert Brown. Sir J.E. Smith's herbarium, which is not available on loan, is held by the Linnaean Society in London (Clements & Cribb, 1984). Many of Robert Brown's types are represented in Edinburgh. Kew has a major orchid herbarium, and holds the John Lindley orchid herbarium, which is also not available on loan, plus much unique literature and illustrations of orchids. The Research undertaken at this time formed the basis of the present paper.

After an 18 month period of seondment I returned to Canberra and once more took up research on the symbiotic germination of Australian orchids. Material already in the living collection at the ANBG was used in this study. This had been collected during the Australian Orchid Foundation expedition to Israelite Bay in Western Australia and field trips to Arnhem Land, the Gawler Ranges, South Australia, the north coast of Tasmania, the Port Douglas-Atherton area in Queensland, parts of Victoria such as the Portland district, Wonthaggi and Mallacoota and many parts of New South Wales. Further trips where undertaken after 1984 to collect additional material for this and other research projects. At this time I undertook the study of Australasian orchid types in Australia herbaria.

In subsequent visits to Europe to work on the micropropagation project at Kew or to attend various conferences such as the International Botanical Congress in West Berlin, I also undertook to search for and examine types of Australian orchids in specific European herbaria. Those herbaria visited were Berlin, Geneve, Leiden, Munchen, Paris, Wein, Zurich, and Halle in the German Democratic Republic. This research, coupled with studies of many species in the field and in cultivation at the ANBG, has enabled me to become familiar with the vast majority of Australian orchid species. It has been on this basis that judgements on the status and classification of many Australian orchids has been made.

The Catalogue is principally a new assessment of all Australian orchids based on viewing the types, coupled with knowledge of the taxa in the field or in cultivation. On publication, the present work will form the basis of the account of the family Orchidaceae in the Flora of Australia. It is also intended to be a reference paper for current and future students of botany interested in Australian orchids and to assist in the research currently being done on this family, including works involving the conservation of our national heritage. Information collected in the course of preparing this document will form the basis of a data bank on the Australian Orchidaceae, for national and international use. Research is continuing on the study of the taxonomy and classification of Australian orchids and it can be expected that further changes in nomenclature and taxonomy will result. However, it is anticipated that from this point on there will be fewer changes of the type dealt with in this paper resulting in a basic stability in nomenclature of Australian orchids.

## Methods

Research for this paper involved a review of the literature, the location, examination and assessment of herbarium material and paintings, and the study and comparison of living material collected in the field. I have located and studied the type material, and information pertaining to it, for the majority taxa covered in this study.

**Literature Review and Research:** Wherever possible, copies of the original descriptions have been collected and the interpretation of the described taxa evaluated. Much of this research was undertaken during visits to the Royal Botanic Gardens, Kew and the British Museum of Natural History in London. Both institutions have outstanding Botanical libraries, as well as holding the diaries and notebooks of many early botanists, such as Sir Joseph Banks, Robert Brown and John Lindley. Reference to this literature has proved essential in this study. In addition, there are many fine illustrations of early taxa that have proved essential in establishing the correct interpretation of names. Most notable of these

are the illustrations accompanying many of the types in John Lindley's Orchid herbarium housed at Kew, and Ferdinand Bauer's paintings of species collected and described by Robert Brown. Locality information, additional to that obtained from herbarium sheets, accompanied some of Bauer's paintings. For the interpretation of taxa described by Brown, I have consistently adopted the principle that these paintings are representative of Brown's concepts. Accordingly, I have located specimens that correspond to Bauer's illustrations from among the pertinent collections and these I have designated as lectotypes of the taxa involved. Where necessary, specimens from Lindley's herbarium have been treated similarly.

In preparing this catalogue I have attempted to review all recent literature pertaining to Australian orchids. Most publications contain valuable information on specific groups of orchids and, where appropriate, this information has been incorporated into the text. Unfortunately, however, fairly recently there has been a spate of papers, based on very little scientific evidence, dealing with the revision or re-classification of significant groups of orchids. The treatment of *Dendrobium* by Brieger (1981) and the subsequent paper dealing with the nomenclatural anomalies created by him (Rauschert, 1983), are two examples. Both of these authors appear to have superficial knowledge of the taxa involved and the basis of their proposed re-classifications is dubious. I acknowledge that these treatments exist but have chosen to treat all their taxa as nomenclatural synonyms of accepted names, pending the publication of more scientifically based treatments of these taxa.

**Herbarium Research:** In order to determine the correct names for Australian orchids the type specimen(s) of a taxon have been studied and, time permitting, photographs taken for future reference. Where possible, all comment besides that accompanying the original description of a taxon has been ignored when making my assessment.

**Field Research:** Prior to, and since embarking on this project, considerable field work has been undertaken in an attempt to determine the correct identity of many named taxa. This part of the research has been done in conjunction with a number of fellow scientists, in particular David Jones, and with a group of interested, enthusiastic amateurs. Where possible, material from the original place of collection of the type specimen(s) has been sought and comparisons made with herbarium material.

**Rank of a taxon:** This subject has already been discussed at great length in other publications. For the purposes of this paper, I have adopted the principle that most taxa, (i) with more than one or (ii) with several difference(s) in morphology and biology, should be ranked as species. However, where taxa are clearly closely related and the variation is slight and possibly related to distribution, where some uncertainty exists as to the limits of each, or where there is insufficient information about a particular taxon to allow an alteration of rank to be made, I have chosen to maintain them at their current rank or to recognize taxa at subspecies or varietal rank. A consequence of this approach is that a number of taxa have been raised to species rank and very few taxa below the rank of species are recognized herein. I have also sought the opinions of colleagues world-wide to enable me to confidently determine the correct name for a particular taxon.

**Structure of the list:** Genera and species are listed alphabetically for ease of location. Names of taxa that I accept are in **bold**, except those under 'Notes' or listed as the type of a genus.

Following the accepted name is the author, place and date of publication, details of the type(s) including where it is held and an assessment of its status (holotype, isotype etc.). Where necessary, a lectotype has been chosen to stabilize the application of a name. The institution(s) where type specimen(s) are housed are recorded using the international code of symbols for Herbaria as listed in Holmgren et al (1981) (Appendix 1). The symbols K-L for the Lindley and K-WALL for the Wallich herbaria are used to differentiate between these and all other material in the main Kew herbarium. Both are maintained as separate herbaria at Kew and because of the major significance of each to the study of orchids. The symbol B† is used to indicate that the specimens were destroyed when the Berlin Herbarium was bombed in 1944.

A 'Notes' section is included with some taxa, immediately following information on the types. The distribution of each taxon in Australia, based on State flora districts (Appendix 2), follows. Should a species also occur outside Australia, the countries in which it is known to occur are listed according to the International Standards Organization (ISO) Common Country Coding (Appendix 3).

Synonyms are given in *italics*, with relevant data on the place of publication and details of the type(s). They are indented and listed in chronological order below accepted taxa. Synonyms are also cross-referenced under genus.

The type of each genus is given as listed in Farr, Leussink and Stafleu (1979). In a few instances the lectotype for a genus has been designated where no type exists. This has been done where I was familiar with the taxa involved.

**Botanical Regions:** For this study taxa are listed according to their distribution in the botanical districts used at the Australian National Botanic Gardens (Map 1). Appendix 2 lists abbreviations for the Botanical Districts used in this study.

**New Taxa:** A number of new taxa are established in this paper. Some of these are new names for previously described taxa and others have been raised in rank. For ease of reference these names are listed separately at the back of the main text in Appendix 4. All are appropriately identified using standard botanical symbols, for example those found in Stearn (1969). Twenty-six new species are described in the main body of the text. Each is accompanied by a brief latin diagnosis to validate the names under the International Code of Botanical Nomenclature (ICBN). Full descriptions and illustrations of each taxon will be published elsewhere.

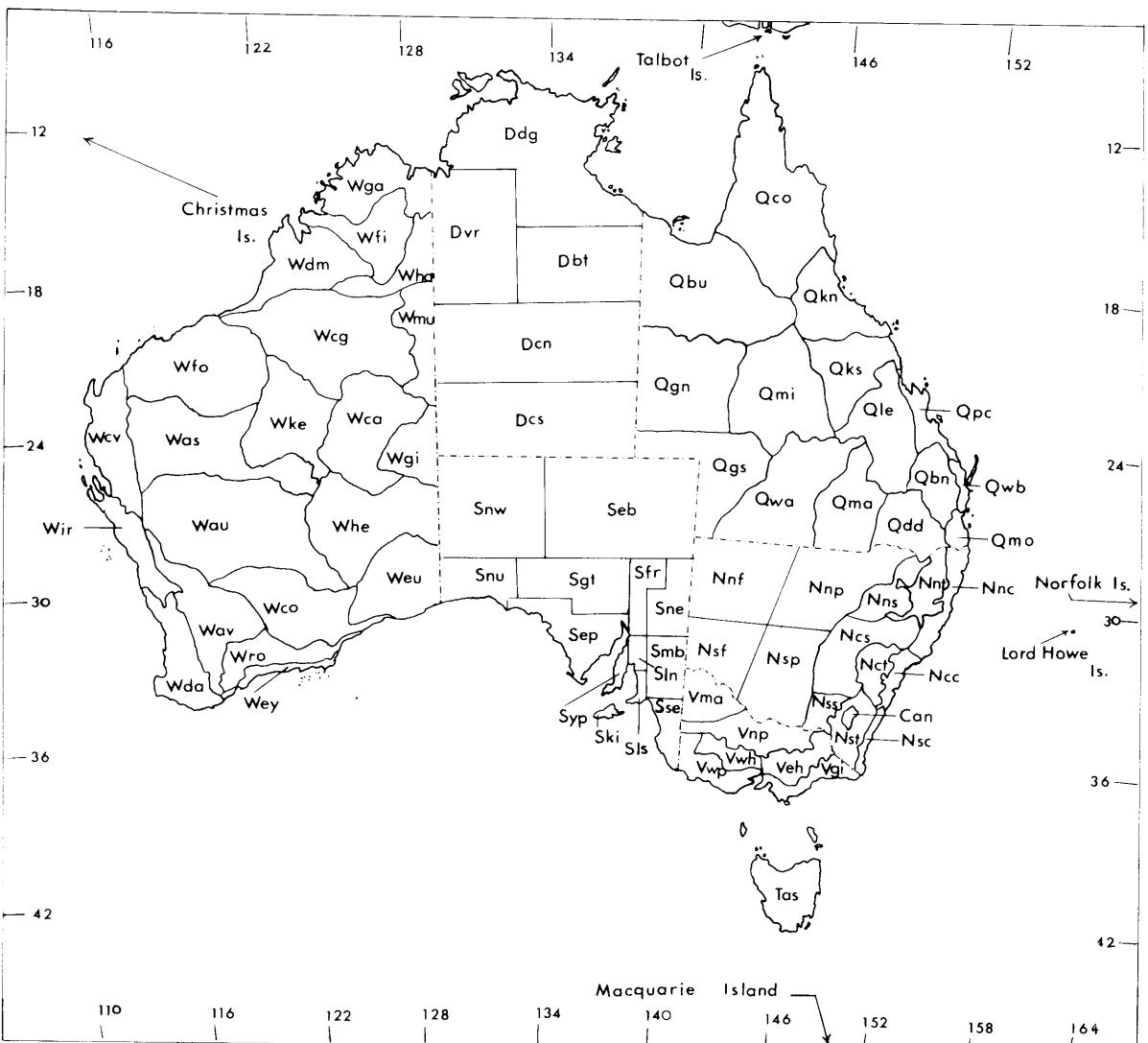
**References:** Standard references have been used for abbreviation of author citations and references in line with those used by authors contributing to the '*Flora of Australia*'. These are cited in the reference section of this document.

Amongst the most valuable references was the English translation of Schlechter's '*The Orchidaceae of German New Guinea*' (Schlechter, 1982). With so many orchids common to New Guinea and Australia, it was an essential reference and one to be recommended.

**Hybrids:** The occurrence of natural hybrids in the wild is of interest but has caused some problems in classification. Interspecific hybrids are treated at the same rank as species in the '*International Code of Botanical Nomenclature*' (Voss et al., 1983), but are differentiated by the placement of the symbol X between the generic and specific names, eg *Dendrobium X delicatum*. In the case of intergeneric hybrids, the symbol X is placed before the hybrid generic name, eg. X Calassodia.

## Methods

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Map 1. Australian Botanical Districts

The ICBN only recognizes these two types of hybrids and not those between taxa below the rank of species. Similarly, hybrids originating from a backcross to one of the parents of a natural hybrid are also treated at the rank of hybrids. The name *D. bigibbum* var. *venosum* falls into this category and has here been re-named *D. X lavarackianum* because of the prior use of the epithet 'venosum' at specific rank.

Inter-generic hybrids are extremely rare in Australia and only one has been named. *Caladenia tutulata* is almost certainly a natural hybrid between *Caladenia deformis* and *Glossodia major*, and is therefore incorrectly placed in that genus. The new name *X Calassodias* and is introduced here to overcome this inconsistency in the nomenclature.

One extremely disturbing recent activity has been the deliberate crossing of species in the field by some unthinking and sometimes unscrupulous people. This activity is detrimental to some species, many of which now exist only as island populations separated by rural or urban land. Should this irresponsible activity continue, entire populations and even species could be lost. In many species the gene pool has already been considerably reduced, through habitat loss and over-collection. A further consequence, albeit minor, is that hybrids can no longer be confidently described as 'natural'.

## Related and Future Research

**Biological, Revisionary, Physiological and Cladistic Studies:** In the course of this study and related research, numerous new taxa have been identified or discovered. Some of these have already been described but many more have yet to be named. These will be described in a series of papers which will be published elsewhere. David Jones will be primarily responsible for the description of these new taxa.

Research being undertaken on Australian orchids at the ANBG (Armstrong, 1987), involves detailed studies of the taxonomy and biology of many species. The other principle researcher involved in many of these studies is David Jones. The relationships within and between genera are being assessed cladistically, and research on the biogeography and possible origin of the family Orchidaceae in Australia is also being undertaken. All genera are being researched but those under intensive study are *Arthrolechis*, *Bulbophyllum*, *Caladenia*, *Calochilus*, *Chiloglottis*, *Corybas*, *Dendrobium*, *Dipodium*, *Diuris*, *Genoplesium* (paper in press), *Habenaria*, *Orthoceras*, *Prasophyllum*, *Pterostylis*, *Rhizanthella* and *Sarcocilus*.

Future research will include comparative studies of taxa common to Australia and adjacent countries, mycorrhizal associations in groups of orchids and continued development of techniques for the *in vitro* propagation of species, with particular emphasis on those taxa that are considered to be endangered, for example *Caladenia rosella* and *Calochilus richiae*.

*Dedicated to G. Hermon Slade and Gerald McCraith for  
their foresight in founding the Australian Orchid Foundation  
and the substantial support they have given to orchid research.*

# Australian Orchidaceae: Genera and Species

## ACIANTHUS

**Acianthus** R. Br., Prod. 321 (1810). Type species: *Acianthus exsertus* R. Br. (here designated). Notes: There is a label on the type of *A. exsertus*, in Brown's hand, that states "the generic character was taken from these".

*Townsonia* Cheesem., Man. New Zealand fl. 691 (1906). Type species: *Townsonia deflexa* Cheesem.

**A. amplexicaulis** (Bailey) Rolfe, Orchid Rev. 11: 344 (1903). Dist: Nnc, Qmo.

*Microstylis amplexicaulis* Bailey, Bot. Bull. Dept. Agric. Queensland 3: 18 (1891); *Listera amplexicaulis* (Bailey) Bailey, Queensl. fl. 5: 1560 (1902). Type: 'Eudlo, Queensland', May 1891, F.M. Bailey s.n. (holo BRI!). Dist: Nnc, Qmo, Qwb?

**A. bifolius** R. Br. = *Chiloglottis reflexa*.

**A. brunonis** F. Muell., Fragm. 5: 96 (1865), nom. illeg. Notes: Mueller used the name in reference to both *A. fornicateus* and *A. exsertus*.

**A. caudatus** R. Br., Prod. 321 (1810). Type: 'Port Jackson; vicinity of Sydney and Parramatta', 1804, F. Bauer s.n. (lectotype specimen (a) BM! here designated). Dist: Sls, Ski, Sse, Vwp, Vwh, Vgi, Veh, Tas, Nsc, Ncc, Nnc, Qmo?.

*Epipactis caudata* (R. Br.) Poiret, Encyl. Suppl. 2: 571 (1812).

*Acianthus caudatus* R. Br. var. *ater* Lindley, Gen. sp. orchid. pl. 397 (1840). Type: Tasmania, Woolnorth, Oct. 1837, R. Gunn 758 (holo K-L!, iso BM! K! K-L! P! W!). Notes: The type does not appear to differ significantly from that of the typical form of the species.

*Acianthus caudatus* R. Br. var. *pallidus* Rupp, Proc. Linn. Soc. New South Wales 71: 290 (1947). Type: 'Smithton, Tasmania', Oct. 1946, H.B. Atkinson s.n. (holo NSW!), syn. nov. Notes: A green, probably albinistic form of the species.

**A. caudatus** R. Br. var. *ater* Lindley = *Acianthus caudatus*.

**A. caudatus** R. Br. var. *pallidus* Rupp = *Acianthus caudatus*.

**A. exsertus** R. Br., Prod. 321 (1810). Type: 'Port Jackson; North Rocks', May 1804, R. Brown s.n. (lectotype specimen (1) BM! here designated, isolectotype BM!); Syntypes: 'Vicinity Sydney', 1804, F. Bauer s.n. (BM!, K! L! P! W!); 'North Rocks', 1802, G. Caley s.n. (BM!); 'North Brush', Apr. 1805, R. Brown s.n. (AD! BM!); 'Near Askin's Basin', May 1805, R. Brown s.n. (BM!). Dist: Sep, Sfr, Sln, Slc, Ski, Smb, Sse, Vwp, Vwh, Vnp, Veh, Vgi, Tas, Nsc, Nst, Can, Nss, Ncc, Nct, Nnc, Nnt, Qmo, Qdd, Qbn, Qle.

*Epipactis exserta* (R. Br.) Poiret, Encyl. Suppl. 2: 571 (1812).

**A. fornicateus** R. Br., Prod. 321 (1810). Type: 'Port Jackson', May 1802, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype AD! K! P! W!); Syntypes: 'Port Jackson', 1803, R. Brown s.n. (AD! BM! E! K! L!). Dist: Nsc, Ncc, Nct, Ncs, Nnc, Nnt, Qmo, Qdd, Qwb, Qpc, Qks, Qkn.

*Epipactis fornicatea* (R. Br.) Poiret, Encyl. Suppl. 2: 571 (1812).

**A. huegelii** (Endl.) Nicholls et Goadby = *Cyrtostylis huegelii*.

**A. ledwardii** Rupp, Queensland Naturalist 10: 113, t. (1938). Type: 'Burleigh Heads, South Queensland', Jun. 1934, C.P. Ledward s.n. (holo NSW!, iso AD!). Dist: Nnc?, Qmo.

**A. reniformis** (R. Br.) Schltr. = *Cyrtostylis reniformis*.

**A. reniformis** (R. Br.) Schltr. var. *huegelii* (Endl.) A.S. George = *Cyrtostylis huegelii*.

**A. sublestus** Dockr., North Queensland Naturalist 23(110): 3, f. (1956). Type: 'Ravenshoe district, North Queensland', 16 Apr. 1954, W.W. Abell & W.G. McPherson s.n. (holo NSW!). Dist: Qkn?, Qco.

**A. tenuissimus** Nicholls et Goadby = *Cyrtostylis tenuissima*.

**A. viridis** J.D. Hook., Fl. Tasman. 2: 372 (1859). Type: 'Tasmania; Base of Mount Wellington', Nov. 1939-40, R. Gunn s.n. (holo K!, iso K-L!). Dist: Tas; NZ.

*Townsonia viridis* (J.D. Hook.) Schltr., Repert. Spec. Nov. Regni Veg. Beih. 9: 250 (1911).

*Townsonia deflexa* Cheesem., Man. New Zealand fl. 691 (1906). Type: 'Mount Rochfort, vicinity of Westport', W. Townson s.n. (lecto AK, isolectotype AD! K!).

## ACRIOPSIS

*Acriopsis Reinw. ex Blume*, Bijdr. 6: t. 2; 8: 376 (1825). Type species: *Acriopsis javanica* Reinw. ex Blume. Notes: I have followed Minderhoud & de Vogel (1986), in their recent revision of the genus but do not necessarily agree entirely with them.

*A. griffithii* H.G. Reichb. = *Acriopsis javanica*.

?*A. harai* Tuyama = *Acriopsis javanica*.

?*A. insulari-sylvatica* Fukuyama = *Acriopsis javanica*.

***A. javanica* Reinw. ex Blume**, Bijdr. 8: 377 (1825). Type: Mt. Salak, Java, C. Blume s.n. (lecto L!, isolectotype L! P!). Dist: Qco; SB, PG, ID, MY, PH, KH, VN, LA?, TH, BU, IN.

*Spathoglottis trivalvis* Lindley, Gen. sp. orchid. pl. 120 (1832). Type: Singapore, N. Wallich 3742 (holo K-L!).

*Acriopsis picta* Lindley in Edwards's, Bot. Reg. 29, misc. 69 (1843). Type: Bantam, Java, Papeleu s.n. (holo K-L!).

*Acriopsis griffithii* H.G. Reichb., Bonplandia 2: 92 (1854); *Acriopsis* sp. Griffith, Not. 3: 333 (1851); *Acriopsis* sp. Griffith, Icon. Pl. Asis. 3, t. 318 (1851). Type: Malacca, W. Griffith s.n. (holo W not seen, probably lost).

*Acriopsis nelsoniana* Bailey, Queensland Agric. J. 3: 160 (1898); *Acriopsis javanica* Reinw. ex Blume var. *nelsoniana* (Bailey) J.J. Smith, Nova Guinea 14: 492 (1929). Type: 'Gira River, New Guinea', May 1898, Lamington s.n (holo BRI!).

? *Acriopsis sumatrana* Schltr., Oesterr. Bot. Z. 50: 249 (1900). Type: 'Bindjei in the province of Deli, Sumatra', F. Krause s.n. (holo B†).

*Acriopsis papuana* Kraenzl. in K. Schum. & Laut., Fl. Schutzgeb. Sudsee, Nachtrage 250 (1905), nom.

*Acriopsis philippinensis* Ames, Orchidaceae 2: 215, f. (1908). Types: 'On dead log, Santa Cruz, Prov. Davao, south eastern Mindanaoa', 5 May 1905, R.S. Williams 2778 (syn AMES); 'Camp Keithley, Lake Lanao, Mindanao', Feb. 1906, M.S. Clemens 218 (syn AMES); sin. loc., Apr. & Nov. 1906, M.S. Clemens s.n. (syn AMES).

*Acriopsis nelsoniana* Bailey var. *pallidiflora* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 950 (1914). Type: 'Kaiser-Wilhelms-Land; On trees on the Waria River near Gobi, alt. c. 300 m', May 1909, R. Schlechter 19564 (holo B†).

? *Acriopsis insulari-sylvatica* Fukuyama, Trans. Nat. Hist. Soc. Taiwan 28: 3 (1938). Type: 'Babaltaob, Palau Island', Kanehira 563 (holo ?TAI).

? *Acriopsis harae* Tuyama, J. Jap. Bot. 19: 129, f. 1, t. 3 (1964). Type: From the vicinity of Gangtok, Sikkim, Hara s.n. (holo ?TI).

*A. nelsoniana* Bailey = *Acriopsis javanica*.

*A. nelsoniana* Bailey var. *pallidiflora* Schltr. = *Acriopsis javanica*.

*A. papuana* Kraenzl. = *Acriopsis javanica*.

*A. philippinensis* Ames = *Acriopsis javanica*.

*A. picta* Lindley = *Acriopsis javanica*.

? *A. sumatrana* Schltr. = *Acriopsis javanica*.

*A. sp.* Griffith = *Acriopsis javanica*.

## ADELOPETALUM

*Adelopetalum* Fitzg. = *Bulbophyllum*.

*A. bracteatum* Fitzg. = *Bulbophyllum bracteatum*.

## ADENOCHILUS

*Adenocheilus* J.D. Hook., Fl. nov.-zel. 1: 246, t. 56 (1853). Type species: *Adenocheilus gracilis* J.D. Hook.

***A. nortonii* Fitzg.**, Austral. orch. 1(2): [t. 2] (1876). Type: 'Mt. Victoria, within a mile of the railway, New South Wales', Nov., J. Norton s.n. (holo & iso BM!). Dist: Ncc, Nnt.

*Caladenia nortonii* (Fitzg.) F. Muell., Syst. cens. Aust. pl. 113 (1883).

## AETHERIA

*Aetheria* Endl. = *Etaeria*.

*A. oblongifolia* (Blume) Lindley = *Hetaeria oblongifolia*.

*A. rubicunda* (Blume) H.G. Reichb. = *Goodyera grandis*.

## ALISMORCHIS

*Alismorchis* Thouars = *Calanthe*.

*A. diploxyphion* (J.D. Hook.) Kuntze = *Calanthe triplicata*.

*A. furcata* (Batem. ex Lindley) Kuntze = *Calanthe triplicata*.

*A. odora* (Griffith) Kuntze = *Calanthe triplicata*.

*A. veratrifolia* (Willd.) Kuntze = *Calanthe triplicata*.

## AMBLYGLOTTIS

*Amblyglottis* Blume = *Calanthe*.

*A. veratrifolia* (Willd.) Blume = *Calanthe triplicata*.

## ANAPHORA

*Anaphora* Gagnep. = *Malaxis*.

*A. liparioides* Gagnep. = *Malaxis latifolia*.

## ANGRAECUM

*Angraecum* Bory de St.-Vincent, Voyage Iles. Afrique 1: 359 (1804). Type species: *Angraecum eburneum* Bory de St.-Vincent.

*A. crumenatum* Rumph = *Dendrobium crumenatum*.

## ANOECTOCHILUS

*Anoectochilus* Blume, Bijdr. 8: 411, t. 15 (1825) (*nom. et orth. cons.*). Type species: *Anoectochilus setaceus* (Blume) Lindley, (*Anecochilus* Blume, *nom. illeg.*) (*type cons.*).

*A. Yatesiae* Bailey, Queensland Agric. J. 19: 148 (1907). Type: 'Near Kuranda', July 1907, A. Yates s.n. (lectotype BRI! here designated). Dist: Qkn, Qco.

## ANTICHEIROSTYLLIS

*Anticheirostylis* Fitzg. = *Prasophyllum*.

*A. apostasiooides* (Fitzg.) Fitzg. = *Prasophyllum apostasiooides*.

*A. borunastylis* T. Durand et B.D. Jackson, Index Kew Suppl. 1: 492 (1906), *nom. illeg.*

## ANTICHIROSTYLLIS

*Antichirostylis* Kuntze in Post & Kuntze, Lex. gen. Phan. 36 (1903) (*orth. var.*) = *Prasophyllum*.

## APATURIA

*Apaturia* Lindley = *Pachystoma*.

*A. lindleyana* Wight = *Pachystoma pubescens*.

*A. montana* Lindley = *Pachystoma pubescens*.

*A. senilis* Lindley = *Pachystoma pubescens*.

*A. smithiana* Lindley = *Pachystoma pubescens*.

## APETALON

*Apetalon* Wight = *Didymoplexis*.

*A. minutum* Wight = *Didymoplexis pallens*.

## APHYLLORCHIS

*Aphyllorchis* Blume, Tab. Pl. Jav. Orch. t. 77 (1825). Type species: *Aphyllorchis pallida* Blume.

*A. anomala* Dockr., Orchadian 1: 116, f. (1965). Type: 'Davies Creek, North Queensland', 23 Jan. 1965, N. Morris & A. W. Dockrill s.n. (holo BRI!). Dist: Qco.

*A. queenslandica* Dockr., Orchadian 1: 115, f. (1965). Type: 'Helenvale, North Queensland', May 1962, C. Le Roy s.n. (holo BRI not found). Dist: Qco.

## APLOSTELLIS

*Apostellis* A. Rich. = *Nervilia*.

*A. flabelliformis* (Lindley) Ridley = *Nervilia aragoana*.

*A. velutina* (Par. et H.G. Reichb.) Ridley = *Nervilia plicata*.

## APORUM

*Aporum* Blume = *Dendrobium*.

*A. crumenatum* (Sw.) Breig. = *Dendrobium crumenatum*.

*A. kwashotense* (Hayata) Rauschert = *Dendrobium crumenatum*.

## APOSTASIA

*Apostasia* Blume, Bijdr. 6: f. 39; 8: 423 (1825). Type species: *Apostasia odorata* Blume. Notes: I have followed the work of de Vogel (1969) for this genus.

*Mesodactylis* Wallich, P. As. Rar. 1: 74 (1830), nom. nud.

*Niemeyera* F. Muell., Fragm. 6: 96 (1867). Type species: *Niemeyera stylidioides* F. Muell.

*A. alba* Rolfe = *Apostasia wallichii*.

*A. curvata* J.J. Smith = *Apostasia wallichii*.

*A. gracilis* Rolfe = *Apostasia wallichii*.

*A. lucida* Blume ex Sieb. = *Apostasia wallichii*.

*A. papuana* Schltr. = *Apostasia wallichii*.

*A. stylidioides* (F. Muell.) H.G. Reichb. = *Apostasia wallichii*.

*A. wallichii* R. Br. in Wallich, Pl. As. Rar. 1: 75, t. 84 (1830). Type: 'Napalae, Nookok', N. Wallich 4448 (lecto K!, isolect E, K! K-L!). Dist: Qks, Qkn, Qco; PG, ID, MY, BN, PH, TH, KH, VN, BU, IN, BD, NP.

*Mesodactylis deflexa* Wallich, Pl. As. Rar. 1: 74 (1830), nom. nud.

*Niemeyera stylidioides* F. Muell., Fragm. 6: 96 (1867); *Apostasia stylidioides* (F. Muell.) H.G. Reichb., Flora 55: 278 (1872). Type: 'In rivulos silvarum circum sinum Rockingham's Bay', 1867, J. Dallachy s.n. (lecto MEL!, isolectotype K! W).

*Apostasia gracilis* Rolfe, J. Proc. Linn. Soc., Bot. 25: 242 (1889). Type: Borneo, Korthals s.n. (holo L, illus. K!).

*Apostasia alba* Rolfe, Orchid Rev. 4: 329 (1896). Type: Borneo, near Janjong Kubong, Barber 95 (lecto K!, isolectotype K!); Syntype: Borneo, Labuan, Motley 95 (K!).

*Apostasia lucida* Blume ex Sieb., Anat. Bau. Apost. 16, 24, 34, 41, 49, 56, 59, f. 3 (1903). Type: (not found).

*Apostasia papuana* Schltr. in K. Schum. & Laut., Fl. Schutzgeb. Sudsee, Nachtrage 72 (1905). Type: New Guinea; am Ramu Flusse, 6 Jan. 1902, R. Schlechter 13871 (lecto BM!, isolectotype B! K! P); Syntype: New Guinea, R. Schlechter 14488 (syn B†). Notes: One of the few orchid types still at Berlin (B). This specimen should have been chosen as the lectotype but was not found when de Vogel requested the material for his revision of the genus.

*Apostasia wallichii* R. Br. var. *seraweiensis* J.J. Smith, Mitt. Inst. Allg. Bot. Hamb. 7: 10 (1927). Type: Serawai, J. Winkler 268 (lecto HBG, isolectotype BO).

*Apostasia curvata* J.J. Smith, Mitt. Inst. Allg. Bot. Hamb. 7: 11, t. 1, f. 1 (1927). Type: Java, J. Winkler 595 (holo BO).

*A. wallichii* R. Br. var. *seraweiensis* J.J. Smith = *Apostasia wallichii*.

## ARETHUSA

*Arethusa* L., Sp. pl. 950 (1753). Type species: *Arethusa bulbosa* L.

*A. bengalensis* Hort. ex Hemsley = *Didymoplexis pallens*.

*A. catenata* Smith = *Caladenia catenata*.

*A. ecristata* Griffith = *Didymoplexis pallens*.

*A. plicata* Andr. = *Nervilia plicata*.

*A. tetrapetala* R. Br. ex J.J. Britten = *Pterostylis revoluta*.

## ARISTOTELEA

*Aristotelea* Lour. = *Spiranthes*.

*A. spiralis* Lour. = *Spiranthes sinensis*.

## ARTHROCHILUS

*Arthrochilus* F. Muell., Fragm. 1: 42 (1858). Type species: *Arthrochilus irritabilis* F. Muell.

**A. byrnesii** Blaxell, Contr. New South Wales Natl. Herb. 4: 278 (1972). Type: 'Waterfall Creek, South Alligator River, Northern Territory', 2 Apr. 1969, N. Byrnes 1530 (holo NSW!, iso DNA!). Dist: Ddg.

**A. dockrillii** Lavarack, Proc. Roy. Soc. Queensland 86(25): 155, f. 1 (1975). Type: 'Kurrimine, near Innisfail, North Queensland', 17 Jul. 1972, P. Lavarack N.P. [National Park number series] 1691 (holo BRI!, iso NSW!). Dist: Qkn, Qco; PG?

**A. huntianus** (F. Muell.) Blaxell, Contr. New South Wales Natl. Herb. 4: 277 (1972). Dist: Vwp, Vwh, Vgi, Tas, Nst, Can, Ncc, Nct.

*Drakaea huntiana* F. Muell., Victorian Naturalist 5: 174 (1889); *Spiculaea huntiana* (F. Muell.) Schltr., Repert. Spec. Nov. Regni Veg. Beih. 17: 81 (1921). Type: 'Tingerinji Mountain, [New South Wales]', 2 Mar. 1889, W. Baeuerlen 175 (holo MEL!, iso NSW!).

**A. irritabilis** F. Muell., Fragm. 1: 43 (1858). Type: 'Moreton Bay', W. Hill & F. Mueller s.n. (holo MEL!, iso K-L!). Dist: Ncc, Nnc, Qmo, Qwb, Qkn, Ddg.

*Drakaea irritabilis* (F. Muell.) H.G. Reichb., Beitr. Syst. Pflanzenk. 68 (1871); *Spiculaea irritabilis* (F. Muell.) Schltr., Repert. Spec. Nov. Regni Veg. Beih. 17: 81 (1921).

## ARUNDINA

*Arundina* Blume, Bijdr. 6: t. 2; 8: 401 (1825). Type species: *Arundina speciosa* Blume.

*Arundina tahitensis* Nadeaud = *Corymborkis veratrifolia*.

## ASCOCENTRUM

*Ascocentrum* Schltr. ex J.J. Smith, Bull. Jard. Bot. Buitenzorg (ser. 2) 14: 49 (1914). Type species: *Saccolabium miniatum* Lindley.

*A. micranthum* (Reinw. ex Blume) Holtt. = *Schoenorchis micrantha*.

## AUSTRALORCHIS

*Australorchis* Brieg. = *Dendrobium*.

*A. monophylla* (F. Muell.) Brieg. = *Dendrobium monophyllum*.

*A. schneiderae* (Bailey) Brieg. = *Dendrobium schneiderae*.

## BLETIA

*Bletia* Ruiz et Pavon, Fl. Peru. Prodr. 119, t. 26 (1794). Type species: *Bletia catenulata* Ruiz et Pavon.

*B. angusta* Gaud. = *Spathoglottis plicata*.

*B. tankervilleae* (Banks) R. Br. = *Phaius tankervilleae*.

## BLETILLA

*Bletilla* H.G. Reichb., Fl. Serres Jard. Eur. 8: 246 (1852-3) (nom. cons.). Type species: *Bletia gebina* Lindley.

*B. bicallosa* D. Don = *Eulophia bicallosa*.

## BOLBORCHIS

*Bolborchis* Zoll. et Moritzi = *Nervilia*.

*B. crociformis* Zoll. et Moritzi = *Nervilia crociformis*.

## BRACHYPEZA

*Brachypeza* Garay, Bot. Mus. Leafl. Harv. Uni. 23(4): 164 (1972). Type species: *Saccolabium archytas* Ridley. Notes: For the purposes of this paper I have followed the treatment of the genus by Wood (1982).

**B. archytas** (Ridley) Garay, Bot. Mus. Leafl. Harv. Uni. 23(4): 164 (1972). Dist: Christmas Island.

*Saccolabium archytas* Ridley, J. Straits Brach. Roy. As. Soc. 23: 137 (1891). Type: 'Christmas Island', 1890, H.N. Ridley s.n. (lecto K!).

## BROMHEADIA

*Bromheadia* Lindley in Edwards's, Bot. Reg. 27: Misc. 89 (1841). Type species: *Bromheadia palustris* Lindley (*Grammatophyllum finlaysonianum* Lindley = *Bromheadia findlaysoniana* (Lindley) Miq.).

*B. palustris* sensu Ewart = *Bromheadia pulchra*.

*B. palustris* Lindley var. *papuana* J.J. Smith = *Bromheadia pulchra*.

**B. pulchra** Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 367 (1912). Types: 'Kaiser-Wilhelms-Land; In humus at the edge of forests near Adolfhafer, c. alt. 10 m', Apr. 1909, R. Schlechter 19212 (holo B†; lectotype K! here

designated, isolectotype L!); Syntypes: 'Kaiser-Wilhelms-Land; on more open slopes of the mountain forests near Jaduna, alt. c. 50 m', Apr. 1908, R. Schlechter 19288 (AMES, E! G! K! L! MO, NSW). Dist: Qco; PG, ID.

*Bromheadia palustris* sensu Ewart, Victorian Naturalist 24: 13 (1907), non Lindley (1841).

*Bromheadia palustris* Lindley var. *papuana* J.J. Smith, Nova Guinea 8(1): 26 (1909). Type: 'New Guinea north side; behind Hollandia (Gaya Pora), c. 300 m', 15 Sep. 1911, Gjellerup 660 (holo BO).

*Bromheadia venusta* Hunt, Austral. Orchid Rev. 18: 101, f. (1953). Type: 'Queensland; Burke District, Weipa Mission Station, Gulf of Carpentaria', 1949, J.H. Barnes s.n. (holo BRI, not seen, away on loan).

*B. venusta* Hunt = *Bromheadia pulchra*.

## BRYOBIUM

*Bryobium* Lindley = *Eria*.

*B. pubescens* Lindley = *Eria retusa*.

## BULBOPHYLLUM

*Bulbophyllum* Thouars, Hist. Pl. Orch., tabl. esp. 3 sub. u. (1822) (*nom. cons.*). Type species: *Bulbophyllum nudum* Thouars (*type cons.*).

*Phyllorchis* Thouars, Hist. Pl. Orch. t. 92 (1822). = *Phyllorkis* Thouars, Nouv. Bull. Soc. Philom. Paris 1: 319 (1809) (*orth. var.*).

*Osyricera* Blume, Bijdr. 6; t. 7, f. 58; 7: 307, t. 58 (1825). Type species: *Osyricera crassifolia* Blume.

*Ephippium* Blume, Bijdr. 6: t. 4, f. 65; 7: 308 (1825). Type species: *non designatus*.

*Cirrhopetalum* Lindley, Gen sp. orchid. pl. 45, 58 (1830) (*nom. cons.*). Type: *Epidendrum umbellatum* G. Forst. Notes: There has been and still is considerable controversy over the rank given to this group of taxa. Many botanists have argued in support of the recognition of the genus distinct from *Bulbophyllum*, based on the possession of the supposedly unique characters of the umbel-shaped inflorescence and the elongated lateral sepals. Others have argued that the characters used to define *Cirrhopetalum* are not unique to that group and therefore all species defined under that name, should be placed into *Bulbophyllum*. Seidenfaden (1979), who has extensively studied species of *Cirrhopetalum* for his account of the orchids of Thailand, favours the inclusion of the taxon under *Bulbophyllum*. This approach seems the most sound given that there has never been a study of the true relationships, via the cladistic method of analysis, of the taxa involved.

*Adelopetalum* Fitzg., J. Bot. 29: 152 (1891). Type species: *Adelopetalum bracteatum* Fitzg.

*B. argyropus* (Endl.) H.G. Reichb., Linnaea 41: 42 (1876). Dist: Nnt, Qmo, Lord Howe Island, Norfolk Island.

*Thelychiton argyropus* Endl., Prodr. fl. Norf. 32 (1833). Type: 'Norfolk Island to Ansons Bay', 15 Nov. 1804, F. Bauer s.n. (holo W!, iso K!).

*Bulbophyllum exiguum* sensu F. Muell., Fragm. 9: 78 (1875), non F. Muell (1860).

*Bulbophyllum tuberculatum* sensu Clemesha, Orchadian 6(6): 136 (1979), non Colenso (1884).

*B. adenocarpum* Schltr. = *Bulbophyllum lageniforme*.

*B. aurantiacum* F. Muell. = *Bulbophyllum schillerianum*.

*B. aurantiacum* F. Muell. var. *wattsii* Bailey = *Bulbophyllum schillerianum*.

*B. baileyi* F. Muell., Fragm. 9: 5 (1875). Type: cult. Brisbane ex 'Top of range Dalrymples Gap, Rockingham's Bay', 1 Jan. 1875, F.M. Bailey s.n. (holo MEL!). Dist: Qkn, Qco; PG, ID.

*Phyllorchis baileyi* (F. Muell.) Kuntze, Revis. gen. pl. 2: 677 (1891).

*Bulbophyllum punctatum* Fitzg., J. Bot. 21: 205 (1883); *Phyllorchis punctata* (Fitzg.) Kuntze, Revis. gen. pl. 2: 677 (1891). Type: 'Cape York, North Australia', Jan., R. D. Fitzgerald s.n.? (holo BM!).

*Bulbophyllum caryophyllum* J.J. Smith, Bull. Jard. Bot. Buitenzorg (ser. 2) 13: 71 (1914). Type: cult. Bogor ex 'Niederl. Neu-Guinea: Am oberen Digoel', B. Branderhorst s.n. (holo ?BO), syn. nov. Notes: In the herbarium at Kew there is a single specimen (a flower only) bearing the name *B. caryophyllum*. It was determined as this species by J.J. Smith. I examined this specimen and compared it with floral material of *B. baileyi* from Australia and they are representative of the same taxon. Accordingly, *B. caryophyllum* is here reduced to a synonym of *B. baileyi*.

*B. blumei* (Lindley) J.J. Smith, Orch. Java 459 (1905) & Fig. Atlas t. 351 (1911). Dist: Qco; NC, SB, PG, ID, PH?

*Ephippium ciliatum* Blume, Bijdr. 309, f. 65 (1825), non *Bulbophyllum ciliatum* Lindley (1830); *Cirrhopetalum blumii* Lindley, Gen. sp. orchid. pl. 59 (1830); *Bulbophyllum cuspidilingue* H.G. Reichb. in Walp., Ann. bot. syst. 6: 264 (1864), *nom. sup.*; *Phyllorchis blumei* (Lindley) Kuntze, Revis. gen. pl. 2: 276 (1891).

- Type: 'Cresit: in sylvis altioribus montis Salak [Java]', Jun., C. Blume s.n. (holo L). Notes: I am indepted to J.J. Vermeulen and P.J. Cribb for drawing my attention to the correct identity of this species.
- Bulbophyllum masdevalliacum* Kraenzl., Bot. Jahrb. Syst. 34: 251 (1904). Type: 'Neu-Guinea, Soron', Beccari 494 (lecto Fl, illus. seen); Syntype: 'Neu-Guinea, Kei-Inseln', Beccari 10211 (Fl), syn. nov.
- B. boonjee** B. Gray et D. Jones, Orchadian 8(2): 40-42 (1984). Type: 'Cook District: State Forest Reserve 310, Parish of Gadgarra, Swiper's Logging Area', 14 Sep. 1978, B. Gray 1005A (holo QRS). Dist: Qco.
- B. bowkettiae** Bailey, Proc. Roy. Soc. Queensland 1: 89 (1885). Type: 'On trees between Herberton and Mourilyan Harbour', J.W.R. Stuart s.n. (holo BRI!). Dist: Qkn, Qco.
- Bulbophyllum waughense* Rupp, Contr. New South Wales Natl. Herb. 1: 318 (1950). Type: 'Waugh's Pocket, Cairns District, North Queensland', Aug. 1949, A. Johnson s.n. (holo NSW!).
- B. bracteatum** Bailey, Bot. Bull. Dept. Agric. Queensland 4: 17-18 (Dec. 1891). Type: 'Queensland; Numminbah, Upper Nerang', H. Schneider s.n. (holo BRI!). Dist: Nnc, Nnt, Qmo.
- Adelopetalum bracteatum* Fitzg., J. Bot. 29: 152 (May 1891). Type: 'Tweed River, New South Wales', Dec., F.M. Bailey s.n. (holo not found; lectotype Fitzgerald's plate CBG! here designated).
- B. caryophyllum** J.J. Smith = *Bulbophyllum baileyi*.
- B. cilioglossum** R. Rogers et Nicholls = *Bulbophyllum radicans*.
- B. clavigerum** (Fitzg.) F. Muell. = *Bulbophyllum longiflorum*.
- B. clavigerum** Bailey = *Bulbophyllum longiflorum*.
- B. cochleatum** Schltr. = *Bulbophyllum sladeanum*.
- B. crassulifolium** (Cunn.) Rupp, Proc. Linn. Soc. New South Wales 62: 27-28, in obs (1937), nom. sup. nud. Notes: The name *Bulbophyllum crassulifolium* is based on *Dendrobium crassulaefolium* which was published in Edwards's Botanical Register (Cunningham, 1839). However, the description is too brief and vague for it to be possible to positively apply the name to a specific taxon. The original description is as follows; "Dendrobium ? crassulaefolium. Of this I have no specimens or description. It is a plant growing on trees in ravines of the Blue Mountains. Never seen in flower. The pseudobulbs are oval and one-leaved: the leaf is small and oval" Cunningham (1839). *B. shepherdii* is the first legitimate and therefore the correct name for the species currently called *B. crassulifolium*.
- B. cuspidilingue** H.G. Reichb. = *Bulbophyllum blumei*.
- B. elisae** (F. Muell.) Benth., Fl. Austral. 6: 289 (1873). Dist: Ncc, Ncc, Nnt, Qmo, Qdd.
- Cirrhopetalum elisae* F. Muell., Fragm. 6: 120 (1868). Type: 'In tractu Blue Mountains', C. Moore s.n. (lectotype MEL! here designated); Syntypes: 'In Nova Anglia prope Tenterfield', C. Stuart 714 (K! MEL!).
- B. evasum** Hunt et Rupp, Proc. Roy. Soc. Queensland 60: 58, t. 111, f. 1 (1949). Type: 'Zarda, Root's Creek track, Mt. Spurgeon via Cairns, North Queensland', 5 Jan. 1936, H. Flecker s.n. (holo NSW!). Dist: Qkn, Qco.
- B. exiguum** F. Muell., Fragm. 2: 72 (1860). Type: 'In truncis arborum muscosis silvarum ad Illawarra', T.W. Shepherd s.n. (lectotype MEL! here designated); Syntypes: 'oppidulum Parramatta versus in loco Foxground', W. Woolls s.n. (MEL!); 'secus flumen Clarence River', H. Beckler s.n. (MEL!). Dist: Nsc, Ncc, Nnc, Nnt, Qmo.
- Dendrobium exiguum* (F. Muell.) F. Muell., Fragm. 5: 95 (1865); *Phyllorchis exigua* (F. Muell.) Kuntze, Revis. gen. pl. 2: 677 (1891).
- Dendrobium caleyi* Cunn., Bot. Mag. Comp. 2: 377 (1837), nom. prov.
- B. exiguum** sensu F. Muell. (1875) = *Bulbophyllum argyropus*.
- B. exiguum** F. Muell. var. *dallachyi* Benth. = *Bulbophyllum wilkianum*.
- B. gadgarrense** Rupp, Proc. Roy. Soc. Queensland 60: 59, t. 111, f. 2 (1949). Types: 'Gadgarra [Reserve], Atherton Tableland, N. Queensland', 27 Jul. 1929, S. Kajewski s.n. (lectotype NSW! here designated, isolectotype BRI!); Syntypes: 'Gadgarra [Reserve], Atherton Tableland, N. Queensland', Sep. 1945, W.W. Abell s.n. (NSW not found); 'Mt. Imslay, N. Queensland', Sep. 1947, A.E. Johnson s.n. (NSW not found). Notes: Rupp indicated on the herbarium sheet that he considered the Kajewski collection the holotype. However, in the published description of *B. gadgarrense*, the Abell collection was cited as the type. Since the Abell collection could not be found and to eliminate any confusion in the future, the Kajewski collection is here designated as the lectotype of the species. Dist: Qkn, Qco.
- B. globuliforme** Nicholls, Orchidol. Zeylancia 5: 123-4, f. 1 (1938). Type: One mile this (NSW) side of the Queensland border, and about 1 mile west of the Sydney-Brisbane railway line, Jan. 1937, A.W. Dockrill s.n. (holo MEL!, iso NSW!). Dist: Nnt, Nnc, Qmo, Qwb.
- B. gracillimum** (Rolfe) Rolfe, Kew Bull. 412 (1907). Notes: I have followed and agree with the treatment of this species by Seidenfaden (1973). Dist: Qco; NC, SB, PG, ID, MY, SG, TH, BU.

*Cirrhopetalum gracillimum* Rolfe, Kew Bull. 34 (1895). Type: 'Burmah?', T.R. Jarvis, J. O'Brien & F. Horsman & Co s.n. (holo K!).

*Cirrhopetalum psittacoides* Ridley, J. Proc. Linn. Soc., Bot. 32: 280 (1896); *Bulbophyllum psittacoides* (Ridley) J.J. Smith, Orch. Ambon 84 (1905). Type: 'Freshwater Isl., Singapore', H.N. Ridley s.n. (holo BM!, iso BM! SING!).

*Cirrhopetalum leratii* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 9: 216 (1911); *Bulbophyllum leratii* (Schltr.) J.J. Smith, Bull. Jard. Bot. Buitenzorg. 28: 25 (1912). Type: 'Mt. Dzumac', Le Rat s.n. (holo B†).

*Cirrhopetalum warianum* Schltr., Repert. Spec. Nov. Regni Veg. 1: 890 (1913). Type: 'Kaiser-Wilhelms-Land: On trees in the forests near Adolfshafen, at the mouth of the Waria River, alt. c. 10 m', Apr. 1909, R. Schlechter 19215 (holo B†, iso K!).

*B. ichthyostomum* Colenso, Trans. & Proc. New Zealand Inst. 26: 319 (1894). Notes: A synonym of *B. pygmaeum* which is now considered a New Zealand endemic.

**B. intermedium** Bailey, Bot. Bull. Dept. Agric. Queensland 14: 12 (1896). Type: cult. Bowen Park, W. Soutter ex 'Hinchimbrook Island', Mar. 1891, [Anon] (holo BRI!). Notes: Previously listed as a synonym of *B. crassulifolium* (= *B. shepherdii*) but the description and specimen are clearly of another species possibly *B. gadgarrense* or one closely related to it. Dist: Qkn.

*Bulbophyllum shepherdii* (F. Muell.) F. Muell. var. *intermedium* (Bailey) Nicholls, North Queensland Naturalist 5(49): 4 (1937).

**B. johnsonii** Hunt, Proc. Roy. Soc. Queensland 60: 60, t. 5, f. 1 (1949). Type: cult. Ipswich, T.E. Hunt 179 ex 'Hambledon [Bellenden Ker], N. Queensland', Oct. 1947, A.E. Johnson s.n. (lectotype BRI! here designated). Notes: This is a variable species that is described as having flowers in which the lateral sepals are linear-lanceolate, acute 10 mm long, yellow with red striae at the base; dorsal sepal 8 mm long, lanceolate, acute, cucullate; petals c. 2 mm long, ovate, yellowish with three red raised striae, minutely glandular-dotted towards the tips and a labellum c. 8 mm long, linear, channelled, deep red with a yellow apex, minutely glandular and dotted below. *B. kirkwoodiae* and *B. whitei* were also described at the same time as *B. johnsonii*, the main differences given being in the size and colour of the flowers. In *B. kirkwoodiae* and *B. whitei* the flowers are smaller, sepals c. 6 mm long, petals 1.5 mm long, labellum c. 5 mm long, mostly yellow in colour with or without red striae and dots but the labellum is mostly red, and the tepals and labellum are obovate to obtuse rather than linear-lanceolate and acute. Research aimed at determining the significance, of the variation in size and colour of flowers found in *B. johnsonii*, is currently in progress (D. Jones pers. comm.). Dist: Qkn, Qco.

*Bulbophyllum kirkwoodiae* Hunt, Proc. Roy. Soc. Queensland 60: 60, t. 5, f. 1 (1949). Type: cult. Ipswich, Nov. 1947, T.E. Hunt 183 ex 'Chilverton, Atherton Tableland, N. Queensland', Jul. 1947, Kirkwood s.n. (lectotype BRI! here designated).

*Bulbophyllum whitei* Hunt et Rupp, Proc. Roy. Soc. Queensland 60: 64-5 (1949). Types: 'Mt. Bartle Frere', Jul. 1946, J.H. Wilkie s.n. (lectotype BRI! here designated); Syntype: 'Gadgarra' [Yungaburra, Atherton Tableland, North Queensland], Jul. 1946, W.W. Abell s.n. (NSW!).

*B. kirkwoodiae* Hunt = *Bulbophyllum johnsonii*.

**B. lageniforme** Bailey, Queensland Agric. J. 15: 494 (1904). Type: 'Bellenden-Ker Expedition', 1904, T. Meston s.n. (lectotype BRI! here designated, isolectotype K!); Syntypes: 'Summit of Bellenden-Ker, 1889, T. Meston s.n. (BM! BRI!). Notes: The lectotype is the only collection with flowers. Dist: Qkn, Qco.

*Bulbophyllum adenocarpum* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 8: 568 (1910). Type: 'Queensland; Auf dem Mount Bartle-Frere', 1891, S. Johnson s.n. (holo B†).

*B. layardii* (F. Muell. ex Kraenzl.) J.J. Smith = *Bulbophyllum longiflorum*.

*B. leratii* (Schltr.) J.J. Smith = *Bulbophyllum gracillimum*.

*B. lichenastrum* F. Muell. = *Dendrobium lichenastrum*.

*B. lichenastrum* sensu Fitzg. = *Dendrobium prenticei*.

**B. liliianiae** Rendle, J. Bot. 55: 308 (1917). Type: 'Bellenden Ker, summit', Mar. 1914, L.S. Gibbs 6304 (holo BM!). Dist: Qkn, Qco.

*Bulbophyllum revolutum* Dockr. et St. Cloud, Victorian Naturalist 74: 67, t. 4 (1957). Type: 'North Queensland, Mt. Lewis, near Mt. Molloy', Aug. 1955, J. Dyson-Holland s.n. (holo NSW!).

**B. longiflorum** Thouars, Orch. Iles Aust. Afr. Espec. III, t. 98 (1822). Type: 'Madagascar', du Petit Thouars s.n. (holo P, iso L!). Notes: For the list of synonyms of this species I have followed the work of Seidenfaden (1973), Cribb (1984) and Vermeulen (1987). The species was first described in 1786 as *Epidendrum umbellatum* by Forster from material collected on the Society Islands in the Pacific Ocean. The same species was described in 1822 by Thouars as *Bulbophyllum longifolium*, based on a plant collected from Mauritius in the Indian Ocean. In 1930 Lindley established the genus *Cirrhopetalum* and designated *Epidendrum umbellatum* as the

type for the genus. Using the 'Kew Rule', which was in use at the time, he re-named Forster's species as *C. thouarsii*. In 1830 Lindley again recognize the genus *Cirrhopetalum* as distinct from *Bulbophyllum*. At that time he described an altogether separate species under the name *Bulbophyllum umbellatum*. Considering Lindley was of the opinion that *Bulbophyllum* and *Cirrhopetalum* were separate genera, the action of using the epithet 'umbellatum' for the second species was legitimate. Under the articles of the IBCN, his actions preclude the later use of the epithet 'umbellatum' in *Bulbophyllum*. The current opinion is that *Cirrhopetalum* should only be treated as a section of *Bulbophyllum*. Accordingly, *B. longiflorum* is the first legitimate name for Forster's species in that genus. Should the genus *Cirrhopetalum* again be recognized as being distinct from *Bulbophyllum*, the correct name for the same species would be *Cirrhopetalum umbellatum*. Dist: Qco; NC, FJ, CK, PF, SB, PG, ID, PH, GU, MU, RE, SC, MG, ZA, ZW, MW, TZ, UG. *Epidendrum umbellatum* G. Forst., Ins. Austr. Prodr. 60 (1786); *Cymbidium umbellatum* (G. Forst.) Spreng., Pl. Min. Cog. Pugill. 2: 82 (1815); *Cirrhopetalum umbellatum* (G. Forst.) Reinw. ex J.D. Hook. et Arn., Bot. Beechey Voy. 71 (1832). Type: 'In Otoheite; Society Island', Apr.-Jul. 1769, [Banks & Solander] G. Forster 147 (holo BM!, iso M!).

*Cirrhopetalum thouarsii* Lindley in Edwards's, Bot. Reg. 10: t. 832 (1824), nom. illeg.

*Cirrhopetalum clavigerum* Fitzg., J. Bot. 21: 204 (1883); *Bulbophyllum clavigerum* (Fitzg.) F. Muell., Syst. cens. Aust. pl., Suppl. 1: 3 (1884); *Phyllum clavigera* (Fitzg.) Kuntze, Revis. gen. pl. 2: 677 (1891). Type: 'Cape York Peninsula', Jan., R.D. Fitzgerald s.n.? (holo BM not found; lectotype Fitzgerald's plate, here designated).

*Bulbophyllum clavigerum* Bailey, Proc. Roy. Soc. Queensland 1: 88 (1884), nom. sup.

*Cirrhopetalum layardii* F. Muell. et Kraenzl., Ost. Bot. 44: 210 (1894); *Bulbophyllum layardii* (F. Muell. et Kraenzl.) J. J. Smith, Bull. Jard. Bot. Buitenzorg 2: 8 (1912). Type: 'New Caledonia', R. Schlechter 15463 (holo B†, iso MEL!).

?*Bulbophyllum trisetum* Ames, Phil. J. Sci. 7: 142 (1912). Type: 'Philippines, Benquet', Bacani 15899? (holo AMES).

*Cirrhopetalum kenejianum* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 899 (1913). Type: 'Kaiser-Wilhelms-Land: On trees in the forests on the Kenejia [River], alt. c. 150 m', Oct. 1908, R. Schlechter 18462 (holo B†).

*Cirrhopetalum longiflorum* (Thouars) Schltr., Beih. Bot. Centralbl. 33(2): 420 (1915).

*Cirrhopetalum africanum* Schltr., Bot. Jahrb. Syst. 53: 573 (1915). Type: 'Tanzania, Rungwe District, Bomalakitana', Dec. 1910, A. Stolz 453 (lectotype Z! here designated, isolectotype L!); Syntypes: 'Massok', A. Stolz 1411 (B†); 'Kiwaro R.', A. Stolz 2406 (B† P!).

non *Epidendrum umbellatum* Sw., Kongl. Svenska Vetenskapsakad. Handl. 21: 241 (1800).

non *Zygopetalum umbellatum* Reinw., Syll. Pl. Nov. 2: 5 (1825-6).

non *Bulbophyllum longiflorum* H.G. Reichb., Naves Nov. App. 235 (1880).

non *Bulbophyllum umbellatum* Lindley, Wall. Cat. no. 1984 (1829), nom. nud.; Gen. sp. orchid. pl. 56 (1830).

non *Bulbophyllum longiflorum* Ridley, J. Proc. Linn. Soc., Bot. 32: 268 (1896).

non *Bulbophyllum clavigerum* Perrier, Not. Syst. 14: 153 (1951).

**B. macphersonii** Rupp, Victorian Naturalist 51: 81, f. (1934). Dist: Qkn, Qco.

*Bulbophyllum purpurascens* Bailey, Proc. Roy. Soc. Queensland 1: 88 (1885), non Teijsm. et Binnend (1862); *Osyricera purpurascens* (Bailey) Deane in Fitzg., Austral. orch. 2(5): [t. 12] (1893). Type: 'Growing on rocks between Herberton and Mourilyan Harbour', 2 May 1885, J.W.R. Stuart s.n. (lectotype BR! here designated, isolectotype K! MEL!).

*B. macphersonii* Rupp var. *spathulatum* Dockr. et St. Cloud = *Bulbophyllum sladeanum*.

*B. masdevalliaeum* Kraenzl. = *Bulbophyllum blumei*.

**B. minutissimum** F. Muell., Fragm. 11: 53 (1878). Dist: Nsc, Ncc, Nnc, Qmo, Qwb, Qpc, Qle.

*Dendrobium minutissimum* F. Muell., Fragm. 5: 95 (1865), nom. nud.; *Phyllum minutissima* (F. Muell.) Kuntze, Revis. gen. pl. 2: 677 (1891). Type: 'ad ostium fluminis Richmond-River', C. Fawcett s.n. (lectotype MEL! here designated, isolectotype BM! K!); Syntype: 'In the vicinity of Port Jackson', W.S. MacLeay s.n. (MEL!).

*Bulbophyllum moniliforme* F. Muell., Gard. Chron. (new ser.) 10: 818 (1878), nom. prov.

*B. moniliforme* F. Muell. = *Bulbophyllum minutissimum*.

**B. nematopodium** F. Muell., Fragm. 8: 30 (1873). Type: 'Ad sinum Rockingham's Bay in silvis', J. Dallachy s.n. (holo MEL!, iso K!). Dist: Qkn, Qco.

*Phylloorchis nematopoda* (F. Muell.) Kuntze, Revis. gen. pl. 2: 677 (1891).

**B. newportii** (Bailey) Rolfe, Orchid Rev. 17: 94 (1909). Dist: Qkn?, Qco.

*Sarcochilus newportii* Bailey, Queensland fl. 6: 2014 (1902). Type: 'Queensland, Mt. Alexandra', 20 Nov. 1902, H. Newport 20 (holo BRI!). Notes: The type of this species is described as having flowers with pink tepals and a labellum which is yellow with pink side-lobes. The segments are also acute rather than obovate. This is not the species previously interpreted as *B. newportii* by Dockrill (1969). I have seen photographs of living material of this species recently collected from north Queensland. It is quite distinct and easily distinguished by the closer pseudobulbs and pink colour of the flowers from the commoner *B. wilkianum* Hunt which has cream to light yellow-green flowers.

*Bulbophyllum trilobum* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 8: 455 (1910). Type: 'Broomfield River', E. Bauer s.n. (holo B†). Notes: The description of *B. trilobum* matches that of *B. newportii* rather than *B. wilkianum*.

*B. oncidiochilum* Kraenzl. = *Dendrobium bifalce*.

*B. prenticei* F. Muell. = *Dendrobium prenticei*.

*B. psittacoides* (Ridley) J.J. Smith = *Bulbophyllum gracillimum*.

*B. punctatum* Fitzg. = *Bulbophyllum baileyi*.

*B. purpurascens* Bailey = *Bulbophyllum macphersonii*.

*B. pygmaeum* (Smith) Lindley, Gen. sp. orchid. pl. 58 (1830). Notes: This species has been reported to occur in Australia, based on a sighting on Norfolk Island. The record cannot be substantiated by a voucher specimen and probably was a reference to a plant of *B. argyropus* rather than *B. pygmaeum*. Therefore, *B. pygmaeum* is here considered to be a New Zealand endemic.

**B. radicans** Bailey, Queensland Agric. J. 1: 81 (1897). Type: 'Range near Cairns', 1897, L.J. Nugent 116 (holo BRI!, iso K!). Notes: Near to *B. betchei* F. Muell. from New Caledonia. Dist: Qkn, Qco.

*Bulbophyllum cilioglossum* R. Rogers et Nicholls, Trans. & Proc. Roy. Soc. South Australia 59: 204, f. 1 (1935). Type: cult. Melbourne, Mar. 1934 ex 'North Queensland, Mount Fox', A. Glindeman s.n. (holo AD!).

*B. revolutum* Dockr. et St. Cloud = *Bulbophyllum lilianiae*.

**B. schillerianum** H.G. Reichb. in Otto, Hamb. Garten 16: 423 (1860). Type: [without locality], Schiller s.n. (holo W!). Notes: Although there are no collection details on the herbarium sheet, the plant material is clearly of the species previously known under the name *B. aurantiacum*. Unfortunately, the name *B. schillerianum* predates that of *B. aurantiacum* (a very appropriate name for the species) and therefore has priority. Dist: Nnc, Nnt, Qmo, Qwb, Qbn, Qpc, Qks, Qkn, Qco.

*Bulbophyllum aurantiacum* F. Muell., Fragm. 3: 39 (1862); *Dendrobium aurantiacum* (F. Muell.) F. Muell., Fragm. 7: 98 (1870); *Phylloorchis aurantiacum* (F. Muell.) Kuntze, Revis. gen. pl. 2: 677 (1891). Type: 'On trees and alternative creeks near Moreton Bay', W. Hill s.n. (holo MEL!), syn. nov.

*Dendrobium shepherdii* F. Muell. var. *platyphyllum* F. Muell., Fragm. 5: 209 (1866). Type: 'In truncis et rupibus ad originem fluvii Crocodile Creek Australiae orientalis tropicae', Bowman s.n. (holo K!), syn. nov.

*Bulbophyllum aurantiacum* F. Muell. var. *wattsii* Bailey, Queensland Agric. J. 31: 192, t. 126 (1913). Type: 'On trees, Herberton District', W.W. Watts s.n. (lectotype BRI! here designated); Syntype: 'Fresh water Creek near Cairns', Aug. 1894, L.J. Nugent s.n. (BRI not found), syn. nov.

**B. shepherdii** (F. Muell.) F. Muell., Fragm. 3: 40 (1862). Dist: Ncc, Nnc, Nnt, Qmo.

*Dendrobium shepherdii* F. Muell., Fragm. 1: 190 (1859); *Phylloorchis shepherdii* (F. Muell.) Kuntze, Revis. gen. pl. 2: 678 (1891). Type: 'Illawarra', T.W. Shepherd s.n. (holo MEL!).

*Bulbophyllum crassulifolium* (Cunn.) sensu Rupp, Proc. Linn. Soc. New South Wales 62: 27 (1937).

*B. shepherdii* (F. Muell.) F. Muell. var. *intermedium* (Bailey) Nicholls = *Bulbophyllum intermedium*.

**B. sladeanum** A. Hawkes, Lloydia 19: 93 (1956). Notes: Features of the flower in particular the spatulate lip, larger and longer segments; the elongate and porrect habit of the leaves, distinguish this species from *B. macphersonii*. Dist: Qkn, Qco.

*Bulbophyllum cochleatum* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 8: 455 (1910), non Lindley (1862). Type: 'Auf dem Mount Bellenden-Ker', 1891, S. Johnson s.n. (holo B†).

*Bulbophyllum macphersonii* Rupp var. *spathulatum* Dockr. et St. Cloud, North Queensland Naturalist 26(117): 4 (1957). Type: 'Davies Creek (Mareeba)', 20 May 1956, St. Cloud & J.H. Wilkie s.n. (holo NSW!), syn. nov.

*B. taylorii* F. Muell. = *Cadetia taylorii*.

*B. toressae* Bailey = *Dendrobium toressae*.

- B. trilobum* Schltr. = *Bulbophyllum newportii*.  
*B. tristum* Ames = *Bulbophyllum longiflorum*.  
*B. tuberculatum* Colenso, Trans. & Proc. New Zealand Inst. 16: 336 (1884). Notes: This species was formerly thought to occur in Australia, but it is now considered a New Zealand endemic. The plants found in Australia and previously identified as this species are referable to *B. argyropus*.  
*B. tuberculatum* sensu Clemesha = *Bulbophyllum argyropus*.  
***B. wadsworthii*** Dockr., Orchadian 1: 94, f. (1964). Type: 'Ravenshoe, north Queensland', 10 Oct. 1962, K. Wadsworth s.n. (holo BRI!). Dist: Qkn, Qco.  
*B. wanjurum* Hunt = *Bulbophyllum wilkianum*.  
*B. waughense* Rupp = *Bulbophyllum bowkettiae*.  
***B. weinthalii*** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 57: 95-6 (1933). Type: cult. 5 Apr. 1932 ex 'New South Wales, Dorrigo', Sep. 1931, F.A. Weinthal s.n. (holo AD!). Dist: Nnt, Qmo.  
*B. whitei* Hunt ex Rupp = *Bulbophyllum johnsonii*.  
***B. wilkianum*** Hunt, North Queensland Naturalist 14(82): 17 (1947). Type: 'Mt. Bartle Frere', Sep. 1946, J.H. Wilkie s.n. (holo BRI!). Notes: This is the species interpreted by Dockrill (1969) as *B. newportii*. However, the type of *B. newportii* is representative of another rarer species that can be distinguished by its pink flowers (see *B. newportii* for more detail). Dist: Qks, Qkn, Qco.  
*Bulbophyllum exiguum* F. Muell. var. *dallachyi* Benth., Fl. Austral. 6: 289 (1873). Type: 'Rockingham Bay', J. Dallachy s.n. (holo K!, iso MEL!), syn. nov.  
*Bulbophyllum wanjurum* Hunt, North Queensland Naturalist 14(82): 18 (1947). Type: 'Mt. Bartle Frere', Sep. 1946, J.H. Wilkie s.n. (holo BRI!), syn. nov.

## BURNETTIA

- Burnettia* Lindley, Gen. sp. orchid. pl. 517 (1840). Type species: *Burnettia cuneata* Lindley.  
***B. cuneata*** Lindley, Gen. sp. orchid. pl. 518 (1840). Type: 'Tasmania, Rocky Cape', Dec. 1937, R. Gunn 947 (holo K-L!, iso K! W!). Dist: Vwp, Vgi, Tas, Nsc, Ncc.  
*Lyperanthus burnettii* F. Muell., Fragm. 5: 96 (1865), nom. illeg.; *Caladenia cuneata* (Lindley) H.G. Reichb., Beitr. Syst. Pflanzenk. 67, in obs. (1871).

## CADETIA

- Cadetia* Gaud. in Freycinet, Voy. Uranie 422, t. 33 (1826). Type species: *Cadetia umbellatum* Gaud.  
***C. collinsii*** Lavarack, Austrobaileya 1(4): 381-2, f. 23a (1981). Type: cult. Brisbane, Feb. 1976 ex 'Rocky River, Cape York Peninsula', Sep. 1975, P.S. Lavarack 1742 (holo BRI!). Dist: Qco.  
*C. hispidula* sensu Fitzg. = *Cadetia taylori*.  
*C. hispidula* (F. Muell.) Dockr. = *Cadetia maideniana*.  
***C. maideniana*** (Schltr.) Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 424 (1912). Notes: This species bears a strong resemblance to *C. umbellatum* Gaud., the type of which I have seen at Paris, but the relationship is not clear and it needs further investigation. Dist: Qkn, Qco; PG, ID.  
*Dendrobium maidenianum* Schltr. in K. Schum. & Laut., Fl. Schutzgeb. Sudsee, Nachtrage 156 (1905), nom.; *Dendrobium hispidum* sensu F. Muell., Fragm. 7: 30 (1869), non A. Rich. (1832); *Cadetia hispidula* (F. Muell.) Dockr., J. Orchidees 2: 92 (1961). Type: 'On trees in Rockingham's Bay', J. Dallachy s.n. (holo MEL!, iso K!).  
*Cadetia taylori* sensu Fitzg., Austral. orch. 2(3): [t. 7] (1888), non (F. Muell.) Schltr. (1912).

- C. ruppii* St. Cloud = *Diplocaulobium glabrum*.  
***C. taylori*** (F. Muell.) Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 424 (1912). Dist: Qkn, Qco; PG.  
*Bulbophyllum taylori* F. Muell., Fragm. 8: 150 (1874); *Dendrobium hispidum* F. Muell. var. *taylori* (F. Muell.) Bailey, Queensl. fl. 5: 1532 (1902). Type: 'Ad flumen Bloomfield's River in silvis densis', N. Taylor s.n. (holo MEL!).  
*Dendrobium uniflos* Bailey, Proc. Roy. Soc. Queensland 1: 12 (1884). Type: 'Near Herberton', J.W.R. Stuart s.n. (holo BRI!).  
*Cadetia hispidum* sensu Fitzg., Austral. orch. 2(3): [t. 7] (1888), non A. Rich. (1832).  
*C. taylori* sensu Fitzg. = *Cadetia maideniana*.  
***C. wariana*** Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 426 (1912). Type: 'Kaiser-Wilhelms-Land; On trees in the mountain forests at Jaduna on the Waria River', Apr. 1909, R. Schlechter 19342 (syn B†; lectotype K!

here designated, isolectotype AMES, BO, G! L! MO, NSW, PR, S); Syntype: 'Kaiser-Wilhelms-Land: On trees and on rocks on [Mount] Mimi in the Waria Valley', Mar. 1908, R. Schlechter 17838 (B†). Dist: Qco; PG, ID?

## CALADENIA

*Caladenia* R. Br., Prod. 323 (1810). Type species: *Caladenia carneae* R. Br. (here designated).

*Leptoceras* (R. Br.) Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. liii (1840). Type species: *Caladenia menziesii* R. Br.

*Petalochilus* R. Rogers, J. Bot. 62: 65 (1924). Type: *non designatus*.

*C. alata* R. Br., Prod. 324 (1810). Type: 'Sydney, Port Jackson', 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! E! FI! K! W!). Dist: Vgi, Tas, Nsc, Nec, Nnc, Qmo; NZ.

*C. carneae* R. Br. var. *alata* (R. Br.) Domin, Bilb. Bot., Stuttgart Heft. 85: 549 (1915).

*Caladenia minor* J.D. Hook. var. *exigua* Cheesem., Man. New Zealand fl. 688 (1906); *Caladenia exigua* Cheesem., Trans. & Proc. New Zealand Inst. 45: 96 (1913); *Caladenia catenata* (Smith) Druce var. *exigua* (Cheesem.) W.M. Curtis, Student's Fl. Tas. pt. 4A: 133 (1979). Type: 'New Zealand, Kaitaia, Mongonui County', R.H. & H.B. Matthews s.n. (lecto AK, isolectotype K!), syn. nov.

*Caladenia holmesii* Rupp, Victorian Naturalist 70: 179 (1954). Type: 'Wyong', Sep. 1953, L. Holmes s.n. (holo NSW!), syn. nov.

*C. alba* R. Br. = *Caladenia catenata*.

*C. alba* R. Br. var. *picta* Nicholls = *Caladenia picta*.

*C. alpina* R. Rogers = *Caladenia lyallii*.

*C. amplexans* A.S. George, Nuytsia 5(1): 53-4, t. 1, A-D (1984). Type: '53 miles (c. 85 km) NE of Wubin, Western Australia', 20 Aug. 1960, A.S. George 900 (holo PERTH!). Notes: Illustrated on page 176 of Hoffman & Brown (1984). Dist: Wro, Wco, Wav, Wau, Wir.

*C. angustata* Lindley = *Caladenia gracilis*.

*C. aphylla* Benth., Fl. Austral. 6: 387 (1873). Type: 'King George's Sound', Jan.-Feb. 1854, W.H. Harvey s.n. (lecto K!); Syntype: 'Forest Hill', Muir s.n. (K!). Notes: Illustrated on page 156 of Hoffman & Brown (1984). Dist: Wda, Wey.

*C. arenaria* Fitzg., Austral. orch. 1(7): [t. 8] (1882). Types: 'Edwards, Murrumbidgee, Yanko and Columbo Rivers, growing on the sand hills among pines', Sep., R.D. Fitzgerald s.n. (holo & iso BM!). Dist: Nss, Nsc, Nsp.

*Caladenia patersonii* R. Br. var. *arenaria* (Fitzg.) Nicholls, Victorian Naturalist 59: 189 (1943). Notes: The combination was made on the false assumption that the plants found at Wonthaggi, Victoria were identical to that described as *C. arenaria* Fitzg. The Wonthaggi plants are an undescribed species (D. Jones and G. Carr pers. comm.).

*C. atkinsonii* Rodway, Pap. & Proc. Roy. Soc. Tasmania for 1922, 77, t. 8 (1923). Type: 'Natone Hill, Lindisfarne, Tasmania', Oct. 1922, H.B. Atkinson s.n. (holo ?HO). Dist: Tas. (where presumed extinct).

*C. atroclavia* D. Jones et M. Clements, Austrobaileya 2(5): 547-553 (1988). Type: 'Queensland. Darling Downs District: Wyberba, in open forests in gravelly soil', 11 Oct. 1987, D.L. Jones 2485 (holo BRI!). Dist: Qdd.

*C. audasii* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 51: 295 (1927). Type: 'Victoria; Mt. McIvor, near Bendigo', 1896, J.W. Audas s.n. (holo MEL!). Dist: Vnp.

*C. aurantiaca* (R. Rogers) Rupp, Proc. Linn. Soc. New South Wales 71: 280 (1947). Dist: Vgi.

*Caladenia carneae* R. Br. var. *aurantiaca* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 46: 154 (1922). Type: 'Alberton, Gippsland', Oct. 1920, A.J. Tadgell s.n. (holo AD!).

*C. barbarossa* H.G. Reichb., Beitr. Syst. Pflanzenk. 64 (1871). Types: 'Swan River', J. Drummond 861 (lecto W!, isolectotype G! K! P!). Notes: Illustrated on page 150 of Hoffman & Brown (1984). Dist: Wda, Wav, Wey, Wro, Wco.

*C. barbata* Lindley = *Caladenia deformis*.

*C. behrii* Schldl., Linnaea 20: 569 (1847). Type: Mt. Lofty Ranges?, O. Behr s.n. (holo ?B† not found); 'Chandler's Hill Ridge, W of Clarendon, South Australia', Sep. 1953, R.C. Nash s.n. (neotype CBG! here designated). Dist: Sls.

*C. bicalliata* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 33: 17 (1909). Type: 'Kingscote, Kangaroo Island, South Australia', 20 Sep. 1908, J. Rogers s.n. (holo AD!). Dist: Wav, Sep, Syp, Sls, Ski, Smb, Sse.

*Caladenia filamentosa* R. Br. var. *bicalliata* (R. Rogers) J. Weber et R. Bates in Black, Fl. S. Austral. (ed. 3) 1: 395 (1978).

*C. bicolor* R. Rogers = *Caladenia radialis*.

- C. brachyscapa** G.W. Carr, Muelleria 6(6): 439-442, f. 1 (1988). Type: 'Nirrand, c. 32 km south-east of Warrnambool, Victoria', 16 Oct. 1959, Mathieson family & A.C. Beaglehole 18642 (holo MEL). Dist: Vwp (where possibly extinct).
- C. brunonis** (Endl.) H.G. Reichb. = *Elythranthera brunonis*.
- C. bryceana** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 54: 46 (1930). Type: 'Gnowangerup, Western Australia', 3 Sep. 1914, B. MacIntyre s.n. (holo AD!). Notes: Illustrated on page 144 of Hoffman & Brown (1984). Dist: Wda, Wro, Wey.
- C. caerulea** R. Br. var. *caerulea* Prod. 324 (1810). Type: 'Port Jackson, Sydney', May 1802, Jun. 1803, Sep. 1804, R. Brown s.n. (lectotype specimen (a) BM! here designated); Syntypes: 'Port Jackson', 1802-3-5, R. Brown s.n. (BM! E! G! K! P!). Dist: Wey, Wro, Vwh, Vgi, Nsc, Nst, NSS, Can, Ncc, Nct, Nnc.
- var. *heliotropica* Rupp, Proc. Linn. Soc. New South Wales 73: 136 (1948). Type: 'Goonoo Forest, Dubbo, N.S.W.', Oct. 1947, Althofer s.n. (holo NSW!). Dist: Ncs.
- C. caesarea** (Domin) M. Clements et Hopper, stat. nov.
- Caladenia filamentosa* R. Br. var. *caesarea* Domin, J. Proc. Linn. Soc., Bot. 41: 251 (1912). Type: 'Bridgetown to Kojonup & Slab Hut Gully', 1910, A. Dorrien-Smith s.n. (holo K!, iso K! L!). Notes: Differs from other taxa in the *C. filamentosa* complex in its perianth which is yellow with prominent dark brown stripes, the labellum protruding with the apex often only partially recurved, and the labellum margins sparsely serrate and usually downcurved. Illustrated on page 82 of Hoffman & Brown (1984). Dist: Wda, Wav, Wro?, Wey?
- C. cairnsiana** F. Muell., Fragm. 7: 31 (1869). Type: 'N. of Stirling Ranges', F. Mueller s.n. (holo MEL!, iso K!). Notes: Illustrated on page 138 of Hoffman & Brown (1984). Dist: Wda, Wav, Wey, Wro, Wco, Wau, Wcv?
- C. calcicola** G.W. Carr, Muelleria 6(3): 185-191, f. 1 (1986). Type: 'Bat's Ridges, c. 10 km west of Portland, Victoria', 13 Oct. 1984, G.W. Carr 10049 (holo MEL!, iso AD! CANB! CBG! MEL! PERTH!). Dist: Vwp.
- C. cardiochila** Tate, Trans. & Proc. Roy. Soc. South Australia 9: 60, t. 2 (1887). Type: 'Sandy ground under the shade of casuarinas and eucalypts, Golden Grove', 2 Oct. 1886, Collected by various members of the Field Naturalists Club s.n. (lectotype AD! here designated); Syntype: 'Barraba Scrub, Hundred of Grace, 1865, S. Dixon s.n. (AD!). Notes: Illustrated on page 110 in Jones (1988). Dist: Sep, Syp, Sm b, Sse, Vnp, Vwp, Vgi.
- C. carnea** R. Br. var. *carnea* Prod. 324 (1810). Type: 'Port Jackson', 1803-5, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype E! G! L! K-L! MEL! W!). Syntypes: 'Hervey's Bay, Sandy Cape', 30-31 Jul. 1802, R. Brown s.n. (BM!); 'Port Jackson', Oct. 1803, R. Brown s.n. (BM!). Dist: Sep, Sfr, Sln, Syp?, Sls, Ski, Smb, Sse, Vnp, Vwp, Vwh, Veh, Vgi, Tas, Nsc, Nst, Can, NSS, Ncc, Nct, Ncs, Nnc, Nnt, Nns, Qmo, Qwb, Qeo; NZ, NC.
- Caladenia catenata* (Smith) Druce forma *carnea* (R. Br.) Halle, Fl. Nov.-Cal. 8: 460 (1977), syn. nov.
- Caladenia carnea* R. Br. var. *bartlettii* Hatch, Trans. & Proc. Roy. Soc. New Zealand 77: 402 (1949). Type: 'Wade River, Silverdale', 8 Oct. 1947, F.W. Bartlett (holo in herb. Hatch 567, iso NSW!).
- var. *attenuata* W. Brinsley, Orchadian 3(2): 16, f. (1968). Type: 'Crest of gravelly hills at about 2,000ft, Durama, Nth. of Bathurst', 28 Oct. 1964, B. Whitehead, C.K. Ingram, P. Althofer & W. Brinsley s.n. (holo NSW!). Dist: Ncs.
- var. *gigantea* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 51: 13 (1927). Type: 'Smith's Lake, Bulahdelah', Sep. 1924, H.M.R. Rupp s.n. (holo AD!). Dist: Nnc.
- Caladenia catenata* (Smith) Druce var. *gigantea* (R. Rogers) W.M. Curtis, Student's Fl. Tas. pt. 4A: 133 (1979), syn. nov.
- var. *gracillima* Rupp, Queensland Naturalist 11(4): 86-87, f. (1940). Type: 'Yandina, South Queensland', N. McKie s.n. (holo NSW!). Dist: Qmo.
- var. *ornata* Nicholls, Victorian Naturalist 62: 61, f. G-J (1945). Type: 'Gorae, via Portland, Victoria', Oct. 1943, C. Beaglehole s.n. (holo MEL). Dist: Vwp.
- var. *subulata* Nicholls, Victorian Naturalist 62: 61, f. A-F (1945). Type: Portland, Victoria, Oct.-Nov. 1913(?), E. Mellblom s.n. (holo MEL). Dist: Vwp.
- C. carnea** R. Br. var. *alata* (R. Br.) Domin. = *Caladenia alata*.
- C. carnea** R. Br. var. *alba* (R. Br.) Benth. = *Caladenia catenata*.
- C. carnea** R. Br. var. *aurantiaca* R. Rogers. = *Caladenia aurantiaca*.
- C. carnea** R. Br. var. *bartlettii* Hatch = *Caladenia carnea* var. *carnea*.
- C. carnea** R. Br. var. *fusca* H.G. Reichb. = *Caladenia fusca*.
- C. carnea** R. Br. var. *minor* (J.D. Hook.) Hatch = *Caladenia minor*.
- C. carnea** R. Br. var. *minor* (J.D. Hook.) Hatch forma *calliniger* Hatch = *Caladenia iridescens*.

- C. carnea* R. Br. var. *pygmaea* R. Rogers, pro parte max. = *Caladenia minor*.  
*C. carnea* R. Br. var. *pygmaea* R. Rogers, pro parte min. = *Caladenia pusilla*.  
*C. carnea* R. Br. var. *quadriseriata* Benth. = *Caladenia gracilis*.
- C. catenata*** (Smith) Druce, Rep. Bot. Exch. Cl. Brit. Isles, Suppl. 2: 611 (1917). Dist: Vgi, Nsc, Nec, Nnc, Qmo, Qwb, Qpc?; NZ, NC.  
*Arethusa catenata* Smith, Exotic Bot. 2: 89, t. 104 (1805). Type: 'Port Jackson, New South Wales', J. White s.n. (holo LINN!).  
*Caladenia alba* R. Br., Prod. 323 (1810); *Caladenia carnea* R. Br. var. *alba* (R. Br.) Benth., Fl. Austral. 6: 387 (1873). Type: 'Port Jackson', 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated; isolectotype AD! BM! Fl! K-L! W!); Syntype: 'Hervey's Bay, Sandy Cape', 31 Jul. 1802, R. Brown s.n. (BM!).
- C. catenata* (Smith) Druce var. *exigua* (Cheesem.) W.M. Curtis = *Caladenia alata*.  
*C. catenata* (Smith) Druce var. *gigantea* (R. Rogers) W.M. Curtis = *Caladenia carnea* var. *gigantea*.  
*C. catenata* (Smith) Druce var. *minor* (J.D. Hook.) W.M. Curtis = *Caladenia minor*.  
*C. catenata* (Smith) Druce forma *carnea* (R. Br.) Halle = *Caladenia carnea* var. *carnea*.
- C. caudata*** Nicholls, Victorian Naturalist 64: 231 (1948). Types: 'Tasmania, Bellerive', Oct. 1947, W.M. Curtis s.n. (holo MEL not found); 'Tasmania, Bellerives', Sep. 1945, W. M. Curtis s.n. (syn MEL not found); 'Railton, Sir W. Somerset Reserve', 4 Nov. 1984, M.A. Clements 3557 (neotype CBG! here designated). Dist: Tas.
- C. clavigera*** Cunn. ex Lindley, Gen. sp. orchid. pl. 422 (1840). Type: 'N. Hollandia; Vale of Clwyd, Blue Mountains', Oct. 1825, A. Cunningham s.n. (lectotype specimen (48b) K-L! here designated, isolectotype K!); Syntype: 'Tasmania', R. Gunn 344 (K!). Dist: Sse, Vwp, Vwh, Veh, Vgi, Tas, Nct.
- Caladenia cordiformis* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 44: 330 (1920). Type: 'Ringwood, Victoria', 30 Sep. 1920, E.E. Pescott ex R. Rogers 3736 (lectotype AD! here designated); Syntypes: 'Cheltenham, Bendigo, Geelong, Castlemaine, Grampians, Orbost, Greensborough', E.E. Pescott s.n. (AD!); 'Oakleigh, Warrandyte, Healesville', C. French s.n. (AD!); 'Gisborne', G. Lyall s.n. (AD!); 'Sale', T.S. Hart s.n. (AD!); 'Blackburn', E. Coleman s.n. (AD!); 'Queenscliff', G. Coghill s.n. (AD!).
- C. clavigera* sensu Fitzg. = *Caladenia fitzgeraldii*.
- C. concinna*** (Rupp) D. Jones et M. Clements, stat. nov.
- Caladenia dilatata* R. Br. var. *concinna* Rupp, Proc. Linn. Soc. New South Wales 53: 554 (1928). Type: 'Griffith, New South Wales', 29 Aug. 1927, G.V. Scammell s.n. (holo & iso NSW!). Notes: Differs from *C. toxochila* in having a more widely flared labellum which is distinctly three lobed, longer marginal teeth on the lateral lobes and laminar calli congested in six irregular rows; a column with fewer red striations on the interior surface; and overall the flowers are generally much paler in colour. Illustrated on page 617 in Jones (1988). Dist: Nsp.
- C. concolor*** Fitzg., Austral. orch. 1(7): [t. 8] (1882). Type: 'Granite hills near Albury', Oct., R.D. Fitzgerald s.n. (holo not found; lectotype Fitzgerald's plate, here designated). Dist: Sse, Vnp, Vwh, Veh, Nss.
- Caladenia patersonii* R. Br. var. *concolor* (Fitzg.) J.H. Willis et Court, Muelleria 1: 45 (1956), syn. nov.
- C. congesta*** R. Br., Prod. 324 (1810). Type: 'Port Dalrymple', Nov. 1804, R. Brown s.n. (lectotype specimen (a) BM! here designated). Dist: Vwp, Vwh, Veh, Vgi, Tas, Nst, Can, Nct.
- C. cordiformis* R. Rogers = *Caladenia clavigera*.
- C. corynephora*** A.S. George, Nuytsia 1(2): 158 (1971). Type: 'Banks of the Donnelly River ±15 miles west of Pemberton, W.A.', 7 Dec. 1957, A.S. George s.n. (holo PERTH!, iso K! MEL!). Illustrated on page 122 of Hoffman & Brown (1984). Dist: Wda.
- C. crebra*** A.S. George, Nuytsia 1(2): 160 (1971). Type: '24 miles south of Dongara, W.A., in sandy soil with *Eucalyptus erythrocorys* and scrub', 30 Aug. 1969, A.S. George 9621 (holo PERTH!, iso K! MEL! NSW!). Notes: Illustrated on page 120 of Hoffman & Brown (1984). Dist: Wir.
- C. cristata*** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 47: 337 (1923). Type: 'Western Australia, Murchison District', 18 Sep. 1923, E.S. Simpson s.n. (holo AD!). Dist: Wav.
- C. cucullata*** Fitzg., Austral. orch. 1(2): [t. 4] (1876). Type: 'Boorawa', Oct., G.H. Sheaffe s.n. (syn not found; lectotype Fitzgerald's plate K! here designated); Syntype: 'Molong', Ross s.n. (not found). Dist: Sse, Vnp, Vwh, Veh, Nst, Can, Nct, Nns.
- C. cuneata* (Lindley) H.G. Reichb. = *Burnettia cuneata*.

- C. deformis** R. Br., Prod. 324 (1810). Type: 'Tasmania, Port Dalrymple', Paterson s.n. (lectotype specimen (a) BM!, here designated). Notes: Illustrated on page 182 of Hoffman & Brown (1984). Dist: Wir, Wda, Wav, Wey, Wro, Wco, Sep, Sfr, Sln, Syp, Sls, Ski, Sse, Vnp, Vwp, Vew, Tas, Nsp, Ncs.
- Caladenia unguiculata* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. li (1840). Type: 'Swan River', 1839, J. Drummond s.n. (lecto K-L!, isolecto K!). Syntype: Vasse River, Molloy s.n. (K-L!).
- Caladenia barbata* Lindley, Gen. sp. orchid. pl. 418 (1840). Type: 'N. Hollandia; Tasmania', R. Gunn 347 (holo K-L!), nom. illeg.
- Caladenia deformis* R. Br. var. *albiflora* Benth., Fl. Austral. 6: 389 (1873). Types: 'W. Australia. Point Henry', F. Mueller s.n. (syn not found); 'Lake Muir: Swan River', J. Drummond s.n. (syn not found); 'Swan River', Preiss 2191 (syn not found).
- Caladenia deformis* R. Br. var. *alba* Gulfoyle, Australian Plants 89 (1911), nom. nud.
- C. deformis* R. Br. var. *alba* Gulfoyle = *Caladenia deformis*.
- C. deformis* R. Br. var. *albiflora* Benth. = *Caladenia deformis*.
- C. denticulata** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. lii (1840). Type: 'Swan River', 1839, J. Drummond s.n. (lectotype specimen (14a) K-L! here designated; isolectotype BM! G!). Notes: Illustrated on page 80 of Hoffman & Brown (1984). Dist: Wir, Wda, Wav, Wey, Wro, Wco, Wau, Wcv?
- Caladenia filamentosa* R. Br. var. *denticulata* (Lindley) H.G. Reichb., Beitr. Syst. Pflanzenk. 66 (1871), syn. nov.
- C. dilatata** R. Br., Prod. 325 (1810). Type: 'Port Dalrymple', R. Brown s.n. (lectotype specimen (a) BM! here designated). Dist: Smb, Sse, Vma, Vnp, Vwh, Vwp, Veh, Vgi, Tas, Nsc, Nst, Can, Nss, Nsp, Ncc, Nct, Ncs, Nns, Nnp, Qdd.
- Caladenia patersonii* R. Br. var. *dilatata* (R. Br.) Benth., Fl. Austral. 6: 382 (1873).
- C. dilatata* R. Br. var. *concinna* Rupp = *Caladenia concinna*.
- C. dilatata* R. Br. var. *falcata* Nicholls = *Caladenia falcata*.
- C. dilatata* R. Br. var. *rhomboidiformis* E. Coleman = *Caladenia rhomboidiformis*.
- C. dilatata* R. Br. var. *stricta* R. Bates = *Caladenia stricta*.
- C. dimorpha** Fitzg., Austral. orch. 1(1): [t. 3] (1875). Type: 'Swampy flats on the tops of mountains & on the stony talli of the cliffs known as "walls" round Bowenfels', Oct., R.D. Fitzgerald s.n. (holo not found; lectotype Fitzgerald's plate K! here designated). Dist: Vgi, Veh, Nst, Can, Nct, Ncs.
- Caladenia praecox* Nicholls, Victorian Naturalist 43: 156-157 (1926); *Caladenia testacea* R. Br. var. *praecox* (Nicholls) Nicholls, Victorian Naturalist 55: 168 (1939). Type: 'Victoria, Croydon', Aug. 1926, W.H. Nicholls s.n. (lectotype MEL! here designated); Syntypes: 'Bayswater, Ringwood, Greensborough, and Diamond Creek', A.B. Braine s.n. (MEL), syn. nov.
- C. diphylla* (R. Br.) H.G. Reichb. = *Chiloglottis diphylla*.
- C. discoidea** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. lii (1840). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L!, iso K!). Notes: Illustrated on page 164 of Hoffman & Brown (1984). Dist: Wir, Wda, Wav, Wey, Wro.
- C. dorrienii** Domin, J. Proc. Linn. Soc., Bot. 41: 251, t. 12, f. 23 (1912). Type: 'Bridgetown to Kojonup and Slab Hut Gully', 1910, A. Dorrien-Smith s.n. (holo K!). Notes: Illustrated on page 76 of Hoffman & Brown (1984). Dist: Wda, Wav.
- Caladenia filamentosa* R. Br. var. *dorrienii* (Domin) A.S. George, Nuytsia 1(2): 170 (1971).
- Caladenia filamentosa* R. Br. var. *pallens* Benth., Fl. Austral. 6: 381 (1873). Type: 'Swan River', J. Drummond 442 (lectotype K! here designated, isolectotype BM! G!); Syntype: 'Swan River', Mylne s.n. (K!), syn. nov.
- C. doutchiae** O. Sarg., J. Bot. 59: 175 (1921). Type: 'Western Australia, Datatine east Katanning', Sep. 1919, L. Doutch ex O.H. Sargent 822 (holo PERTH, iso BM!). Notes: Illustrated on page 146 of Hoffman & Brown (1984). Dist: Wav, Wro, Wau, Wco, Wey.
- C. drummondii** Benth., Fl. Austral. 6: 383 (1873). Type: 'Swan River', J. Drummond s.n. (holo K!). Notes: Illustrated on page 86 of Hoffman & Brown (1984). Dist: Wro, Wav.
- Caladenia glossodiphylloides* Rupp et Erickson, West Australian Naturalist 4: 65 (1953). Type: 'Western Australia, Wongan Hills', 10 Jun. 1953, R. Erikson s.n. (holo PERTH).
- C. echidnachila** Nicholls, Pap. & Proc. Roy. Soc. Tasmania for 1932: 13, t. 6 (1933). Type: 'Lenah Valley, Hobart', H.M. Atkinson s.n. (holo HO, iso MEL?!). Dist: Tas., Vgi?
- C. elliptica* (R. Br.) H.G. Reichb. = *Rimacola elliptica*.
- C. elongata* Lindley = *Caladenia latifolia*.
- C. emarginata* (Lindley) H.G. Reichb. = *Elythranthera emarginata*.

**C. eminens** (Domin) M. Clements et D. Jones, stat. nov.

*Caladenia longicauda* Lindley var. *eminens* Domin, J. Proc. Linn. Soc., Bot. 41: 253 (1912). Type: 'Mallet, W.A.', 1910, A. Dorrien-Smith s.n. (holo & iso K!). Notes: This is the common large *Caladenia*, with white flowers, that was previously known as *C. patersonii* var. *longicauda* (Lindley) R. Rogers. Illustrated on page 62 of Hoffman & Brown (1984) and on page 618 in Jones (1988). Dist: Wir, Wda, Wav, Wro, Wey.

**C. ensata** Nicholls, Victorian Naturalist 64: 138, f. (1947). Type: 'Abundant in very heavy scrub, King River, adjacent to Balleymena Guest House and along granite slopes westward (1.5 miles)', Oct. 1946, W.H. Nicholls s.n. (holo MEL!), iso PERTH). Dist: Wda, Wav, Wey.

**C. X ericksoniae** Nicholls, Victorian Naturalist 66: 214, f. E (1950). Type: 'Bolgart, W.A.', 27 Sep. 1949, R. Erickson s.n. (holo MEL!). Notes: A natural hybrid between *C. cairnsiana* and one of the taxa within the *C. denticulata* group. Notes: Illustrated on page 90 of Hoffman & Brown (1984). Dist: Wda, Wav, Wro, Wey.

**C. exigua** (Cheesem.) Cheesem. = *Caladenia alata*.

**C. falcata** (Nicholls) M. Clements et Hopper, stat. nov.

*Caladenia dilatata* R. Br. var. *falcata* Nicholls, Victorian Naturalist 65: 268, f. (1949). Type: 'Kojonup, W.A.', 26 Sep. 1948, W.H. Nicholls s.n. (holo & iso MEL!). Notes: Differs from other taxa in the *C. dilatata* complex in its upturned lateral sepals, the labellum lamina uniformly yellow-green except for the dark maroon apex, and calli stopping short of the mid-lobe. Illustrated on page 128 of Hoffman & Brown (1984) as *Caladenia* sp. Dist: Wda, Wav, Wey, Wro.

**C. ferruginea** Nicholls, Victorian Naturalist 64: 136, f. (1947). Type: 'Armidale, Western Australia', Sep. 1946 W.H. Nicholls s.n. (lecto MEL!); Syntype: 'between Yarloop and Cookernup', Oct. 1946, W.H. Nicholls s.n. (MEL!). Notes: Illustrated on page 108 of Hoffman & Brown (1984) as *Caladenia* sp. Dist: Wda.

**C. filamentosa** R. Br. var. *filamentosa* Prod. 324 (1810). Type: 'Tasmania, Port Dalrymple', 1805, Paterson s.n. (lectotype specimen (a) BM! here designated, isolectotype BM!). Dist: Vwp?, Vgi?, Veh, Tas, Can, Nss, Ncs, Nns, Qdd.

var **tentaculata** R. Rogers, Fl. S. Austral. (ed. 1) 1: 138 (1922). Type: 'Coroona Hill, towards Gawler Ranges', Aug. 1889, W. Cleland s.n. (holo AD!). Dist: Wro, Wey, Wco, Sep, Sfr, SIn, Syp, Ski, Smb, Sse, Vma, Vnp, Vwp.

*Caladenia tentaculata* Tate, Trans. & Proc. Roy. Soc. South Australia 12: 130 (1889), non Schldl. (1847).

**C. filamentosa** sensu Lindley = *Caladenia lindleyana*.

**C. filamentosa** R. Br. var. *bicalliatata* (R. Rogers) J. Weber et R. Bates = *Caladenia bicalliatata*.

**C. filamentosa** R. Br. var. *caesarea* Domin = *Caladenia caesarea*.

**C. filamentosa** R. Br. var. *denticulata* (Lindley) H.G. Reichb. = *Caladenia denticulata*.

**C. filamentosa** R. Br. var. *dorrienii* (Domin) A.S. George = *Caladenia dorrienii*.

**C. filamentosa** R. Br. var. *filifera* (Lindley) H.G. Reichb. = *Caladenia filifera*.

**C. filamentosa** R. Br. var. *pallens* Benth. = *Caladenia dorrienii*.

**C. filifera** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. lii (1840). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L!, iso BM! E! Fl! L!). Notes: Illustrated on page 98 of Hoffman & Brown (1984). Dist: Wda, Wav, Wro.

*Caladenia filamentosa* R. Br. var. *filifera* (Lindley) H.G. Reichb., Beitr. Syst. Pflanzenk. 66 (1871), syn. nov.

**C. fimbriata** (Lindley) H.G. Reichb. = *Leporella fimbriata*.

**C. fitzgeraldii** Rupp, Victorian Naturalist 58: 199 (1942). Type: 'Near Mudgee, and near Bathurst', W. Woolls s.n. (holo Fitzgerald's plate of *C. clavigera*). Notes: Rupp maintained that the specimens illustrated by Fitzgerald were not representative of *C. clavigera* Cunn. ex Lindley and that they differed from *C. cordiformis*. Accordingly he gave Fitzgerald's plants the name *C. fitzgeraldii*. There has been much confusion about the correct application of the name *C. fitzgeraldii* since that time. In fact Rupp was correct in his interpretation of these taxa but it was only recently after seeing fresh material of both *C. clavigera* and *C. fitzgeraldii*, collected from near the type localities for each, was it possible to confirm the existence of *C. fitzgeraldii*. This species differs from *C. clavigera* in having thicker and longer clubbed osmophores, a broader labellum with a prominent marginal fringe, and narrower calli. Dist: Nct.

**C. flava** R. Br., Prod. 324 (1810). Type: 'King George's Sound, New Holland', A. Menzies s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! E!). Notes: Illustrated on page 160 of Hoffman & Brown (1984). Dist: Wir, Wda, Wav, Wro, Wey.

**C. fragrantissima** D. Jones et G.W. Carr, nom. et stat. nov.

*Caladenia patersonii* R. Br. var. *suaveolens* Nicholls, Victorian Naturalist 57: 83 (1940). Type: 'Portland', Nov. 1933, F. Mellblom & D. Lesley s.n. (lectotype MEL! here designated). Notes: Differs from *C. patersonii* in having greenish rather than cream or pale yellow flowers with blackish, glands on the perianth segments,

particularly towards the apices, and by its strong floral fragrance. In raising this taxon to specific rank a new name was needed because the epithet 'suaveolens' had already been used by Reichenbach when he erroneously placed *Lyperanthus suaveolens* in *Caladenia*. The specific epithet was chosen because the flowers of this species emit a strong pleasant fragrance (D. Jones pers. comm.). Dist: Vwp.

**C. fuscata** (H.G. Reichb.) M. Clements et D. Jones, stat. nov.

*Caladenia carnea* R. Br. var. *fuscata* H.G. Reichb., Beitr. Syst. Pflanzenk. 63 (1871). Type: 'Australasia', Huegel s.n. (holo W!). Notes: Differs from *C. carnea* in having small solitary flowers, a narrow labellum with pronounced, forward-protruding lateral lobes embracing the small column, and small deflexed acute mid-lobe. Small reddish-brown glands are prominent on the outer surface of the perianth segments, giving a marked brownish colouration from which the species derives its name. This species has long been confused with *C. carneae* but the two taxa are easily recognized and in general occupy different habitats. *C. fuscata* most commonly is found in dry *Eucalyptus* woodlands on the western side of the Great Divide in eastern Australia while *C. carneae* tends to favour wetter areas near the coast and in the ranges. Dist: Veh, Vnp?, Nst, Can, Nss, Nsp, Ncc, Nct, Ncs, Nns, Nnp?, Qdd?

**C. gemmata** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. lii (1840). Type: 'Swan River', 1839, J. Drummond s.n. (lecto K-L!, isolectotype E! Fl! K!); Syntype: 'Swan River', J. Mangles s.n. (K-L!). Notes: Illustrated on page 180 of Hoffman & Brown (1984). Dist: Wir, Wda, Wav, Wro, Wey.

*Caladenia pellita* Endl. in Lehm., Pl. Preiss. 2: 8 (1846). Type: Near Perth, 23 Sep. 1839, Preiss 2192 (lecto W!, isolectotype G! W!).

*C. gemmata* Lindley var. *ixioides* (Lindley) Ewart et White = *Caladenia ixioides*.

*C. gemmata* Lindley forma *lutea* Clemesha = *Caladenia ixioides*.

**C. gertrudeae** Ostenf., Dansk. Vidensk. Selsk. Biol. Medd. 3(2): 43 (1921). Type: 'Western Australia, Yallingup Cave', 26 Sep. 1914, C.H. Ostenfeld 225 (holo C, iso K!). Notes: This species has long been confused with or included as a synonym of *C. gemmata*. However, following recent field research by A. Brown it has been proposed that *C. gertrudeae* should once more be recognized as a separate species distinct from either *C. gemmata* or *C. ixioides*. *C. gertrudeae* is morphologically distinct from *C. gemmata* and they can be found growing sympatrically. *C. gertrudeae* also inhabits areas along the coast of south-west Western Australia while *C. gemmata* is a much more widespread species (S. Hopper pers. comm.). Dist: Wda.

**C. gladiolata** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 31: 210, t. 26 (1907). Type: 'Hornsdale, near Appila-Yarrowie', 10 Sep. 1907, E. Keyes ex R. Rogers 527 (holo AD!, iso MEL!). Dist: Sfr, Sln, Sls.

*C. glossodia* F. Muell., Fragm. 7: 135 (1871), nom. illeg. Notes: The name was applied to also include both *Glossodia major* and *G. minor*.

*C. glossodiphyllo* Rupp et Erickson = *Caladenia drummondii*.

**C. gracilis** R. Br., Prod. 324 (1810). Type: 'Tasmania, Port Dalrymple', Nov. 1804, R. Brown s.n. (lectotype specimen (a) BM! here designated). Dist: Sse, Vwp, Vwh, Veh, Vgi, Tas, Nst, Can, Nct, Nnt.

*Caladenia angustata* Lindley, Gen. sp. orchid. pl. 420 (1840); *Caladenia testacea* R. Br. var. *angustata* (Lindley) Ewart, Fl. Victoria 354 (1931). Type: Tasmania, Oct.-Nov., R. Gunn 911 (holo specimen (8c) K-L!).

*Caladenia carneae* R. Br. var. *quadriseriata* Benth, Fl. Austral. 6: 387 (1873). Type: 'South Port', C. Stuart ex herb. F. Muell. s.n. (lectotype K! here designated); Syntype: 'Between Ravioli Bay and Mt. Gambier', F. Mueller s.n. (K!), syn. nov.

**C. graminifolia** A.S. George, Nuytsia, 1(2): 162, f. 3 (1971). Type: 'Culhem Inlet, west of Hopetoun, W.A., in sandy soil under *Eucalyptus platypus* var. *heterophylla*', 1 Aug. 1969, A.S. George 9468 (holo PERTH, iso K! MEL! NSW!). Notes: Illustrated on page 134 of Hoffman & Brown (1984). Dist: Wey, Wro.

*C. gunnii* (Lindley) H.G. Reichb. = *Chiloglottis gunnii*.

**C. hastata** (Nicholls) Rupp, Victorian Naturalist 58: 197-8 (1942). Notes: Confined to the Portland area where now extremely rare due to most of the habitat being cleared to make way for an aluminium smelter. Dist: Vwp.

*Caladenia patersonii* R. Br. var. *hastata* Nicholls, Victorian Naturalist 58: 115-6, f. F-J (1941). Type: 'Portland', 17 Oct. 1941, F. Mellblom ex W.H. Nicholls 618 (lectotype MEL! here designated); Syntypes: 'Portland', Oct. 1941, F. Mellblom ex W.H. Nicholls 619, 620, 621 (AD! MEL!).

*C. hildae* E.E. Pescott et Nicholls = *Caladenia testacea* var. *hildae*.

**C. hirta** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. lii (1840). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L!, iso BM! Fl! K!). Notes: Illustrated on page 166 of Hoffman & Brown (1984). Dist: Wir, Wda, Wav, Wro, Wey.

*Caladenia tenuis* Fitzg., Gard. Chron. (new ser.) 17: 461 (1882). Type: 'Werburg, Western Australia', R.D. Fitzgerald s.n. (holo BM!).

*C. holmesii* Rupp = *Caladenia alata*.

**C. huegelii** H.G. Reichb., Beitr. Syst. Pflanzenk. 66 (1871). Type: 'King George Sound', Huegel s.n. (lectotype W!). Syntypes: 'Swan River', J. Drummond 439, 832 (K! K-L! W!). Notes: George (1972) drew attention to the fact that the name *C. huegelii* had been over-looked in previous accounts on Western Australian orchids. The original description had been published in the middle of a paragraph. A lectotype was chosen from amongst the specimens present on the herbarium sheet, labelled *C. huegelii* by Reichenbach. Unfortunately, the specimen designated as the lectotype by George does not exactly match the species described in original diagnosis. The characters used for the diagnosis, in particular an oblong labellum, toothed at the front and with a rounded, shallowly notched end, are however consistent with those found in another specimen, namely the one on the left hand side of the same herbarium sheet. It is therefore here proposed (by Hopper and M. Clements) in accordance with the guidelines set down in the ICBN, that this specimen (labelled as a syntype), be re-designated as the lectotype of *C. huegelii*. Thus the name *C. huegelii* correctly applies to a species that was previously thought to be undescribed. It is illustrated on page 112 of Hoffman & Brown (1984) as *Caladenia* sp. Hopper (in prep.) in a separate paper will deal with all other Western Australian *Caladenia* spp., including the description of new taxa. Dist: Wda, Wey.

*C. huegelii* H.G. Reichb. var. *reticulata* (Fitzg.) J. Weber et R. Bates = *Caladenia reticulata*.

*C. huegelii* H.G. Reichb. var. *rigida* (R. Rogers) J. Weber et R. Bates = *Caladenia rigida*.

**C. infundibularis** A.S. George, Nuytsia 5(1): 55-6, t. 1, E-I (1984). Type: 'Near Scenic Drive turnoff, Augusta-Cape Leeuwin road, Western Australia', 16 Oct. 1973, A.S. George 11727 (holo PERTH!, iso CANB!). Notes: Illustrated on page 114 of Hoffman & Brown (1984). Dist: Wda.

**C. integra** E. Coleman, Victorian Naturalist 49: 246, f. (1933). Type: 'Tunney, Aurora, Kendenup, W.A.', Sep. 1930, R. Sandilands & F. Row s.n. (lectotype MEL! here designated); Syntypes: 'Tunney, Aurora, Kendenup, W.A.', 1921, 1931, 1932, R. Sandilands & F. Row s.n. (MEL!). Notes: Illustrated on page 132 of Hoffman & Brown (1984). Dist: Wir, Wav, Wey.

**C. iridescent** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 44: 328-9, t. 13 (1920). Type: 'Hall's Gap, Grampian Mts., Victoria', 30 Oct. 1913, E.E. Pescott s.n. (holo AD!). Dist: Vwp, Vwh, Vgt, Tas, Nct; NZ. *Caladenia carneae* R. Br. var. *minor* (J.D. Hook.) Hatch forma *calliniger* Hatch, Trans. Roy. Soc. New Zealand Bot. 2: 187 (1963). Type: 'Bankside, Silverdale', 12 Oct. 1949, F.W. Bartlett s.n. (holo AK), syn. nov.

**C. ixiooides** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. lii (1840). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L!, iso BM! K!). Notes: Illustrated on page 158 of Hoffman & Brown (1984) as *C. gemmata* forma *lutea*. Dist: Wda, Wav.

*Caladenia gemmata* Lindley var. *ixiooides* (Lindley) Ewart et White, Proc. Roy. Soc. Victoria 22(new ser.): 317 (1910).

*Caladenia gemmata* Lindley forma *lutea* Clemesha, Orchadian 2(9): 118 (1967), nom. illeg. Notes: Forma 'lutea' was a new name for this taxon but it was published without the designation of a type. The name is therefore illegal under the Articles of the ICBN.

**C. latifolia** R. Br., Prod. 324 (1810). Type: 'Port Dalrymple', 1805, Paterson s.n. (lectotype BM! here designated, isolectotype BM!). Notes: Illustrated on page 170 of Hoffman & Brown (1984). Dist: Wir, Wda, Wey, Sep, Sfr, Syp, Ski, Sls, Sse, Vwp, Vgi, Tas, Nsc?

*Caladenia elongata* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. li (1840). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L!, iso K!).

*Caladenia mollis* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. li (1840). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L!, iso K!).

*Caladenia latifolia* R. Br. var. *alba* Guilfoyle, Australian Plants 89 (1911), nom. nud.

*C. latifolia* R. Br. var. *alba* Guilfoyle = *Caladenia latifolia*.

*C. latifolia* R. Br. var. *angustifolia* Benth. = *Caladenia marginata*.

*C. latifolia* R. Br. var. *glandula* Ewart et Wood = *Caladenia marginata*.

**C. X lavandulacea** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 51: 11 (1927). Type: 'Western Australia, between York and Narrogin', Sep. 1926, W. Dedman s.n. (holo AD!). Notes: This taxon would appear to be a natural hybrid between *C. douthiae* and a taxon currently in the *C. dentigulata* complex. Dist: Wav, Wro.

**C. leptochila** Fitzg., Gard. Chron. (new ser.) 17: 462 (1882). Type: 'Mt. Lofty, South Australia', 25 Oct., R.D. Fitzgerald s.n. (holo & iso BM!). Dist: Sls, Sfr, Vgi?

**C. lindleyana** (H.G. Reichb.) M. Clements et D. Jones, stat. nov.

*Caladenia patersonii* R. Br. var. *lindleyana* H.G. Reichb., Beitr. Syst. Pflanzenk. 66 (1871); *Caladenia filamentosa* sensu Lindley, Gen. sp. orchid. pl. 421 (1840), non R. Br. (1810). Type: 'Tasmania, Circular Head', 1837, R. Gunn 910 (holo W!, iso Fl! K! K-L! P! W!). Notes: Differs from the closely related *C. patersonii* in having smaller, greenish yellow flowers with an acuminate labellum that is maroon in colour towards the apex. *C. lindleyana* also resembles *C. caudata* but lacks the tailed apex of the labellum. Dist: Vwp?, Vgi, Tas.

**C. lobata** Fitzg., Gard. Chron. (new ser.) 17: 461 (1882). Type: 'St. Werburg's, on the Upper Hay River', Sep., R.D. Fitzgerald s.n. (holo BM!, iso BM! NSW!). Notes: Illustrated on page 130 of Hoffman & Brown (1984). Dist: Wda, Wav, Wro, Wey.

**C. longicauda** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. lii (1840). Type: 'Swan River', 1839, J. Drummond s.n. (lectotype specimen (46a) K-L! here designated, isolectotype BM! E! G! K!). Notes: Apparently restricted to the sandy coastal plain around Perth. Dist: Wda.

*Caladenia patersonii* R. Br. var. *longicauda* (Lindley) R. Rogers, Trans. & Proc. Roy. Soc. South Australia 44: 351 (1920), syn. nov.

*C. longicauda* Lindley var. *eminens* Domin = *Caladenia eminens*.

**C. longiclavata** E. Coleman, Victorian Naturalist 46: 196, f. (1930). Types: 'West Australia, Busselton, Capel, Donnybrook, Augusta, Forest Grove, Boyup-Brook', Sep.-Oct., 1928, 1929, Corker, Hill, Mitchell, E. Bryant ex herb. E. Coleman s.n. (lecto MEL!, syn MEL! PERTH). Notes: There is a specimen of *C. magniclavata* amongst the syntypes. Illustrated on page 101 of Hoffman & Brown (1984). Dist: Wda, Wav, Wey.

*C. longiclavata* E. Coleman var. *magniclavata* (Nicholls) A.S. George = *Caladenia magniclavata*.

*C. longiclavata* E. Coleman var. *rhomboïdiformis* (E. Coleman) A.S. George = *Caladenia rhomboïdiformis*.

**C. longii** R. Rogers, Pap. & Proc. Roy. Soc. Tasmania 1931: 105 (1932). Type: 'Railton Hills, N.W. coastal Tasmania', 20 Oct. 1930, F.A. Long in herb. R. Rogers s.n. (holo AD!). Notes: This taxa was previously interpreted as a natural hybrid between *Caladenia carneae* R. Br. and another closely related species, possibly *C. iridescent* R. Rogers or *C. testacea* R. Br. (Clements, 1982). However, on re-examination of the type of *C. longii*, and from the study of material in the field, it has now been established that this name applies to a distinct species which is thought to be endemic to Tasmania. Dist: Tas.

**C. lyallii** J.D. Hook., Fl. nov.-zel. 1: 247 (1853). Type: 'On grassy hills, Otago, New Zealand', Dec. 1850, Lyall s.n. (holo K!, iso K! K-L!). Dist: Vwh, Veh, Tas, Nst, Can, Nnt; NZ.

*Caladenia alpina* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 51: 12 (1927). Type: 'Victoria, Mt. Feathertop', Dec. 1921, A.J. Tadgell in herb. R. Rogers 2106 (lectotype AD! here designated); Syntypes: 'Victoria; Mt. Hotham & Mt. Bogong', Dec. 1921, Jan. 1924, A.J. Tadgell s.n. (AD!); 'Baw Baws', 3 Jan. 1925, W.H. Nicholls s.n. (AD!); 'New South Wales, Mt. Kuscusko', Jan. 1924, G.V. Scammell s.n. (AD!).

*C. macrophylla* R. Br. = *Caladenia menziesii*.

**C. macrostylis** Fitzg., Gard. Chron. (new ser.) 17: 462 (1882). Type: 'St. Werburg, Upper Hay River', Sep., R.D. Fitzgerald s.n. (holo BM!). Notes: Illustrated on page 116 of Hoffman & Brown (1984). Dist: Wda, Wav, Wey.

**C. magniclavata** Nicholls, Victorian Naturalist 64: 135, f. (1947). Type: 'Lesmurdie in the Darling Range, W.A.', 14 Sep. 1946, W.H. Nicholls s.n. (holo MEL!). Dist: Wda, Wey.

*Caladenia longiclavata* E. Coleman var. *magniclavata* (Nicholls) A.S. George, Nuytsia 1(2): 173 (1971), syn. nov.

**C. magnifica** (Nicholls) D. Jones et G.W. Carr, stat. nov.

*Caladenia patersonii* R. Br. var. *magnifica* Nicholls, Victorian Naturalist 52: 167 (1936). Type: "Rising Shine" in the Clydesdale District', Nov. 1932, M. Ritter s.n. (lectotype MEL! here designated); Syntype: "Rising Shine" in the Clydesdale District', Oct.-Nov. 1933, 1934, M. Ritter s.n. (MEL!). Notes: Differs from *C. patersonii* in having large, dark-coloured flowers with very heavy perianth segments, densely covered in dark glands and a blackish labellum (Jones, pers. comm.). Illustrated on plate 262 in Nicholls (1969). Dist: Vwh, Veh.

*C. major* (R. Br.) H.G. Reichb. = *Glossodia major*.

**C. marginata** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. li (1840). Type: 'King George Sound', A. Collie s.n. (holo K-L!, iso BM! K!). Notes: Illustrated on page 154 of Hoffman & Brown (1984). Dist: Wda, Wav, Wey.

*Caladenia ochreata* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. li (1840); *Caladenia marginata* Lindley var. *ochreata* (Lindley) H.G. Reichb., Beitr. Syst. Pflanzenk. 64 (1871). Type: 'Swan River', J. Drummond s.n. (holo K-L!, iso BM! K! L!).

*Caladenia latifolia* R. Br. var. *angustifolia* Benth., Fl. Austral. 6: 385 (1873). Type: 'Lake Muir', Muir s.n. (lecto not found); Syntype: 'Upper Hay River', 1870, Warburton ex herb. F. Mueller s.n. (K!). Notes: The Warburton material is a mixed collection of *C. marginata* and *C. reptans* specimens.

*Caladenia paniculata* Fitzg., Gard. Chron. (new ser.) 17: 461 (1882). Type: 'St. Werburg, W.A.', R.D. Fitzgerald s.n. (holo & iso BM!).

*Caladenia purdieana* C.R.P. Andrews, J. Proc. Mueller Bot. Soc. Western Australia (10): 39 (1902). Type: 'Ironstone gravel, Darling Range, Kelmscott near Perth', 11 Oct. 1902, C.R.P. Andrews 934 (holo PERTH, iso BM!).

*Caladenia latifolia* R. Br. var. *glandula* Ewart et Wood, Proc. Roy. Soc. Victoria (new ser.) 23: 290 (1911). Type: 'Lowden, Preston River, West Australia', Nov.-Dec. 1909, M. Koch 1944 (holo MEL!, iso E! K! P!).

*C. marginata* Lindley var. *ochreata* (Lindley) H.G. Reichb. = *Caladenia marginata*.

**C. menziesii** R. Br., Prod. 325 (1810). Type: 'New Holland, King George's Sound', A. Menzies s.n. (holo BM!). Notes: Illustrated on page 162 of Hoffman & Brown (1984). Dist: Wda, Wir, Wav, Wro, Wey, Sep, Sfr, Syp, Sls, Ski, Sse, Vnp, Vwh, Vwp, Vgi, Tas.

*Leptoceras menziesii* (R. Br.) Lindley, Gen. sp. orchid. pl. 416 (1840).

*Caladenia macrophylla* R. Br., Prod. 325 (1810); *Leptoceras macrophylla* (R. Br.) Lindley, Gen. sp. orchid. pl. 416 (1840). Type: 'New Holland, King George's Sound', A. Menzies s.n. (holo BM!).

*Leptoceras oblonga* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. lii (1840). Type: 'Swan River', J. Mangles s.n. (holo K-L!, iso BM!).

*Caladenia menziesii* R. Br. var. *alba* Guilfoyle, Australian Plants 89 (1911), nom. nud.

*C. menziesii* R. Br. var. *alba* Guilfoyle = *Caladenia menziesii*.

**C. minor** J.D. Hook., Fl. nov.-zel. 1: 247, t. 56b (1853). Type: 'New Zealand; Northern Island. Dry clay hills', Edgerly s.n. (lectotype specimen (a) K! here designated, isolectotype E! K-L!); Syntypes: 'New Zealand', W. Colenso 1945 (K!). Notes: All other syntypes are *C. alata*. Dist: Sep, Sls, Sse, Vwp, Vgi, NZ.

*Caladenia carneae* R. Br. var. *minor* (J.D. Hook.) Hatch, Trans. & Proc. Roy. Soc. New Zealand, 75(3): 368 (1945); *Caladenia catenata* (Smith) Druce var. *minor* (J.D. Hook.) W.M. Curtis, Student's Fl. Tas. pt. 4A: 133 (1979), syn. nov.

*C. variegata* Colenso, Trans. & Proc. New Zealand Inst. 17: 248 (1885). Type: 'New Zealand', W. Colenso s.n. (holo K!).

*Petalochilus calyciformis* R. Rogers, J. Bot. 62: 65-66, t. 571, f. 1-3 (1924). Type: 'New Zealand: Kaitaia, County Mongonui', 27 Oct.-15 Nov. 1916, H.B. Matthews s.n. (holo AD!).

*Petalochilus saccatus* R. Rogers, J. Bot. 62: 66-67, t. 572, f. 4-7 (1924). Type: 'New Zealand: Kaitaia, County Mongonui', 10-31 Oct. 1917, H.B. Matthews s.n. (holo AD!).

*Caladenia carneae* R. Br. var. *pygmaea* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 5: 13 (1927). Type: 'Scotts Creek', 15 Nov. 1903, R.S. Rogers 318 (lectotype AD! here designated); Syntypes: 'Healesville', 2 Nov. 1923, H.B. Williamson s.n. (AD!); 'Healesville', 10 Oct. 1926, J.B. Howie s.n. (AD!), pro parte max.

*C. minor* (R. Br.) H.G. Reichb. = *Glossodia minor*.

*C. minor* J.D. Hook. var. *exigua* Cheesem. = *Caladenia alata*.

*C. mollis* Lindley = *Caladenia latifolia*.

**C. multiclavia** H.G. Reichb. var. **multiclavia** Beitr. Syst. Pflanzenk. 64 (1871). Type: 'Swan River', J. Drummond 441 (lecto W!, isolectotype BM! FI! G! K! K-L! W!). Notes: Illustrated on page 106 of Hoffman & Brown (1984). Dist: Wav, Wro, Wey.

var. *brevicuspis* Benth., Fl. Austral. 6: 380 (1873). Type: 'Swan River', J. Drummond s.n. (holo not found). Notes: Bentham described the variety as having "Points of the sepals much shorter, the dorsal sepal very narrow, and the petals less dilate than in the typical form, the calli at the base of the labellum free or nearly so, long and clavate". I have been unable to locate the Type for this variety or specimens that match the description. Until further material of this taxon is found and its correct identity can be established, there is little choice but to follow Bentham. Dist: Wav.

**C. nana** Endl. in Lehm., Pl. Preiss. 2: 7 (1846). Type: 'Swan River', Huegel s.n. (holo & iso W!). Notes: A diminutive species in which the smaller flowers open tardily compared to those of *C. unita*. Dist: Wda.

*C. nigricans* (R. Br.) H.G. Reichb. = *Hyperanthus nigricans*.

*C. nortonii* (Fitzg.) F. Muell. = *Adenochilus nortonii*.

*C. ochreata* Lindley = *Caladenia marginata*.

- C. ovata** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 33: 16-17, t. 1 (1909). Type: 'Hog Bay River, Kangaroo Island', 10 Oct. 1906, Wilson s.n. (lectotype AD! here designated, isolectotype NSW!). Dist: Ski, Sls.
- C. pallida** Lindley, Gen. sp. orchid. pl. 421 (1840). Type: 'Tasmania, Circular Head', Oct.-Nov. 1837, R. Gunn 907 (holo K-L!, iso E! Fl! L! MO! NSW! P! SING!). Dist: Vwp, Vwh, Veh, Tas.  
*Caladenia patersonii* R. Br. var. *pallida* (Lindley) H.G. Reichb., Beitr. Syst. Pflanzenk. 66 (1871).
- C. paniculata** Fitzg. = *Caladenia marginata*.
- C. patersonii** R. Br., Prod. 324 (1810). Type: 'Tasmania, Port Dalrymple', Nov. 1804, Paterson s.n. (lectotype specimen (a) BM! here designated, isolectotype BM!). Dist: Sse?, Vwp, Vwh, Vgi?, Tas.  
*Caladenia patersonii* R. Br. var. *typica* Benth., Fl. Austral. 6: 382 (1873), *nom. illeg.*
- C. patersonii** R. Br. var. *arenaria* (Fitzg.) Nicholls = *Caladenia arenaria*.
- C. patersonii** R. Br. var. *concolor* (Fitzg.) J.H. Willis et Court = *Caladenia concolor*.
- C. patersonii** R. Br. var. *dilatata* (R. Br.) Benth. = *Caladenia dilatata*.
- C. patersonii** R. Br. var. *hastata* Nicholls = *Caladenia hastata*.
- C. patersonii** R. Br. var. *lindleyana* H.G. Reichb. = *Caladenia lindleyana*.
- C. patersonii** R. Br. var. *longicauda* (Lindley) R. Rogers = *Caladenia longicauda*.
- C. patersonii** R. Br. var. *magnifica* Nicholls. = *Caladenia magnifica*.
- C. patersonii** R. Br. var. *pallida* (Lindley) H.G. Reichb. = *Caladenia pallida*.
- C. patersonii** R. Br. var. *rosea* Rupp, Victorian Naturalist 56: 143 (1940), *nom. illeg.* Types: 'Ouse, central Tasmania', 1921, T. Bethune s.n. (syn NSW!); 'Tasmania, Circular Head, Glen Leith', 25 Nov.-18 Dec. 1837 & 24 Oct. 1840, R. Gunn s.n. (syn NSW!). Notes: No latin diagnosis.
- C. patersonii** R. Br. var. *suaveolens* Nicholls = *Caladenia fragrantissima*.
- C. patersonii** R. Br. var. *typica* Benth. = *Caladenia patersonii*.
- C. pectinata** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 47: 341 (1920). Types: 'Western Australia, Albany District', Sep., 1919, R.S. Rogers s.n. (lectotype AD! here designated); Syntypes: 'York', O.H. Sargent s.n. (AD); 'Cork Swamp, near Perth', 3 Sep. 1907, Tapp s.n. (AD); 'Swan view', 13 Sep. 1906, W.E. Cook s.n. (AD). Notes: Illustrated on page 110 of Hoffman & Brown (1984) under the name *C. huegelii*. Dist: Wda, Wey.
- C. pellita** Endl. = *Caladenia gemmata*.
- C. picta** (Nicholls) M. Clements et D. Jones, stat. nov.  
*Caladenia alba* R. Br. var. *picta* Nicholls, Victorian Naturalist 47: 157-61, f. VII, a,b,c (1931). Types: 'New South Wales, Waterfall Creek, National Park; Lime Kiln Bay', May 1928. E. Nubling s.n. (lectotype f. VII, a,b,c! here designated). Notes: Differs from *C. catenata* in lacking marginal teeth on the upper parts of the lateral lobes of the labellum and having a reddish band of on the inner surface of the column. *C. picta* also flowers earlier than *C. catenata*. Illustrated on page 621 in Jones (1988). Dist: Nsc, Ncc, Nnc.
- C. plicta** Fitzg., Gard. Chron. (new ser.) 17: 461 (1882). Type: 'St. Werburg, W.A.', Sep., R.D. Fitzgerald s.n. (holo & iso BM!). Notes: Illustrated on page 118 of Hoffman & Brown (1984). Dist: Wda.
- C. praecox** Nicholls = *Caladenia dimorpha*.
- C. preissii** Endl. = *Caladenia reptans*.
- C. pulcherrima** F. Muell., Fragm. 5: 93 (1865), *nom. illeg.* Notes: Mueller used the name in reference to both *C. patersonii* and *C. dilatata* "sub quo nomine saltem *C. patersonii* et *C. dilatata* nisi etiam plures aliae sectiomis Calonematis conjungendae" in discussions on various Australian orchids.
- C. pumila** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 46: 152 (1922). Type: 'Port Phillip Bay, west Bannockburn', 29 Sep. 1921, E.E. Pescott s.n. (holo AD!). Dist: Vwp (presumed extinct).
- C. purdieana** C.R.P. Andrews = *Caladenia marginata*.
- C. pusilla** W.M. Curtis, Student's Fl. Tas. pt. 4A: 133 (1980). Type: 'The Plains, Naracoopa, King Island, Tasmania', 29 Oct. 1976, P. Barnett & W.M. Curtis s.n. (holo HO). Dist: Ski?, Sse?, Vgi, Veh, Tas, Nsc.
- Caladenia carneae* R. Br. var. *pygmaea* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 5: 13 (1927). Type: 'Tasmania, Flinders Island', Nov. 1912, Sutton s.n. (lectotype AD here designated), *pro parte min.*
- C. radialis** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 51: 296 (1927). Type: 'Western Australia. Dowerin, 1 Sep. 1926, E.H. Ising s.n. (lectotype specimen (a) AD! here designated, isolectotype AD!); Syntype: 'Beverley, W.A.', 13 Sep. 1913, F. Stoward s.n. (AD!). Notes: Illustrated on page 88 of Hoffman & Brown (1984). Dist: Wav, Wro, Wey.
- Caladenia bicolor* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 54: 46 (1930). Type: 'Western Australia, Swan River and Muresk, Swan View', 13 Sep. 1907, W.E. Cooke s.n. (lectotype AD! here designated); Syntype: 'Muresk', 4 Sep. 1907, W.E. Cooke s.n. (AD!).

- C. radiata** Nicholls, Victorian Naturalist 65: 267 (1949). Type: 'W.A., Yarloop', 9 Oct. 1948, W.H. Nicholls s.n. (holo PERTH, iso MEL!). Notes: Illustrated on page 126 of Hoffman & Brown (1984). Dist: Wda.
- C. reniformis** (R. Br.) H.G. Reichb. = Cyrtostylis reniformis.
- C. reniformis** (R. Br.) H.G. Reichb. var. *huegelii* (Endl.) H.G. Reichb. = Cyrtostylis huegelii.
- C. reptans** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. lii (1840). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L!, iso Fl! G! K!). Notes: Illustrated on page 172 of Hoffman & Brown (1984). Dist: Wir, Wda, Wav, Wey.
- Caladenia preissii* Endl. in Lehm., Pl. Preiss. 2:7 (1846). Type: 'Preston Creek, Perth', 25 Jul. 1839, Preiss 2208 (holo W!).
- C. reticulata** Fitzg., Gard. Chron. (new ser.) 17: 462 (1882). Type: 'Mt. Lofty, South Australia', 25 Oct., R.D. Fitzgerald s.n. (holo BM!). Dist: Sls, Ski?, Sse, Vwp, Vwh, Veh?, Vgi.
- Caladenia huegelii* H.G. Reichb. var. *reticulata* (Fitzg.) J. Weber et R. Bates in Black, Fl. S. Austral. (ed. 3) 1: 397 (1978).
- C. reticulata** Fitzg. var. *valida* Nicholls = *Caladenia valida*.
- C. rhomboidiformis** (E. Coleman) M. Clements et Hopper, stat. nov.
- Caladenia dilatata* R. Br. var. *rhomboidiformis* E. Coleman, Victorian Naturalist 46: 197 (1930); *Caladenia longiclavata* E. Coleman var. *rhomboidiformis* (E. Coleman) A.S. George, Nuytsia 1(2): 173 (1971). Types: 'Busselton, Capel, Forest Grove, Augusta, Boyup Brook, Mundaring, Waterloo', Sep.-Oct. 1928, 1929, E. Corker, C. Hill, S. Mitchell & E. Bryant s.n. (lecto MEL!, syn MEL!). Notes: Differs from other taxa in the *C. longiclavata* complex in its slender sepaline clubs and its flattened broad greenish labellum with a short slender fringe on horizontal margins and with the calli crowded into a narrow central band. Illustrated on page 104 of Hoffman & Brown (1984). Dist: Wda.
- C. rigida** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 54: 45 (1930). Type: 'South Australia, Golden Grove, 12 Sep. 1908, R.S. & J. Rogers s.n. (lectotype AD! here designated); Syntypes: 'Macclesfield', 15 Sep. 1929, J. Rogers s.n. (AD!); 'Hermitage', 24 Sep. 1909, A. Vernal s.n. (AD!); 'Kersbrook and other parts of Mount Lofty Ranges', 1 Oct. 1929, McDonald s.n. (syn AD!). Dist: Sln, Sls.
- Caladenia huegelii* H.G. Reichb. var. *rigida* (R. Rogers) J. Weber et R. Bates in Black, Fl. S. Austral. (ed. 3) 1: 398 (1978).
- C. roei** Benth., Fl. Austral. 6: 383 (1873). Type: 'Western Australia', Roe s.n. (holo K!). Notes: Illustrated on page 148 of Hoffman & Brown (1984). Dist: Wau, Wav, Wro, Wco.
- C. rosella** G.W. Carr, Muelleria 6(6): 442-6, f. 2 (1988). Type: 'Hurstbridge, c. 3 km N. of township, Victoria', 22 Sep. 1985, G.W. Carr 10391 (holo MEL). Dist: Veh.
- C. saccharata** H.G. Reichb., Beitr. Syst. Pflanzenk. 63 (1871). Type: 'Swan River', J. Drummond 324 (holo W!, iso BM! K! W!). Notes: Illustrated on page 152 of Hoffman & Brown (1984). Dist: Wav, Wau, Wro, Wco.
- C. sericea** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. lii (1840). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L!, iso K!). Notes: Illustrated on page 174 of Hoffman & Brown (1984). Dist: Wda.
- C. serrata* (Lindley) H.G. Reichb. = *Lyperanthus serratus*.
- C. sigmoidea** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 62: 12 (1938). Type: 'Western Australia, Kumarl, near Salmon Gums, on the Kalgoorlie-Esperance Railway line', 25 Aug. 1937, L. Horbury s.n. (holo AD!, iso K! MEL!). Notes: Illustrated on page 84 of Hoffman & Brown (1984). Dist: Wro, Wey, Wco.
- C. stricta** (R. Bates) R. Bates, Orchadian 8(12): 247-9, f. (1987). Dist: Sep, Syp.
- Caladenia dilatata* R. Br. var. *stricta* R. Bates, J. Native Orch. Soc. South Australia 8(2): 23-25, f. S 1-3 (1984). Type: 'South Australia; between Moonta and Maitland, Yorke Peninsula', 20 Sep. 1983, R. Bates 3396 (holo AD!, iso CHRIST, K! MEL, NSW, PERTH).
- C. suaveolens** (R. Br.) H.G. Reichb. = *Lyperanthus suaveolens*.
- C. sulphurea** Cunn. = *Lyperanthus suaveolens*.
- C. tentaculata** Schldl., Linnaea 20: 571 (1847). Type: 'Lofty Range', O. Behr ex herb. W. Sonder s.n. (holo ?B†; lectotype specimen (41b) K-L! here designated). Notes: There is one collection of *C. behrii* in the Lindley orchid herbarium at Kew. The specimen is a single flower on a herbarium sheet amongst specimens of *C. dilatata*. This specimen of *C. behrii* is the only one I could find in all herbaria visited and is therefore possibly the only extant material of this species collected by O. Behr. I have taken it to be part of the type. Since a type could not be found at HAL or B it is assumed that it was destroyed during the Second World War or has been lost. The Kew specimen fits the description of *C. behrii* and therefore has been chosen as the lectotype of the species. This species, which mostly inhabits areas in and around the Mount Lofty Ranges in South Australia, has been interpreted as a large form of *Caladenia dilatata*. The exact distribution of this species is uncertain at present. Dist: Sls, Smb, Vwh.

- C. tentaculata* Tate = *Caladenia filamentosa* var. *tentaculata*.
- C. tenuis* Fitzg. = *Caladenia hirta*.
- C. tessellata* Fitzg., Austral. orch. 1(2): [t. 3] (1876). Type: 'Hunter's Hill, near Sydney', R.D. Fitzgerald s.n. (holo BM!). Dist: Vgi, Nst, Nsc, Ncc.
- C. testacea* R. Br. var. *testacea* Prod. 324 (1810). Type: 'Port Jackson; Sydney & Parramatta', Oct. 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype E! FI! G! K! K-L! P!); Syntypes: 'Port Jackson', 1804, R. Brown s.n. (AD! L!). Dist: Vgi, Tas, Nsc, Ncc, Nct, Nnc, Nnt?, Nns.  
var. *hildae* (E.E. Pescott et Nicholls) Nicholls, Victorian Naturalist 55: 168 (1939); *Caladenia hildae* Victorian Naturalist 45: 235-7, t. (1929). Type: 'Cobungra, in the North East of Victoria', 1927, H. Morgan s.n. (holo MEL not found). Dist: Veh.
- C. testacea* R. Br. var. *angustata* (Lindley) Ewart = *Caladenia gracilis*.
- C. testacea* R. Br. var. *praecox* (Nicholls) Nicholls = *Caladenia dimorpha*.
- C. toxochila* Tate, Trans. & Proc. Roy. Soc. South Australia 12: 129-130 (1889). Type: 'Caroona Hill, 45 miles due west of Port Augusta', Aug. 1889, W.L. Cleland s.n. (holo AD!, iso MEL!). Notes: Illustrated on page 135 in Jones (1988). Dist: Sep, Sfr, Sln, Syp, Sne.
- C. X triangularis* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 51: 10 (1927). Type: 'Western Australia, Highbury, between Wagin and Narrogin', Sep. 1924, B.T. Goadby s.n. (holo AD!). Notes: This is a rare plant intermediate in morphology between *C. eminens* and *C. flava*. It is almost certainly a natural hybrid between these two species and accordingly is here given hybrid status. Illustrated on page 70 of Hoffman & Brown (1984). Dist: Wda, Wav.
- C. tutelata* R. Rogers = *X Calassodia tutelata*.
- C. uliginosa* A.S. George, Nuytsia 5(1): 56-7, t. 2 (1984). Type: '31 km N of Frankland, Western Australia', 3 Oct. 1978, A.S. George 15250 (holo PERTH!, iso AD! CANB! K! MEL! NSW! PERTH!). Notes: Illustrated on page 124 of Hoffman & Brown (1984). Dist: Wda.
- C. unguiculata* Lindley = *Caladenia deformis*.
- C. unita* Fitzg., Gard. Chron. (new ser.) 17: 461 (1882). Type: 'Wilson's Inlet, W.A.', R.D. Fitzgerald s.n. (lectotype BM! here designated). Notes: This taxon was formerly listed as a synonym of *C. nana* (George, 1971), but the two taxa are quite distinct. Fitzgerald described both taxa but illustrated only one. Fortunately the plant he illustrated is not *C. nana* but rather the second species. The lectotype has been chosen to fix the application of the name to the second taxon as it is also clear that most of the description was based on it. Plants of *C. unita* are generally a much taller and more robust, have larger flowers that expand fully when open compared to those found in *C. nana*. The porrect, broader labellum has longer side lobes and combs and more pronounced calli. Illustrated on page 168 of Hoffman & Brown (1984), under the name *C. nana*. Dist: Wda, Wey.
- C. valida* (Nicholls) M. Clements et D. Jones, stat. nov.
- Caladenia reticulata* Fitzg. var. *valida* Nicholls, Victorian Naturalist 59: 189 (1943). Type: 'Portland', F. Mellblom & C. Beaglehole in herb. W.H. Nicholls s.n. (holo MEL not found; lectotype plate 251! Nicholls (1969)). Notes: Differs from *C. reticulata* in having a more robust habit and larger whitish flowers with stiffly spreading perianth segments. The plate of *C. reticulata* var. *valida* was prepared prior to the publication of the description. It is almost certainly part of the Type collection and has therefore been designated as the lectotype. Dist: Ski, Sse, Vwp.
- C. X variabilis* Nicholls, Victorian Naturalist 66: 223, f. L-M (1950). Types: 'Yarram, Victoria', Sep. 1930, J. Anderson s.n. (syn MEL!); 'Wonthaggi, Victoria', Oct. 1930, E. Bond & E.H. Homann s.n. (syn MEL!). Notes: This is a rare plant known only from a few collections in East Gippsland. This taxon is intermediate and probably a natural hybrid between *Caladenia* sp. aff. *fragrantissima* (*C. patersonii* R. Br. var. *arenaria* sensu Nicholls) and *C. cardiochila*. Dist: Vgi.
- C. variegata* Colenso = *Caladenia minor*.
- C. wanosa* A.S. George, Nuytsia 5(1): 57-8, t. 3, A-E (1984). Type: 'Z. Bend, Murchison River, Kalbarri N.P.', Sep. 1972, N. Hoffman s.n. (holo PERTH!, iso K! MEL! NSW!). Notes: Illustrated on page 92 of Hoffman & Brown (1984). Dist: Wir.

## CALANTHE

**Calanthe** R. Br. in Edwards's, Bot. Reg. 7: sub t. 573 (1821) (nom. cons.). Type: *Limodorum veratrifolium* Willd., nom. illeg. (*Orchis triplicata* Willemet, *C. triplicata* (Willemet) Ames). Notes: I have followed the work of Seidenfaden (1975a) for *C. triplicata* although I do not necessarily agree with all of it.

*Alismorchis* Thouars, Pl. Orch. tabl. sp. 1 (1822) (orth. var.) = *Alismorkis* Thouars (1809) nom. rej. vs. *Calanthe* R. Br. (1821) (nom. cons.).

*Amblyglottis* Blume, Bijdr. 6: t. 3; 8: 369 (1825). Type: *non designatus*.

*C. angraeciflora* H.G. Reichb. = *Calanthe triplicata*.

*C. catilligera* H.G. Reichb. = *Calanthe triplicata*.

*C. celebica* Rolfe = *Calanthe triplicata*.

*C. comosa* H.G. Reichb. = *Calanthe triplicata*.

*C. diploxyphion* J.D. Hook. = *Calanthe triplicata*.

*C. furcata* Batem. ex Lindley = *Calanthe triplicata*.

*C. matsamurana* Schltr. = *Calanthe triplicata*.

*C. odora* Griffith = *Calanthe triplicata*.

*C. orthocentron* Schltr. = *Calanthe triplicata*.

*C. perrottetii* A. Rich. = *Calanthe triplicata*.

*C. proboscidea* H.G. Reichb. = *Calanthe triplicata*.

*C. pubescens* Ridley = *Calanthe triplicata*.

*C. triplicata* (Willemet) Ames, Philipp. J. Sci. 2: 326 (1907). Dist: Nsc, Nec, Nnc, Qmo, Qwb, Qpc? Qks, Qkn, Qco; NC, VU, SB, FJ, PF, PG, ID, MY, TH, LA, KH, VN, PH, TW, JP.

*Flos triplicatus* Rumph., Herb. Amb. 6: 115, t. 52, f. 2 (1750), nom. illeg. pre 1753; *Orchis triplicata* Willemet in Usteri, Ann. Bot. 18: 52 (1796); *Limodorum veratrifolium* Willd., Sp. Pl. 4: 122 (1805), nom. illeg.; *Calanthe veratrifolia* (Willd.) R. Br. in Edwards's, Bot. Reg. 7, t. 573 (1821); *Calanthe veratrifolia* (Willd.) R. Br. in Edwards's, Bot. Reg. 9: t. 720 (1823), nom. illeg.; *Amblyglottis veratrifolia* (Willd.) Blume, Bijdr. 370 (1825); *Alismorchis veratrifolia* (Willd.) Kuntze, Revis. gen. pl. 2: 650 (1891); *Limodorum ventricosum* Steud., Nomencl. ed. 1: 481 (1821), nom. illeg. Type: Amboyne, *Rumphius* s.n. (holo presumed lost; lecto illust. in *Rumphius*!).

*Calanthe furcata* Batem. ex Lindley in Edwards's, Bot. Reg. 24: Misc. 28 (1838); *Alismorchis furcata* (Batem. ex Lindley) Kuntze, Revis. gen. pl. 2: 650 (1891). Type: 'Philippines, Manilla', Cuming s.n. (holo K-L!). Notes: Included as a synonym of *C. triplicata* by some authors but doubtfully that taxon.

*Calanthe perrottetii* A. Rich., Ann. Sci. Nat. 2. s., 15: 68 (1841). Type: 'Indes-Orientales; Nil-Gherries; Crescit in sylvis humidis circa', Avalanchey s.n. (holo P; illustration of type at W!).

*Calanthe comosa* H.G. Reichb., Linnaea 19(3): 374 (1846). Type: 'Ni Pgherries: Kotigherrig', 1838, Delessert s.n (holo W!).

*Calanthe odora* Griffith, Not. 3: 365 (1851); *Alismorchis odora* (Lindley) Kuntze, Revis. gen. pl. 2: 650 (1891). Type: Upper Assam, W. Griffith 3 (holo not found, illus. W!).

*Calanthe veratrifolia* (Willd.) R. Br. var. *australis* Lindley et Paxton in Paxton's, Fl. Gard. 2: 132 (1851-53). Type: cult. Kew ex 'New Holland, Illawarra', Aug. 1822, A. Cunningham s.n. (holo K-L!).

*Calanthe catilligera* H.G. Reichb., Bonplandia 5: 37 (1857). Type: 'Java', Zollinger s.n. (holo W!).

*Calanthe veratrifolia* (Willd.) R. Br. var. *stenochila* H.G. Reichb., Hamb. Gart. Blume. 13: 313 (1857). Type: 'Im Garten des berrn Borfig zu Moabit bei Berlin von berrn Gaerdt cultivirt' (holo W not found).

*Calanthe angraeciflora* H.G. Reichb., Linnaea 41: 75 (1877). Type: 'N. Caladonia', Deplanche s.n. (holo W!).

*Calanthe proboscidea* H.G. Reichb., Gard. Chron. 476 (1884). Type: cult. ex Sunda Islands, J. Veitch s.n. (holo W!).

*Calanthe diploxyphion* J.D. Hook., Fl. Brit. Ind. 5: 849 (1890); *Alismorchis diploxyphion* (J.D. Hook.) Kuntze., Revis. gen. pl. 2: 650 (1891). Type: 'Barat: Perak, at Goping in shady places', King s.n. (holo K!).

*Calanthe celebica* Rolfe, Kew Bull. 129 (1899). Type: 'North East Celebes; summit of Mt. Mosarang, Minahassa', Koorders 29520 (holo K!). Notes: Included under *C. triplicata* by some authors but doubtfully that taxon.

*Calanthe matsamurana* Schltr., Repert. Spec. Nov. Regni Veg. 2: 168 (1906). Type: 'Liutkuu-Inseln: Yakunosima', Matsumura s.n. (holo B†).

*Calanthe orthocentron* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 380 (1912). Type: 'Kaiser-Wilhelms-Land: In humus in the forests near Toliba, c. 300 m', R. Schlechter 18960 (holo B†).

*Calanthe veratrifolia* (Willd.) R. Br. var. *kennyi* Bailey, Queensland Agric. J. 28: 276 (1912). Type: 'Lake Eacham', F. Hamilton-Kenny s.n. (holo BRI!).

*Calanthe pubescens* Ridley, Kew Bull. 117 (1923). Type: 'Malay Peninsula, Jalor Besar in sylvis', 1899, Gwynn-Vaughn 261 (holo K!).

*Calanthe veratrifolia* (Willd.) R. Br. var. *densissima* J.J. Smith, Bull. Jard. Bot. Buitenzorg (ser. 3) 11(2): 116 (1931). Types: 'Central Borneo. Liang Gagong', 1893-1894, H. Hallier 2621 (syn BO?); 'Central East Borneo. West Koertai: On the Kiao, 700 m, especially on steep wet walls, also on low river terraces', 25 Oct. 1925, F.H. Endert 4588 (syn BO?).

*Calanthe veratrifolia* (Willd.) R. Br. var. *incurvicalcar* J.J. Smith, Bull. Jard. Bot. Buitenzorg (ser. 3) 11(2): 115 (1931). Type: 'Central East Borneo, W. Kutai, Kambing on limestone rocks', 24 Nov. 1925, F.H. Endert 5232 (syn L!); 'Lakoom', 26 Jun. 1925, F.H. Endert 1763 (syn L!).

*Calanthe veratrifolia* (Willd.) R. Br. var. *lancipetala* J.J. Smith, Bull. Jard. Bot. Buitenzorg (ser. 3) 11(1): 74 (1931). Types: 'Taland, Eil (Island), Karakelang, S. slope of Mt. Duata, 150 m., forest on limestone ground', 30 Apr. 1926, H.J. Lam 2689 (holo L!).

*Calanthe veratrifolia* (Willd.) R. Br. var. *timorensis* J.J. Smith, Repert. Spec. Nov. Regni Veg. 35: 110 (1934). Type: 'S. Coast, Timor, Rasi mentan, Kapam, 950 m.', 10 Feb. 1929, M.E. Walsh 98 (holo L!).

non *Calanthe veratrifolia* Miquel, Fl. Bat. 3: 711 (1859) (C. *flava*).

non *Calanthe veratrifolia* Hook. et Arnott, 71 (1841) (C. *gracillima*).

C. *veratrifolia* (Willd.) R. Br. = *Calanthe triplicata*.

C. *veratrifolia* (Willd.) R. Br. var. *australis* Lindley et Paxton = *Calanthe triplicata*.

C. *veratrifolia* (Willd.) R. Br. var. *densissima* J.J. Smith. = *Calanthe triplicata*.

C. *veratrifolia* (Willd.) R. Br. var. *incurvicalcar* J.J. Smith = *Calanthe triplicata*.

C. *veratrifolia* (Willd.) R. Br. var. *kennyi* Bailey = *Calanthe triplicata*.

C. *veratrifolia* (Willd.) R. Br. var. *lancipetala* J.J. Smith = *Calanthe triplicata*.

C. *veratrifolia* (Willd.) R. Br. var. *stenochila* H.G. Reichb. = *Calanthe triplicata*.

C. *veratrifolia* (Willd.) R. Br. var. *timorensis* J.J. Smith = *Calanthe triplicata*.

## X CALASSODIA

**X Calassodia** M. Clements, hybrid gen. nov.

Ad *Glossodium* R. Br. affinis, a qua labelli callis laminae aliquot et dentibus marginalibus paucis, differt.

*Caladenia tutelata* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 31: 211 (1907). Type: *Caladenia tutulata* R. Rogers. Notes: Intermediate between *Glossodia major* R. Br. and *Caladenia deformis* R. Br.

**X C. tutelata** (R. Rogers) M. Clements, comb. nov.

*Caladenia tutelata* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 31: 211 (1907). Type: 'Blackwood, South Australia', 24 Aug. 1907, E. Ashby s.n. (holo AD!). Notes: This taxon appears to be a rare natural hybrid between *Glossodia major* R. Br. and *Caladenia deformis* R. Br. X C. *tutelata* has been recorded from New South Wales but it is thought that these reports are based on hybrids of different parentage, viz. *Glossodia major* X *Caladenia caerulea*. Dist: Sl, Vwp.

## CALEANA

**Caleana** R. Br., Prod. 329 (1810). Type species: *Caleana major* R. Br.

*Caleya* R. Br. in W. Aiton et W.T. Aiton, Hort. Kew. (ed. 2) 5: 204 (1813) (orth. var.).

*Paracaleana* Blaxell, Contr. New South Wales Natl. Herb. 4: 281 (1972). Type species: *Caleana minor* R. Br. Notes: Blaxell (1972), syn. nov. listed five features he saw as important in segregating *Paracaleana* from *Caleana*. They were; (i) the elongate column foot, (ii) column wings decurrent on the column foot and the column, (iii) the column is held at right angles to the ovary, (iv) relative position of floral organs in the fully opened flower and (v) tuberculate versus smooth labella. *Caleana major* has many morphological features in common with all the species of *Paracaleana*. In addition, they share the same or similar mycorrhizal fungi, and the pollination syndrome is the same. One recently discovered species in Western Australia was found to have a labellum which is almost glabrous and therefore intermediate between *Caleana* and *Paracaleana* based on that character (Hopper pers. comm.). The general evidence suggests that none of these characters is sufficiently significant to maintain *Paracaleana* as separate genus.

**C. major** R. Br., Prod. 329 (1810). Type: 'Port Jackson; Bennelong Point', Sep. 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype E! Fl! K! K-L! P!); Syntypes: 'Derwent', Apr. 1804, R. Brown s.n. (BM! K!). Dist: Sl, Ski, Sse, Vwp, Vwh, Vgi, Veh, Tas, Nsc, Nst, Ncc, Nct, Nnc, Qmo, Qdd, Qle.

*Caleya major* (R. Br.) R. Br. in W. Aiton et W.T. Aiton, Hort. Kew. (ed. 2) 5: 204 (1813).

**C. minor** R. Br., Prod. 329 (1810). Type: 'Port Jackson; Sandy ground between brickfields & Barclay Lagoon', Oct.-Nov. 1803', R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype E! G! K! K-L! P!). Dist: Sl, Ski, Sse, Vwp, Vwh, Veh, Vgi, Tas, Nsc, Nst, Can, Ncc, Nct, Nnc, Qmo, Qdd, Qle; NZ.

*Caleya minor* (R. Br.) Sweet, Hort. Brit. 385 (1827); *Paracaleana minor* (R. Br.) Blaxell, Contr. New South Wales Natl. Herb. 4: 281 (1972), *syn. nov.*

*Caleya sullivanii* F. Muell., Chem. & Druggist, Aust. Suppl. 4: 44 (1882); *Caleana sullivanii* (F. Muell.) E.E. Pescott, Victorian Naturalist 43: 228 (1926); *Paracaleana sullivanii* (F. Muell.) Blaxell, Contr. New South Wales Natl. Herb. 4: 282 (1972). Type: 'Near Mt. Zero, Grampians in Victoria', Jan. 1882, D. Sullivan s.n. (holo MEL!).

*Caleana nubblingii* Nicholls, Victorian Naturalist 48: 15 (1931). Type: 'New South Wales, Bell, Blue Mountains, 27 Dec. 1930, E. Nubling s.n. (holo MEL!). Notes: Although the type was found in Adelaide it has been listed as being lodged in Melbourne where it rightfully belongs.

*C. nigrita* J. Drummond ex Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. liv (1840). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L!, iso E! G! K!). Dist: Wir, Wda, Wav, Wro, Wey, Ski.

*Paracaleana nigrita* (J. Drummond ex Lindley) Blaxell, Contr. New South Wales Natl. Herb. 4: 282 (1972), *syn. nov.*

*C. nubblingii* Nicholls = *Caleana minor*.

*C. sullivanii* (F. Muell.) E.E. Pescott = *Caleana minor*.

## CALEYA

*Caleyia* R. Br. = *Caleana*.

*C. major* (R. Br.) R. Br. = *Caleana major*.

*C. minor* (R. Br.) Sweet = *Caleana minor*.

*C. sullivanii* F. Muell. = *Caleana minor*.

## CALLISTA

*Callista* Lour. = *Dendrobium*.

*C. adae* (Bailey) Kuntze = *Dendrobium adae*.

*C. aemula* (R. Br.) Kuntze = *Dendrobium aemulum*.

*C. agrostophylla* (F. Muell.) Kuntze = *Dendrobium agrostophyllum*.

*C. antennata* (Lindley) Kuntze = *Dendrobium antennatum*.

*C. baileyi* (F. Muell.) Kuntze = *Dendrobium baileyi*.

*C. bairdiana* (Bailey) Kuntze = *Dendrobium fellowsii*.

*C. beckleri* (F. Muell.) Kuntze = *Dendrobium schoeninum*.

*C. bifalce* (Lindley) Kuntze = *Dendrobium bifalce*.

*C. bigibba* (Lindley) Kuntze = *Dendrobium bigibbum*.

*C. canaliculata* (R. Br.) Kuntze = *Dendrobium canaliculatum* var. *canaliculatum*.

*C. comata* (Blume) Kuntze = *Flickingeria comata*.

*C. conostalix* (H.G. Reichb.) Kuntze = *Dendrobium lobbii*.

*C. convexa* (Blume) Kuntze = *Flickingeria convexa*.

*C. crumenatum* (Sw.) Kuntze = *Dendrobium crumenatum*.

*C. cucumerina* (Macleay ex Lindley) Kuntze = *Dendrobium cucumerinum*.

*C. dicupha* (F. Muell.) Kuntze = *Dendrobium affine*.

*C. elongata* Kuntze = *Dendrobium gracilicaule*.

*C. eriaeoides* (Bailey) Kuntze = *Eria eriaeoides*.

*C. fairfaxii* (F. Muell. et Fitzg.) Kuntze = *Dendrobium fairfaxii*.

*C. falcorostris* (Fitzg.) Kuntze = *Dendrobium falcorostrum*.

*C. foelschei* (F. Muell.) Kuntze = *Dendrobium foelschei*.

*C. fitzgeraldii* (F. Muell.) Kuntze = *Dendrobium X superbiiens*.

*C. gracilicaulis* (F. Muell.) Kuntze = *Dendrobium gracilicaule*.

*C. johannis* (H.G. Reichb.) Kuntze = *Dendrobium johannis*.

*C. kingiana* (Bidw.) Kuntze = *Dendrobium kingianum*.

*C. linguiformis* (Sw.) Kuntze = *Dendrobium linguiforme*.

*C. lobbii* (Teijsmann et Binned.) Kuntze = *Dendrobium lobbii*.

- C. mirbeliana* (Gaud.) Kuntze = *Dendrobium mirbelianum*.  
*C. monophylla* (F. Muell.) Kuntze = *Dendrobium monophyllum*.  
*C. mortii* (F. Muell.) Kuntze = *Dendrobium mortii*.  
*C. ophioglossa* (H.G. Reichb.) Kuntze = *Dendrobium smillieae*.  
*C. phalaenopsis* (Fitzg.) Kuntze = *Dendrobium phalaenopsis*.  
*C. pugioniformis* (Cunn.) Kuntze = *Dendrobium pugioniforme*.  
*C. rigida* (R. Br.) Kuntze = *Dendrobium rigidum*.  
*C. smillieae* (F. Muell.) Kuntze = *Dendrobium smillieae*.  
*C. speciosa* (Smith) Kuntze = *Dendrobium speciosum*.  
*C. striolata* (H.G. Reichb.) Kuntze = *Dendrobium striolatum*.  
*C. stuartii* (Bailey) Kuntze = *Dendrobium stuartii*.  
*C. summeri* (F. Muell.) Kuntze = *Dendrobium bigibbum*.  
*C. superbiens* (H.G. Reichb.) Kuntze = *Dendrobium X superbiens*.  
*C. tattorianum* (Bateman ex H.G. Reichb.) Kuntze = *Dendrobium tattorianum*.  
*C. teijsmannii* (Mig.) Kuntze = *Dendrobium lobbii*.  
*C. teretifolia* (R. Br.) Kuntze = *Dendrobium teretifolium*.  
*C. tetragona* (Cunn.) Kuntze = *Dendrobium tetragonum*.  
*C. tortilis* (Cunn.) Kuntze = *Dendrobium monophyllum*.  
*C. undulata* (R. Br.) Kuntze = *Dendrobium discolor* var. *discolor*.

## CALOCHILUS

- Calochilus* R. Br., Prod. 320 (1810). Type species: *Calochilus paludosus* R. Br. (here designated).
- C. australianus* F. Muell., Fragm. 5: 96 (1865), nom. illeg. Notes: This name was used by Mueller in reference to both *C. campestris* and *C. paludosus*.
- C. caeruleus* L.O. Williams, Bot. Mus. Leafl., Harv. Uni. 12(5): 151-2, t. 22 (1946). Type: 'Tarara, Wassi Kussa River, Western district, New Guinea', Jan. 1937, J. Brass 8600 (holo AMES, iso BM! K! L!). Dist: Qco, Ddg; PG, IN?
- C. campestris* R. Br., Prod. 320 (1810). Type: 'Port Jackson, Sydney', Sep.-Oct. 1804, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! E! L! K!); Syntype: 'Shoalwater Bay', R. Brown s.n. (BM!). Dist: Wey, Sls, Sse, Vwp, Vwh, Vgi, Tas, Nsc, Nst, Can, Ncc, Nct, Nnc, Nnt, Nns, Nnp, Qmo, Qpc; NZ?
- Calochilus cupreus* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 42: 24, t. 2 (1918). Type: 'McLaren Vale, South Australia', 10 Oct. 1918, R.S. & J. Rogers s.n. (holo AD!, iso K!).
- Calochilus saprophyticus* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 54: 41 (1930). Type: 'Victoria, Cravensville', 21 Oct. 1918, A.B. Braine s.n. (holo AD!).
- C. campestris* sensu Fitzg. = *Calochilus robertsonii*.
- C. campestris* R. Br. var. *grandiflorus* Benth. = *Calochilus grandiflorus*.
- C. cupreus* R. Rogers = *Calochilus campestris*.
- C. gracillimus* Rupp, Victorian Naturalist 60: 28 (1943). Type: 'Blackwall Mountain, Woy Woy', 25 Dec. 1933, H.M.R. Rupp s.n. (lectotype NSW! here designated); Syntypes: 'Mount Irvine, Blue Mountains', Jan. 1934, C.A. Messmer s.n. (NSW); 'Mount Irvine, Blue Mountains', Jan. 1943, J.P. & G.J. Scrivener s.n. (NSW). Dist: Ncc, Nct, Nnc, Qdd, Qmo.
- C. grandiflorus* (Benth.) Domin, Bibl. Bot., Stuttgart Heft. 85: 551 (1915). Dist: Nnc, Qmo, Qwb.
- Calochilus campestris* R. Br. var. *grandiflorus* Benth., Fl. Austral. 6: 315 (1873). Type: 'Voyage of the Rattlesnake: Freshwater marshes, Moreton Island', 18 Oct. 1847, J. McGillivray s.n. (lectotype K! here designated); Syntype: 'McLeay River', C. Moore s.n. (K!).
- Calochilus grandiflorus* Rupp, Victorian Naturalist 60: 240 (1934). Type: 'Queensland: Burleigh Heads', Dec. 1939, C.P. Ledward s.n. (lecto NSW!), nom. illeg.
- C. grandiflorus* Rupp, nom. illeg. = *Calochilus grandiflorus*.
- C. herbaceus* Lindley, Gen. sp. orchid. pl. 459 (1840). Type: 'Tasmania, Rocky Cape', Dec. 1837, R. Gunn 920 (lectotype specimen (3b) K-L! here designated, isolectotype K! W!). Dist: Tas.
- C. holtzei* F. Muell., Bot. Centralbl. 50: 127 (1892). Type: 'Near Port Darwin, N.T.', 1891, M. Holtze 1276 (holo MEL!, iso K!). Dist: Qco, Ddg, Wga.
- C. holtzei* F. Muell. var. *obligacocca* J. Simmons, Orchadian 6: 85 (1979), nom. nud.

## CALOCHILUS

- C. imberbis** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 51: 4 (1927). Type: 'Victoria, Rushworth, 3 Oct. 1923, E. Rich s.n. (lectotype AD! here designated); Syntype: 'Ringwood', Oct. 1924, E. Coleman s.n. (not found). Notes: This taxon is possibly only a petaloid form of *Calochilus robertsonii*, but until the biology of the taxon can be worked out it should be regarded as a species. Dist: Vnp, Vwh, Vgi, Tas, Nsc, Nst
- C. paludosus** R. Br., Prod. 320 (1810). Type: 'Port Jackson; Sydney', Oct.-Nov. 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated,); Syntypes: 'Hunter River', 1804, R. Brown s.n. (BM! K!). Dist: Sse, Vwp, Vwh, Vgi, Tas, Nsc, Can, Ncc, Nct, Nnc, Qmo.
- C. richiae** Nicholls, Victorian Naturalist 45: 233, t. 9 (1929). Type: 'Whroo near Rushworth', 1928, E. Rich s.n. (holo MEL!). Notes: Perhaps our rarest and most endangered native orchid. Dist: Vnp.
- C. robertsonii** Benth., Fl. Austral. 6: 315 (1873). Type: 'Heaths on Glenelg River, Victoria', 28 Sep. 1843, Robertson 27? or 627 (lectotype K! here designated); Syntype: 'Heaths on Glenelg River, Victoria', 10 Dec. 1843, Robertson 27? (K! W!); 'Bendigo', Oldfield 155 (K!). Dist: Wda, Sls, Sse, Vwp, Vwh, Vnp, Veh, Vgi, Tas, Nsc, Nst, Can, Ncc, Nct, Ncs, Nnc, Nnt, Nns, Qmo, Qdd; NZ.  
*Calochilus campestris* sensu Fitzg., Austral. orch. 1(4): [t. 6] (1978), non R. Br. (1810).

**C. saprophyticus** R. Rogers = *Calochilus campestris*.

## CAMAROTIS

*Camarotis* Lindley = *Micropora*.

*C. keffordii* (Bailey) J.J. Smith = *Micropora fasciculata*.

## CERAIA

*Ceraia* Lour. = *Dendrobium*.

*C. simplicissima* Lour. = *Dendrobium crumenatum*.

## CERATOPSIS

*Ceratopsis* Lindley = *Epipogium*.

*C. rosea* (D. Don) Lindley = *Epipogium roseum*.

## CHEIROSTYLISTIS

*Cheirostylis* Blume, Bijdr. 6: t. 1, f. 1b; 8: 413 (1825). Type species: *Cheirostylis montana* Blume.

*C. grandiflora* sensu Maiden = *Cheirostylis ovata*.

*C. kanarensis* Blatt. et. McCann = *Didymoplexis pallens*.

**C. ovata** (Bailey) Schltr., Bot. Jahrb. Syst. 45: 394, in obs (1921). Dist: Nnc, Qmo, Qkn, Qco.

*Gastrodia ovata* Bailey, Bot. Bull. Dept. Agric. Queensland 14: 13 (1896). Type: 'Mountain Range, near Cairns', L.J. Nugent s.n. (holo BRI not found).

*Cheirostylis grandiflora* sensu Maiden, Proc. Linn. Soc. New South Wales 21: 625-6 (1896), non Blume (1825). Type: 'Richmond River near Lismore, New South Wales', W. Finselback s.n (holo NSW!), nom. illeg.

*Zeuxine attenuata* Rogers et C. White, Proc. Roy. Soc. Queensland 32: 123-4, f. 2 (1921). Type: 'Queensland, Mackay', 13 Sep. 1895, L.J. Nugent s.n. (holo BRI!).

## CHILOGLOTTIS

*Chioglossa* R. Br., Prod. 322 (1810). Type species: *Chioglossa diphyllea* R. Br.

**C. cornuta** J.D. Hook., Fl. antarct. 1: 69 (1844). Type: 'Campbell Islands', Lyall s.n. (holo K!). Dist: Sse, Veh, Tas, Nst; NZ.

*Chioglossa muelleri* Fitzg., Austral. orch. 2(2): [t. 6] (1885). Type: 'Loddon, Victoria', Nov., C. French ex F. Mueller s.n. (holo not found; lectotype Fitzgerald's plate here designated).

**C. diphyllea** R. Br., Prod. 323 (1810). Type: 'Port Jackson; Sydney & Parramatta', Mar. 1805, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype E! K! K-L! P!); Syntype: 'Port Jackson', 1804, R. Brown s.n. (AD!). Dist: Nsc, Ncc.

*Caladenia diphyllea* (R. Br.) H.G. Reichb., Beitr. Syst. Pflanzenk. 67 (1871).

*C. dockrillii* Rupp = *Chioglossa trilabia*.

**C. formicifera** Fitzg., Austral. orch. 1(3): [t. 9] (1877). Type: 'Liverpool', Sep.-Oct., C. King s.n. (holo not found; lectotype Fitzgerald's plate here designated). Dist: Nsc, Ncc, Nct, Nnc, Nnt, Qdd; NZ.

**C. gunnii** Lindley, Gen. sp. orchid. pl. 387 (1840). Type: 'Tasmania, Circular Head', Nov. 1837, R. Gunn 913 (holo K-L!, iso K! P!). Dist: Vwh, Vgi, Veh, Tas, Nsc, Nst, Can, Nss, Ncc, Nnt; NZ.

*Caladenia gunnii* (Lindley) H.G. Reichb., Beitr. Syst. Pflanzenk. 67 (1871).

*C. muelleri* Fitzg. = *Chiloglottis cornuta*.

*C. X pescottiana* R. Rogers, Proc. Roy. Soc. Victoria (new ser.) 30: 139, t. 25 (1918). Type: 'Cravensville near Tallangatta', 8 Oct. 1917, A.B. Braine s.n. (holo AD!, iso MEL!). Notes: A natural hybrid between *C. gunnii* and *C. trapeziformis*. Dist: Veh, Nst.

*C. reflexa* (*Labill.*) Druce, Rep. Bot. Exch. Cl. Brit. Isles Suppl. 2: 614 (1917). Dist: Vwp, Vwh, Vgi, Veh, Tas, Nsc, Ncc, Nnt.

*Epipactis reflexa* Labill., Nov. Holl. pl. 2: 60, t. 211 (1806). Type: Van Diemen, *J. Labillardiere* s.n. (lecto FI! illustration only).

*Acianthus bifolius* R. Br., Prod. 322 (1810), nom. illeg.

*C. sylvestris* D. Jones et M. Clements, Proc. Roy. Soc. Queensland 98: 123-4, f. 1 (1987). Type: 'Queensland Springbrook', 12 Jan. 1986, D.L. Jones 2231 (holo BRI!, iso AMES! BRI! CBO! K! MO! NSW! PERTH! US!). Dist: Ncc, Nnc, Qmo.

*C. trapeziformis* Fitzg., Austral. orch. 1(3): [t. 9] (1877). Type: 'New South Wales, Liverpool', C. King s.n. (holo BM!). Dist: Sse, Vgi, Veh, Tas, Nst, Can, NSS, Ncc, Nct, Ncs.

*C. trilabrum* Fitzg., J. Bot. 21: 204 (1883). Type: 'Mount York, Blue Mountains, N.S.W.', R.D. Fitzgerald s.n. (holo BM!). Dist: Nst, Can, Net, Nnt.

*Chiloglottis dockrillii* Rupp, Victorian Naturalist 70: 54, f. (1953). Type: 'Barrington Tops, New South Wales', Feb. 1953, A.W. Dockrill s.n. (holo NSW!, iso MEL!), syn. nov.

*C. truncata* D. Jones et M. Clements, Proc. Roy. Soc. Queensland 98: 124, f. 2 (1987). Type: 'Queensland, Anduramba, W. of Toogoolawah', Aug. 1984, D.L. Jones s.n. (holo BRI!, iso AMES! CBG! K! MO! NSW!). Dist: Qdd, Qle.

## CHILOSCHISTA

*Chiloschista* Lindley in Edwards's, Bot. Reg. 18: sub t. 1522 (1832). Type species: *Epidendrum usneoides* D. Don.

*C. phyllorhiza* (F. Muell.) Schltr., Bot. Jahrb. Syst. 56: 492 (1921). Dist: Qco, Ddg; PG? ID.

*Sarcocilus phyllorhizus* F. Muell., Fragm. 5: 201 (1866); *Thrixspermum phyllorhizum* H.G. Reichb., Beitr. Syst. Pflanzenk. 71 (1871). Type: 'Ad promontorium Cape York', E. Daemel s.n. (holo MEL!, iso W!). Notes: Reichenbach included this species under *Thrixspermum* without reference to Mueller's original description. Seidenfaden (1988) reports on the possible occurrence of this species, or a form of it in Java.

## CHLOIDIA

*Chloidia* Lindley = *Corymborkis*.

*Chloidia confusa* Ames = *Corymborkis veratrifolia*.

## CIRRHOPELALUM

*Cirrhopetalum* Lindley = *Bulbophyllum*.

*C. africanum* Schltr. = *Bulbophyllum longiflorum*.

*C. blumi* Lindley = *Bulbophyllum blumei*.

*C. clavigerum* Fitzg. = *Bulbophyllum longiflorum*.

*C. elisae* F. Muell. = *Bulbophyllum elisae*.

*C. gracillimum* Rolfe = *Bulbophyllum gracillimum*.

*C. kenejianum* Schltr. = *Bulbophyllum longiflorum*.

*C. layardii* F. Muell. et Kraenzl. = *Bulbophyllum longiflorum*.

*C. leratii* Schltr. = *Bulbophyllum gracillimum*.

*C. longiflorum* (Thouars) Schltr. = *Bulbophyllum longiflorum*.

*C. psittacoides* Ridley = *Bulbophyllum gracillimum*.

*C. thouarsii* Lindley = *Bulbophyllum longiflorum*.

*C. umbellatum* (G. Forst.) Reinw. ex J.D. Hook. et Arn. = *Bulbophyllum longiflorum*.

*C. warianum* Schltr. = *Bulbophyllum gracillimum*.

## CISTELLA

*Cistella* Blume = *Geodorum*.

*C. cernua* (Willd.) Blume = *Geodorum densiflorum*.

## CLEISOSTOMA

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### CLEISOSTOMA

*Cleisostoma* Blume, Bijdr. 6: t. 3, f. 27; 8: 362 (1825). Type species: *Cleisostoma sagittatum* Blume.

*Sarcanthus* Lindley, Coll. Bot. t. 39B (1826), non Lindley (1824). Type species: *Sarcanthus rostratus* Lindley. Notes: I have followed Seidenfaden (1975b) in the treating this taxon as a synonym of *Cleisostoma*.

*C. armitii* (F. Muell.) Bailey = *Saccolabiopsis armitii*.

*C. beckleri* F. Muell. ex Benth. = *Papillilabium beckleri*.

*C. brevilabre* F. Muell. = *Plectorrhiza brevilabris*.

*C. congestum* Bailey = *Thrixspermum congestum*.

*C. cornutum* Rupp = *Plectorrhiza tridentata*.

*C. erectum* Fitzg. = *Plectorrhiza erecta*.

*C. gemmatum* Rupp = *Schistotylus purpuratus*.

*C. keffordii* Bailey = *Micropora fasciculata*.

*C. macphersonii* (F. Muell.) Benth. = *Pomatocalpa macphersonii*.

*C. marsupiale* Kraenzl. = *Pomatocalpa marsupiale*.

*C. nugentii* Bailey = *Saccolabiopsis armitii*.

*C. orbiculare* Rupp = *Saccolabiopsis armitii*.

*C. purpuratum* Rupp = *Schistotylus purpuratus*.

*C. tridentata* Lindley = *Plectorrhiza tridentata*.

### COELANDRIA

*Coelandria* Fitzg. = *Dendrobium*.

*C. smilliae* (F. Muell.) Fitzg. = *Dendrobium smilliae*.

### COELOGYNE

*Coelogyne* Lindley, Coll. Bot. sub. t. 33 (1821). Type species: non designatus.

*C. conchoidea* (Lindley) H.G. Reichb. = *Pholidota imbricata*.

*C. crotalina* H.G. Reichb. = *Pholidota imbricata*.

*C. ? javanica* Lindley = *Nervilia crociformis*.

*C. loricata* (H.G. Reichb.) H.G. Reichb. = *Pholidota imbricata*.

*C. triotos* H.G. Reichb. = *Pholidota imbricata*.

### CONCHIDIUM

*Conchidium* W. Griffith = *Eria*.

*C. lobbii* (Teijsm. et Binned.) Rauschert = *Dendrobium lobbii*.

### CONOSTALIX

*Conostalix* (Kraenzl.) Brieg. = *Dendrobium*.

*C. calcaratum* Lindley = *Dendrobium lobbii*.

*C. lobbii* (Teijsm. et Binned.) Rauschert = *Dendrobium lobbii*.

? *C. paludicola* (Schltr.) Rauschert = *Dendrobium lobbii*.

*C. teijemannii* (Miq.) Rauschert = *Dendrobium lobbii*.

### CORDYLA

*Cordyla* Blume = *Roptrostemon*.

*C. discolor* Blume = *Nervilia plicata*.

### CORUNASTYLIS

*Corunastylis* Fitzg. = *Prasophyllum*.

*C. apostasiooides* Fitzg. = *Prasophyllum apostasiooides*.

### CORYBAS

*Corybas* Salisb., Parad. Lond. t. 83 (1807). Type species: *Corybas aconitiflorus* Salisb.

*Corysanthes* R. Br., Prod. 328 (1810). Type species: *Corysanthes fimbriata* R. Br.

*Nematoceras* J.D. Hook., Fl. nov.-zel. 1: 249 (1853). Type: non designatus.

- C. abellianus** Dockr. North Queensland Naturalist 24(112): 1-2, f. (1955). Types: 'North Queensland, (Atherton Tableland), Atherton and Ravenshoe', 10 Apr. 1955, W.W. Abell & T. Abell s.n (holo NSW). Dist: Qco.
- C. aconitiflorus** Salisb., Parad. Lond. t. 83 (1807). Type: cult. ex Australia [Sydney, Anon] (holo not found; lectotype t. 83! here designated). Dist: Vgi, Tas, Nsc, Ncc, Nnc, Qmo.  
*Corysanthes aconitiflorus* (Salisb.) Druce, Rep. Bot. Exch. Cl. Brit. Iles, Suppl. 2: 617 (1917).  
*Corysanthes bicalcarata* R. Br., Prod. 328 (1810). Type: 'Port Jackson, Farm Cove', May-Jul. 1804, F. Bauer s.n. (lectotype specimen (a) BM! here designated, isolectotype E! L! P! W!).
- C. barbara** D. Jones, Austrobaileya 2(5): 548-50, f. 1 D, E & F (1988). Type: 'Queensland. Moreton District: Heritage Creek, south-eastern side of Mt Tamborine, protected slopes in open forest', 21 May 1987, D.L. Jones 2484 & B.E. Jones (holo BRI!, iso AD! AMES! BRI! CBG! K! MEL! MO! NSW! PERTH! US!). Dist: Ncc, Nnc, Qmo, Qwb, Qbn, Qpc, Qkn, Qco, Lord Howe Island.
- C. callosus** Blume = *Corybas fimbriatus*.
- C. cheesemanii** (J.D. Hook, ex Kirk) Kuntze, Revis. gen. pl. 6: 657 (1891). Notes: This species is now considered a New Zealand endemic distinct from *C. aconitiflorus* (D. Jones pers comm.).
- C. despectans** D. Jones et R.C. Nash, Muelleria 3(3): 165-8, f. 1 (1976). Type: 'South Australia, lower Coorong', 8 Aug. 1967, R.C. Nash 308 (holo AD, iso AD! MEL!). Dist: Wey, Sep, Syp, Smb, Sls, Ski, Sse, Vwp, Vgi.
- C. diemenicus** (Lindley) H.G. Reichb., Beitr. Syst. Pflanzenk. 42 (1871). Dist: Sls, Ski, Sse, Vwp, Vwh, Veh, Vnp, Tas, Nst, Can, Nss, Nct, Ncs.  
*Corysanthes diemenica* Lindley, Gen. sp. orchid. pl. 393 (1840); *Corysanthes fimbriata* R. Br. var. *diemenica* (Lindley) Benth., Fl. Austral. 6: 351 (1873). Type: 'Tasmania, Circular Head', Jun. 1837, R. Gunn 614 (holo K-L!, iso K! L! P! W!). Notes: Illustrated on page 317 in Jones (1988).  
*Corysanthes dilatata* Rupp et Nicholls, Proc. Linn. Soc. New South Wales 53(1): 87-88, t. 12 (1928); *Corybas dilatatus* (Rupp et Nicholls) Rupp, Proc. Linn. Soc. New South Wales 53: 551 (1928). Type: 'South Australia, Belair National Park', 27 Jul. 1908, R.S. Rogers s.n. (lecto AD!, iso BM!).
- C. diemenicus** sensu Rupp = *Corybas incurvus*.
- C. dilatatus** (Rupp et Nicholls) Rupp = *Corybas diemenicus*.
- C. fimbriatus** (R. Br.) H.G. Reichb., Beitr. Syst. Pflanzenk. 42 (1871). Dist: Vgi, Veh, Tas, Nsc, Ncc, Nnc, Qmo, Qkn, Qco.  
*Corysanthes fimbriata* R. Br., Prod. 328 (1810). Type: 'Sydney & Parramatta', May-Jul. 1804, F. Bauer s.n. (lectotype specimen (a) BM! here designated, isolectotype E! FI! K! L! P!); Syntypes: 'North Rocks', Jun. 1804, F. Bauer s.n. (BM!); 'Sydney', May 1805, G. Caley s.n. (BM!).  
*Corybas callosus* Blume, Orch. Arch. Ind. 146, t. 63, f. 38 (1858). Type: 'New South Wales, Coogee', M. Verreaux 699 (holo P!), syn. nov. Notes: Van Royen (1984) interpreted this name as the earliest for *C. hispidus*. However, he clearly was not familiar with the taxa involved as *C. hispidus* inhabits mountainous areas of eastern Australia while the type of *C. callosus* was collected at Coogee [Beach] a seaside suburb of Sydney. I have examined the type of *C. callosus* and, as expected, it is representative of the common *C. fimbriatus*, a species found along much of the coast in eastern Australia.
- C. fordhamii** (Rupp) Rupp, Victorian Naturalist 59: 61 (1942). Dist: Sls, Vwp, Vgi, Nnc, Qmo.  
*Corysanthes fordhamii* Rupp, Victorian Naturalist 58: 83-4, f. (1941). Types: 'Brunswick Heads, New South Wales', Aug. 1932, 1940, 1941, F. Fordham s.n. (syn NSW).
- C. hispidus** D. Jones, Victorian Naturalist 90: 96, t. 1, f. 1 (1973). Type: 'Mt Hamilton ±5.5 miles NNE of Wulgulmerang Post Office', 2 Mar. 1972, D.L. Jones & K. C. Rogers s.n. (holo MEL!, iso MEL! NSW!). Dist: Vgi, Veh, Tas, Nst, Can, Nss, Nct, Nnt, Qmo, Qdd.
- C. incurvus** D. Jones et M. Clements, Kew Bull. 43(1): 135-7, f. 1B, D, F-H (1988). Type: 'Victoria 5 km ENE of Tyabb, on Yaringa Road, at edge of Western Port Bay, 4 m', 9 Aug. 1985, H.M.E. Richards 82 (holo CBG!, iso MEL!, K!). Notes: Illustrated on page 320 in Jones (1988). Dist: Sfr, Sln, Slc, sse, Vwp, Vwh, Vnp, Vgi, Veh, Tas, Nst, Nss, Nct, Ncs.  
*Corybas diemenicus* sensu Rupp, Proc. Linn. Soc. New South Wales 53: 55 (1928), non (Lindley) H.G. Reichb. (1871).  
*Corysanthes hamiltonii* Fitzg. ex Rupp et Nicholls, Proc. Linn. Soc. New South Wales 53(1): 81 (1928), nom. nud. Notes: Based on the collection 'Guntawang, near Mudgee', Jul. 1886, A.G. Hamilton s.n. (holo NSW!, icon Mitchell Library, Sydney!).
- C. macranthus** (J.D. Hook.) H.G. Reichb., Beitr. Syst. Pflanzenk. 67 (1871). Dist: Tas (Macquarie Island); NZ.  
*Nematoceras macranthus* J.D. Hook., Fl. nov.-zel. 1: 250 (1853); *Corysanthes macrantha* (J.D. Hook.) J.D. Hook., Handb. New Zealand fl. 266 (1864). Type: 'New Zealand', 1853, W. Colenso 134 (lectotype specimen (a) K! here designated); Syntypes: 'New Zealand', W. Colenso s.n. (E! FI! K! P!).

*Corybas macranthus* (J.D. Hook.) H.G. Reichb. var. *typicus* Hatch, Trans. Roy. Soc. New Zealand 76: 579 (1949), nom. illeg.

*C. macranthus* (J.D. Hook.) H.G. Reichb. var. *typicus* Hatch = *Corybas macranthus*.

*C. matthewsii* (Cheesem.) Schltr., Repert Spec. Nov. Regni Veg. Beih. 19: 23 (1923). Notes: Previously listed as a synonym of *C. unguiculatus* but here considered a New Zealand endemic (D. Jones pers. comm.).

*C. montanus* D. Jones, Austrobaileya 2(5): 547-9, f. 1A & B (1988). Type: 'Queensland. Moreton District: Mt Maroon, dense open forest in valley between north and south peak', 30 May 1987, D.L. Jones 2483 & T.D. Jones (holo BRI!, iso AD! AMES! BRI! CANB! CBG! K! MEL! MO! NSW! US!). Dist: Qmo.

*C. neocalledonius* (Schltr.) Schltr., Repert Spec. Nov. Regni Veg. 19: 23 (1924). Dist: Qpc, Qkn, Qco; NC.

*Corysanthes neocalledonica* Schltr., Bot. Jahrb. Syst. 39: 47 (1907). Types: New Caledonia, R. Schlechter 14918 (holo B†); 'New Caledonia, Thy Valley', McKee 11472 (neo CANB! vide van Royen, 1984).

*C. pruinosa* (Cunn.) H.G. Reichb., Beitr. Syst. Pflanzenk. 42 (1871). Dist: Nsc, Ncc, Nnc.

*Corysanthes pruinosa* Cunn. in Llotsky, New South Wales Mag. 1: 41 (1833). Type: 'Near Parramatta', A. Cunningham s.n. (holo K!). Notes: R. Cunningham has been credited with the authorship of this and the following species. However, careful research by R. Beveridge, Library Assistant, ANBG, established that it was more likely to have been A. Cunningham who described these taxa and not his brother, and that the editor of this section of the short-lived N.S.W. Magazine was Llotsky.

*C. undulatus* (Cunn.) Rupp, Proc. Linn. Soc. New South Wales 53: 551 (1928). Dist: Nsc, Ncc, Nnc, Qmo, Qwb.

*Corysanthes undulata* Cunn. in Llotsky, New South Wales Mag. 1: 41 (1833). Type: 'Near Parramatta', A. Cunningham s.n. (holo K!).

*C. unguiculatus* (R. Br.) H.G. Reichb., Beitr. Syst. Pflanzenk. 43 (1871). Dist: Wda, Wey, Sse, Vwp, Vwh, Veh, Vgi, Tas, Nsc, Ncc, Nnc.

*Corysanthes unguiculata* R. Br., Prod. 328 (1810). Type: 'Port Jackson', Jun.-Jul. 1804, F. Bauer s.n. (lectotype specimen (a) BM! here designated, isolectotype BM!).

## CORYMBIS

*Corymbis* Thouars = *Corymborkis*.

*C. angusta* Ridley = *Corymborkis veratrifolia*.

*C. batjanica* J.J. Smith = *Corymborkis veratrifolia*.

*C. brevistylis* J.D. Hook. = *Corymborkis veratrifolia*.

*C. confusa* (Ames) Schltr. = *Corymborkis veratrifolia*.

*C. disticha* (Breda) Lindley = *Corymborkis veratrifolia*.

*C. exaltata* Schltr. = *Corymborkis veratrifolia*.

*C. lauterbachii* Schltr. = *Corymborkis veratrifolia*.

*C. ledermannii* Schltr. = *Corymborkis veratrifolia*.

*C. longiflora* J.D. Hook. = *Corymborkis veratrifolia*.

*C. minor* Schltr. = *Corymborkis veratrifolia*.

*C. rhytidocarpa* J.D. Hook. = *Corymborkis veratrifolia*.

*C. subdensa* Schltr. = *Corymborkis veratrifolia*.

*C. thouarsii* Kraenzl. = *Corymborkis veratrifolia*.

*C. trukensis* Tuyama = *Corymborkis veratrifolia*.

*C. veratrifolia* H.G. Reichb. = *Corymborkis veratrifolia*.

## CORYMBORKIS

*Corymborkis* Thouars, Nouv. Bull. Sci. Soc. Philom. Paris 1: 518 (1809). Type species: *Corymborkis corymbis* Thouars. Notes: The correct spelling of this genus is *Corymborkis* but taxa described using *Corymborchis* are also recognised as the two names are treated as orthographic variants. For the purpose of this paper I have followed the treatment of the genus by Rasmussen (1977). Further research on the biology of this and related taxa is needed.

*Corymbis* Thouars, Orch. Hist. Pl. Orchidees 1: tt. 37-38 (1822).

*Rynchanthera* Blume, Tab. Java. Orchid. t. 16 (1825) (nom. rej. vs. *Rynchanthera* A.P. de Candolle (1828)) (nom. cons.). Type species: *Rynchanthera paniculata* Blume.

*Hysteria* Reinw., Syll. Pl. Nov. 2: 5 (1828). Type species: *Hysteria veratrifolia* Reinw.

*Macrostylis* Breda, Gen. Sp. Orchid. Asclep. [3], t. 2 (1828), non Barting et H.L. Wendland (1824). Type species: *Macrostylis disticha* Breda.

*Chloidia* Lindley, Gen. sp. orchid. pl. 484 (1840). Type species: *Serapias polystachya* Sw. (vide Rasmussen, 1977).

*C. angustissima* J.J. Smith = *Corymborkis veratrifolia*.

*C. assamica* Blume = *Corymborkis veratrifolia*.

*C. batjanica* (J.J. Smith) J.J. Smith = *Corymborkis veratrifolia*.

*C. brevistylis* (J.D. Hook.) Kuntze = *Corymborkis veratrifolia*.

*C. confusa* (Ames) Ames = *Corymborkis veratrifolia*.

*C. longiflora* (J.D. Hook.) Kuntze = *Corymborkis veratrifolia*.

*C. parviflora* J.J. Smith = *Corymborkis veratrifolia*.

*C. rhytidocarpa* (J.D. Hook.) Kuntze = *Corymborkis veratrifolia*.

*C. ruttenii* J.J. Smith = *Corymborkis veratrifolia*.

*C. sakisimensis* Fukuyama = *Corymborkis veratrifolia*.

*C. subdensa* (Schltr.) Fukuyama = *Corymborkis veratrifolia*.

*C. tropidiifolia* J.J. Smith = *Corymborkis veratrifolia*.

*C. trukensis* (Tuyama) Fukuyama = *Corymborkis veratrifolia*.

***C. veratrifolia*** (Reinw.) Blume., Orchid. Arch. Ind. 125, t. 42, f. E; t. 43, f. 1 (1858). Dist: Qco; NC, VU, SB, PG, ID, MY, SG, PH, GU, JP, VN, KH, LA, TH, IN, LK.

*Hysteria veratrifolia* Reinw. in Blume, Cat. van eenige der merk. zoö inals uit. gew. 1: 99 (1823), as nom. nud.; Reinw. in Blume, Cat. van eenige der merk. zoö inals uit. gew. 5 (1825-26); *Corymborchis veratrifolia* Blume., Fl. Javae Orch., 105, t. 42e & t. 43, f. 1 (1859); *Corymbis veratrifolia* (Reinw.) H.G. Reichb., Flora 48: 184 (1865). Type: 'Java', T. Lobb 162. (holo-neo K!, iso-neo BM! illus. C).

*Rynchanthera paniculata* Blume, Tab. Java. Orchid. t. 16 (1825). Type: cult. Bogor? ex Java (illus.).

*Macrostylis disticha* Breda, Gen. Sp. Orchid. Asclep. t. 2 (1828); *Corymbis disticha* (Breda) Lindley, Fol. Orch. 5 (1854). Type: Java, Breda s.n. (illus.).

*Corymborkis assamica* Blume, Fl. Javae Orch., 126, t. 43, f. 2 (1859). Type: 'Assam', Jenkins s.n. (lecto L, isolectotype K!).

*Arundina tahitensis* Nadeaud, Enum. pl. Tahiti 37 (1873). Type: Tahita, J. Naeaud s.n. (holo & iso P!), syn. nov.

*Corymbis rhytidocarpa* J.D. Hook., Fl. Brit. Ind. 6: 92 (1890); *Corymborkis rhytidocarpa* (J.D. Hook.) Kuntze, Revis. gen. pl. 658 (1891). Type: Malaysia; Perak, Aug. 1885, King's collector 8014 (lecto K!, isolecto BO, E, SING, WU); Syntypes: Malaysia; Perak, King's collector 7925 (BM! L, K! P); Malaysia, Scortechini 1259 (K!); Malaysia, L. Wray 490 (K! SING).

*Corymbis longiflora* J.D. Hook., Fl. Brit. Ind. 6: 92 (1890); *Corymborkis longiflora* (J.D. Hook.) Kuntze, Revis. gen. pl. 2: 658 (1891). Type: Malaysia, Perak, King's collector 6988 (lecto K!, isolectotype SING); Syntypes: Malaysia, Scortechini 216b (K, SING); Malacca, Maimay 3134 (Kew distrib. 1661) (K!).

*Corymbis brevistylis* J.D. Hook., Fl. Brit. Ind. 6: 92 (1890); *Corymborkis brevistylis* (J.D. Hook.) Kuntze, Revis. gen. pl. 2: 658 (1891). Type: Malaysia, Perak, Sep. 1885, King's collector, Bwada Depong 8248 (lecto K!, isolectotype BM! L).

*Corymbis angusta* Ridley, J. Straits Branch Roy. As. Soc. 45: 234 (1906). Type: 'Christmas Island', N.H. Ridley 102 (lecto SING, isolectotype AMES, BM!).

*Corymbis subdensa* Schltr., Repert. Spec. Nov. Regni Veg. 2: 168 (1906). *Corymborkis subdensa* (Schltr.) Fukuyama, Trans. Nat. Hist. Soc. Taiwan 31: 289 (1941). Type: Bonin Island, H. Hattori s.n. (holo not found).

*Chloidia confusa* Ames, Orchidaceae 2: 67 (1908); *Corymbis confusa* (Ames) Schlr., Bot. Jahrb. Syst. 54: 395 (1911); *Corymborkis confusa* (Ames) Ames, Orchidaceae 5: 48 (1915). Type: Philippines, Mindanao, R.S. Williams 2153 (holo NY, iso AMES).

*Corymbis batjanica* J.J. Smith, Bull. Dept. Agric. Indes Neerl. 22: 11 (1909); *Corymborkis batjanica* (J.J. Smith) J.J. Smith, Icon. Orchid. Malay. 2: t. 10, f. 4 (1930). Type: Indonesia, Batjan Island, Moluccas, 265m, J.J. Smith s.n. (holo BO?).

*Corymbis lauterbachii* Schlr., Repert. Spec. Nov. Regni Veg. Beih. 1: 94 (1911). Type: 'Kaiser-Wilhelms-Land: On the route from Ramu [River] to the coast, alt. c. 300 m', Feb. 1902, R. Schlechter 15719 (lecto L); Syntype: 'In humus in the forests of the Finisterre Range, alt. c. 700 m', Aug., R. Schlechter 17944 (B†); 'On the Gogol River', Nov. 1890, C. Lauterbach 929, 1074 & 1117 (B†).

## CORYMBORKIS

- Corymbis minor* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 95 (1911). Type: 'Kaiser-Wilhelms-Land: In the forest near Bulu, alt. c. 20 m', May 1907, R. Schlechter 16073 (holo B†).
- Corymbis exaltata* Schltr., Repert. Spec. Nov. Regni Veg. 10: 15 (1911). Type: Indonesia, Celebes, R. Schlechter 20544 (holo B†, lecto K!).
- Corymbis ledermannii* Schltr., Bot. Jahrb. Syst. 56: 456 (1921); *Corymborkis ledermannii* (Schltr.) Fukuyama, Trans. Nat. Hist. Soc. Taiwan 31: 289 (1941). Types: Palau Island, C. Ledermann 14151 & 14349 (syn not found); Mariana Island (Guam), Fritz s.n. (syn not found).
- Corymborchis angustissima* J.J. Smith, Bull. Jard. Bot. Buitenzorg (ser. 3) 9: 37 (1927). Type: Indonesia, Java, A. Thorenaar 363 (holo BO).
- Corymborchis parviflora* J.J. Smith, Bull. Jard. Bot. Buitenzorg (ser. 3) 9: 448 (1928). Type: Indonesia, Molucca, Buru Island, L.J. Toxopeus 285 (lecto L, isolectotype BO); Syntype: Indonesia, Molucca, Buru Island, L.J. Toxopeus 338 (BO).
- Corymborchis ruttenii* J.J. Smith, Bull. Jard. Bot. Buitenzorg (ser. 3) 10: 102 (1928). Type: Indonesia, Molucca, Seram, L. Rutten 235 (holo L).
- Corymborchis tropidifolia* J.J. Smith, Nova Guinea 18: 14 (1935). Type: Indonesia, Irian Barat, W.M. van Leeuwan 9124b (lecto L, isolectotype BO).
- Corymbis trukensis* Tuyama, Bot. Mag. (Tokyo) 54: 266 (1940); *Coymborkis trukensis* (Tuyama) Fukuyama, Trans. Nat. Hist. Soc. Taiwan 31: 289 (1941). Type: Carolina Island, Truk, G. Koidzumi s.n. (holo TI).
- Corymborkis sakisimensis* Fukuyama, Trans. Nat. Hist. Soc. Taiwan 31: 266 (1942); *Corymbis sakisimensis* (Fukuyama) Masamune, J. Geobot. 12: 101 (1963). Type: Japan, Ryu-Kyu Island, Ishigaki, N. Fukuyama 7241 (holo TAI).
- Corymbis disticha* sensu F. Muell., Fragm. 7: 30 (1869), non Lindley (1854).

## CORYSANTHES

- Corysanthes* R. Br. = *Corybas*.
- C. aconitiflorus* (Salisb.) Druce = *Corybas aconitiflorus*.
- C. bicalcarata* R. Br. = *Corybas aconitiflorus*.
- C. diemenica* Lindley = *Corybas diemenicus*.
- C. dilatata* Rupp et Nicholls = *Corybas diemenicus*.
- C. fimbriata* R. Br. = *Corybas fimbriatus*.
- C. fimbriata* R. Br. var. *diemenica* (Lindley) Benth. = *Corybas diemenicus*.
- C. fordhamii* Rupp = *Corybas fordhamii*.
- C. hamiltonii* Fitzg. ex Rupp et Nicholls = *Corybas incurvus*.
- C. macrantha* (J.D. Hook.) J.D. Hook. = *Corybas macranthus*.
- C. matthewsii* (Cheesem.) = *Corybas matthewsii*.
- C. neocalledonica* Schltr. = *Corybas neocalledonius*.
- C. pruinosa* Cunn. = *Corybas pruinosis*.
- C. undulata* Cunn. = *Corybas undulatus*.
- C. unguiculata* R. Br. = *Corybas unguiculatus*.

## CRYPTANTHEMIS

- Cryptanthemis* Rupp = *Rhizanthella*.
- C. slateri* Rupp = *Rhizanthella slateri*.

## CRYPTOSTYLIS

- Cryptostylis* R. Br., Prod. 317 (1810). Type species: *Cryptostylis erecta* R. Br. (here designated).
- C. erecta* R. Br., Prod. 317 (1810). Type: 'Port Jackson', R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype E!). Dist: Vgi, Veh, Tas, Nsc, Ncc, Nnc, Qmo, Qwb, Qpc.
- C. hunteriana* Nicholls, Victorian Naturalist 54: 182, t. 18 (1938). Type: 'Country off the old Bemm Road, from Cape Conran to Orbost, "Marlo Plains", Dec.-Jan.', W. Hunter s.n. (holo MEL!). Dist: Vgi, Nsc, Ncc, Nns.
- C. leptochila* Benth., Fl. Austral. 6: 334 (1873). Type: 'Springwood', 1834, R. Cunningham s.n. (lectotype K! here designated, isolectotype MEL!). Syntype: 'Kurrajong', M. Corbet s.n. (K!). Dist: Vgi, Veh, Nsc, Ncc, Nnc, Nns, Qmo.
- Cryptostylis leptochila* Benth. var. *frenchiana* F. Muell., Victorian Naturalist 9: 53 (1892). Type: 'near Dandenong Ranges', Apr.- (Mar.) 1892, C. French s.n. (syn MEL!).

*C. leptochila* Benth. var. *frenchiana* F. Muell. = *Cryptostylis leptochila*.

*C. longifolia* R. Br. = *Cryptostylis subulata*.

*C. ovata* R. Br., Prod. 317 (1810). Type: 'King George's Sound', Dec. 1801, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype E! K!). Dist: Wda, Wey.

*C. subulata* (Labill.) H.G. Reichb., Beitr. Syst. Pflanzenk. 15 (1871). Dist: Sls, Sse, Vwp, Vwh?, Vgi, Veh, Tas, Nsc, Ncc, Nct, Nnt, Nnc, Qmo, Qwb, Qpc, Qkn, Qle.

*Malaxis subulata* Labill., Nov. Holl. pl. 2: 62, t. 212 (1806). Type: 'Van Diemen', *J. Labillardiere* s.n. (holo FI!, iso FI! P!).

*Cryptostylis longifolia* R. Br., Prod. 317 (1810). Type: 'Middle Island, Port Dalrymple', 13 Jan. 1804, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype AD! E! K! P!); Syntype: 'Port Jackson', 1803, R. Brown s.n. (BM!).

## CYMBIDIUM

*Cymbidium* Sw., Nov. Act. Soc. Sci. Upsal. 6: 70 (1799). Type: *Cymbidium aloifolium* (L.) Sw. Notes: I have followed and agree with the treatment of the Australian taxa in the recent revision of *Cymbidium* by Du Puy & Cribb (1988).

*C. albuciflorum* F. Muell. = *Cymbidium madidum*.

*C. canaliculatum* R. Br., Prod. 331 (1810). Type: 'Tropical Queensland; Broad Sound', Sep. 1803, R. Brown s.n. (lectotype BM!, here designated); Syntypes: 'East Coast Dryander's land', R. Brown s.n. (BM! E! K!). Dist: Nnc, Ncs, Nns, Nnp, Nnf, Nnt, Qdd, Qmo, Qwa, Qgs, Qbn, Qle, Qpc, Qks, Qmi, Qgn, Qkn, Qbu, Qeo, Dbf, Ddg, Dvr, Wha, Wfi, Wga.

*Cymbidium hillii* F. Muell., Garten Flora 28: 138-9 (1879). Type: cult. Brisbane Botanic Gardens ex 'In coastal forest Mulgrave Mountains, North Queensland', W. Hill s.n. (holo MEL not found).

*Cymbidium sparkesii* Rendle, J. Bot. 36: 221 (1898); *Cymbidium canaliculatum* R. Br. var. *sparkesii* (Rendle) Bailey, Compr. cat. Queensland pl. 845 (1909). Type: cult. London, 26 Apr., 1909, J. Sparkes ex 'North-east Queensland', A.O. Jones s.n. (holo BM!).

*Cymbidium canaliculatum* R. Br. var. *canaliculatum* forma *inconstans* Rupp, Proc. Linn. Soc. New South Wales 59: 98-9 (1934).

*Cymbidium canaliculatum* R. Br. var. *canaliculatum* forma *aureolum* Rupp, Proc. Linn. Soc. New South Wales 59: 99, t. 3, f. 8 (1934). Type: Pilliga, N.S.W., Oct. 1932, H.M.R. Rupp s.n. (holo NSW!).

*Cymbidium canaliculatum* R. Br. var. *marginatum* Rupp, Proc. Linn. Soc. New South Wales 59: 99 (1934).

*Cymbidium canaliculatum* R. Br. var. *marginatum* Rupp forma *fuscum* Rupp, Proc. Linn. Soc. New South Wales 59: 99 (1934). Type: 'Cairns, north Queensalnd', 1933, W.F. Tierney s.n. (holo NSW!).

*Cymbidium canaliculatum* R. Br. var. *marginatum* Rupp forma *purpurascens* Rupp, Proc. Linn. Soc. New South Wales 59: 99 (1934). Type: 'Head of the Brisbane River, Queensland', F.A. Weinthal s.n. (holo not found).

*Cymbidium canaliculatum* R. Br. var. *barrettii* Nicholls, Austral. Orchid Rev. 7: 40 (1942). Type: 'Groote Eyland, Northern Territory', C. Barrett s.n. (holo MEL).

*C. canaliculatum* R. Br. var. *barrettii* Nicholls = *Cymbidium canaliculatum*.

*C. canaliculatum* R. Br. var. *canaliculatum* forma *aureolum* Rupp = *Cymbidium canaliculatum*.

*C. canaliculatum* R. Br. var. *canaliculatum* forma *inconstans* Rupp = *Cymbidium canaliculatum*.

*C. canaliculatum* R. Br. var. *marginatum* Rupp = *Cymbidium canaliculatum*.

*C. canaliculatum* R. Br. var. *marginatum* Rupp forma *fuscum* = *Cymbidium canaliculatum*.

*C. canaliculatum* R. Br. var. *marginatum* Rupp forma *purpurascens* Rupp = *Cymbidium canaliculatum*.

*C. canaliculatum* R. Br. var. *sparkesii* (Rendle) Bailey = *Cymbidium canaliculatum*.

*C. gomphocarpum* Fitzg. = *Cymbidium suave*.

*C. hillii* F. Muell. = *Cymbidium canaliculatum*.

*C. iridifolium* Cunn. = *Cymbidium madidum*.

*C. leai* Rendle = *Cymbidium madidum*.

*C. leroyi* St Cloud = *Cymbidium madidum*.

*C. madidum* Lindley in Edwards's, Bot. Reg. 26: Misc. 34, [no. 6, pp 9-10] (1839). Type: cult. ex Australia (East Indies?), Rollinsons s.n. (holo K-L!). Dist: Nnc, Qmo, Qdd, Qwb, Qpc, Qbn, Qks, Qkn, Qco.

*Cymbidium iridifolium* Cunn. in Edwards's, Bot. Reg. 25: Misc. 34 (1839), non Roxb. (1814). Type: 'On decayed trunks of trees in large masses, damp shaded woods on the Brisbane River', Jul. 1828, A. Cunningham s.n. (holo K?). Notes: The name *Cymbidium iridifolium* Cunn. is a later homonym of

*C. iridifolium* Roxb., Hort. Bengal. 63 (1814); Fl. Indica 3: 458 (1832), based on the name *Oberonia iridifolia* Lindley, which in turn is a later homonym of *Oncidium iridifolium* Sw. ex Steud., Nom. ed. 2(1): 460 (1840).  
*Cymbidium albuciflorum* F. Muell., Fragm. 1: 158 (1859). Type: 'Moreton Bay', W. Hill s.n. (holo MEL!).  
*Cymbidium leai* Rendle, J. Bot. 36: 221-2 (1898). Type: cult. ex 'Sonata, Queensland', 3 Sep. 1886, T.S. Lea s.n. (holo BM!).

*Cymbidium queenianum* Klinge, Acta Horti petropolitani 17, fasc. 1: 137, t. 11, f. 13, 14 (1899). Type: 'Australia', Perisch s.n. (holo LE).

*Cymbidium leroyi* St. Cloud, North Queensland Naturalist 24(112): 3, f. (1955); *Cymbidium madidum* Lindley var. *leroyi* (St. Cloud) Menninger, Amer. Orchid Soc. Bull. 30: 870 (1961). Type: cultivated Cairns and type locality, Jan 1955, ex 'Emmagen Creek north of Cape Tribulation, North Queensland', Dec 1954, C.G. Le Roy s.n. (holo QRS!).

*C. madidum* Lindley var. *leroyi* (St. Cloud) Menninger = *Cymbidium madidum*.

*C. pictum* R. Br. = *Geodorum densiflorum*.

*C. queenianum* Klinge = *Cymbidium madidum*.

*C. reflexum* R. Br. = *Liparis reflexa*.

*C. sparkesii* Rendle = *Cymbidium canaliculatum*.

**C. suave** R. Br., Prod. 331 (1810). Type: 'Port Jackson; Hunter River', R. Brown s.n. (lectotype BM!, here designated). Dist: Nsc, Ncc, Nnc, Qmo, Qpc, Qks, Qkn, Qco.

*Cymbidium gomphocarpum* Fitzg., J. Bot. 21: 203 (1883). Type: Australia, R.D. Fitzgerald s.n. (holo BM!).

*C. umbellatum* (G. Forst.) Spreng. = *Bulbophyllum longiflorum*.

## CYRTOPERA

*Cyrtopera* Lindley = *Eulophia*.

*C. papuana* Ridley = *Eulophia zollingeri*.

*C. sanguinea* Lindley = *Eulophia zollingeri*.

*C. zollingeri* H.G. Reichb. = *Eulophia zollingeri*.

## CYRTOPODIUM

*Cyrtopodium* R. Br. in W. Aiton et W.T. Aiton, Hort. Kew. (ed. 2) 5: 216 (1813). Type species: *Cymbidium andersonii* Lambert.

*C. parkinsonii* F. Meull. ex Kraenzl. = *Eulophia bicallosa*.

## CYRTOSTYLIS

**Cyrtostylis** R. Br., Prod. 322 (1810). Type species: *Cyrtostylis reniformis* R. Br. Notes: For discussion on the status of the genus refer to Jones and Clements (1987).

**C. huegelii** Endl. in Lehm., Pl. Preiss. 2: 6 (1846). Type: Rottnest Island, 22 Aug. 1839, Preiss 2204 (lecto W!, isolectotype G! M! MEL! MO! P! W!). Notes: Illustrated on page 192 of Hoffman & Brown (1984). Dist: Wir, Wda, Wey, Wro.

*Caladenia reniformis* R. Br. var. *huegelii* (Endl.) H.G. Reichb., Beitr. Syst. Plfantenk. 67 (1871); *Cyrtostylis reniformis* R. Br. var. *huegelii* (Endl.) Benth., Fl. Austral. 6: 376 (1873); *Acianthus huegelii* (Endl.) Nicholls et Goadby, Victorian Naturalist 50: 106 (1933); *Acianthus reniformis* R. Br. var. *huegelii* (Endl.) A.S. George, Nuytsia 1(2): 168 (1971), syn. nov.

*C. macrophylla* J.D. Hook. = *Cyrtostylis reniformis*.

*C. oblonga* J.D. Hook., Fl. nov.-zel. 1: 246 (1853). Notes: A New Zealand endemic that has erroneously been placed as a synonym of *C. reniformis*.

*C. oblonga* J.D. Hook. var. *rotundifolia* (J.D. Hook.) Cheesem. = *Cyrtostylis reniformis*.

**C. reniformis** R. Br., Prod. 322 (1810). Type: 'Port Jackson', May-Jun. 1802, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype E! Fl! K! K-L! MEL! P! W!). Dist: Sep, Syp, Sls, Ski, Sse, Vwp, Vwh, Vgi, Vnp, Veh, Tas, Nsc, Nst, Can, NSS, Ncc, Nct, Ncs, Nnc, Nqd.

*Caladenia reniformis* (R. Br.) H.G. Reichb., Beitr. Syst. Plfantenk. 67(1871); *Acianthus reniformis* (R. Br.) Schltr., Bot. Jahrb. Syst. 34: 39 (1906).

*Cyrtostylis rotundifolia* J.D. Hook., Fl. nov.-zel. 1: 246 (1853); *Cyrtostylis oblonga* J.D. Hook. var. *rotundifolia* (J.D. Hook.) Cheesem., Man. N. Zealand fl. 685 (1906). Type: 'New Zealand', W. Colenso 755 (holo K!).

*Cyrtostylis macrophylla* J.D. Hook., Fl. nov.-zel. 1: 246 (1853). Type: 'New Zealand', W. Colenso 1944 (holo K!).

**C. robusta** D. Jones et M. Clements, Lindleyana 2(3): 157-60, f. 11-15 (1987). Type: 'Western Australia; c. 5 km south of Jerramungup', 28 Aug. 1986, D.L. Jones 2410 (holo CBG!, iso AD! CBG! K!). Notes: Illustrated on page 190 of Hoffman & Brown (1984) as *Acanthus reniformis*. Dist: Wda, Wey, Sep, Syp, Ski, Sls, Smb, Sse, Vwp, Vgt, Tas.

**C. tenuissima** (Nicholls et Goadby) D. Jones et M. Clements, Lindleyana 2(3): 157 (1987). Dist: Wda, Wey.

*Acanthus tenuissimus* Nicholls et Goadby, Victorian Naturalist 50: 22 (1933). Type: 'Bayswater, near Perth', Sep.-Oct. 1932, B.T. Goadby s.n. (holo PERTH!, iso NSW! PERTH!). Notes: Illustrated on page 194 of Hoffman & Brown (1984).

## DENDROBIUM

**Dendrobium** Sw., Nov. Act. Soc. Sci. Upsal. 6: 82 (1799) (nom. cons.). Type species: *Dendrobium moniliforme* Sw. (type cons. *vide* Holttum et al 1979).

*Ceraia* Lour., Fl. Cochinch. 2: 518 (1790). Type species: *Ceraia simplicissima* Lour., nom. rej. vs. *Dendrobium* Sw. (1799) (nom. cons.).

*Callista* Lour., Fl. Cochinch. 2: 519 (1790). Type species: *Callista amabilis* Lour., nom. rej. vs. *Dendrobium* Sw. (1799) (nom. cons.).

*Pedilonum* Blume, Bijdr. 6: f. 36; 7: 320 (1825). Type species: *Pedilonum secundum* Blume.

*Onychium* Blume, Bijdr. 7: 323 (1825), non Kaulfuss (1820). Type species: non *designatus*.

*Grastidium* Blume, Bijdr. 7: 333 (1825). Type species: *Grastidium salacense* Blume.

*Aporum* Blume, Bijdr. 6: f. 39; 7: 334 (1825). Type species: *Aporum indivisum* Blume.

*Thelychiton* Endl., Prod. Fl. Norf. 32 (1833). Type species: *Thelychiton macropus* Endl. (here designated). Notes: *T. macropus* best fits the generic description.

*Tropilis* Rafin., Fl. Tell. 2: 95 (1837). Type species: *Dendrobium aemulum* R. Br.

*Latourea* Blume, Rumphia 4: 41, t. 195, f. 1 (1849), non (Endl.) Lindley (1847). Type species: *Latourea spectabilis* Blume.

*Dichopus* Blume, Mus. Bat. 2: 176 (1856). Type species: *Dichopus insignis* Blume.

*Coelandria* Fitzg., Austral. orch. 1(7): [t. 2] (1882). Type species: *Dendrobium smilliae* F. Muell.

*Sayeria* Kraenzl., Ost. Bot. Z. 44; 257 (1894). Type species: *Sayeria paradoxa* Kraenzl., syn. nov.

*Katherinea* A. Hawkes, Lloydia 19: 94 (1956). Type species: *Dendrobium amplum* Lindley, syn. nov.

*Conostalix* (Kraenzl.) Brieg. in Schltr., Die Orchideen 3(1): 659 (1981). Type species: *Dendrobium calcaratum* Lindley, syn. nov.

*Monanthos* (Schltr.) Brieg. in Schltr., Die Orchideen 3(1): 660 (1981). Type species: *Dendrobium bilobum* Lindley, syn. nov.

*Trachyrhizum* (Schltr.) Breig. in Schltr., Die Orchideen 3(1): 687 (1981). Type species: *Dendrobium chalmersii* F. Muell., syn. nov.

*Dendrocoryne* (Lindley) Brieg. in Schltr., Die Orchideen 3(1): 724 (1981), nom. illeg. Type species: *Dendrobium speciosum* Smith, syn. nov.

*Latourorchis* Brieg. in Schltr., Die Orchideen 3(1): 727 (1981). Type species: *Latourea spectabilis* Blume, syn. nov.

*Australorchis* Brieg. in Schltr., Die Orchideen 3(1): 741 (1981). Type species: *Dendrobium monophyllum* F. Muell., syn. nov.

*Dockrillia* Brieg. in Schltr., Die Orchideen 3(1): 745 (1981). Type species: *Dendrobium linguiforme* Sw., syn. nov.

**D. adae** Bailey, Proc. Roy. Soc. Queensland 1: 149 (1884). Type: 'Scrub between Herberton and Mourilyan Harbour', J.W.R. Stuart s.n. (lectotype K! here designated, isolectotype L!). Dist: Qkn, Qco.

*Callista adae* (Bailey) Kuntze, Revis. gen. pl. 2: 654 (1891); *Tropilis adae* (Bailey) Butzin, Willdenowia 12(2): 250 (1982), syn. nov.; *Tropilis adae* (Bailey) Rauschert, Feddes Repert. 94(7-8): 470 (1983), nom. illeg.

*Dendrobium palmerstoniae* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 3: 317 (1907). Type: 'Queensland: auf dem Mount Bellenden Ker', 1888, C. Palmerston s.n. (holo B†).

*Dendrobium ancorarium* Rupp, Queensland Naturalist 12: 114, t. 6 (1945). Type: cult. Northbridge, 1944, H.M.R. Rupp ex 'neighbourhood of Mount Spurgeon', 1939, H. Flecker s.n. (holo NSW).

**D. aemulum** R. Br., Prod. 333 (1810). Type: 'Port Jackson, trunks of trees', R. Brown s.n. (lectotype specimen (a) BM! here designated); Syntypes: 'On the narrow band [leaf] Iron Bark, near Parramatta', 1804, R. Brown

s.n. (K!); 'On an Iron Bark which is dead', Sep. 1803, R. Brown s.n. (E! K!). Dist: Nsc, Ncc, Nnc, Nnt, Qmo, Qdd, Qwb, Qbn.

*Tropilis aemula* (R. Br.) Rafin., Fl. Tell. 2: 95 (1837), syn. nov.; *Callista aemula* (R. Br.) Kuntze, Revis. gen. pl. 2: 654 (1891); *Dendrocoryne aemulum* (R. Br.) Brieg. in Schltr., Die Orchideen 3(1): 724 (1981), syn. nov.

*D. aemulum* R. Br. var. *giganteum* Leaney, Orchidol. Zealanica 1: 72, t. (1934), nom. nud.

**D. affine** (Decne.) Steud., Nomencl. ed. 2: 489 (1840). Notes: It has been established through examination of material collected in Australia and Indonesia, that all specimens are representative of a single widespread, slightly variable species and its correct name is *D. affine* (P. Cribb pers. comm.). Dist: Ddg, Wga; ID.

*Onychium affine* Decne., Nouv. Ann. Mus. Hist. Nat. 3: 365 (1836). Type: 'Timor', *Decaisne & Teysman* s.n.? (holo L.).

*Dendrobium bigibbum* sensu F. Muell., Fragm. 6: 119 (1868), non Lindley (1853); *Dendrobium dicuphum* F. Muell., Fragm. 8: 28 (1873); *Callista dicupha* (F. Muell.) Kuntze, Revis. gen. pl. 2: 654 (1891). Type: Liverpool River, Gulliver s.n. (holo MEL!, iso K! W!).

*Dendrobium leucolophotum* H.G. Reichb., Gard. Chron. (new ser.) 18: 552 (1882). Type: cult. England, J. Veitch & Sons ex Malay archipelago, [Timor], Rimann s.n. (holo W!).

*Dendrobium urvillei* Finet, Bull. Soc. Bot. France 50: 372, t. 11, F. 1-9 (1903). Type: 'Timor', 1841, Le Guillou 40, 41 (holo P.).

*Dendrobium dicuphum* F. Muell. var. *grandiflorum* Rupp et Hunt, Proc. Linn. Soc. New South Wales 72: 241 (1948). Type: 'near Darwin, Northern Territory', G.L. Piper or R.J. Langdon s.n. (lectotype BRI! here designated).

*Dendrobium dicuphum* F. Muell. var. *album* Hort. ex E.C. Cooper, Roy. Hort. Soc. Dist. Gdng. 2: 653 (1951), nom. illeg.

**D. agrostophyllum** F. Muell., Fragm. 8: 28-9 (1873). Type: 'Ad sinum Rockingham's Bay', J. Dallachy s.n. (holo MEL!, iso K!). Dist: Qkn, Qco.

*Callista agrostophylla* (F. Muell.) Kuntze, Revis. gen. pl. 2: 654 (1891); *Trachyrhizum agrostophylla* (F. Muell.) Rauschert, Feddes Repert. 94(7-8): 469 (1983), syn. nov.

*Dendrobium muellerianum* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 3: 316 (1907). Type: 'Queensland: Auf dem Mount Bartle Frere', 1892, S. Johnson s.n. (holo Bt!).

*D. ancorarium* Rupp = *Dendrobium adae*.

**D. antennatum** Lindley, London J. Bot. 2: 236 (1843). Type: 'New Guinea', Hind s.n. (holo K-L!). Dist: Qco; SB, PG, ID.

*Callista antennata* (Lindley) Kuntze, Revis. gen. pl. 2: 654 (1891).

*Dendrobium d'albertisii* H.G. Reichb., Gard. Chron. (new ser.) 9: 366 (1878). Type: cult. London, H. Veitch ex 'New Guinea', D'Albertis s.n. (holo & iso W!).

*D. arachnanthe* Kraenzl. = *Dendrobium discolor* var. *discolor*.

*D. aruanum* Kraenzl. = *Dendrobium mirbelianum*.

*D. aurantiaco-purpureum* (Nicholls) Dockr. = *Dendrobium prenticei*.

*D. aurantiacum* (F. Muell.) F. Muell. = *Bulbophyllum schillerianum*.

**D. baileyi** F. Muell., Fragm. 8: 173-4 (1874). Type: 'In silvis montium altorum pone Rockingham's Bay', F.M. Bailey s.n. (holo MEL!). Dist: Qkn, Qco.

*Callista baileyi* (F. Muell.) Kuntze, Revis. gen. pl. 2: 654 (1891); *Grastidium baileyi* (F. Muell.) Rauschert, Feddes Repert. 94(7-8): 447 (1987), syn. nov.

*Dendrobium keffordii* Bailey, Proc. Roy. Soc. Queensland 1: 2 (1884). Type: 'Queensland, Johnstone River', W.R. Kefford s.n. (holo BRI not found); cult. Bowen Park, 4 Jan. 1887, F.M. Bailey s.n. (neotype BRI! here designated). Notes: The original type appears to have been lost or destroyed. The only specimen in the BRI bearing the name *D. keffordii*, in Bailey's hand, was collected from a plant grown at Bowen Park, Brisbane. There are many documented cases of plants being collected in the wild and then cultivated at Bowen Park and material being taken from them to describe new species. It seems likely this may be one of those cases. This material has therefore been designated as the neotype for *D. keffordii* in the absence of an original type.

*D. bairdianum* Bailey = *Dendrobium fellowsii*.

**D. baseyanum** St. Cloud, North Queensland Naturalist 23(110): 1-2, f. (1955). Type: 'Kings Plains, North Queensland', F.L. Basey s.n. (holo QRS not found; lectotype original illustration QRS! here designated). Notes: Dockrill (1969) listed this taxon as a synonym of *D. teretifolium* var. *fasciculatum* (= *D. calamiforme*).

However, in the description of *D. baseyanum* there are a number of characters which are inconsistent with those found in *D. calamiforme*, notably the small size of the flowers, the arrangement of the callus ridges, the flat spur with a prominently marked back. The flowers of this species were also reported to not be widely expanded. It should also be noted that some authors had an exceedingly broad concept of the limits of taxa found in the *D. teretifolium* complex. In fact, all of these taxa (*D. teretifolium*, *D. calamiforme*, *D. fairfaxii*, *D. baseyanum* and *D. dolichophyllum*) are morphologically distinct in plant habit and in their floral parts, and in many cases occupy different habitats and biogeographic regions. Recent collections of *D. baseyanum* from north Queensland have also confirmed that this species is more widely distributed than previously thought. Dist: Qco.

*Dockrillia baseyana* (St. Cloud) Rauschert, Feddes Repert. 94(7-8): 446 (1983), syn. nov.

*D. beckleri* F. Muell. = *Dendrobium schoeninum*.

*D. beckleri* F. Muell. var. *racemosum* Nicholls = *Dendrobium racemosum*.

**D. bifalce** Lindley, London J. Bot. 2: 237 (1843). Type: 'New Guinea', Hind s.n. (holo K-L!). Dist: Qco; PG, ID.

*Doritis bifalcis* (Lindley) H.G. Reichb., Xenia Orchid 2: 7 (1874); *Callista bifalcis* (Lindley) Kuntze, Revis. gen. pl. 2: 654 (1891); *Sayeria bifalcis* (Lindley) Rauschert, Feddes Repert. 94(7-8): 466 (1983), syn. nov.

*Dendrobium chloropterum* H.G. Reichb. et S. Moore, J. Bot. 16: 137, t. 196 (1878); *Phylloorchis chloroptera* (H.G. Reichb.) Kuntze, Revis. gen. pl. 2: 677 (1891). Type: cult. Royal Botanic Gardens, Kew ex 'possibly from the Challenger expedition', [Anon] (holo K!, iso W!).

*Bulbophyllum oncidiochilum* Kraenzl., Bot. Jahrb. Syst. 17: 485 (1893); *Latourea oncidiochila* (Kraenzl.) Kraenzl., Ost. Bot. 44: 336 (1894). Type: 'Sumatra', Micholitz s.n. (holo B†).

*Dendrobium breviracemosum* Bailey, Queensland Agric. J. 3: 158-9 (1898). Type: 'Douglas Harbour, New Guinea', May 1898, F.M. Bailey 17 (holo BR!?).

**D. bigibbum** Lindley in Paxton's, Fl. Gard. 3: 25, f. 245 (1852). Type: cult. London ex 'New Holland', Jan. 1852, Loddiges s.n. (holo K-L!). Notes: The type locality of the species has been cited as 'Mount Adolphus, Torres Strait, on the north-east coast of New Holland', (Blake, 1964), based on notes from Lindley (1856). Since Lindley never stated that the specimen figured in the second paper was the type of the species, then it cannot unequivocally be taken as being so. It is also interesting to note that *D. bigibbum* was first flowered at the Royal Botanic Gardens, Kew in 1824 (Reichenbach, 1878). It therefore is possible that there were other collections made of this species before those of Thomson, who has been credited as the collector of one of Loddiges' plants. Dist: Qco, Ddg?; PG, ID.

*Callista bigibba* (Lindley) Kuntze, Revis. gen. pl. 2: 654 (1891).

*Dendrobium sumneri* F. Muell., Fragm. 6: 94 (1867); *Dendrobium bigibbum* Lindley var. *sumneri* (F. Muell.) Bailey, Syn. Queensl. fl. 509 (1883); *Callista sumneri* (F. Muell.) Kuntze, Revis. gen. pl. 2: 655 (1891). Type: 'In vicinity of promontory of Cape York', 1867, F. Jardine s.n. (holo MEL!).

*Dendrobium bigibbum* Lindley var. *candidum* H.G. Reichb., Gard. Chron. (new ser.) 9: 68 (1878); *Dendrobium bigibbum* Lindley subvar. *candidum* (H.G. Reichb.) Veitch in Veitch & Son, Man. Orchid. Pl. 1(3): 23 (1888). Type: cult. B.S. Williams ex 'Torres Strait', 1877?, Goldie s.n. (holo W!). Notes: Flowers white.

*Dendrobium phalaenopsis* Fitzg. var. *statterianum* Sander, Reichenbachia (ser. 2) 1: 15, t. 7 (1892), nom. illeg. Type: cultivated Manchester, England by T. Statter from a plant brought from F. Sander & Co ex 'Torres Strait', [Anon] (holo not found; lectotype t. 7! here designated).

*D. bigibbum* sensu F. Muell. = *Dendrobium affine*.

*D. bigibbum* Lindley var. *albomarginatum* Linden, Lindenia 7: 61, t. 317 (Aug. 1891), non Bailey (Mar. 1891). Notes: This taxon has been listed as a synonym of *D. bigibbum* but correctly it is a synonym of *D. striaenopsis*.

*D. bigibbum* Lindley var. *albomarginatum* Bailey = *Dendrobium X superbians*.

*D. bigibbum* Lindley var. *albopurpuratum* Hort., Gard. Chron. (ser. 3) 18: 396, in obs. (1895), tax. inc. stat. Type: (not found). Notes: This taxon appears referable to *D. striaenopsis*, a species not considered to occur in Australia.

*D. bigibbum* Lindley var. *album* Bailey = *Dendrobium bigibbum*.

*D. bigibbum* Lindley var. *candidum* H.G. Reichb. = *Dendrobium bigibbum*.

*D. bigibbum* Lindley var. *georgei* C. White = *Dendrobium X lavarackianum*.

*D. bigibbum* Lindley var. *macranthum* Bailey = *Dendrobium phalaenopsis*.

*D. bigibbum* Lindley var. *phalaenopsis* (Fitzg.) Bailey = *Dendrobium phalaenopsis*.

*D. bigibbum* Lindley var. *phalaenopsis* (Fitzg.) Bailey forma *compactum* (C. White) St. Cloud = *Dendrobium lithocola*.

*D. bigibbum* Lindley var. *sumneri* (F. Muell.) Bailey = *Dendrobium bigibbum*.

## DENDROBIUM

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- D. bigibbum* Lindley var. *superbum* Hort. ex. H.G. Reichb. = *Dendrobium phalaenopsis*.  
*D. bigibbum* Lindley var. *superbum* Hort. ex. H.G. Reichb. subvar. *compactum* (C. White) Dockr. = *Dendrobium lithocola*.  
*D. bigibbum* Lindley var. *superbiens* (H.G. Reichb.) Bailey = *Dendrobium X superbiens*.  
*D. bigibbum* Lindley subvar. *candidum* (H.G. Reichb.) Veitch = *Dendrobium bigibbum*.  
*D. bigibbum* Lindley subvar. *compactum* (C. White) St. Cloud = *Dendrobium lithocola*.  
*D. bigibbum* Lindley forma *compactum* (C. White) St. Cloud = *Dendrobium lithocola*.  
*D. bigibbum* Lindley var. *venosum* Bailey = *Dendrobium X lavarackianum*.  
*D. bigibbum* Lindley forma *venosum* (Bailey) Bailey = *Dendrobium X lavarackianum*.  
***D. bowmanii* Benth.** Fl. Austral. 6: 286 (1873). Type: 'Bersaker range and Port Cooper', Bowman s.n. (lectotype K! here designated, isolectotypes MEL! W!); Syntypes: 'On trees and rocks, Rodd's Bay, N.S.W.' [During King's second voyage], A. Cunningham 276 (BM! K!). Notes: This name correctly applies to the taxon previously interpreted as *D. mortii*. Bentham in fact examined type material of both *D. mortii* and *D. beckleri* (= *D. schoeninum*) but only reported the correct interpretation of one of those species, viz. *D. mortii* (syn *D. tenuissimum*). He incorrectly determined that *D. beckleri* was conspecific with *D. mortii*, perhaps because of the small size of the specimens or because of the generally poor condition of the available flowers. Whatever the reason, Bentham's account of these species was the source of much confusion for botanists in Australia. Rupp (1943), in particular was quite confused and incorrectly interpreted these and related taxa. These same mistakes were perpetuated by Dockrill (1969). Since the name *D. mortii* correctly applies to the species previously known and reported by both Rupp and Dockrill as *D. tenuissimum*, this clearly leaves the name *D. bowmanii* as the only legitimate one for the species they interpreted as *D. mortii*. Dist: Nnc, Qmo, Qwb, Qpc, Qks, Qkn, Qco; NC.  
*Dendrobium striolatum* H.G. Reichb. var. *chalandei* Finet, Bull. Soc. Fr. 50: 380 (1903); *Dendrobium chalandei* (Finet) Kraenzl., Pflanzenreich Orch.-Mon.-Dendr. 1: 299 (1910). Type: New Caledonia, 12 Sep. 1884, Chalande s.n. (holo P!), syn. nov.  
*Dendrobium mortii* sensu Dockr., Austral. Indig. Orchids 1: 360, t. (1969), non F. Muell. (1859), syn. nov.  
***D. brachypus* (Endl.) H.G. Reichb.**, Linnaea 41: 42 (1877). Notes: I previously subscribed to the interpretation that this orchid was a synonym of *D. macropus* and it in turn was the earliest name for the taxon known as *D. gracilicaule* (Green, 1986). *D. macropus* sens. str. and *D. brachypus* are endemic to Norfolk Island where no other species of *Dendrobium* exists. Both taxa have flowers in which the labellum is petaloid and the column tube-like enclosing the stigma and part of the anther rendering pollinia transfer between plants impossible. These taxa are either apomictic or self-pollinating and in either case are not exchanging genes between plants. The nature of the biology of these taxa and the fact that they are the only members of the genus on this isolated island means neither taxon can interbreed with other members of the same so-called species, viz. *D. macropus* subsp. *gracilicaule* (= *D. gracilicaule*) and *D. macropus* subsp. *howeanum* (= *D. comptonii*). *D. macropus* is therefore here treated as a species separate from either *D. gracilicaule* or *D. comptonii*. *D. brachypus* is possibly only an diminutive form of *D. macropus*, but it has some characteristics not seen in *D. macropus*, viz. an attenuate apex to the pseudobulbs and a flexuose inflorescence. The flowers also rarely open fully. The two can be separated morphologically and are recognized in this paper at the rank of species. Dist: Norfolk Island (where extremely rare).  
*Thelychiton brachypus* Endl., Prodr. Fl. Norf. 33 (1833). Type: 'Norfolk Island', F. Bauer s.n. (holo W!).  
*D. brandtiae* Kraenzl. = *Dendrobium X superbiens*.  
*D. breviracemosum* Bailey = *Dendrobium bifalce*.  
*D. brisbanense* H.G. Reichb. = *Dendrobium gracilicaule*.  
*D. broomfieldii* (Fitzg.) Fitzg. = *Dendrobium discolor* var. *broomfieldii*.  
*D. buluense* Schltr. = *Dendrobium mirbelianum*.  
*D. buluense* Schltr. var. *kanloense* Schltr. = *Dendrobium mirbelianum*.  
***D. cacatua* M. Clements et D. Jones, sp. nov.**  
Ad *Dendrobium tetragonum* Cunn. affinis, a qua caulis longioribus angustioribus, floribus viridibus, flavis vel pallide auranteis, tepalis longioribus filamentosissimis, labello acbo marginibus incurvis undulatis et porcis callosis in lobum medium extensis, et hamis parvis in marginibus columnae, differt. Type: cult. ANBG, 1986, M.A. Clements 3715 ex Queensland, Mt. Lewis road, 12 miles from Mossman-Mt. Molloy road, 28 May 1972, J.W. Wrigley 199 (holo CBG!, iso BRI! K!). Dist: Qks, Qkn, Qco.  
*Dendrobium tetragonum* Cunn. var. *giganteum* Leaney, Orchidol. Zeylanica 1: 73 (1934). Type: 'Northern part of Australia', Leaney s.n. (not found), syn. nov.

*Dendrobium tetragonum* Cunn. var. *giganteum* P.A. Gilbert, Austral. Orchid Rev. 7(2): 36 (Jun. 1942), *pro parte max.*, nom. illeg. Type: cult Sydney, 17 Oct. 1930, P.A. Gilbert ex 'near Cairns', [Anon] (not found), syn. nov. Notes: Dockrill (1969) illustrated this taxon as 'one variant of var. *giganteum* Gilbert', viz. figure C on page 421.

*Dendrobium tetragonum* Cunn. var. *hayesianum* sensu Dockr., Aust. Indig. Orch. Vol. 1: 422, f. E, N (1969), non P.A. Gilbert (1942), syn. nov.

*D. calamiforme* Lodd. in Edwards's, Bot. Reg. 27: Misc. 9, no. 26 (1841). Type: cult. ex 'New Holland', Loddiges s.n. (lectotype K-L! here designated). Dist: Qkn, Qco.

*Dendrobium teretifolium* R. Br. var. *fasciculatum* Rupp, Proc. Linn. Soc. New South Wales 60: 157, t. 4 (1935). Type: 'North Queensland, Cairns', Aug. 1934, Tierney & H. Flecker s.n. (holo NSW!), syn. nov.

*D. calcaratum* Lindley = *Dendrobium lobbii*.

*D. caleyi* Cunn. = *Bulbophyllum exiguum*.

*D. canaliculatum* R. Br. var. *canaliculatum* Prod. 333 (1810). Type: 'Tropical Australia; Endeavour River', J. Banks s.n. (holo illust. BM!). Notes: The taxon, known as *D. canaliculatum* var. *nigrescens*, is the only member of the group which occurs at the site where the type of *D. canaliculatum* was collected by Sir Joseph Banks. There are three, closely related species in this group. All are morphologically distinct and inhabit different areas of northern Australia. *D. tattorianum* is found in coastal swamps on paper-bark trees, south of about Cairns while *D. canaliculatum* is found further north in swamps and inland in paper-bark and other woodlands. *D. foelschei* inhabits relict rainforests and woodlands, in areas from Arnhem Land to the northern Kimberley ranges. (D. Jones pers. comm.). Illustrated on page 443 in Jones (1988). Dist: Qco.

*Callista canaliculata* (R. Br.) Kuntze, Revis. gen. pl. 2: 655 (1891).

*Dendrobium canaliculatum* R. Br. var. *nigrescens* Nicholls, Austral. Orchid Rev. 7: 40 (1942). Type: cult. ex Australia, F.A. Weinthal s.n. (holo MEL not found, lectotype Nicholl's plate 412 b,c,e! here designated), syn. nov.

var. *pallidum* Dockr., North Queensland Naturalist 24(115): 21 (1956). Type: 'Australia, Queensland, Starke River', Le Roy s.n. (holo NSW). Dist: Qco.

*D. canaliculatum* R. Br. var. *foelschei* F. Muell. = *Dendrobium foelschei*.

*D. canaliculatum* R. Br. var. *nigrescens* Nicholls = *Dendrobium canaliculatum* var. *canaliculatum*.

*D. canaliculatum* R. Br. var. *tattorianum* (Bateman ex H.G. Reichb.) H.G. Reichb. = *Dendrobium tattorianum*.

*D. cancroides* Hunt, North Queensland Naturalist 14(83): 30-31, f. (1947). Type: 'Bellenden Ker Range', Oct. 1946, J.H. Wilkie s.n. (holo BRI!). Dist: Qco, Qkn.

*Grastidium cancroides* (Hunt) Rauschert, Feddes Repert. 94(7-8): 448 (1987), syn. nov.

*D. caninum* (Burm. f.) Merr. = *Dendrobium crumenatum*.

*D. capitisyork* M. Clements et D. Jones, sp. nov.

Ad *Dendrobium tetragonum* Cunn. affinis, a qua floribus majoribus viridulis manifeste rufo-maculatis, labello multo majore manifeste rufo-reticulato lobis lateribus maximis et lobo medio parvo longe acuminate, differt. Type: cult. ANBG, 15 Jul. 1985, M.A. Clements 3690 ex F.M. Hill. To north of Road to Tozer's Gap, Iron Range, Queensland, 7 Sep. 1976, J.W. Wrigley 268 (holo CBG!, iso BRI! K!). Notes: Illustrated as *D. tetragonum* var. *giganteum* on page 491 in Jones (1988). Dist: Qkn, Qks, Qco.

*Dendrobium tetragonum* Cunn. var. *giganteum* P.A. Gilbert, Austral. Orchid Rev. 7(2): 36 (Jun. 1942), *pro parte min.* Type: cult. Melbourne ex 'North Queensland', Sep.-Nov., W.H. Nicholls s.n. (type not found), syn. nov.

*Dendrobium tetragonum* Cunn. var. *tomentosum* Nicholls, Austral. Orchid Rev. 7: 40 (Sep. 1942). Types: 'Kuranda', W. Fitzpatrick s.n. (syn MEL); 'near Cairns', F.A. Weinthal s.n. (syn MEL); 'Mt. Fox, via Ingham', A. Glindeman s.n. (syn MEL). Notes: Illustrated as *D. tetragonum* var. *giganteum*, plate 411, f-j by Nicholls (1969), syn. nov.

*D. capituliflorum* Rolfe, Bull. Misc. Inform., Kew 146 (1901). Notes: The name is no longer considered to apply to an Australian taxon.

*D. carrii* Rupp et C. White, Queensland Naturalist 10: 26, t. 2 (1937) & Queensland Naturalist 12: 19 (1942). Type: (holo not preserved); cult. N.S.W., Sep. 1944, H.M.R. Rupp ex Mt. Spurgeon, North Queensland, Sep. 1936, C.T. White & T. Carr s.n. (neotype NSW! here designated). Notes: The neotype was lodged in the herbarium by Rupp, as the type of *D. carrii*, after the description of the species was published. The specimen apparently came from the original plant used by Rupp when describing the species. Dist: Qkn, Qco.

*Katherinea carrii* (Rupp et C. White) Brieg. in Schltr., Die Orchideen 3(1): 737 (1981), syn. nov.

**D. carronii** Lavarack et Cribb, Austrobaileya 1(5): 497-501 (1982). Type: 'Australia, Queensland, Cape York Peninsula', P.S. Lavarack 2573 (holo BRI!). Dist: Qco; PG.

*D. cassythoides* Cunn. = *Erythrorchis cassythoides*.

*D. ceraia* Lindley = *Dendrobium crumenatum*.

*D. chalandei* (Finet) Kraenzl. = *Dendrobium bowmanii*.

*D. chloropterum* H.G. Reichb. & S. Moore = *Dendrobium bifalce*.

*D. comatum* (Blume) Lindley = *Flickingeria comata*.

*D. complanatum* Cunn. = *Oberonia complanata*.

**D. comptonii** Rendle, J. Proc. Linn. Soc., Bot. 45: 247 (1920). Type: 'New Caledonia', Compton 1151 (holo BM!).

Notes: Following examination of living and herbarium material of plants collected from various islands in the south-west Pacific region, it has been established that *D. comptonii* possesses characteristics not found in any of the supposedly closely related taxa, viz. *D. macropus*, *D. brachypus* and *D. gracilicaule*. In particular, plants of *D. comptonii* consistently have thicker canes, larger flowers that are lemon-yellow, sometimes green in colour with or without brown blotches on the outer surfaces of the sepals and petals. The possession of these characteristics in the group, indicates that there has been a genetic change in the plants inhabiting the Pacific region compared to those found on the Australian mainland. In addition, there are no authentic records of *D. gracilicaule* occurring in the same region as *D. comptonii*. Since there are morphological differences between these taxa, they inhabit different geographic regions, these taxa are genetically isolated and thus unable to interbreed with either *D. macropus* or *D. brachypus*, then each should be treated as a separate species. The name *D. comptonii* was the first one used to describe the species found in the Pacific region. Research has commenced on a study to determine the relationships between *D. gracilicaule*, *D. comptonii*, *D. macropus* and *D. brachypus*, but until this is complete each is here being treated as a distinct species. Dist: Lord Howe Island; NC, VU, FJ.

*Tropilis comptonii* (Rendle) Rauschert, Feddes Repert. 94(7-8): 470 (1983), syn. nov.

*Dendrobium drake-castilloi* Kraenzl. in Lecomte, Not. Syst. 4: 135 (1928); *Tropilis drake-castilloi* (Kraenzl.) Rauschert, Feddes Repert. 94(7-8): 470 (1983), syn. nov. Type: Gatope, Mt. de Panoui, 1861-67, Vieillard 3287 (holo P!).

*Dendrobium gracilicaule* F. Muell. var. *howeanum* Maiden, Proc. Linn. Soc. New South Wales 24: 382 (1889); *Dendrobium macropus* (Endl.) H.G. Reichb. ex Lindley subsp. *howeanum* (Maiden) P. Green, J. Arn. Arb. 67: 115 (1986). Type: cult. ex 'Lord Howe Island', Maiden s.n. (not found).

*D. conostalix* H.G. Reichb. = *Dendrobium lobbii*.

*D. convexum* (Blume) Lindley = *Flickingeria convexa*.

**D. coxii** Bailey, Queensl. Agric. J. 16: 411-12 (1900). Type: cult. Adelaide, E. Baxter Cox s.n ex New Guinea (holo BRI!). Notes: It is not clear, from the description, if this is an Australian species, but from the meagre information provided it would appear this might be a New Guinea species. I have studied the Type of this species and although it lacks any floral material, I consider it is representative of the species known as *D. inaequale* Rolfe. If this determination is correct, the name *D. coxii* has priority over *D. inaequale*.

*D. crassulaefolium* Cunn. in Edwards's, Bot. Reg. 25: Misc. 33 (1839), nom. sup. nov.

*D. criniferum* Lindley = *Flickingeria comata*.

**D. crumenatum** Sw. in Schrad., J. Bot. 2: 237 (1799). Type: 'Habitat in India orientali Java', [Anon] (holo S). Notes: I have followed Seidenfaden (1985) and Sprunger (1986) for synonymy of this species. Dist: Christmas Island; ID, SG, MY, BN, PH, TH, VN, CN, KH, BU, IN, BD.

*Angraecum crumenatum* Rumph., Herb. Amb. 6: t. 472 (1750), nom. illeg. pre (1753); *Onychium crumenatum* (Sw.) Blume, Bijdr. 328 (1825); *Callista crumenata* Kuntze, Revis. gen. pl. (1891); *Aporum crumenatum* (Sw.) Breig, in Schltr., Die Orchideen 3(1): 671 (1981).

*Dendrobium caninum* sensu Merr., Philipp. J. Sci. 19: 344 (1921). Type: Java, *Rumphius* s.n. (holo presumed lost; lecto Illust. in Rumph.). Notes: Why the name *D. caninum* should not have priority over *D. crumenatum* is not altogether clear from the literature. Seidenfaden (1985) avoids the issue of the identification of this taxon, preferring instead to retain the status quo, vide Merrill (1923). Apparently Merrill, on being criticized by Ridley, retracted his proposal of interpreting the name *Epidendrum caninum* Burm. f. (1768), as the earliest legitimate one for the species known as *D. crumenatum*. In effect what all of these authors are saying is that the combination *Dendrobium caninum* (Burm. f.) Merr. was based on an incorrect interpretation of *Epidendrum caninum* Burm. f. and it should be cited simply as *D. caninum* Merr. without reference to the basionym. Having studied the *Rumphius* plate myself, it is difficult to believe Merrill was not correct the first time. However, further study is necessary before the situation can be resolved.

*Epidendrum spatulatum* auct. non. Burm. f., Fl. Ind. 188 (1768), non L.

? *Ceraja simplicissima* Lour., Fl. Indoch. 578 (1790); *Dendrobium cerata* Lindley, Gen. sp. orchid. pl. 89 (1830); *Dendrobium simplicissima* (Lour.) Kraenzl., Pflanzenreich 50: 235 (1910). Type: Cochinchina and China, Loureiro 162 (holo BM). Notes: Seidenfaden examined this specimen and noted that it was very incomplete and lacked leaves or flowers. Consequently he was reluctant to positively determine the specimen as representative of and therefore conspecific with *D. crumenatum*. If it was ever established that *Ceraja simplicissima* was representative of the species now known as *D. crumentatum*, Loureiro's epithet would take priority over that of Swartz's.

*Dendrobium schmidianum* Kraenzl., Bot. Tiddkr. 24: 7 (1900). Type: 'Thailand, Koh Chang', Schmidt 550 (holo C).

*Dendrobium kwashotense* Hayata, Icon pl. formos. 4: 41-3, f. 13 d-g, 15 (1914); *Aporum kwashotense* (Hayata) Rauschert, Feddes Repert. 94: 440 (1983), nom. superfl. Type: 'Kwashoto', Jun. 1913, T. Soma s.n. (holo TAI!).

**D. cucumerinum** MacLeay ex Lindley in Edwards's, Bot. Reg. 28: Misc. 58-9 (1842). Type: cult. London, Loddiges ex 'New South Wales', W. MacLeay s.n. (lecto illust. from Bot. Reg. 29: t. 37 (1843) in K-L!, here designated). Notes: The type specimen appears to have been lost. The only sheet bearing this name in Lindley's herbarium at Kew, contains an illustration taken from the Botanical Register which is here designated as the lectotype. Dist: Ncc, Nnc, Qmo, Qwb.

*Callista cucumerinum* (MacLeay ex Lindley) Kuntze, Revis. gen. pl. 2: 654 (1891); *Dockrillia cucumerina* (MacLeay ex Lindley) Brieg. in Schltr., Die Orchideen 3(1): 745 (1981), syn. nov.

**D. curvicaule** (Bailey) M. Clements et D. Jones, stat. nov.

*Dendrobium speciosum* Smith var. *curvicaule* Bailey, Bot. Bull. Dept. Agric. Queensland 14: 12 (1896). Type: cult. Bowen Park, Brisbane ex 'Lady Elliot's Island', Sep., [Bailey?] s.n. (holo BRI!). Notes: A lithophytic species that was first collected by Robert Brown at Port Clinton and subsequently described from other collections. It differs, from all other related species in having flowers with shorter, stouter, cream-coloured segments. It is most closely related to *D. pedunculatum* and differs from it in not having a labellum in which the midlobe is prominently notched at the base (D. Jones, pers. comm.). There appears to be less variation between populations of *D. curvicaule* than that found in *D. pedunculatum*. The name *curvicaule* has erroneously been used for another northern species, viz. *D. pedunculatum* (Clemesha, 1981). Dist: Qpc, Qle.

*Dendrobium speciosum* [var. *fragrans* R. Br.] sensu R. Br., Prod. 332 (1810), pro parte. Type: 'Tropical Australia, Port II' [Port Clinton, Queensland], R. Brown s.n. (lectotype BM! here designated).

*Dendrobium speciosum* Smith var. *capricornicum* S.C. Clemesha, Orchadian 7(5): 103-6, f. 2, 3, 4 & 6 (1982). Type: cult. Coffs Harbour, May 1978, S.C. Clemesha ex 'near a disused quarry on an old volcanic plug about 8 km inland from Yeppoon, Queensland', 24 Jul. 1981, S.C. Clemesha s.n. (holo NSW!), syn. nov. Notes: The description of habitat and habit of the plant, are consistent with those described for *D. curvicaule*.

*D. d' albertisii* H.G. Reichb. = *Dendrobium antennatum*.

**D. X delicatum** (Bailey) Bailey, Queensl. fl. 5: 1527 (1902). Dist: Nnt, Nnc? Qmo.

*Dendrobium speciosum* Smith. var. *delicatum* Bailey, Proc. Roy. Soc. Queensland 1: 11 (1884); *Tropilis X delicata* (Bailey) Butzin, Willdenowia 12(2): 250 (1982), syn. nov.; *Tropilis X delicata* (Bailey) Rauschert, Feddes Repert. 94(7-8): 470 (1983), nom. illeg. Type: 'Main Range, Queensland', B. Crow & C.H. Hartmann s.n. (holo BRI!). Note: Almost certainly a natural hybrid between *D. kingianum* and *D. tarberi* (*D. speciosum* var. *hillii*). The type specimen has unfortunately deteriorated and now lacks floral material.

*Dendrobium speciosum* Smith var. *album* B.S. Williams in Warner et Williams, Orch. Alb. 7, t. 332 (1888). Type: cult. London, Pitt s.n. (holo K!), syn. nov. Notes: Plants of this hybrid are frequently shown and sold, in Europe, under this name.

*D. dicuphum* F. Muell. = *Dendrobium affine*.

*D. dicuphum* F. Muell. var. *album* E.C. Cooper = *Dendrobium affine*.

*D. dicuphum* F. Muell. var. *grandiflorum* Rupp et Hunt = *Dendrobium affine*.

**D. discolor** Lindley var. *discolor* in Edwards's, Bot. Reg. 27: Misc. 21, No. 50; 27, t. 52 (1841). Type: cult. ex 'East Indies', Loddiges s.n. (holo K-L!). Dist: Qpc, Qks, Qkn, Qco; PG.

*Dendrobium undulatum* R. Br., Prod. 332 (1810), non Pers. (1807); *Callista undulata* (R. Br.) Kuntze, Revis. gen. pl. 2: 655 (1891). Type: 'Bustard Bay, Bay of Inlets, Cape Grafton', J. Banks & W. Solander s.n. (lectotype BM! here designated); Syntypes: 'Keppel Bay', R. Brown s.n. (BM! E! K! MEL!).

*Dendrobium arachnanthe* Kraenzl. in Engl., Pflanzenr. Orch. Mon. Dendr. 1: 152 (1910). Type: Kei Islands, Beccari s.n. (holo FI).

*Dendrobium elobatum* Rupp, Victorian Naturalist 69: 116-7 (1953). Type: 'Growing on *Wormia alata* in the mangrove scrubs of Trinity Bay, Cairns district, N. Queensland', Aug. 1952, S.F. Goesling-St Cloud s.n. (holo NSW). Notes: The illustration accompanying the description of this species is so poor as to make it impossible to equate this plant with any known species. However, the original collector of *D. elobatum* gives further details of the flowering habit of the plant in another journal (St. Cloud, 1954). It was clear from this account that *D. elobatum* was merely an unusual form of *D. discolor*, in which the perianth segments are, under certain circumstances, narrow-lanceolate and not undulate. The type of *D. elobatum*, which was maintained in cultivation, later produced inflorescences with flowers identical to those normally found in *D. discolor*.

var. **broomfieldii** (Fitzg.) M. Clements et D. Jones, comb. nov.

*Dendrobium undulatum* R. Br. var. *broomfieldii* Fitzg., Austral. orch. 2(3): [t. 5] (1888); *Dendrobium broomfieldii* (Fitzg.) Fitzg., Austral. orch. 2(3): back cover (1888); *Dendrobium discolor* Lindley forma *broomfieldii* (Fitzg.) Dockr., Austral. Pl. 3: 28-30 (1964). Type: cult. Sydney ex 'Northern Australia', Oct., Broomfield s.n. (holo BM!). Notes: Differs from other variants of *D. discolor* in having flowers with a varnished lustre which are greenish-yellow to bright golden or canary yellow and a prominent white labellum callus. Dist: Qkn, Qco.

*Dendrobium undulatum* R. Br. var. *carterae* Bailey., Comp. Cat. Queensland Pls. 524 (1909). Type: cult. Brisbane ex 'Pine Islet, Percy Islands', T.W. Carter s.n. (holo BRI not found).

var. **fimbrilabium** (H.G. Reichb.) Dockr., Austral. Pl. 3: 28-30 (1964). Dist: Qco.

*Dendrobium undulatum* R. Br. var. *fimbrilabium* H.G. Reichb., Gard. Chron. (new ser.) 9: 40 (1878). Type: cult. Victoria and Paradise Nursery, London, 1877, B.S. Williams s.n. (holo W!).

var. **fuscum** (Fitzg.) Dockr., Austral. Pl. 3: 28 (1964). Dist: Qkn.

*Dendrobium fuscum* Fitzg. in Sydney Morning Herald 24 Sep. (1879) & Gard. Chron. (new ser.) 12: 680 (1879). Type: cult. ex Australia, Port Denison, Queensland, Edgar s.n. (holo not found).

*D. discolor* Lindley forma *broomfieldii* (Fitzg.) Dockr. = *Dendrobium discolor* var. *broomfieldii*.

**D. dolichophyllum** D. Jones et M. Clements, sp. nov.

Ad *Dendrobium teretifolium* R. Br. affinis, a qua caulis tenuibus pendulis non-flexuosis, foliis longis angustis pendulis, floribus paucioribus majoribus flavis late dispositis, et sepalis ad basin manifeste purpureo-striatis, differt. Type: O'Reilly's property, Green Mountains, Queensland, 9 Sep. 1987, C.W. Harman s.n. (holo CBG!, iso BRI!). Dist: Nnc, Qmo, Qdd, Qwb, Qpc, Qkn.

*Dendrobium teretifolium* R. Br. var. *aureum* Bailey, Queensl. fl. 5: 1534 (1902); *Dendrobium teretifolium* R. Br. var. *fairfaxii* Fitzg. ex F Muell. forma *aureum* (Bailey) Clemesha, Orchadian 2: 11 (1965). Type: cult. Balmain, Oct. 1888 ex Richmond River, J. Geary s.n. (lectotype BRI! here designated); Syntype: 'Queensland, Spring Creek Killarney', J.F. Bailey s.n. (BRI!), syn nov.

*Dendrobium teretifolium* R. Br. var. *album* C. White, Proc. Roy. Soc. Queensland 47: 82 (1936). Type: cult., 6 Oct. 1933, B.D. Grimes ex 'Mount Spec, North Queensland', B.D. Grimes s.n. (holo BRI!), syn. nov.

*D. elobatum* Rupp = *Dendrobium discolor* var. *discolor*.

*D. elongatum* Cunn. = *Dendrobium gracilicaule*.

*D. eriae* F. Muell., Sec. Syst. Census. Austral. pl. 186 (1889), nom. invad.

*D. eriaeoides* Bailey = *Eria eriaeoides*.

*D. exiguum* (F. Muell.) F. Muell. = *Bulbophyllum exiguum*.

**D. fairfaxii** F. Muell. et Fitzg., Sydney Mail 360 (21/9/1872). Type: 'Mount Tomah', Aug. 1872, R.D. Fitzgerald s.n. (holo MEL!, iso BM!). Notes: This species is an inhabitant of rainforest whereas in New South Wales *D. teretifolium* is mainly found growing on *Casuarina glauca* in estuaries. Dist: Nct, Nnt.

*Callista fairfaxii* (F. Muell. et Fitzg.) Kuntze, Revis. gen. pl. 2: 654 (1891); *Dendrobium teretifolium* R. Br. var. *fairfaxii* (F. Muell. et Fitzg.) Bailey, Syn. Queensl. fl. 512 (1883); *Dockrillia fairfaxii* (F. Muell. et Fitzg.) Rauschert, Feddes Repert. 94(7-8): 446 (1983), syn. nov.

**D. falcorostrum** Fitzg., Sydney Morning Herald 7 (18/11/1876). Type: 'Upon trees on a mountain at the head of the MacLeay River', R.D. Fitzgerald s.n. (holo BM!, iso K! W!). Dist: Nnt, Qmo.

*Callista falcorostris* (Fitzg.) Kuntze, Revis. gen. pl. 2: 654 (1891); *Tropilis falcorostra* (Fitzg.) Butzin, Willdenowia 12(2): 250 (1982), syn. nov.; *Tropilis falcorostra* (Fitzg.) Rauschert, Feddes Repert. 94(7-8): 470 (1983), nom. illeg.

*D. fasciculatum* Bailey = *Flickingeria comata*.

**D. fellowsii** F. Muell., Fragn. 7: 63 (1870). Type: 'Ad sinum Rockingham Bay', Sep., J. Dallachy s.n. (holo MEL!).

Notes: The type consists of a small cane bearing several inflorescence stems and 3 flowers in a packet. Only one of the flowers has a labellum. Accompanying the specimen are the following notes; "All that I got of

this orchid, it was on the ground, its flowers are yellow. I could not see any plants in flower in the trees". The specimen is representative of the species previously known as *D. bairdianum*. Dist: Qkn, Qco.

*Dendrobium bairdianum* Bailey, Syn. Queensl. fl. Suppl. 1: 53 (1886); *Callista bairdiana* (Bailey) Kuntze, Revis. gen. pl. 2: 654 (1891); *Sayeria bairdiana* (Bailey) Rauschert, Feddes Repert. 94(7-8): 447 (1987) Type: 'Between Herberton and Mourilyan Harbour', J.W.R. Stuart s.n. (holo BRI), syn. nov.

*Dendrobium giddinsii* Hunt, North Queensland Naturalist 15(87): 25 (1948). Type: 'Hartley Creek', Apr. 1947, R. Giddins s.n. (holo BRI!).

*D. fitzgeraldii* F. Muell. ex Bailey = *Dendrobium X superbiens*.

**D. fleckeri** Rupp et C. White, Queensland Naturalist 10: 25, t. 1 (1937). Type: 'Mount Spurgeon, Cairns district', Sep. 1935, H. Flecker s.n. (lectotype NSW! here designated); Syntype: 'Mount Spurgeon, Cairns district', Sep. 1936, C. T. White & T. Carr s.n. (NSW!). Dist: Qkn, Qco.

*Tropilis fleckeri* (Rupp et C. White) Butzin, Willdenowia 12(2): 250 (1982), syn. nov.; *Tropilis fleckeri* (Rupp et C. White) Rauschert, Feddes Repert. 94(7-8): 470 (1983), nom. illeg.

**D. X foederatum** St. Cloud, North Queensland Naturalist 23(111): 2-4, f. (1955). Type: cult, Oct. 1954-Jan. 1955 ex 'Growing on *Heritiera littoralis* in mangrove swamp, Aeroglen, near Cairns', Sep. 1954, J. Dyson-Holland s.n. (holo QRS!). Notes: A natural hybrid between *D. rigidum* and *D. calamiforme*. Dist: Qco.

*Dockrillia X foederata* (St. Cloud) Rauschert, Feddes Repert. 94(7-8): 446 (1983), syn. nov.

**D. foelschei** F. Muell., S. Sci. Rec. 2: 230 (1882). Type: 'Port Darwin', 1882, P. Foelsche s.n. (holo MEL!, iso K! W!). Notes: *D. foelschei* has for years been considered a variety of *D. canaliculatum* (Dockrill, 1969). However, from examination of the flowers taken from representatives of a number of populations of *D. foelschei* it has been established that this taxon is distinct from *D. canaliculatum* and is probably more closely related to *D. tattorianum* than it is to the former species. *D. foelschei* is similar to *D. tattorianum* in that the basal colour of the flowers is cream but the apices of the sepals and petals are a mostly light brown rather than yellow. The midlobe of the labellum is similarly coloured to that of *D. tattorianum*. The most striking differences are that *D. foelschei* has a narrow labellum with a distinctly dilated mid-lobe and acute apex. The flowers are also thinner in substance and rarely open widely (D. Jones, pers. comm.). Dist: Ddg, Wga. *Callista foelschei* (F. Muell.) Kuntze, Revis. gen. pl. 2: 654 (1891); *Dendrobium canaliculatum* R. Br. var. *foelschei* (F. Muell.) Rupp et Hunt, Proc. Linn. Soc. New South Wales 72: 240 (1948).

*D. fuscum* Fitzg. = *Dendrobium discolor* var. *fuscum*.

*D. fusiforme* (Bailey) Bailey = *Dendrobium jonesii* subsp. *jonesii*.

*D. fusiforme* (Bailey) Bailey var. *blackburnii* Nicholls = *Dendrobium jonesii* subsp. *blackburnii*.

*D. fusiforme* (Bailey) Bailey forma *magnifica* Dockr. = *Dendrobium jonesii* subsp. *bancroftianum*.

*D. giddinsii* Hunt = *Dendrobium fellowsii*.

*D. giulianettii* Bailey = *Dendrobium mirbelianum*.

*D. glabrum* J.J. Smith = *Diplocaulobium glabrum*.

*D. goldiei* H.G. Reichb. = *Dendrobium X superbiens*.

*D. gouldii* H.G. Reichb., Gard. Chron. 1867: 901 (1867). Notes: This name has sometimes mistakenly been used for Australian species. *D. gouldii* is not however found in Australia (Cribb, 1986).

**D. gracilicaule** F. Muell., Fragm. 1: 179 (1859). Type: 'In silvis ad sinum ovarium Moreton Bay', W. Hill s.n. (holo MEL!). Dist: Ncc, Nnc, Nnt, Qmo, Qwb, Qkn, Qco.

*Callista gracilicaulis* (F. Muell.) Kuntze, Revis. gen. pl. 2: 654 (1891); *Tropilis gracilicaulis* (F. Muell.) Butzin, Willdenowia 12(2): 250 (1982), syn. nov.; *Tropilis gracilicaulis* (F. Muell.) Rauschert, Feddes Repert. 94(7-8): 470 (1983), nom. illeg.; *Dendrobium macropus* (Endl.) H.G. Reichb. ex Lindley subsp. *gracilicaule* (F. Muell.) P. Green, J. Arn. Arb. 67: 115 (1986). Notes: After further study of this and related taxa I have decided to treat this taxon as a species separate from *D. macropus*, *D. brachypus* and *D. comptonii* (for more detailed discussion see *D. brachypus*).

*Dendrobium elongatum* Cunn. in Edwards's, Bot. Reg. 25: Misc. 33 (1839), non Lindley (1830); *Dendrobium brishanense* H.G. Reichb., Ann. bot. syst. 6: 299 (1861), nom.; *Callista elongata* Kuntze, Revis. gen. pl. 2: 654 (1891), nom. Type: Nov. Holland, A. Cunningham s.n. (holo K-L!!).

*D. gracilicaule* F. Muell. var. *howeanum* Maiden = *Dendrobium comptonii*.

**D. X gracillimum** (Rupp) Leaney, Orchidol. Zeylanica 1: 73 (1934). Dist: Nnt, Qmo.

*Dendrobium speciosum* Smith var. *gracillimum* Rupp, Proc. Linn. Soc. New South Wales 54: 550 (1929); *Tropilis X gracillima* (Rupp) Butzin, Willdenowia 12(2): 250 (1982), syn. nov.; *Tropilis X gracillima* (Rupp) Rauschert, Feddes Repert. 94(7-8): 470 (1983), nom. illeg. Type: cult. ex 'Paterson', Sep. 1929, H.M.R. Rupp s.n. (holo NSW!). Notes: Generally accepted as a natural hybrid between *D. gracilicaule* and *D. tarberi* (syn *D. speciosum* var. *hillii*).

# DENDROBIUM

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*Dendrobium X gracilorum* Clemesha, Orchadian 6(11): 257 (1981), nom. illeg. Type: cult. ex 'Moleton, north-west of Coffs Harbour', Sep. 1978, S.C. Clemesha s.n. (holo NSW!).

*D. X gracilorum* Clemesha = *Dendrobium X gracillimum*.

**D. X grimesii** C. White et Summerh., Bull. Misc. Inform. 3: 106 (1934). Type: 'Lake Barrine, near Atherton', Aug. 1932, B.D. Grimes s.n. (holo K!, iso BRI!). Notes: A putative natural hybrid between *D. nugentii* and *D. calamiforme*. Dist: Qco.

*Dockrilla X grimesii* (C. White et Summerh.) Rauschert, Feddes Repert. 94(7-8): 446 (1983), syn. nov.

*D. haekeanum* Steud., Nomencl. ed. 2, 1: 490 (1840). Notes: This taxon has been previously treated as a synonym of *Geodorum densiflorum* (Lam.) Schltr. but I have been unable to establish if that interpretation is correct.

*D. hillii* F. Muell. = *Sarcochilus hillii*.

*D. hillii* J.D. Hook. = *Dendrobium tarberi*.

*D. hispidum* F. Muell. = *Cadetia maideniana*.

*D. hispidum* F. Muell. var. *taylori* (F. Muell.) Bailey = *Cadetia taylori*.

*D. holrrungii* Kraenzl. var. *australiense* Rendle = *Dendrobium smilliaeae*.

**D. insigne** (Blume) Miq., Fl. Ind. Bat. 3: 640 (1855). Dist: Qco (Torres Strait islands); PG, ID.

*Dichopus insignis* Blume, Mus. Bot. 2: 176 (1855). Type: 'New Guinea', *Zippelius* s.n. (holo L!).

*Dendrobium pentactis* Kraenzl. in Engler, Pflanzenreich Orch.-Mon.-Dendr. 1: 200 (1910). Type: 'Papuanische Provinz: Aru-Inseln', Beccari s.n. (holo FI).

*D. ionoglossum* Schltr. = *Dendrobium nindii*.

*D. ionoglossum* Schltr. var. *potamophilum* Schltr. = *Dendrobium nindii*.

*D. joffitii* Durand et B.D. Jackson, Index Kewensis Suppl. 1: 130 (1906), nom. inval.

**D. johannis** H.G. Reichb., Gard. Chron. 1865: 890 (1865). Type: 'N. Australia', J.G. Veitch s.n. (lectotype Reichenbach's illustration of the taxon W! here designated). Notes: Other collections under this name at Wien (W) are of *D. trilamellatum*. Dist: Qco; PG, ID?

*Dendrobium undulatum* R. Br. var. *johannis* (H.G. Reichb.) Bailey, Syn. Queensl. fl. 509 (1883); *Callista johannis* (H.G. Reichb.) Kuntze, Revis. gen. pl. 2: 655 (1891).

*D. johannis* H.G. Reichb. var. *semifuscum* H.G. Reichb. = *Dendrobium trilamellatum*.

*D. johnsoniae* F. Muell., S. Sci. Rec. 2: 95 (1882). Notes: There is considerable doubt as to the authenticity of the collection reported to be from Australia (Lavarack & Gray, 1984). The taxon is therefore treated here as not occurring in this country.

**D. jonesii** Rendle subsp. **jonesii** J. Bot. 39: 197 (1901). Type: cult. London ex 'Johnstone River, Queensland', A.O. Jones (holo BM!). Dist: Qkn, Qco.

*Dendrobium speciosum* Smith var. *fusiforme* Bailey, Proc. Linn. Soc. New South Wales 2: 277-8 (1878); *Dendrobium fusiforme* (Bailey) Bailey, Queensl. fl. 5: 1527 (1902), non Thouars (1822); *Dendrobium ruppianum* A. Hawkes, Austral. Orchid. Rev. 29: 40 (1964); *Dendrocoryne speciosum* (Smith) Brieg. var. *fusiforme* (Bailey) Brieg. in Schltr., Die Orchideen 3(1): 725-6 (1981), nom. inval.; *Tropolis ruppiana* (A. Hawkes) Butzin, Willdenowia 12(2): 250 (1982), syn. nov.; *Tropolis ruppiana* (A. Hawkes) Rauschert, Feddes Repert. 94(7-8): 470 (1984), nom. illeg. Type: 'Cairns Range, North Queensland', Aug. 1894, F.M. Bailey s.n. (holo K!).

subsp. **bancroftianum** (H.G. Reichb.) M. Clements et D. Jones, stat. nov.

*Dendrobium speciosum* Smith var. *bancroftianum* H.G. Reichb., Gard. Chron. (new ser.) 15: 782 (1881); *Dendrobium speciosum* Smith var. *hillii* Bailey forma *bancroftianum* (H.G. Reichb.) Bailey, Queensl. fl. 5: 1526 (1902). Type: cult. T. Christy ex Australia, T.L. Bancroft s.n. (holo W!). Notes: Differs from typical *D. jonesii* in having larger and longer perianth segments that lack any purple markings. It also generally flowers much later than the typical subspecies. Dist: Qkn, Qco.

*Dendrobium fusiforme* (Bailey) Bailey forma *magnifica* Dockr., North Queensland Naturalist 24(114): 24 (1956); *Dendrobium ruppianum* A. Hawkes forma *magnificum* (Dockr.) Dockr., Austral. Pl. 3: 224 (1965). Types: 'North Queensland: Bellenden Ker', Oct. 1951, J.H. Wilkie s.n. (holo NSW!), syn. nov.

subsp. **blackburnii** (Nicholls) M. Clements et D. Jones, stat. nov.

*Dendrobium fusiforme* (Bailey) Bailey var. *blackburnii* Nicholls, Victorian Naturalist 66: 255 (1950); *Dendrobium ruppianum* A. Hawkes var. *blackburnii* (Nicholls) Dockr., Austral. Pl. 3: 224 (1965). Type: cult. Melbourne, W.H. Nicholls ex 'Font Hills, Cliff Trig, west of Port Douglas (16° 39' South, 145° 08' East), North Queensland', Jul. 1945, J.A. Blackburn s.n. (holo MEL). Notes: Differs from typical *D. jonesii* 'chiefly in its much more robust pseudobulbs that are from 12-22 cm long and 2.5-3 cm wide'. The pendulous

racemes have shortly-segmented pale primrose yellow flowers (Nicholls, 1950). Font Hills is an isolated pocket of rainforest on the western side of the Great Divide. Dist: Qco.

*D. keffordii* Bailey = *Dendrobium baileyi*.

**D. X kestevenii** Rupp, Proc. Linn. Soc. New South Wales 56: 137 (1931). Type: 'Eastern side of the Alum Mountain, Bulahdelah', Sep. 1930, H.L. Kesteven s.n. (holo NSW!). Notes: Almost certainly derived as a natural hybrid between *D. speciosum* and *D. kingianum* both of which are present in profusion on Alum Mountain, Bulahdelah. This is not the same hybrid as *D. X delicatum* which is a hybrid between *D. tarberi* and *D. kingianum*. Dist: Nnc.

*Dendrobium kestevenii* Rupp var. *coloratum* Rupp, Orch. New South Wales 114 (1943). Type: cult. Northbridge, H.M.R. Rupp, Sep. 1943 ex 'Bulahdelah', Sep. 1936, Fieldsend s.n. (holo NSW!). Notes: Appears to be closer to *D. kingianum* than *D. speciosum* and possibly originates from a backcross of *D. X kestevenii* to *D. kingianum*.

*D. kestevenii* Rupp var. *coloratum* Rupp = *Dendrobium X kestevenii*.

**D. kingianum** Bidw. ex Lindley in Edwards's, Bot. Reg. 30: Misc. 11-12 (1844). Type: Australia, 1844, J.T. Bidwill s.n. (holo K-L!). Notes: A variable and complex taxon that requires considerable study by a competent scientist before a satisfactory account of the infraspecific taxa can be made. Dist: Nnc, Nnt, Qmo, Qdd, Qwb, Qbn, Qle.

*Callista kingiana* (Bidw. ex Lindley) Kuntze, Revis. gen. pl. 2: 654 (1891); *Tropilis kingiana* (Bidw. ex Lindley) Butzin, Willdenowia 12(2): 250 (1982), syn. nov.; *Tropilis kingiana* (Bidw. ex Lindley) Rauschert, Feddes Repert. 94(7-8): 470 (1983), nom. illeg.

*Dendrobium kingianum* Bidw. ex Lindley var. *pallidum* Bailey, Proc. Roy. Soc. Queensland 1: 11 (1884). Type: 'On rocks Main Range, Queensland', B. Crow & C.H. Hartmann s.n. (holo BRI!, iso K!).

*Dendrobium kingianum* Bidw. ex Lindley subvar. *pallidum* Veitch, Man. Orchid. Pl. 1(3): 52 (1888). Type: (not found). Notes: Veitch's description is legitimate under the rules of the ICBN; "A sub-variety called pallidum has white flowers with a few purple stripes on the labellum". Clearly this is representative of the taxon known as *D. kingianum* var. *silcockii*.

*Dendrobium kingianum* Bidw. ex Lindley var. *silcockii* Bailey, Queensl. fl. 5: 1528 (1902). Type: 'Towards the Tweed River', 24 Sep. 1901, P. Silcock s.n. (holo BRI!, iso K!).

*Dendrobium kingianum* Bidw. ex Lindley var. *aldersoniae* Bailey, Queensland Agric. J. 15: 781 (1905). Type: 'Blackall Range', G.W. Alderson s.n. (holo BRI not found).

*Dendrobium kingianum* Bidw. ex Lindley var. *pulcherrimum* Rupp, Orchids New South Wales 116 (1943). Type: cult. Northbridge, H.M.R. Rupp ex 'Upper Hastings River, N.S.W.', Fieldsend s.n. (holo NSW!), syn. nov. Notes: A large-flowered form of the species.

*D. kingianum* Bidw. ex Lindley var. *aldersoniae* Bailey = *Dendrobium kingianum*.

*D. kingianum* Bidw. ex Lindley var. *pallidum* Bailey = *Dendrobium kingianum*.

*D. kingianum* Bidw. ex Lindley var. *pulcherrimum* Rupp = *Dendrobium kingianum*.

*D. kingianum* Bidw. ex Lindley var. *silcockii* Bailey = *Dendrobium kingianum*.

*D. kingianum* Bidw. ex Lindley subvar. *pallidum* Veitch = *Dendrobium kingianum*.

*D. kwashotense* Hayata = *Dendrobium crumenatum*.

**D. X lavarackianum** M. Clements hybrid, nom. et stat. nov.

*Dendrobium bigibbum* Lindley var. *venosum* Bailey, Bot. Bull. Dept. Agric. Queensland (7): 18 (1890); *Dendrobium bigibbum* Lindley forma *venosum* (Bailey) Bailey, Queensl. fl. 5: 1524 (1902). Type: cult. Brisbane, J.A. Bedal ex Cape York, [Anon] (holo BRI!). Notes: The evidence suggests that the plants described under this name have arisen as a back-cross between *D. bigibbum* and *D. X superbiens*. The taxon has therefore been raised to hybrid rank. This striking plant has been named in honour of Dr P.S. Lavarack, who has done much to increase the knowledge of orchids of Cape York Peninsula. Dist: Qco.

*Dendrobium bigibbum* Lindley var. *georgei* C. White, Proc. Roy. Soc. Queensland 47: 81 (1936). Type: cult. Brisbane, Jan. 1931, H.J. Hockings ex 'Australia: Dayman Island?', Torres Strait, H.J. Hockings s.n. (holo BRI!), syn. nov.

*D. leuchophotum* H.G. Reichb. = *Dendrobium affine*.

**D. lichenastrum** (F. Muell.) Kraenzl. in Engler, Pflanzenreich Orch.-Mon.-Dendr. 1: 289 (1910). Dist: Qkn, Qco.

*Bulbophyllum lichenastrum* F. Muell., Fragm. 7: 60 (1869); *Dendrobium lichenastrum* (F. Muell.) Kraenzl. emend. Dockr., North Queensland Naturalist 24(115): 20 (1956), nom. sup.; *Dockrillia lichenastrum* (F. Muell.) Brieg. in Schltr., Die Orchideen 3(1): 746 (1981), nom. inval. Type: 'In monte Seaview-Range, prope Rockingham's Bay', Sep. 1868, J. Dallachy s.n. (holo MEL!).

*D. lichenastrum* (F. Muell.) Kraenzl. var. *prenticei* (F. Muell.) Dockr. = *Dendrobium prenticei*.

*D. lichenastrum* (F. Muell.) Kraenzl. var. *prenticei* (F. Muell.) Dockr. forma *aurantiaco-purpureum* (Nicholls) Dockr. = *Dendrobium prenticei*.

**D. linguiforme** Sw., Kongl. Svenska Vetenskapsakad. Handl. 21: 247 (1800). Type: 'Port Jackson, New South Wales', White s.n. (holo SUNIV!, iso LINN! W!). Dist: Nsc, Ncc, Nnt, Nnc, Qmo, Qdd, Qwb.

*Callista linguiformis* (Sw.) Kuntze, Revis. gen. pl. 2: 655 (1891); *Dockrillia linguiforme* (Sw.) Brieg. in Schltr., Die Orchideen 3(1): 745 (1981), syn. nov.

*Dendrobium linguiforme* Sw. var. *huntianum* Rupp, Austral. Orchid Rev. 7: 40 (1942). Type: 'Upper Brisbane River', Jun., T.E. Hunt s.n. (holo NSW), syn. nov. Notes: Plants collected from the region of the type locality of this taxon are indistinguishable from other populations of the species. Flowering times have also proved unreliable and are greatly influenced by the seasons. It therefore seems best, for the present, to treat this taxon as a synonym of *D. linguiforme*.

*D. linguiforme* Sw. var. *huntianum* Rupp = *Dendrobium linguiforme*.

*D. linguiforme* Sw. var. *nugentii* Bailey = *Dendrobium nugentii*.

**D. lithocola** D. Jones et M. Clements, nom. nov.

*Dendrobium phalaenopsis* Lindley var. *compactum* C. White, Austral. Orchid Rev. 6: 53 (1941); *Dendrobium bigibbum* Lindley var. *phalaenopsis* (Fitzg.) Bailey forma *compactum* (C. White) G.L. Piper, Austral. Orchid Rev. 15: 40, in obs. (1950); *Dendrobium bigibbum* Lindley subvar. *compactum* (C. White) St. Cloud, North Queensland Naturalist 24(115): 18 (1956); *Dendrobium bigibbum* Lindley forma *compactum* (C. White) St. Cloud, North Queensland Naturalist 24(115): 18 (1956); *Dendrobium bigibbum* Lindley var. *superbum* Hort ex H.G. Reichb. subvar. *compactum* (C. White) Dockr., Austral. Indig. Orchids 1: 422 (1969). Type: cult. Brisbane ex 'Hartley's Creek, Queensland', Mar. 1941, A. Hilsden s.n. (lectotype BRI! here designated); Syntype: cult. Brisbane ex 'Mossman River, Queensland', W.A. Moller s.n. (BRI not found). Notes: Differs from *D. bigibbum* and *D. phalaenopsis* in having short, stout pseudobulbs and a narrower labellum. *D. lithocola* is entirely lithophytic in habit and is geographically isolated, to the south, of the other two species. Dist: Qeo.

**D. litorale** Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 567 (1912). Types: 'Kaiser-Wilhelms-Land: On trees at the beach of Morowe (Adolfshafen), alt. c. 10 m', Apr. 1909, R. Schlechter 19214 (syn B†); 'On trees at the mouth of the Waria [River], alt. c. 15 m', Jul. 1909, R. Schlechter 19958 (syn B†). Notes: Discovered on Dauan Island during the Australian Orchid Foundation/Queensland National Parks and Wildlife Service, Feb. 1989, field survey of Torres Strait islands (D. Jones pers. comm.). Dist: Qeo; PG, ID?

**D. lobbii** Teijsm. et Binnend., Natuurk. Tijdschr. Ned.-Indie 5: 491 (1853). Type: 'India', Lobb 482 (holo K-L!, iso W!). Notes: I have followed the work of Seidenfaden (1985), for this species. Dist: Qkn, Qeo, Ddg; PG, ID, SG, MY, TH, BU, IN.

*Callista lobbii* (Teijsm. et Binnend.) Kuntze, Revis. gen. pl. 2: 655 (1891); *Conostalix lobbii* (Teijsm. et Binnend.) Rauschert, Feddes Repert. 94(7-8): 444 (1983).

*Dendrobium teijsmannii* Miq., Fl. Ind. Bat. 3: 640 (1859); *Callista teijsmannii* (Miq.) Kuntze, Revis. gen. pl. 2: 655 (1891); *Conostalix teijsmannii* (Miq.) Rauschert, Feddes Repert. 94(7-8): 444 (1983). Notes: This name is a nomenclatural synonym of *D. lobbii* Teijsm. et Binned. The change was made unnecessarily by Miquel on account of Lindley describing an altogether different species as *D. lobbii* (Seidenfaden, 1985).

*Dendrobium calcaratum* Lindley in Edwards's, Bot. Reg. 26: Misc. 89 (1840), non A. Rich. (1834); *Dendrobium conostalix* H.G. Reichb. in Walp., Ann. bot. syst. 6: 292 (1861); *Callista conostalix* (H.G. Reichb.) Kuntze, Revis. gen. pl. 2: 654 (1891); *Conostalix calcaratum* (Lindley) Brieg. in Schltr., Die Orchideen 3(1): 659 (1981). Type: 'India', Lobb 482 (holo K-L!, iso W!).

? *Dendrobium paludicola* Schltr. in Schum. et Laut., Fl. Schutzgeb. Sudsee, Nachtrage 173 (1905); ? *Conostalix paludicola* (Schltr.) Rauschert, Feddes Repert. 94: 444 (1983). Type: 'Kaiser-Wilhelmsland: In marshy locations at the foot of the Bismarck Range, alt. c. 200 m', Jan. 1902, R. Schlechter 13915 (holo B†).

**D. luteocillum** Rupp, North Queensland Naturalist 13(77): 1 (1945). Type: 'Babinda, North Queensland', 26 Oct. 1945, J.H. Wilkie s.n. (holo NSW!). Dist: Qkn, Qco.

*Grastidium luteocillum* (Rupp) Rauschert, Feddes Repert. 94(7-8): 450 (1983), syn. nov.

*D. macraei* sensu Rendle = *Flickingeria nativitatis*.

**D. macropus** (Endl.) H.G. Reichb. ex Lindley, J. Proc. Linn. Soc., Bot. 3: 9 (1859). Notes: See notes under *Dendrobium brachypus* for discussion on the status of this and other supposedly closely related species. Dist: Norfolk Island.

*Thelychiton macropus* Endl., Prodr. Fl. Norf. 33 (1833). Type: 'Norfolk Island', F. Bauer s.n. (holo W!).

- D. macropus* (Endl.) H.G. Reichb. ex Lindley subsp. *gracilicaule* (F. Muell.) P. Green = *Dendrobium gracilicaule*.  
*D. macropus* (Endl.) H.G. Reichb. ex Lindley subsp. *howeanum* (Maiden) P. Green = *Dendrobium comptonii*.  
*D. maidenianum* Schltr. = *Cadetia maideniana*.
- D. malbrownii*** Dockr., Austral. Pl. 4: 134 (1967). Type: 'McIlwraith Range Cape York Peninsula', 4 Mar. 1967, M. Brown s.n. (holo BRI!). Dist: Qco.  
*Monanthus malbrownii* (Dockr.) Rauschert, Feddes Repert. 94(7-8): 454 (1983), syn. nov.
- D. masonii* Rupp = *Diplocaulobium masonii*.
- D. melaleucaphilum*** M. Clements et D. Jones, sp. nov.  
Ad *Dendrobium tetragonum* Cunn. affinis, a qua caulis ab hospite perpendicularibus et randiantibus, floribus majoribus et labelle lobo medio late dilatato conspicuo, differt. Type: Grafton area, New South Wales, 22 Aug. 1986, M.A. Clements 4156 & J. Groves (holo CBG!, iso BRI! CBG! K! NSW!). Dist: Ncc, Nnc, Qmo, Qwb, Qle.
- D. milliganii* F. Muell. = *Dendrobium striolatum*.
- D. minutissimum* F. Muell. = *Bulbophyllum minutissimum*.
- D. mirbelianum*** Gaud. in Freycinet, Voy. Uranie 423, t. 38 (1826). Type: Moluccas, Gaudichaud Dupre s.n. (holo P). Notes: I have followed Cribb (1986) for synonyms of this species. Dist: Qco; PG, SB, ID.  
*Callista mirbeliana* (Gaud.) Kuntze, Revis. gen. pl. 2: 655 (1891).  
*Dendrobium rosenbergii* Teijsm. et Binnend., Natuurk Tijdschr. Ned.-Indie 24: 317 (1862). Type: Amboina, Rosenberg s.n. (holo BO).  
*Dendrobium polycarpum* H.G. Reichb., Gard. Chron. 2: 492 (1883). Type: cult. London, Veitch ex Sunda Islands, Veitch s.n. (holo W!).  
*Dendrobium prionochilum* F. Muell. ex Kraenzl., Ost. Bot. 44: 162 (1894). Type: 'Neu-Guinea, Dinner Island', 1887, Forbes s.n. (holo BM not found).  
*Dendrobium giulianettii* Bailey, Queensland Agric. J. 3: 158 (1898). Type: 'On trees, Holdicott Bay, New Guinea', 1898, A. Giulianetti ex Lamington 21 (holo BRI!, iso K!).  
*Dendrobium aruanum* Kraenzl. in Engl., Pflanzenr. Orch.-Mon.-Dendr. 1: 242 (1910). Type: Aru Islands, Beccari s.n. (holo FI).  
*Dendrobium buluense* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 549 (1912). Type: 'Kaiser-Wilhelms-Land: On trees in the coastal forest near Bulu, alt. c. 30 m', Dec. 1908, R. Schlechter 19038 (holo B†).  
*Dendrobium buluense* Schltr. var. *kauloense* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 550 (1912). Type: 'Kaiser-Wilhelms-Land: On trees in the mountain forests near the Kaulo Base, alt. c. 400 m', Nov. 1907, R. Schlechter 16833 (holo B†).  
*Dendrobium wilkianum* Rupp., North Queensland Naturalist 10(67): 4 (1941). Type: 'Babinda, North Queensland, Oct. 1941, J.H. Wilkie s.n. (holo NSW).  
*D. moniliforme* F. Muell., Fragn. 3: 60 (1862), nom. inval.
- D. monophyllum*** F. Muell., Fragn. 1: 189 (1859). Type: 'In silvis ad sinum Moreton Bay', Oct.-Nov., W. Hill s.n. (holo MEL not found; lectotype W! here designated). Dist: Nnc, Nnt, Qmo, Qdd, Qwb, Qbn, Qle, Qpc, Qks, Qkn, Qco.  
*Callista monophylla* (F. Muell.) Kuntze, Revis. gen. pl. 2: 655 (1891); *Australorchis monophylla* (F. Muell.) Brieg. in Schltr., Die Orchideen 3(1): 741 (1981), syn. nov.  
*Dendrobium tortile* Cunn. in Edwards's, Bot. Reg. 25: Misc. 33 (1839), nom. nud.; *Callista tortilis* (Cunn.) Kuntze, Revis. gen. pl. 2: 655 (1891).
- D. moorei*** F. Muell., Fragn. 7: 29 (1869). Type: 'In insula Lord Howe's Island', C. Moore s.n. (holo MEL!, iso K! W!). Dist: Lord Howe Island.  
*Tropilis moorei* (F. Muell.) Butzin, Willdenowia 12(2): 250 (1982), syn. nov.; *Tropilis moorei* (F. Muell.) Rauschert, Feddes Repert. 94(7-8): 470 (1983), nom. illeg.
- D. mortii*** F. Muell., Fragn. 1: 214 (1859). Type: 'In nemorosis ad flumen Hastings', H. Beckler s.n. (holo MEL!). Notes: The type of *D. mortii* is a specimen of the species previously interpreted as *D. tenuissimum* by authors such as Rupp (1943) and Dockrill (1969). It is surprising that this situation should have arisen because Rupp reported that he borrowed and examined the type specimens of *D. mortii* before describing his *D. tenuissimum*. In addition, neither Rupp nor Dockrill recognised the potential problem that existed either from analysis of Mueller's original description of *D. mortii* or from the locality from which the type was collected, viz. the Hastings River. The species they interpreted as *D. mortii* (correctly *D. bowmanii*), barely gets into northern New South Wales. There are no records of *D. bowmanii* occurring south of about

# DENDROBIUM

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Lismore. The Hastings River is c. 300 km south of that region. Illustrated on page 470 in Jones (1988).  
Dist: Nnt, Nnc, Nnc, Qmo.

*Callista mortii* (F. Muell.) Kuntze, Revis. gen. pl. 2: 655 (1891); *Dockrillia mortii* (F. Muell.) Rauschert, Feddes Repert. 94(7-8): 446 (1983), syn. nov.

*Dendrobium tenuissimum* Rupp, Proc. Linn. Soc. New South Wales 52: 570 (1927), syn. nov.; *Dockrillia tenuissimum* (Rupp) Rauschert, Feddes Repert. 94(7-8): 447 (1983). Type: 'Upper Allyn River near Barrington Tops', Oct. 1925, Hopson & H.M.R. Rupp s.n. (holo NSW!), syn. nov.

*Dendrobium robertsii* F. Muell ex Rupp, Queensland Naturalist 9: 52 (1934). Type: cult. J. Roberts ex 'In rocky, wooded mountains at the source of Condamine's River', Hartmann s.n. (holo MEL!), syn. nov.

*D. mortii* sensu Dockr. = *Dendrobium bowmanii*.

*D. muellerianum* Schltr. = *Dendrobium agrostophyllum*.

*D. nativitatis* Ridley = *Flickingeria nativitatis*.

**D. nindii** W. Hill in Votes & Proc. Legis. Ass. Qd. Session 2: 871 (1874) & in Rep. Bris. Bot. Garden 7 (1874).

Type: Australia, Queensland, Nind s.n. (holo BRI not found); 'Gap Creek, Bloomfield area', Mar. 1980, Scarth-Johnson 934A (neotype BRI! here designated). Dist: Qco; PG, ID.

*Dendrobium toftii* Bailey, Syn. Queensl. Fl. Suppl. 3: 71 (1890). Type: 'Queensland, Johnstone River', 1887, A.G. Toft s.n. (holo BRI!, iso K! MEL!).

*Dendrobium ionoglossum* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 551 (1912). Type: 'Kaiser-Wilhelms-Land: On trees in the forests at the mouth of Waria River, alt. c. 20 m', Jul. 1909, R. Schlechter 19936 (holo B†).

*Dendrobium ionoglossum* Schltr. var. *potamophilum* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 551 (1912). Type: 'Kaiser-Wilhelms-Land: On isolated trees, on the banks of the Giagoro River, (Kenejia Valley), alt. c. 200 m', Aug. 1908, R. Schlechter 18103 (holo B†).

**D. X nitidum** (Bailey) M. Clements et D. Jones, stat. nov.

*Dendrobium speciosum* Smith var. *nitidum* Bailey, Proc. Roy. Soc. Queensland 1: 10 (1884). Type: 'Tropical Queensland', F.M. Bailey s.n. (holo BRI not found); cult. Bowen Park, Brisbane, 14 Sep. 1894, F.M. Bailey ex Queensland, [Anon] s.n. (neotype BRI! here designated). Notes: White (notes accompanying herbarium sheet) was of the opinion that Bailey never kept a Type of *D. speciosum* var. *nitidum*. The only specimen labelled with this name in Bailey's hand, bearing details on the identity of the taxon, is here designated as the neotype. Bailey wrote of this specimen "This seems only to differ from the specimens I described as *Dendrobium speciosum* var. *nitidum* from in its yellow blooms, and in the normal form the white and yellow colour is not constant, and the dot marks on the leaf which may be a disease". *D. nitidum* differs from *D. pedunculatum* chiefly in having clusters of narrow stems and dense, short racemes of flowers which are at first yellowish green, afterwards pure white. These features are uncharacteristic of *D. pedunculatum*, which is the other species in the group from north Queensland, and so the two have been maintained as separate taxa. *D. nitidum* is probably a natural hybrid between *D. pedunculatum* and *D. gracilicaule* and thus has been given hybrid status. Dist: Qks, Qkn, Qco.

**D. nugentii** (Bailey) D. Jones et M. Clements, stat. nov.

*Dendrobium linguiforme* Smith var. *nugentii* Bailey, Queensl. fl. 6: 1533 (1902). Type: 'Eungella Range', Aug-Sep. 1894, L.J. Nugent s.n. (holo BRI!, iso K!). Notes: This species can be easily distinguished from *D. linguiforme* by having broader, rounder leaves that are prominently furrowed and rough-textured and cream flowers with shorter, more obtuse perianth segments. Dist: Qkn, Qco; NC.

*D. nutans* Presl, Rel. Haenk. 1: 102 (1827). Notes: Previously listed as a synonym of *Geodorum densiflorum*, but I am not satisfied that both names apply to the same taxon.

*D. obcuneatum* Bailey, Queensland Agric. J. 17: 231-2 (1906). Type: 'East-coast, British New Guinea', Copland King s.n. (BRI!). Notes: This species has been listed by some authors as a synonym of *D. insigne*. From a study of the types it is clear *D. obcuneatum* is a distinct species that has smaller flowers with obovate rather than falcate tepals. It also lacks a column appendage as well as the heavy orange markings found on the inside of the tepals in *D. insigne*.

*D. ophioglossum* H.G. Reichb. = *Dendrobium smillieae*.

*D. palmerstoniae* Schltr. = *Dendrobium adae*.

*D. paludicola* Schltr. = *Dendrobium lobbii*.

*D. pectinatum* Ridley = *Flickingeria nativitatis*.

**D. pedunculatum** (Clemesha) D. Jones et M. Clements, stat. nov.

*Dendrobium speciosum* Smith var. *pedunculatum* Clemesha, Orchadian 6(11): 261 (1981). Type: cult. Coffs Harbour, 26 Aug. 1980, S.C. Clemesha ex 'Bones Knob via Atherton', B. Gray s.n. (holo NSW!,

(iso BRI!). Notes: This tropical species differs from other allied species in having small, thick, erect pseudobulbs, glossy leaves; an inflorescence usually with a pronounced peduncle; small fleshy cream-coloured flowers in which the labellum, flecked with mauve-blue markings, has a pronounced mid-lobe that is notched at the apex. Further research is being undertaken, at the ANBG, on this and related taxa. Dist: Qco.

*D. pentactis* Kraenzl. = *Dendrobium insigne*.

***D. phalaenopsis*** Fitzg., Gard. Chron. (ser. 2) 14: 38 (1880). Type: cult. Balmain, Sydney, Broomfield ex 'near Cooktown, Queensland', Apr., Broomfield s.n. (holo BM!). Notes: *D. phalaenopsis* differs from *D. bigibbum* in having a larger, less compact flowers without reflexed lateral tepals, a lip in which the mid-lobe is longer, with central callus ridges not as pronounced and predominantly mauve rather than white. In addition to these morphological features both species inhabit separate areas of northern Australia. *D. phalaenopsis* is thought to occur exclusively in an area along the coastal ranges between Mt. Molloy and the Iron Range. *D. bigibbum*, by contrast, is found on the western side of Cape York Peninsula, Torres Strait islands and the southern coast of New Guinea. *D. phalaenopsis* is the Cooktown Orchid and thus the floral Emblem of Queensland. The name *D. phalaenopsis* has been incorrectly used for another species in the *D. sect. Phalaeanthe* group from the islands off West Irian, viz *D. striaenopsis*. Further research is underway on this group of species. Illustrated on page 428 in Jones (1988) as *D. bigibbum* var. *superbum*. Dist: Qco.

*D. phalaenopsis* Fitzg. var. *compactum* C. White = *Dendrobium lithocola*.

*D. phalaenopsis* Fitzg. var. *statterianum* Hort. ex Sander = *Dendrobium bigibbum*.

*D. polycarpum* H.G. Reichb. = *Dendrobium mirbelianum*.

***D. prenticei*** (F. Muell.) Nicholls, North Queensland Naturalist 7(56): 2 (1938). Dist: Qks, Qkn, Qco.

*Bulbophyllum prenticei* F. Muell., S. Sci. Rec. 1: 173 (1881); *Dendrobium lichenastrum* (F. Muell.) Kraenzl. var. *prenticei* (F. Muell.) Dockr., North Queensland Naturalist 24(115): 20-21 (1956). Type: 'Bellenden Ker Range, at an elevation of 3-4,000 feet', Aug. 1881, Karsten s.n. (holo MEL!).

*Bulbophyllum lichenastrum* sensu Fitzg., Austral. orch. 2(5): [t. 18] (1893), non F. Muell. (1869).

*Dendrobium variabile* Nicholls, North Queensland Naturalist 7(56): 2 (1938). Type: 'Mt Fox', Mar. 1936, A. Glindeman s.n. (holo MEL!).

*Dendrobium aurantiaco-purpureum* Nicholls, North Queensland Naturalist 10(68): 2 (1942); *Dendrobium lichenastrum* (F. Muell.) Kraenzl. var. *prenticei* (F. Muell.) Dockr. forma *aurantiaco-purpureum* (Nicholls) Dockr., North Queensland Naturalist 24(115): 20 (1956). Type: 'Mt. Fox, Burdekin River via Ingham', Dec. 1941, A. Glindeman s.n. (holo MEL!), syn. nov.

*D. prionochilum* F. Muell. et Kraenzl. = *Dendrobium mirbelianum*.

***D. pugioniforme*** Cunn. in Edwards's, Bot. Reg. 25: Misc. 33 (1839). Type: 'A beautiful epiphyte, hanging loosely from the stems of trees, so as to swing freely to the wind that sweeps through the forests on the summit of the belt of mountains bounding the coast district of Illawarra, on the west (lat. 34 1/2)', Aug. 1818, A. Cunningham s.n. (holo BM!, iso K!). Dist: Nsc, Nec, Nnc, Nnt, Qmo.

*Callista pugioniformis* (Cunn.) Kuntze, Revis. gen. pl. 2: 655 (1891); *Dockrillia pugioniformis* (Cunn.) Rauschert, Feddes Repert. 94(7-8): 446 (1983), syn. nov.

*Dendrobium pungentifolium* F. Muell., Fragn. 1: 189 (1859). Type: 'In summitase rupestris montis Lindsay', W. Hill s.n. (lectotype MEL! here designated); Syntypes: 'In silvis ad flumen Brisbane', F. Mueller s.n. (not found!); 'Ad Illawarra', T.W. Shepherd s.n. (MEL!).

*D. punctatum* Smith = *Dipodium punctatum*.

*D. pungentifolium* F. Muell. = *Dendrobium pugioniforme*.

***D. pygmaeum*** Smith in Rees, Cyclop. 11: sub *Dendrobium* n. 27 (1808). Notes: Previously recorded as occurring in Australia because of a reported sighting of the species on Lord Howe Island. However, no specimen has since been found to support this claim and therefore the species is now regarded as a New Zealand endemic. The sighting possibly is referable to a plant of *Bulbophyllum argyropus*.

***D. quadrilobium*** Rupp, North Queensland Naturalist (1942). Type: '20 miles W. of Paluma, which is 60 miles from Townsville, North Queensland', 1941, K. Kennedy s.n. (holo NSW?), nom. illeg., tax. inc. sed. Notes: I have been unable to locate the specimen to which Rupp was referring when he introduced this name into the literature on Australian orchids. It is impossible, from his account of the species, to determine the correct identity of the specimen he had in hand.

***D. racemosum*** (Nicholls) Clemesha et Dockr., Orchadian 1(5): 52-4, f. (1964). Dist: Qkn, Qco.

*Dendrobium beckleri* F. Muell. var. *racemosum* Nicholls, North Queensland Naturalist 4(45): 35, f. (1936); *Dockrillia racemosum* (Nicholls) Rauschert, Feddes Repert. 94(7-8): 446 (1983). Type: 'Cairns', Sep. 1935, H.G. Henson s.n. (holo MEL!), syn. nov.

## D. rex M. Clements et D. Jones, nom. et stat. nov.

*Dendrobium speciosum* Smith var. *grandiflorum* Bailey, Bot. Bull. Dept. Agric. Queensland 14: 12 (1896). Type: cult. Bowen Park, Brisbane, Sep. 1896, F.M. Bailey ex 'Eumundi', Sep. 1894, [Anon] s.n. (holo BRI!). Notes: Plants of this species are rather large and similar in habit to those found in *D. tarberi*. *D. rex* consistently has erect, cylindrical or slightly fusiform pseudobulbs that are contracted near the base, erect/spreading aerial roots to catch litter and numerous many-flowered inflorescences with flowers that have a proportionally smaller labellum than those found in *D. speciosum*. Compared to *D. tarberi* this species has large, stellate, bright yellow, sometimes cream-coloured flowers with labella heavily marked with deep mauve-blue blotches. The specific epithet was chosen because of the spectacular habit of the plant and because of the vernacular name of 'King Orchid' or 'Kingies'. This is one of our most spectacular native orchid species. Dist: Qwb, Qbn, Qpc.

*Dendrobium speciosum* Smith var. *hillii* Bailey forma *grandiflorum* (Bailey) Bailey, Queensl. fl. 5: 1526 (1902).

## D. rigidum R. Br., Prod. 333 (1810). Type: 'Tropical Australia', R. Brown s.n. (icon. BM!). Dist: Qco; PG.

*Callista rigida* (R. Br.) Kuntze, Revis. gen. pl. 2: 655 (1891); *Dockrillia rigida* (R. Br.) Rauschert, Feddes Repert. 94(7-8): 447 (1983), syn. nov.

*D. robertsii* F. Muell. ex Rupp = *Dendrobium mortii*.

*D. rosenburgii* Teijsm. et Binnend. = *Dendrobium mirbelianum*.

*D. ruppianum* A. Hawkes = *Dendrobium jonesii* subsp. *jonesii*.

*D. ruppianum* A. Hawkes var. *blackburnii* (Nicholls) Dockr. = *Dendrobium jonesii* subsp. *blackburnii*.

*D. ruppianum* A. Hawkes forma *magnificum* = *Dendrobium jonesii* subsp. *bancroftianum*.

**D. X ruppiosum** Clemesha, Orchadian 7(4): 91-2 (1982). Type: cult. Woolgoolga, Sep. 1981 ex 'In the mountains near Tinaroo Dam north Queensland', Jan. 1964, S.C. Clemesha s.n. (holo BRI!). Notes: A natural hybrid between *D. jonesii* and *D. pedunculatum*. Dist: Qkn.

*D. schmidtianum* Kraenzl. = *Dendrobium crumenatum*.

**D. schneiderae** Bailey var. *schneiderae* Occas. Pap. Queensl. Fl. 1: 7-8 (1886). Type: 'Darlington Range' [near Eagle Heights, SE Queensland], 26 Jun. 1886, H. Schneider s.n. (holo BRI not found); cult. ANBG, 9 Dec. 1988, M.A. Clements 4707 ex 'Spring Creek E. of Kilarney on the Lower W. slopes of the McPherson Range', 29 Sep. 1987, R. Crane 207 (neotype CBG! here designated). Dist: Nnt, Nnc, Qmo, Qdd, Qwb, Qbn.

*Australorchis schneiderae* (Bailey) Brieg. in Schltr., Die Orchideen 3(1): 742 (1981), syn. nov.

var. *major* Rupp, Queensland Naturalist 11: 3 (1939). Type: cult. ex 'Eungella Range, Mackay, Queensland', Mar. 1937, C.P. Ledward s.n. (holo NSW!). Dist: Qks.

**D. schoeninum** Lindley, Gard. Chron. 7 (1846). Type: cultivated ex 'New Holland', Loddiges 390 (holo K-L!, iso W!). Notes: The description of this taxon has been previously overlooked as the name was first published as a nomen nudum and is only recorded in Index Kewensis in that state. However, there is no doubt as to which species Lindley was referring when he described *D. schoeninum*. The description is adequate and there is an excellent type specimen and illustration of the flower in his herbarium at Kew. Dist: Nnc, Nnt, Qmo, Qdd, Qwb, Qbn, Qpc?

*Dendrobium beckleri* F. Muell., Fragm. 7: 59 (1869); *Dendrobium striolatum* H.G. Reichb. var. *beckleri* (F. Muell.) Bailey, Syn. Queensl. fl. Suppl. 1: 55 (1886); *Callista beckleri* (F. Muell.) Kuntze, Revis. gen. pl. 2: 654 (1891); *Dockrillia beckleri* (F. Muell.) Rauschert, Feddes Repert. 94(7-8): 446 (1983). Type: 'Ad flumen Clarence River', H. Beckler s.n. (lectotype MEL! here designated); Syntype: 'Ad flumen MacLeay's River', R.D. Fitzgerald s.n. (MEL!), syn. nov.

*Dendrobium striolatum* sensu Bailey, Syn. Queensl. fl. 512 (1883), non H.G. Reichb. (1857), syn. nov.

*D. semifuscum* (H.G. Reichb.) Lavarack et Cribb = *Dendrobium trilamellatum*.

*D. shepherdii* F. Muell. = *Bulbophyllum shepherdii*.

*D. shepherdii* F. Muell var. *platyphyllum* F. Muell. = *Bulbophyllum schillerianum*.

*D. simplicissimum* (Lour.) Kraenzl. = *Dendrobium crumenatum*.

**D. smilliae** F. Muell., Fragm. 6: 94 (1867). Type: 'In silvis montium ad sinum Rockingham' [Rockingham Bay], J. Dallachy s.n. (holo MEL!, iso K!). Dist: Qco; PG, ID.

*Coelandria smilliae* (F. Muell.) Fitzg., Austral. orch. 1(7): [t. 7] (1882); *Callista smilliae* (F. Muell.) Kuntze, Revis. gen. pl. 2: 655 (1891); *Pedilonum smilliae* (F. Muell.) Rauschert, Feddes Repert. 94(7-8): 464 (1983), syn. nov.

*Dendrobium ophioglossum* H.G. Reichb., J. Proc. Linn. Soc., Bot. 15: 113 (1876); *Dendrobium smilliaeae* F. Muell. var. *ophioglossum* (H.G. Reichb.) Bailey, Syn. Queensl. fl. 510 (1883); *Callista ophioglossa* (H.G. Reichb.) Kuntze, Revis. gen. pl. 2: 655 (1891); *Pedilonum ophioglossum* (H.G. Reichb.) Brieg. in Schltr., Die Orchideen 3(1): 679 (1981), syn. nov. Type: 'Cape York', Sep. 1874, [Anon] (holo K!).

*Dendrobium hollrungii* Kraenzl. var. *australiense* Rendle, J. Bot. 37: 339 (1899). Type: cult. Ewhurst, Surrey, May 1899, J. Sparks ex 'Geraldton, Johnstone River, N.E. Queensland', A.O Jones s.n. (holo BM!).

*D. smilliaeae* F. Muell. var. *ophioglossum* (H.G. Reichb.) Bailey = *Dendrobium smilliaeae*.

***D. speciosum* Smith.**, Exotic Bot. 1: 17, t. 10 (1804). Type: 'Port Jackson, New South Wales', J. White in herb. J.E. Smith 1404.6 & 7 (holo LINN!). Notes: *D. speciosum* in its strict sense has thick conical stems that may or may not be curved, lacks the aerial roots found in *D. tarberi* or *D. rex* and has racemes of numerous, large, thick-textured flowers that are yellowish, cream or sometimes white in colour. *D. speciosum* is predominantly a lithophyte. Dist: Vgi, Nsc, Ncc, Nnc, Nns.

*Callista speciosa* (Smith) Kuntze, Revis. gen. pl. 2: 655 (1891); *Tropilis speciosa* (Smith) Butzin, Willdenowia 12(2): 250 (1982), syn. nov.; *Tropilis speciosa* (Smith) Rauschert, Feddes Repert. 94(7-8): 471 (1983), nom. illeg.

*D. speciosum* Smith var. *album* B.S. Williams = *Dendrobium X delicatum*.

*D. speciosum* Smith var. *bancroftianum* H.G. Reichb. = *Dendrobium jonesii* subsp. *bancroftianum*.

*D. speciosum* Smith var. *capricornicum* S.C. Clemesha = *Dendrobium curvicaule*.

*D. speciosum* Smith var. *curvicaule* Bailey = *Dendrobium curvicaule*.

*D. speciosum* Smith var. *delicatum* Bailey = *Dendrobium X delicatum*.

*D. speciosum* Smith var. [*fragrans* R. Br.] = *Dendrobium curvicaule*.

*D. speciosum* Smith var. *fusiforme* Bailey = *Dendrobium jonesii* subsp. *jonesii*.

*D. speciosum* Smith var. *gracillimum* Rupp = *Dendrobium X gracillimum*.

*D. speciosum* Smith var. *grandiflorum* Bailey = *Dendrobium rex*.

*D. speciosum* Smith var. *hillii* Anon = *Dendrobium tarberi*.

*D. speciosum* Smith var. *hillii* Anon forma *grandiflorum* (Bailey) Bailey = *Dendrobium rex*.

*D. speciosum* Smith var. *hillii* Anon forma *bancroftianum* (H.G. Reichb.) Bailey = *Dendrobium jonesii* subsp. *bancroftianum*.

*D. speciosum* Smith forma *hillii* Domin = *Dendrobium tarberi*.

*D. speciosum* Smith var. *nitidum* Bailey = *Dendrobium X nitidum*.

*D. speciosum* Smith var. *pedunculatum* Clemesha = *Dendrobium pedunculatum*.

*D. statterianum* Hort. ex J. O'Brien, Gard. Chron. (new ser.) 8: 194, 381 (1890), nom. invalid; *Dendrobium phalaenopsis* Fitzg. var. *statterianum* Hort., Gard. Chron. (ser. 3) 10: 577 (Nov. 1891), nom. invalid; *D. X statterianum* (Sander) Rolfe, Orchid Rev. 11: 284 (1903), tax. inc. sed. Type: cult. Cheltenham, J. Cypher s.n. (not found). Notes: The description probably refers to a plant of *D. striatopsis* rather than that of *D. bigibbum* under which it has been placed (Blake, 1964).

*D. X statterianum* (Sander) Rolfe = *Dendrobium statterianum*.

***D. striolatum* H.G. Reichb.**, Hamburger Garten-Blumenzeitung 13: 313 (1857). Type: cult. Schiller s.n. (holo W!). Dist: Tas, Vgi, Nsc, Ncc, Nnc.

*Callista striolata* (H.G. Reichb.) Kuntze, Revis. gen. pl. 2: 655 (1891); *Dockrillia striolata* (H.G. Reichb.) Rauschert, Feddes Repert. 94(7-8): 447 (1983), syn. nov.

*Dendrobium teretifolium* sensu Lindley in Edwards's, Bot. Reg. 25: Misc. 32 (1839), non R. Br. (1810).

*Dendrobium milliganii* F. Muell., Fragm. 1: 88, t. 6 (1859). Type: Flinders Peaks, Granite Rocks, 10 Oct. 1845, J. Milligan 923 (lectotype MEL! here designated, isolectotype BM! W!); Syntypes: Strzelecki's Peak, Van Diemen Land, 3,000 ft. east coast of Flinders Island, J. Milligan 923 (K! MEL?); Also on granite rocks. 2-3,000 ft. above sea level on Freycinet Peninsula, Van Diemen Land, J. Milligan 923 (BM! K! MEL?).

*D. striolatum* sensu Bailey = *Dendrobium schoeninum*.

*D. striolatum* H.G. Reichb. var. *beckleri* (F. Muell.) Bailey = *Dendrobium schoeninum*.

*D. striolatum* H.G. Reichb. var. *chalandeai* Finet = *Dendrobium bowmanii*.

***D. stuartii* Bailey**, Proc. Roy. Soc. Queensland 1: 12 (1884). Type: cult. Brisbane Botanic Gardens ex 'Herberton', J.W.R. Stuart s.n. (holo BRI not found; neotype Fitzgerald's illustration of *D. stuartii* in Aust. orch. 2(3): [t. 6] (1888) CBG!, here designated). Notes: The plant illustrated by Fitzgerald was sent to him by Bailey. It is probably part of the plant on which the description of the species was based. In fact, *D. stuartii* was

"Described from a single plant now flowering in the Brisbane Botanic Gardens" and Fitzgerald's illustration of the species was published less than four years later. In the absence of a holotype I have designated Fitzgerald's plate of this species as the neotype. This species, as well as occurring in Australia, is distributed throughout much of the Malay archipelago where it is erroneously known under the name of *D. tetrodon*. The type of *D. tetrodon*, which I examined in Wein, is representative of another species closely allied to *D. aphyllum* (Seidenfaden, 1985). Dist: Qco; PG, ID, MY.

*Callista stuartii* (Bailey) Kuntze, Revis. gen. pl. 2: 655 (1891).

*Dendrobium whiteanum* Hunt, Queensland Naturalist 14: 60 (1951). Type: cult. Brisbane, 31 Jan. 1950, T.E. Hunt 181 ex 'Queensland-Cook District: Portland Roads', A. Johnson s.n. (holo BRI!).

**D. X suffusum** Cady, Orchadian 1: 80 (1964). Type: cult. Nowra, 9 Sep. 1961, L. Cady ex 'North Brother Mountain, Laurieton area N.S.W.', A. Willows s.n. (holo NSW!). Notes: An apparent natural hybrid between *D. gracilicaule* and *D. kingianum*. Dist: Nnc.

*Tropilis X suffusa* (Cady) Butzin, Willdenowia 12(2): 250 (1982), syn. nov.; *Tropilis X suffusa* (Cady) Rauschert, Feddes Repert. 94(7-8): 471 (1983), nom. illeg.

*D. sumneri* F. Muell. = *Dendrobium bigibbum*.

**D. X superbiens** H.G. Reichb., Gard. Chron. (new ser.) 6: 516 (1876). Type: cult. ex 'Northern Australia', Veitch s.n. (holo W!, iso K!). Notes: It is remarkable that in describing this taxon, Reichenbach did not record any undulations or twisting in the margins of the tepals, a condition generally associated with hybrids between *D. bigibbum* and *D. discolor*. Dist: Qco.

*Dendrobium bigibbum* Lindley var. *superbiens* (H.G. Reichb.) Bailey, Syn. Queensl. fl. 509 (1883); *Callista superbiens* (H.G. Reichb.) Kuntze, Revis. gen. pl. 2: 655 (1891).

*Dendrobium goldiei* H.G. Reichb., Gard. Chron. (new ser.) 9: 652 (1878). Type: cult. 1877, W. Bull s.n. (holo W!).

*Dendrobium superbiens* Fitzg., Aust. orch. 2(1): [t. 5] (1884); *Dendrobium fitzgeraldii* F. Muell. ex Bailey, Syn. Queensl. fl. Suppl. 1: 55 (1886); *Callista fitzgeraldii* (F. Muell.) Kuntze, Revis. gen. pl. 2: 654 (1891). Type: cult. Sydney, Apr., W. MacArthur ex 'North Queensland', [W. MacArthur s.n.] (holo BM!).

*Dendrobium bigibbum* Lindley var. *albomarginatum* Bailey, Bot. Bull. Dept. Agric. Queensland (7): 18 (Mar. 1891), non Linden (Aug. 1891). Type: cult. Brisbane, J.A. Beal ex Cape York [Anon] (holo BRI!).

*Dendrobium brandtiae* Kraenzl., Gard. Chron. (ser. 3) 40: 404 (1906). Type: cult. ex 'North Australia or New Guinea', Ida Brandt s.n. (holo not found). Notes: Rolfe determined that this taxon was a synonym of *D. X superbiens*, a position I have followed here.

*Dendrobium X vinicolor* St. Cloud, North Queensland Naturalist 25 (116): 4-5, f. (1956). Type: 'North Queensland; Mt. Charlie (25 miles north of Cairns) at approximately 1600 ft. alt.', Aug. 1955, N. Whittaker s.n. (holo QRS!), syn. nov.

*D. superbiens* Fitzg. = *Dendrobium X superbiens*.

**D. tarberi** M. Clements et D. Jones, nom. nov.

*Dendrobium hillii* J.D. Hook. in Curtis's. Bot. Mag. 87: t. 5261 (1861), nom. illeg. non F. Muell. (1859); *Dendrobium speciosum* Smith var. *hillii* Anon, Gard. Chron. (new ser.) 7: 112, f. 18 (1877); *Dendrobium speciosum* Smith forma *hillii* Domin, Beitr. Fl. Pflanzenk. 539 (1915); *Dendrocoryne speciosa* (Smith) Brieg. var. *hillii* (J.D. Hook.) Brieg. in Schltr., Die Orchideen 3(1): 725-6 (1981), nom. invalid. Type: cult. Royal Botanic Gardens, Kew ex 'Moreton Bay', W. Hill s.n. (holo K!). Notes: This species differs from *D. speciosum* in a number of critical points. *D. tarberi* consistently has erect cylindrical or slightly fusiform pseudobulbs that are contracted near the base; has erect/spreading aerial roots to catch litter, numerous many-flowered inflorescences with flowers that have a proportionally smaller labellum than those found in *D. speciosum*. With these differences in morphology coupled with knowledge of the differences in their breeding biology the two taxa are recognised at specific rank. Further research is in progress on the group as a whole. The specific epithet is derived from the Aboriginal words Tar Beri, once used to describe this and similar orchids from the region of SE Queensland. Illustrated under the name *D. speciosum* var. *hillii* on page 481 in Jones (1988). Dist: Nnc, Nnt, Qmo, Qdd, Qwb.

**D. tattorianum** Bateman ex H.G. Reichb., Gard. Chron. 1865: 890 (1865); Bot. Mag. 91: t. 5537 (1865). Type: cult. Lord Egerton of Tatton, ex 'N. Australia', J.G. Veitch s.n. (holo W!, iso K!). Notes: This taxon was previously interpreted as *D. canaliculatum* but the two are morphologically distinct and they mostly inhabit different areas in Queensland. *D. tattorianum* is found in coastal swamps on paper-bark trees, south of about Cairns while *D. canaliculatum* is found further north in swamps and inland in paper-bark and other woodlands. The most obvious difference between *D. tattorianum* and *D. canaliculatum* is the colour of the flowers. Those of *D. tattorianum* have a predominant cream base colour, yellowish apices to the sepals and petals

and purple-lavender markings on the labellum apex. In contrast, the flower colour of *D. canaliculatum* is predominantly brown, with darker apices to the sepals and petals, and with red and yellow markings on the labellum. The callus ridges of the labellum are less prominent in *D. tattorianum* than they are in *D. canaliculatum*. In addition, *D. tattorianum* has a sweet honey-like fragrance while those of *D. canaliculatum* have a more musky odor (D. Jones, pers. comm.). Dist: Qpc, Qks, Qkn, Qco.

*Dendrobium canaliculatum* R. Br. var. *tattorianum* (Bateman ex H.G. Reichb.) H.G. Reichb., Xenia Orchid. 2: 165, t. 169, III (1870); *Callista tattorianum* (H.G. Reichb.) Kuntze, Revis. gen. pl. 2: 655 (1891).

*D. taylori* (F. Muell.) Fitzg. = *Cadetia taylori*.

*D. teijsmannii* Miq. = *Dendrobium lobbii*.

*D. tenuissimum* Rupp = *Dendrobium mortii*.

**D. teretifolium** R. Br., Prod. 333 (1810). Type: 'Port Jackson, harbour', R. Brown s.n. (lectotype specimen (a) BM!, here designated, isolectotype E! K!). Syntype: 'Botany Bay', J. Banks s.n. (BM!). Dist: Nsc, Ncc, Nnc, Qmo, Qwb.

*Callista teretifolia* (R. Br.) Kuntze, Revis. gen. pl. 2: 655 (1891); *Dockrillia teretifolia* (R. Br.) Brieg. in Schltr., Die Orchideen 3(1): 745 (1981), syn. nov.

*D. teretifolium* sensu Lindley = *Dendrobium striolatum*.

*D. teretifolium* R. Br. var. *album* C. White = *Dendrobium dolichophyllum*.

*D. teretifolium* R. Br. var. *aureum* Bailey = *Dendrobium dolichophyllum*.

*D. teretifolium* R. Br. var. *fairfaxii* (Fitzg. ex F. Muell.) Bailey = *Dendrobium fairfaxii*.

*D. teretifolium* R. Br. var. *fairfaxii* Fitzg. ex F. Muell. forma *aureum* (Bailey) Clemesha = *Dendrobium dolichophyllum*.

*D. teretifolium* R. Br. var. *fasciculatum* Rupp = *Dendrobium calamiforme*.

**D. tetragonum** Cunn. in Edwards's, Bot. Reg. 25: Misc. 33 (1839). Type: 'An epiphyte, hanging loosely from the stems of small trees, in dry shaded woods, Moreton Bay', Jun. 1828, A. Cunningham s.n. (holo BM!, iso K!). Dist: Ncc, Nnc, Nnt, Qmo, Qwb, Qbn, Qpc.

*Callista tetragona* (Cunn.) Kuntze, Revis. gen. pl. 2: 655 (1891); *Dendrocoryne tetragona* (Cunn.) Brieg. in Schletterer, Die Orchideen 3(1): 716 (1981), nom. invalid; *Tropilis tetragona* (Cunn.) Butzin, Willdenowia 12(2): 250 (1982), syn. nov.; *Tropilis tetragona* (Cunn.) Rauschert, Feddes Report. 94(7-8): 471 (1983), nom. illeg.

*Dendrobium tetragonum* Cunn. var. *hayesianum* P.A. Gilbert, Austral. Orchid Rev. 2(4): 20 (1937). Types: 'Gully in the Illawarra District', 1928, E.L. Hayes & P.A. Gilbert s.n. (syn not found); 'South of Sydney', E.L. Hayes & A.W. Dockrill s.n (syn not found); 'South of Sydney', P.A. Gilbert s.n. (syn not found). Notes: An albinistic form of the species that co-exists in some populations of this widespread and slightly variable species (B. Wallace pers. comm.). A type specimen does not appear to have been lodged at a recognised herbarium.

*Dendrobium tetragonum* Cunn. var. *variabilis* P.A. Gilbert, Austral. Orchid Rev. 7: 36 (1942). Type: Eastern New South Wales (not found). Notes: No specific collection was cited, nor I think collected, as a type of the variety.

*D. tetragonum* Cunn. var. *giganteum* Leaney = *Dendrobium cacatua*.

*D. tetragonum* Cunn. var. *giganteum* P.A. Gilbert, pro parte max. = *Dendrobium cacatua*.

*D. tetragonum* Cunn. var. *giganteum* P.A. Gilbert, pro parte min. = *Dendrobium capitisyork*.

*D. tetragonum* Cunn. var. *hayesianum* sensu Dockr. = *Dendrobium cacatua*.

*D. tetragonum* Cunn. var. *tomentosum* Nicholls = *Dendrobium capitisyork*.

*D. tetragonum* Cunn. var. *variabilis* P.A. Gilbert = *Dendrobium tetragonum*.

*D. thysanochilum* Schltr. = *Flickingeria comata*.

*D. toftii* Bailey = *Dendrobium nindii*.

**D. toressae** (Bailey) Dockr., Orchadian 1: 64 (1964). Dist: Qkn, Qco.

*Bulbophyllum toressae* Bailey, Syn. Queensl. fl. Suppl. 3: 72 (1890). Type: 'On the shady rocks, Whelanian Pools' [Belleden Ker], Jun.-Jul. 1889, T. Meston s.n. (holo BRI!, iso K! MEL! NSW!).

*D. tortile* Cunn. = *Dendrobium monophyllum*.

**D. tozerensis** Lavarack, Austrobaileya 1: 70, f. 5 (1977). Type: 'Tozer's Gap, Cape York Peninsula', 11 Aug. 1975, P.S. Lavarack 990 (holo & iso BRI!). Type: Dist: Qco.

## DENDROBIUM

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*D. trilamellatum* J.J. Smith, Bull. Dept. Agric. neerl. 19: 21 (1908); Nova Guinea 8: 69-70, t. 24, 76 (1909).

Types: Dutch New Guinea [Irian Jaya]; Merauke, Jan. 1901, *Jaheri* s.n. (syn BO); between Geelvink Bay and MacCluer Gulf, 1906, W. den Berger s.n. (syn BO). Dist: Qco, Dgd; PG.

*Dendrobium johannis* H.G. Reichb. var. *semifuscum* H.G. Reichb., Gard. Chron. 1883: 368 (1883); *Dendrobium semifuscum* (H.G. Reichb.) Lavarack et Cribb, Orchadian 6(9): 209 (1980). Type: cult. ex Australia, Queensland, W. Bull s.n. (holo W!).

*D. undulatum* R. Br. = *Dendrobium discolor* var. *discolor*.

*D. undulatum* R. Br. var. *broomfieldii* Fitzg. = *Dendrobium discolor* var. *broomfieldii*.

*D. undulatum* R. Br. var. *carterae* Bailey = *Dendrobium discolor* var. *broomfieldii*.

*D. undulatum* R. Br. var. *fimbrilabium* H.G. Reichb. = *Dendrobium discolor* var. *fimbrilabium*.

*D. undulatum* R. Br. var. *johannis* (H.G. Reichb.) Bailey = *Dendrobium johannis*.

*D. uniflos* Bailey = *Cadetia taylori*.

*D. urvillei* Finet = *Dendrobium affine*.

*D. variabile* Nicholls = *Dendrobium prenticei*.

*D. X vinicolor* St. Cloud = *Dendrobium X superbiens*.

*D. wassellii* S.T. Blake, Proc. Roy. Soc. Queensland 73: 66 (1963). Type: cult. Brisbane, May-Jun. 1959, C. Thomson ex 'Queensland.-Cook District: Rocky Creek, about N. of Coen', L.J. Wassell ex S.T. Blake 20560A (holo BRI!). Dist: Qco.

*Dockrillia wassellii* (S.T. Blake) sic Brieg. in Schltr., Die Orchideen 3(1): 745 (1981), syn. nov. Notes: The spelling is incorrect but it is as Brieger would have it.

*D. whiteanum* Hunt = *Dendrobium stuartii*.

*D. wilkianum* Rupp = *Dendrobium mirbelianum*.

*D. sect. Cadetia* sp. sec. Ridley = *Flickingeria nativitatis*.

## DENDROLIRIUM

*Dendrolirium* Blume = *Eria*.

*D. retusum* Blume = *Eria retusa*.

## DENDROCOLLA

*Dendrocolla* Blume = *Thrixspermum*.

*D. brachyglossis* (J.D. Hook.) Ridley = *Trachoma rhopalorrhache*.

*D. carinatifolius* (Ridley) Ridley = *Thrixspermum carinatifolium*.

*D. rhopalorrhachis* H.G. Reichb. = *Trachoma rhopalorrhache*.

## DENDROCORYNE

*Dendrocoryne* (Lindley) Brieg. = *Dendrobium*.

*D. aemula* (R. Br.) Brieg. = *Dendrobium aemulum*.

*D. kingiana* (Bidw. ex Lindley) Brieg. = *Dendrobium kingianum*.

*D. speciosa* (Smith) Brieg. = *Dendrobium speciosum*.

*D. speciosa* Smith var. *fusiforme* (Bailey) Brieg. = *Dendrobium jonesii* subsp. *jonesii*.

*D. speciosa* Smith var. *hillii* (J.D. Hook.) Brieg. = *Dendrobium tarberi*.

*D. tetragona* (Cunn.) Brieg. = *Dendrobium tetragonum*.

## DESMOTRICHUM

*Desmotrichum* Blume = *Flickingeria*.

*D. comatum* Blume = *Flickingeria comata*.

*D. convexum* Blume = *Flickingeria convexa*.

*D. criniferum* (Lindley) Kraenzl. = *Flickingeria comata*.

*D. scopo* Kraenzl. = *Flickingeria comata*.

## DICHOPUS

*Dichopus* Blume = *Dendrobium*.

*D. insignis* Blume = *Dendrobium insigne*.

## DIDYMOPLEXIS

*Didymoplexis* Griffith, Calcutta J. Nat. Hist. 4: 383, t. 17 (1843). Type species: *Didymoplexis pallens* Griffith.

*Apetalon* Wight, Icon. Pl. Ind. Orient. 5(1): 22, t. 1758 (1851). Type species: *Apetalon minutum* Wight.

**D. pallens** Griffith, Calcutta J. Nat. Hist. 4: 383, t. 17 (1843). Type: 'India; Prope caespites Bambusarum, Calcutta, Serampore', W. Griffith s.n.? (holo CAL). Dist: Qco, Ddg, Wga; PG, ID, MY, TH, BU?, IN.

*Epiphantes pallens* (Griffith) H.G. Reichb. in Seem., Fl. Vitenis 296 (1868); *Gastrodia pallens* (Griffith) F. Muell., Contr. phytogr. New Hebrides 22 (1870).

*Arethusa bengalensis* Hort. ex Hemsley, J. Proc. Linn. Soc., Bot. 20: 311 (1884), syn. pro.

*Leucorchis sylvatica* Blume, Mus. Bot. 1: 31 (1849); *Didymoplexis sylvatica* (Blume) Ridley, J. Bot. 345 (1884). Type: 'In provincia Bantam Javae insulae', Harriang s.n. (holo not found, iso BM!).

*Apetalum minutum* Wight, Icon. Pl. Ind. Orient 5(1): 22, t. 1758 (1851). Type: India, Wight? (holo K!).

*Arethusa ecristata* Griffith in McClelland, Post. Pap. Griff. 3: 378 (1851). Type: (icon t. 343, Icon. Pl. Asia. (1847)).

*Pogonia pachystomoides* F. Muell., Fragn. 8: 174 (1874); *Nervilia pachystomoides* (F. Muell.) Schltr., Bot. Jahrb. Syst. 45: 404 (1911). Type: 'Ad sinum Rockingham's Bay', W. Hill s.n. (holo MEL!), syn. nov.

*Cheirostylis kanarensis* Blatt. et McCann, J. Bombay Nat. Hist. Soc. 35: 732-3, f. 4 (1932). Type: 'N. Kanara: Tatwal', Jun. 1912, T.R. Bell s.n. (not found).

## DIENIA

*Dienia* Lindley = *Malaxis*.

*D. carinata* H.G. Reichb. = *Malaxis acuminata*.

*D. congesta* Lindley = *Malaxis latifolia*.

*D. fusca* Lindley = *Malaxis latifolia*.

## DIPLOCAULOBIIUM

*Diplocaulobium* (H.G. Reichb.) Kraenzl., Pflanzenreich Orch.-Mon.-Dendr. 45: 331 (1910). Type species: *Diplocaulobium nitidissimum* (H.G. Reichb.) Kraenzl. (*Dendrobium nitidissimum* H.G. Reichb.).

**D. glabrum** (J.J. Smith) Kraenzl., Pflanzenreich Orch.-Mon.-Dendr. 45: 339 (1910). Dist: Qco; PG, ID.

*Dendrobium glabrum* J.J. Smith, Bull. Dept. Agric. Indes neerl. 5: 4 (1907). Type: 'Dutch New Guinea, Soengai', Meranke s.n. (holo BO).

*Cadetia ruppii* St. Cloud, North Queensland Naturalist 23(110): 2-3 (1955). Type: 'North Queensland; Whitfield Range, Cairns', Sep. 1934, S. St. Cloud s.n. (holo QRS).

**D. masonii** (Rupp) Dockr., Orchadian 1: 132 (1965). Dist: Qco; PG.

*Dendrobium masonii* Rupp, Austral. Orchid Rev. 18: 18 (1953). Type: cult. Sydney, Oct. 1952 ex 'Cape Tribulation, North Queensland', 1950, W.W. Mason s.n. (holo NSW!). Notes: Plants have been found in New Guinea that are undoubtedly representative of this species. It would therefore be of no surprise if an earlier name exists for it.

## DIPLODIUM

*Diplodium* Sw. = *Pterostylis*.

*D. alata* (Labill.) Sw. = *Pterostylis alata*.

## DIPODIUM

*Dipodium* R. Br., Prod. 330 (1810). Type species: *Dendrobium punctatum* Smith.

*Wailesia* Lindley, J. Hort. Soc. London 4: 261 (1849). Type species: *Wailesia picta* Lindley.

**D. ensifolium** F. Muell., Fragn. 5: 42 (1865). Type: 'In rupibus montium juxta Rockingham's Bay', J. Dallachy s.n. (holo MEL!, iso K!). Dist: Qkn, Qco.

**D. hamiltonianum** Bailey, Proc. Linn. Soc. New South Wales 6: 140-3 (1881). Type: 'Stradbroke Island', B. Scortechni & F.M. Bailey s.n. (holo BRI!). Dist: Veh, Can, Nst, Ncc, Nnt, Nns, Qmo, Qdd, Qwb, Qbn, Qle, Qco.

*Dipodium punctatum* (Smith) R. Br. var. *hamiltonianum* (Bailey) Bailey, Syn. Queensl. fl. 517 (1883).

*Dipodium punctatum* sensu Fitzg., Austral. orch. 1(7): [t. 4, RHS figure] (1882), non (Smith) R. Br. (1810).

*D. pandanum* Bailey = *Dipodium pictum*.

**D. pictum** (Lindley) H.G. Reichb., Xenia Orchid 2: 15 (1862). Dist: Qco; SB, PG, ID, MY.

*Wailesia pictum* Lindley, J. Hort. Sci. 4: 261 (1849). Type: cult. ex 'Java', Lobb s.n. (holo K-L!, iso K! W!).

*Dipodium pandanum* Bailey, Queensland Agric. J. 6: 287, t. 187, 188 (1900). Type: 'New Guinea; Near Samarai', W.E. Armit s.n. (holo BRI!), *syn. nov.*

**D. pulchellum** D. Jones et M. Clements, Proc. Roy. Soc. Queensland 98: 128-130, F. 6 (1987). Type: 'Queensland, Tallebudgera Range', 28 Dec. 1985, D.L. Jones 2230 (holo BRI!, iso AMES! BRI! CBG! K! MO! NSW! US!). Dist: Nnt, Nnc, Qmo, Qdd.

*Dipodium punctatum* (Smith) R. Br. var. *album* Bailey, Syn. Queensl. fl. Suppl. 3: 73 (1890). Type: 'Cleveland' [Moreton Bay area], W.R. Kefford s.n. (holo BRI).

**D. punctatum** (Smith) R. Br., Prod. 331 (1810). Dist: Ssl, Sse, Vwp, Vwh, Vnp, Veh, Vgi, Tas, Nsc, Nst, NSS, Ncc, Nnc, Nnt

*Dendrobium punctatum* Smith, Exotic Bot. 1: 2, t. 12 (1804); *Waileśia punctatum* (Smith) Nichols, Dict. Gard. 4: 191 (1887). Type: 'Port Jackson, New South Wales', J. White in herb. J.E. Smith 1404.3 (lecto specimen (a) LINN!, isolectotype LIV!).

*D. punctatum* sensu Fitzg. (LHS) = *Dipodium variegatum*.

*D. punctatum* sensu Fitzg. (RHS) = *Dipodium hamiltonianum*.

*D. punctatum* (Smith) R. Br. var. *album* Bailey = *Dipodium pulchellum*.

*D. punctatum* (Smith) R. Br. var. *hamiltonianum* (Bailey) Bailey = *Dipodium hamiltonianum*.

*D. punctatum* (Smith) R. Br. var. *stenochilum* (O. Schwarz) Rupp = *Dipodium stenochilum*.

**D. stenochilum** O. Schwarz, Repert. Spec. Nov. Regni Veg. 24(659): 80-81 (1927). Type: 'Port Darwin', Schultz 623 (lectotype K! here designated); Syntype: 'Koolpinyah (30 miles e. of Darwin): Bridge Creek', Bleeser 561 (not found). Dist: Qco, Ddg, Wga.

*Dipodium punctatum* (Smith) R. Br. var. *stenochilum* (O. Schwarz) Rupp, North Queensland Naturalist 11(71): 2-3 (1944).

**D. variegatum** M. Clements et D. Jones, Proc. Roy. Soc. Queensland 98: 128, f. 5 (1987). Type: 'Queensland, Beenleigh, beside Pacific Highway', 19 Dec. 1985, D.L. Jones 2226 & T.D. Jones (holo BRI!, iso AMES! CBG! K! MO! NSW! PERTH! US!). Dist: Vgi, Nsc, Ncc, Nnc, Qmo, Qwb, Qpc, Qkn, Qco.

*Dipodium punctatum* sensu Fitzg., Austral. orch. I(7): [t. 4, LHS figure] (1882), *non* (Smith) R. Br. (1810).

*D. venosum* F. Muell. = *Eulophia bicallosa*.

## DISA

*Disa* P. Bergius, Descript. Pl. Cap. 348 (1767). Type species: *Disa uniflora* P. Bergius.

*D. bracteata* Sw. = *Monadenia bracteata*.

## DISPERIS

*Disperis* Sw., Kongl. Vetensk. Acad. Nya Handl. Sep. 1800 (1800). Type species: *Disperis secunda* (Thunberg) Sw., nom. illeg. (*Arethusa secunda* Thunberg, nom. illeg.: *Ophrys circumflexa* L.).

*D. alata* Labill. = *Pterostylis alata*.

## DIURIS

*Diuris* Smith, Trans. Linn. Soc. London 4: 222 (1798). Type species: *Diuris aurea* Smith.

**D. abbreviata** Benth., Fl. Austral. 6: 329 (1873). Type: 'New South Wales, New England', C. Stuart s.n. (lectotype specimen (a) K! here designated, isolectotype MEL!). Dist: Nnt, Ncs, Nns, Qdd.

*Diuris rhomboidalis* Rupp, Contr. New South Wales Natl. Herb. 1: 125 (1941). Type: 'North West Warialda', 9 Oct. 1916, H.M.R. Rupp 24 (holo NSW!), *syn. nov.*

*Diuris citrina* Nicholls, Victorian Naturalist 66: 211, f. A-C (1950). Type: 'Dripstone', 7 Oct. 1947, G.W. & P. Althofer s.n. (holo MEL!), *syn. nov.* Notes: The description of *D. citrina*, was based on a misinterpretation of the identity of *D. abbreviata* sensu Fitzg. non Benth. (1873).

*Diuris althoferi* Rupp, Proc. Linn. Soc. New South Wales 73: 133, f. 1 (1948). Type: 'Guntawang and Yamble Mountain', Sep. 1947, G.W. & P. Althofer s.n. (holo NSW!, iso MEL! NSW!), *syn. nov.*

*Diuris cucullata* Rupp, Proc. Linn. Soc. New South Wales 73: 135, f. 2 (1948). Type: 'Gulgong', Oct. 1945, G.W. & P. Althofer s.n. (lectotype NSW! here designated); Syntype: 'Yamble, near Guntawang', Sep. 1947, G.W. & P. Althofer (NSW!), *syn. nov.*

**D. aequalis** F. Muell. ex Fitzg., Austral. orch. 1(2): [t. 6] (1876). Type: 'New South Wales, Liverpool', Nov. 1870, R.D. Fitzgerald s.n. (lectotype BM! here designated, isolectotype MEL!); Syntypes: 'Port Jackson', Woolls s.n. (MEL!); 'Richlands', McArthur s.n. (K! K-L!). Dist: Nst, Ncc, Nct.

*Diuris maculata* Smith var. *concolor* Benth., Fl. Austral. 6: 328 (1873). Type: 'New South Wales, Liverpool', Nov. 1870, R.D. Fitzgerald s.n. (lectotype BM! here designated, isolectotype MEL!); Syntypes: 'Port Jackson', Woolls s.n. (MEL!); 'Richlands', McArthur s.n. (K! K-L!).

**D. alba** R. Br., Prod. 326 (1810). Type: 'Tropical Australia; Port II', [Port Clinton, Queensland], 22 Aug. 1802, R. Browns.s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! K! P!); Syntypes: 'Shoal Bay Passage', 26 Aug. 1802, R. Brown s.n. (BM!); 'Pine Port, East Coast, (Port Bowen)', 1802, R. Brown s.n. (E! K!). Dist: Ncc, Nnc, Qmo, Qwb, Qpc, Qks, Qkn.

*Diuris punctata* Smith var. *alba* (R. Br.) Ewart et B. Rees, Proc. Roy. Soc. Victoria (new ser.) 26(1): 3 (1913), syn. nov.; *Diuris punctata* Smith var. *alba* (R. Br.) Dockr., Victorian Naturalist 81: 135-136 (1964), nom. illeg.

*D. althoferi* Rupp = *Diuris abbreviata*.

**D. aurea** Smith, Exotic Bot. 1: 15, t. 9 (1805). Type: 'Port Jackson', J. White in herb. J.E. Smith 1393.6 (holo LINN!, iso LIV!). Dist: Nsc, Ncc, Nnc Ncs.

*Diuris spathulata* Sw., Neues J. Bot. 1(1): 60 (1805). Type: 'Nov. Holland', herb. Swartz s.n. (holo SUNIV!). Notes: The single type specimen is probably part of the White collection.

*Diuris aurea* Sw. var. *obtusa* Benth., Fl. Austral. 6: 327 (1873). Type: Nangus, Mc Arthur 171 (lectotype specimen (2b) K-L! here designated); Syntypes: 'Hunter's River', in herb. Lindley and Hooker s.n. (K-L! K!); 'Port Jackson', W. Woolls s.n. (not found). Notes: There are two collections in Lindley's herbarium at Kew that were annotated by Bentham under this name. The first of these is thought to be one of the syntypes and since it is the best material available it has been designated as the lectotype. The second is without collection details but I have taken it to be one of the syntypes. It has also now been established, from recent research of material collected in the field, that this taxon merely represents a large flowering variant of the species.

*D. aurea* Smith var. *obtusa* Benth. = *Diuris aurea*.

**D. behrii** Schldl., Linnaea 20: 572 (1849). Type: 'At Kowimanilla', [South Australia], Sep., O. Behr s.n. (holo B†, iso P!?). Notes: There is a collection at Paris (P) that might be an isotype of this taxon. In South Australia this species has been called *D. pedunculata* and more recently *D. lanceolata*. The distribution of *D. behrii* is at present uncertain but it may well extend into western Victoria and beyond. Dist: Sfr, Syp, Sln, Slc, Smb.

**D. bracteata** Fitzg., Austral. orch. 2(4): [t. 2] (1889). Type: 'Gladesville on the edge of the Parramatta River', Sep., H. Deane s.n. (type not found; lectotype Fitzgerald's plate CBG! here designated). Notes: There are no recent authentic collections of this species and it may well be that the species was never widely spread. Further research is needed to determine the conservation status of *D. bracteata*. Dist: Ncc.

**D. brevifolia** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 46: 148 (1922). Type: 'Mount Lofty Ranges, S. Aust.', 11 Nov. 1906, R.S. Rogers 1455 (holo AD!, iso AD! BM!). Dist: Slc, Skl.

*Diuris sulphurea* R. Br. var. *brevifolia* (R. Rogers) J. Weber et R. Bates, Fl. S. Austral. (ed. 3) 1: 417 (1978).

*D. brevissima* Fitzg. ex Nicholls, Victorian Naturalist 56: 125-6, f. (1939), nom. illeg.

**D. brevissima** Fitzg. ex Nicholls, Victorian Naturalist 59: 54 (1942). Type: 'Lawson, Blue Mountains, New South Wales', R.D. Fitzgerald s.n. (holo, unpublished plate in Mitchell Library, Sydney!). Dist: Vwh, Ncc, Nct, Ncs, Nss.

**D. carinata** Lindley, Gen. sp. orchid. pl. 510 (Sep. 1840). Type: 'Swan River', 1839, J. Drummond s.n. (lecto K-L!, isolectotype BM! K!); Syntype: 'Swan River', J. Mangles s.n. (K-L!). Notes: Previously confused with *D. laxiflora*. Dist: Wda.

**D. chrysantha** D. Jones et M. Clements, Proc. Roy. Soc. Queensland 98: 130-2, f. 7 (1987). Type: 'Queensland, hill about 4 km north-west of Stanthorpe', 3 Nov. 1985, D.L. Jones 2188 (holo BRI!, iso CBG!). Notes: Previously confused with *D. aurea* in Queensland and with *D. abbreviata* in New South Wales. Illustrated on page 229 in Jones (1988). Dist: Ncc, Nnt, Qmo, Qdd, Qwb.

*D. citrina* Nicholls = *Diuris abbreviata*.

*D. colemaniae* Rupp = *Diuris tricolor*.

**D. corymbosa** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. li (1840). Type: 'Swan River', 1839, J. Drummond s.n. (lecto K-L!, isolectotype K!); Syntypes: 'Tasmania, Circular Head', Sep. & Oct. 1836, R. Gunn 931 (BM! K! K-L! L!). Notes: Previously confused with *D. longifolia*, a species now considered endemic to south-western Western Australia. Illustrated on page 231 in Jones (1988). Dist: Wda, Wav, Wro, Wey, Sep, Syp, Sln, Slc, Ski, Smb, Sse, Vwp, Vwh, Vgi, Tas, Nsc.

*Diuris longifolia* R. Br. var. *corymbosa* (Lindley) Domin, J. Proc. Linn. Soc., Bot. 41: 249 (1912).

*Diuris porrifolia* Lindley in Edwards's, Bot. Reg. 1-23: Swan. Riv. Append. li (1840). Type: 'Swan River', 1839, J. Drummond s.n. (lecto K-L!, isolectotype K! L!).

*Diuris corymbosa* Lindley var. *minor* Lindley, Linnaea 26: 242 (1853), nom. nud.

*Diuris longifolia* R. Br. var. *parviflora* Nicholls, Victorian Naturalist 64: 115 (1947). Type: 'Lesmurdie area at the Darling Range', Sep. 1946, W.H. Nicholls s.n. (holo & iso MEL!), syn. nov.

*D. corymbosa* Lindley var. *minor* Lindley = *Diuris corymbosa*.

**D. cuneata** Fitzg., Austral. orch. 2(4): [t. 2] (1889). Type: 'Cootamundra', Dec. 1888, W.S. Campbell s.n. (holo not found; lectotype Fitzgerald's plate CBG! here designated). Notes: Illustrated on page 232 in Jones (1988). Dist: Vnp, Nst, NSS, Nsp, Nct, Ncs, Nns.

*Diuris punctata* Smith var. *longissima* Benth., Fl. Austral. 5: 327 (1873). Type: 'Mudgee, New South Wales', 1870, Taylor s.n. (holo MEL!), syn. nov.

*D. cucullata* Rupp = *Diuris abbreviata*.

*D. cuneilabris* Rupp = *Diuris platichila*.

*D. curtifolia* Rupp = *Diuris platichila*.

**D. curvifolia** Lindley, Gen. sp. orchid. pl. 507 (1840). Type: 'Tasmania', R. Gunn 343 (holo K-L!, iso K!). Notes: *D. curvifolia* was previously placed under *D. maculata* but the type specimens are not typical of that species. The status of *D. curvifolia* therefore needs further checking. Dist: Tas.

*D. dendrobioides* Fitzg. = *Diuris punctata* var. *punctata*.

**D. drummondii** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. li (1840). Type: 'Swan River', 1839, J. Drummond s.n. (lecto K-L!, isolectotype BM! FI!). Notes: Previously confused with *D. emarginata*. Dist: Wda.

*D. elongata* Sw. = *Diuris punctata* var. *punctata*.

**D. emarginata** R. Br., Prod. 316 (1810). Type: 'King George III Sound', Dec. 1801, R. Brown s.n. (lectotype specimen BM!, here designated, isolectotype BM!). Dist: Wda.

*Diuris setacea* R. Br. var. *emarginata* (R. Br.) Domin, J. Proc. Linn. Soc., Bot. 41: 248 (1912).

*D. emarginata* R. Br. var. *pauciflora* (R. Br.) A.S. George = *Diuris pauciflora*.

**D. fastidiosa** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 51: 6-7 (1927). Type: 'Victoria, Tottenham', 9 Sep. 1923, W.H. Nicholls ex R.S. Rogers 1500 (holo AD, iso MEL!). Notes: A putative hybrid between *D. lanceolata* and *D. palustris*. Dist: Vwp.

**D. filifolia** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. li (1840). Type: 'Swan River', 1839, J. Drummond s.n. (lecto K-L!, isolectotype BM! FI! K! L!). Notes: Reduced to a synonym of *D. setacea* by George (1971), but from a study of the types and research conducted by David Jones in the field it has been established that *D. setacea* and *D. filifolia* are separate species. *D. filifolia* differs from *D. setacea* in having a tufts of spirally twisted rather than stiff leaves, and a flower in which the side-lobes of the labellum are entire rather than irregularly toothed. *D. filifolia* inhabits damp, coastal sandplain areas and flowers in October. In comparison *D. setacea* is only found in the Albany district where it inhabits granite outcrops and flowers in December. Dist: Wda.

*D. flavopurpurea* Messmer = *Diuris platichila*.

**D. fragrantissima** D. Jones et M. Clements, nom. et stat. nov.

*Diuris punctata* Smith var. *albo-violacea* Rupp ex Dockr., Victorian Naturalist 81: 137 (1964). Type: 'Sydenham, Victoria', Oct. 1912, P.R.H. St. John s.n. (holo MEL!). Notes: Differs from *D. punctata* in having a dwarf habit, the stiff erect habit of the flowers that are white with purple markings, and its strong fragrance. Endemic to the Keilor plains west of Melbourne where it is extremely rare and threatened with extinction. Dist: Vwp.

*D. goonooensis* Rupp = *Diuris platichila*.

**D. laevis** Fitzg., Gard. Chron. (new ser.) 17: 495 (1882). Type: 'Wilson's Inlet, Western Australia.', Sep., R.D. Fitzgerald s.n. (holo & iso BM!). Dist: Wda, Wey.

**D. lanceolata** Lindley, Gen. sp. orchid. pl. 508 (1840). Type: 'Tasmania, Circular Head', Nov. 1837, R. Gunn 934 (holo K-L!, iso BM! FI! K! L! PI! SING!). Notes: Previously misinterpreted as *D. pedunculata*. Dist: Sse, Vwp, Vwh, Vnp, Vgi, Veh, Tas, Nst, Can, NSS, Ncc, Nct, Ncs, Nnt, ?Qdd.

*Diuris pedunculata* R. Br. var. *lanceolata* (Lindley) Domin., Bibl. Bot. 20: 546 (1915).

*Diuris pedunculata* sensu Fitzg., Austral. orch. 1(7): [t. 3] (1882), non R. Br. (1810).

*Diuris pedunculata* R. Br. var. *gigantea* Nicholls, Victorian Naturalist 49: 174 (1932). Type: 'Noble Park, Victoria', W.H. Nicholls s.n. (holo MEL), syn. nov.

*D. latifolia* Rupp = *Diuris sulphurea*.

- D. laxiflora** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append li (1840). Type: 'Swan River', 1839, J. Drummond s.n. (lecto K-L!, isolectotype BM! Fl! K!). Notes: Previously confused with *D. carinata* and other closely related species. Dist: Wda.
- D. lilacina* F. Muell. ex Lindley = *Diuris punctata* var. *punctata*.
- D. lineata* Messmer = *Diuris platichila*.
- D. longifolia** R. Br., Prod. 316 (1810). Type: 'King George's Sound, West coast of New Holland, Lat. 35°', 1803, A. Menzies 7 (lectotype specimen (a) BM! here designated, isolectotype BM! LINN!). Dist: Wda, Wav. *Diuris longifolia* R. Br. var. *typica* Domin, J. Proc. Linn. Soc., Bot. 41: 249, in obs. (1942), nom. illeg.
- D. longifolia* R. Br. var. *corymbosa* (Lindley) Domin = *Diuris corymbosa*.
- D. longifolia* R. Br. var. *parviflora* Nicholls = *Diuris corymbosa*.
- D. longifolia* R. Br. var. *typica* Domin = *Diuris longifolia*.
- D. maculata** Smith, Exotic Bot. 1: 57, t. 30 (1804-05). Type: 'Port Jackson, New South Wales', J. White in herb. J.E. Smith 1393.2 (holo specimen (1) LINN!, iso LIV!). Dist: Vwp, Vgi, Tas, Nsc, Nst, Ncc, Nct, Nnc, Qdd.
- D. maculata* Smith var. *concolor* Benth. = *Diuris aequalis*.
- D. maculata* Smith var. *palustris* (Lindley) H.G. Reichb. = *Diuris palustris*.
- D. maculosissima* Rupp = *Diuris platichila*.
- D. novae-zealandiae* A. Rich. = *Orthoceras novae-zealandiae*.
- D. oculata* F. Muell. ex Lindley = *Diuris sulphurea*.
- D. X palachila** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 31: 209-210 (1907). Type: South Australia; Blackwood, 13 Sep. 1907, R.S. Rogers s.n. (lectotype AD! here designated). Notes: Despite the original author's contention that his new orchid was not of hybrid origin, it is undoubtedly the result of a cross between *D. pardina* and *D. behrii*. Dist: Sls.
- D. pallens* Benth. = *Diuris pedunculata*.
- D. palustris** Lindley, Gen. sp. orchid. pl. 507 (1840). Type: 'Tasmania, Circular Head', Dec. 1837, R. Gunn 933 (holo K-L!, iso BM! Fl! HO! K! P!). Dist: Sep, Sfr, Sln, Sls, Smb, Sse, Vwp, Vwh, Tas. *Diuris maculata* Smith var. *palustris* (Lindley) H.G. Reichb., Beitr. Syst. Pflanzenk. 56, in obs. (1871).
- D. pardina** Lindley, Gen. sp. orchid. pl. 507 (1840). Type: 'Nov. Holland meridional, Bugle Range', [Mount Lofty Ranges, South Australia], Oct., ex herb. F. Muellers s.n. (lectotype K-L!, here designated, isolectotype Fl!); Syntype: 'Van Diemen's Land', C. Stuart s.n. (K-L!). Notes: Previously interpreted as a form of *D. maculata* but the two taxa are quite distinct. Dist: Sep, Syp, Sfr, Sls, Ski, Smb, Sse, Vwp, Vwh, Tas.
- D. parvipetala** (Dockr.) D. Jones et M. Clements, Proc. Roy. Soc. Queensland 98: 132 (1987). Dist: Qdd, Qbn. *Diuris punctata* Smith var. *parvipetala* Dockr. Victorian Naturalist 81: 137 (1964). Type: 'Brigooda, Queensland' [Proston District], Sep. 1954, W. Power s.n. (holo BRI!).
- D. pauciflora** R. Br., Prod. 316 (1810). Type: 'King George Sound', Dec. 1801, R. Brown s.n. (lectotype specimen (a) BM!, here designated, isolectotype AD! E! K! L!). Notes: A species that has been much confused with the closely allied *D. emarginata*, *D. drummondii* and *D. setacea*. Further study on this group of taxa is currently being undertaken. Dist: Wda. *Diuris emarginata* R. Br. var. *pauciflora* (R. Br.) A.S. George, Nuytsia 1(2): 178 (1972), syn. nov.
- D. pedunculata** R. Br., Prod. 316 (1810). Type: 'Near Sydney, towards Hawkesbury, Port Jackson', Sep.-Oct. 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! E! K!); Syntype: 'Port Jackson', 1802-5, R. Brown s.n. (BM!). Notes: Previously confused with *D. lanceolata*. One of the most endangered species in the genus. Dist: Ncc, Nnc, Nnt. *Diuris pallens* Benth. Fl. Austral. 6: 329 (1873). Type: 'New England' [Open plains Tenterfield], Oct., C. Stuart 1059 (holo K!, iso MEL!), syn. nov.
- D. pedunculata* sensu Fitzg. = *Diuris lanceolata*.
- D. pedunculata* R. Br. var. *lanceolata* (Lindley) Domin = *Diuris lanceolata*.
- D. pedunculata* R. Br. var. *gigantea* Nicholls = *Diuris lanceolata*.
- D. picta** J. Drummond in Hooker's, J. Bot. 5: 347 (1853). Type: 'Western Australia: east of Wallemarra, the flower is large and white, the lip margined with purple, and all the divisions of the perianth more or less marked with the same colour: it grew in considerable quantities in a dry watercourse', J. Drummond s.n. (holo K not found); 'Western Australia, Frog Rock, c. 35 km SW. of Southern Cross', 13 Oct. 1988, D.L. Jones 3054 & M.A. Clements (neotype CBG! here designated). Notes: The description appears to apply to a recently recognised taxon found around granite outcrops in the wheat-belt of Western Australia. Dist: Wav, Wro?.

**D. platichila** Fitzg., Austral. orch. 2(4): [t. 3] (1891). Type: 'Woodford', Oct. 1887, R.D. Fitzgerald s.n. (holo BM!, iso NSW!). Notes: This species is very variable in floral morphology and as such has caused much confusion with many authors, notably Rupp (1948, 1955), who tried to delimit species from the variants within the taxon. Dist: Nst, Can, NSS, Nct, Ncs, Nsp, Nns, Nnp, Qdd.

*Diuris flavopurpurea* Messmer in Rupp, Orchids New South Wales, Suppl. 141 (1943). Type: 'Mount Victoria', Oct. 1943, P.R. Messmer s.n. (holo NSW!), syn. nov.

*Diuris lineata* Messmer in Rupp, Orchids New South Wales, Suppl. 142 (1943). Type: 'Mount Victoria', Oct. 1943, P.R. Messmer s.n. (holo NSW!), syn. nov.

*Diuris cuneilabris* Rupp, Proc. Linn. Soc. New South Wales 73: 134, f. 1 (1948). Type: 'Kerr's Creek, between Dripstone and Orange', Oct. 1947, G.W. & P. Althofer s.n. (holo NSW!).

*Diuris goonooensis* Rupp, Victorian Naturalist 72: 110 (1955). Type: 'Goonoo Forest, 18 miles from Dubbo', Oct. 1947, G.W. Althofer s.n. (holo NSW!), syn. nov. Notes: A large flowered form of *D. platichila*.

*Diuris maculosissima* Rupp, Victorian Naturalist 72: 110 (1955). Type: 'Kerr's Creek, Wellington-Molong Road', Oct. 1947, P. Althofer s.n. (lectotype NSW! here designated); Syntype: 'Dripstone', Oct. 1947, G.W. Althofer s.n. (NSW!), syn. nov.

*Diuris curtifolia* Rupp, Victorian Naturalist 72: 111 (1955). Type: 'Ganoo Forest, Dubbo', Sep. 1950, G.W. Althofer s.n. (holo NSW!), syn. nov.

**D. X polymorpha** Messmer in Rupp, Orchids New South Wales, Suppl. 142 (1943). Type: 'Mount Victoria', Oct. 1943, P.R. Messmer s.n. (holo NSW!). Notes: Previously treated as a species but the type appears to have characteristics intermediate between *D. platichila* and *D. lanceolata*. Both these species have been recorded from the same area. Based on this evidence it seems likely that *D. polymorpha* is a hybrid between *D. platichila* and *D. lanceolata* and accordingly has been given hybrid status. Dist: Can, Ncs.

*Diuris victoriensis* Messmer in Rupp, Orchids New South Wales, Suppl. 142 (1943). Type: 'Mount Victoria', Oct. 1943, P.R. Messmer s.n. (holo NSW!), syn. nov. Notes: Previously treated as a species but the type also appears to be a hybrid between *D. platichila* and *D. lanceolata*.

*D. porrifolia* Lindley = *Diuris corymbosa*.

**D. punctata** Smith var. **punctata** Exotic Bot. 1: 13, t. 8 (1804). Type: 'Port Jackson, New South Wales', J. White in herb. J.E. Smith 1393.7 (holo LINN!, iso LINN! LIV!). Notes: In his treatment of this species Dockrill (1964) stated that "Searches in the herbaria at Kew and British Museum (Nat. Hist.) have failed to reveal the specimen delineated by Smith, so presumably it has been lost. Smith's illustration (l.c.) must therefore serve as an Iconotype.". Dockrill also selected a neotype for this taxon in his paper. However, since the holotype and isotypes are extant the selection of a iconotype and neotype was superfluous. In addition Dockrill's interpretation of the taxon was erroneous being based on the belief that the type of the species had spots on all segments. The spots were caused by thrips damage, the true colour of the specimens being a fairly uniform mauve. Dist: Sse, Vwh, Vnp, Vgi, Nsc, Nst, Can, NSS, Ncc, Nnc, Nnt, Qmo, Qco.

*Diuris elongata* Sw., Neues J. Bot. 1(1): 59 (1805). Type: 'Nov. Holland', in herb. Swartz s.n. (holo SUNIV!). Notes: The type collection is probably part of the White collection.

*Diuris lilacina* F. Muell. ex Lindley, Linnaea 26: 239 (1854). Type: 'Australia felix', in herb. W. Sonder s.n. (holo K-L!), nom. illeg.

*Diuris dendrobioides* Fitzg., Austral. orch. 1(7): [t. 3] (1882). Type: 'Cunningham's Plain near Murriumburrah, New South Wales', R.D. Fitzgerald s.n. (type not found; lectotype Fitzgerald's plate CBG!, here designated), syn. nov. Notes: Fitzgerald makes reference to the two specimens he collected, being found amongst *D. elongata* (= *D. punctata*). It therefore seems likely that *D. dendrobioides* is merely a petaloid form of *D. punctata* and it thus would be best to treat it as a synonym of that species.

*Diuris punctata* Smith var. *d'altoni* C. Walter, Victorian Naturalist 23: 240 (1907). Type: 'Mount Arapiles, near Natimuk', C. Walters s.n. (holo not found), syn. nov. Notes: A doubtful variety collected from near the extreme west of the species range.

*Diuris punctata* Smith forma *blakneyae* Bailey, Compr. Cat. Queensland Pl. 847, f. 973 a, b & e (1909). Type: 'Ravenshoe, North Queensland', 2 Nov. 1912, F.A. Blakney s.n. (holo BRI!).

var. *sulfurea* Rupp, Proc. Linn. Soc. New South Wales 69: 73 (1944). Type: 'Green Valley, Guyra, N.S.W.', Oct. 1937, T.P. Skinner s.n. (lecto NSW!). Dist: Nnt.

*Diuris punctata* Smith forma *sulfurea* (Rupp) Dockr., Victorian Naturalist 81: 135 (1964), syn. nov.

*D. punctata* Smith var. *alba* (R. Br.) Ewart et B. Rees = *Diuris alba*.

*D. punctata* Smith var. *alba* (R. Br.) Dockr. = *Diuris alba*.

*D. punctata* Smith var. *albo-violacea* Rupp ex Dockr. = *Diuris fragrantissima*.

*D. punctata* Smith var. *d'altoni* C. Walters = *Diuris punctata* var. *punctata*.

- D. punctata* Smith var. *longissima* Benth. = *Diuris cuneata*.
- D. punctata* Smith var. *minor* Benth. = *Diuris striata*.
- D. punctata* Smith var. *parvipetala* Dockr. = *Diuris parvipetala*.
- D. punctata* Smith forma *blakneyae* Bailey = *Diuris punctata* var. *punctata*.
- D. punctata* Smith forma *striata* (Rupp) Clemesha = *Diuris striata*.
- D. punctata* Smith forma *sulfurea* (Rupp) Dockr. = *Diuris punctata* var. *sulfurea*.
- D. purdiei** Diels, J. Proc. Mueller Bot. Soc. Western Australia 1(11): 79 (1903). Type: 'Cannington', 7 Oct. 1900, A. Purdie 895 (holo BM!, iso NSW! PERTH!). Dist: Wda.
- D. rhomboidalis* Rupp = *Diuris abbreviata*.
- D. secundiflora** Fitzg., Austral. orch. 1(4): [t. 9] (1878). Type: 'Macleay River', R.D. Fitzgerald s.n. (holo not found; lectotype Fitzgerald's plate CBG! here designated). Dist: Nnc.
- D. semilunulata** Messmer in Rupp, Orch. New South Wales 139-140 (1943). Type: 'Mount Jerrabomberra, Queanbeyan', Oct. 1942, P.R. Messmer s.n. (holo NSW!). Dist: Nst, Can.
- D. setacea** R. Br., Prod. 316 (1810). Type: 'King George's Sound', Dec. 1801, R. Brown s.n. (lectotype specimen (a) BM! here designated). Dist: Wda, Wey.  
*Diuris setacea* R. Br. var. *typica* Domin, J. Proc. Linn. Soc., Bot. 41: 248, in obs. (1912), *nom. illeg.*
- D. setacea* R. Br. var. *emarginata* (R. Br.) Domin = *Diuris emarginata*.
- D. setacea* R. Br. var. *typica* Domin = *Diuris setacea*.
- D. sheaffiana* Fitzg. = *Diuris tricolor*.
- D. spathulata* Sw. = *Diuris aurea*.
- D. spathulata* Fitzg. = *Diuris striata*.
- D. striata** Rupp, Orch. New South Wales 15 (1943). Dist: Ncs (where possibly extinct), Ncc, Nnc, Nnt.  
*Diuris spathulata* Fitzg., Austral. orch. 2(4): [t. 2] (1889), non Sw. (1805); *Diuris punctata* Smith forma *striata* (Rupp) Clemesha, Orchadian 3: 20 (1968). Type: 'Forbes', Nov., G.H. Sheaffe s.n. (holo BM!). Notes: Not found near Forbes since the original collection.  
*Diuris punctata* Smith var. *minor* Benth., Fl. Austral. 5: 327 (1873). Type: [New South Wales, Clifton, on Tenterfield Creek, c. 19 miles W. of Tenterfield], 'New England', 1870, C. Stuart 1061 (lecto MEL!, isolectotype K! MEL!); Syntypes: 'Upper Clarence River', Riley s.n. (syn not found), *syn. nov.*
- D. sulphurea** R. Br., Prod. 316 (1810). Type: 'Moist meadows towards George's River', Oct. 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! E! K!); Syntypes: 'Port Jackson', 1803-5, R. Brown s.n. (BM! E! L!). Dist: Sse, Vwp, Vwh, Vnp, Vgi, Veh, Tas, Nsc, Nst, Can, Nss, Ncc, Nct, Ncs, Nnc, Nnt, Nns, Qmo, Qdd, Qwb.  
*Diuris oculata* F. Muell. ex Lindley, Linnaea 26: 241 (1854). Type: 'Austr. felix; Ad ripam graminosam coll. flurii Yarra', Oct. 1852, F. Mueller s.n. (holo K-L!, iso MEL!), *nom. illeg.*  
*Diuris sulphurea* R. Br. forma *immaculata* Gand., Bull. Soc. Bot. France 47: 307 (1900). Type: 'Tasmania, Winton', Spicer s.n. (holo LY).  
*Diuris sulphurea* R. Br. forma *tasmanica* Gand., Bull. Soc. Bot. France 47: 307 (1900). Types: 'Tasmania, Launceston', R. Gunn 932 (syn LY, isosyn K-L!); 'Georges Bay', Samson 709 (syn LY); 'Oyster Cove', Dec. 1852, Milligan 937 (syn LY, MEL!).  
*Diuris latifolia* Rupp, Contr. New South Wales Natl. Herb. 1: 318 (1951). Type: 'Baerami, via Denman, N.S.W.', Oct. 1949, R.D. Crockett s.n. (holo NSW!).  
*D. sulphurea* R. Br. var. *brevifolia* (R. Rogers) J. Weber et R. Bates = *Diuris brevifolia*.  
*D. sulphurea* R. Br. forma *immaculata* Gand. = *Diuris sulphurea*.  
*D. sulphurea* R. Br. forma *tasmanica* Gand. = *Diuris sulphurea*.  
**D. tricolor** Fitzg., J. Bot. 23: 137 (1885). Type: New South Wales, Mudgee, R.D. Fitzgerald s.n. (holo BM!, iso NSW!). Dist: Nst, Nss, Nsp, Ncs, Nns, Qdd.  
*Diuris sheaffiana* Fitzg., Austral. orch. 2(4): [t. 3] (1889). Type: 'Forbes, New South Wales', Oct., G.H. Sheaffe s.n. (holo not found; lectotype Fitzgerald's plate CBG! here designated), *syn. nov.*  
*Diuris colemaniæ* Rupp, Victorian Naturalist 57: 63 (1940). Type: 'New South Wales, Warialda', 9 Oct. 1916, H.M.R. Rupp 25 (holo & iso NSW!), *syn. nov.*  
**D. venosa** Rupp, Proc. Linn. Soc. New South Wales 51: 313, f. 1-6 (1926). Type: 'Barrington Tops', Dec. 1925, B. Sivyer s.n. (lectotype NSW! here designated); Syntypes: 'Barrington Tops', Jan. 1915, J.L. Boorman s.n.

(NSW!); 'Barrington Tops', Jan. 1925, L. Harrison s.n. (NSW!); 'Barrington Tops', Jan. 1926, C. Barret s.n. (NSW!). Dist: Nnt.

*D. victoriensis* Messmer = *Diuris* X *polymorpha*.

## DOCKRILLIA

*Dockrillia* Brieg. = *Dendrobium*.

*D. baseyanum* (St. Cloud) Rauschert = *Dendrobium baseyanum*.

*D. beckleri* (F. Muell.) Rauschert = *Dendrobium schoeninum*.

*D. cucumerina* (Lindley) Brieg. = *Dendrobium cucumerinum*.

*D. fairfaxii* (F. Muell. ex Fitzg.) Rauschert = *Dendrobium fairfaxii*.

*D. foederata* (St. Cloud) Rauschert = *Dendrobium* X *foederatum*.

*D. X grimesii* (C.T. White et Summerh.) Rauschert = *Dendrobium* X *grimesii*.

*D. lichenastrum* (F. Muell.) Brieg. = *Dendrobium lichenastrum*.

*D. linguiforme* (Sw.) Brieg. = *Dendrobium linguiforme*.

*D. mortii* (F. Muell.) Rauschert = *Dendrobium mortii*.

*D. pugioniformis* (Cunn.) Rauschert = *Dendrobium pugioniforme*.

*D. racemosa* (Nicholls) Rauschert = *Dendrobium racemosum*.

*D. rigida* (R. Br.) Rauschert = *Dendrobium rigidum*.

*D. striolata* (H.G. Reichb.) Rauschert = *Dendrobium striolatum*.

*D. tenuissima* (Rupp) Rauschert = *Dendrobium mortii*.

*D. teretifolia* (R. Br.) Brieg. = *Dendrobium teretifolium*.

*D. toressae* (Bailey) Brieg. = *Dendrobium toressae*.

*D. wassellii* (S.T. Blake) [sic] Brieg. = *Dendrobium wassellii*.

## DORITIS

*Doritis* Lindley, Gen. sp. orchid. pl. 178 (1833). Type species: *Doritis pulcherrima* Lindley.

*D. bifalcis* (Lindley) H.G. Reichb. = *Dendrobium bifalce*.

## DRAKAEA

*Drakaea* Lindley in Edwards's, Bot. Reg. 1-23; Swan Riv. Append. Iv (1840). Type species: *Drakaea elastica* Lindley.

*D. ciliata* (Lindley) H.G. Reichb. = *Spiculaea ciliata*.

*D. elastica* Lindley in Edwards's, Bot. Reg. 1-23; Swan Riv. Append. Ivi (1840). Type: 'Swan River', J. Drummond s.n. (lectotype one flower in a packet (b) and the illustration on the sheet in Lindley's herbarium (c) K-L! here designated, isolectotype K!). Notes: In the Lindley herbarium at Kew there is a single sheet labelled *D. elastica*. This sheet contains specimens of three species from the genus. Lindley clearly, was of the opinion that all were representative of a single species which he named and described with an illustration. The illustration published with the description of the genus and species, is identical to the illustration on the sheet of *D. elastica* in Lindley's herbarium. It is representative of the species currently known as *D. jeanensis*. A specimen of that species and the illustration on the sheet in Lindley's herbarium have therefore been designated as the lectotype for that name. In fact the flowers in the packet are in very poor condition and two of them lack a labellum. The material designated as isolectotype is however in much better condition. The species is illustrated on page 216 of Hoffman & Brown (1984), under the name *D. jeanensis*. Dist: Wda.

*Drakaea lucida* J. Drummond in Hooker's, London J. Bot. 1: 628 (1842). Type: 'Swan River', J. Drummond s.n. (lectotype specimen (a) K-L! here designated, isolectotypes E! F! G! K! K-L!), syn. nov. Notes: A previously overlooked name.

*Drakaea jeanensis* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 44: 322 (1920). Type: 'Ravenswood, near Pinjarra, Western Australia', 1 Oct. 1919, R.S. & J. Rogers s.n. (holo AD!), syn. nov.

*D. elastica* sensu Fitzg. = *Drakaea livida*.

*D. fitzgeraldii* Schltr. = *Drakaea livida*.

*D. glyptodon* Fitzg., Gard. Chron. (new ser.) 17: 494 (1882). Type: 'Dardanup and Albany' [Bunbury], Sep., R.D. Fitzgerald s.n. (holo BM!, iso BM! NSW!). Notes: There is a single specimen of this species in

Drummond's collection at Kew. Illustrated on page 214 of Hoffman & Brown (1984). Dist: Wir, Wda, Wav, Wro, Wey.

*D. huntiana* F. Muell. = *Arthochilus huntianus*.

*D. irritabilis* (F. Muell.) H.G. Reichb. = *Arthochilus irritabilis*.

*D. jeanensis* R. Rogers = *Drakaea elastica*.

**D. livida** J. Drummond in Hooker's, London J. Bot. 1: 628 (1842). Type: 'Swan River', J. Drummond s.n. (lectotype K!, isolectotype K!). Notes: *D. livida* is the correct name for the species previously interpreted as *D. elastica*. The name *D. livida* had previously been overlooked because of the obscurity of the description. Illustrated on page 212 of Hoffman & Brown (1984) as *D. elastica*. Dist: Wir, Wda.

*Drakaea fitzgeraldii* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 17: 81 (1921). Type: 'Perth, Western Australia', Sep., R.D. Fitzgerald s.n. (holo BM!, icon Fitzgerald's plate). Notes: Schlechter in describing *D. fitzgeraldii* cited "*D. elastica* Fitzg., Aust. Orch. II, I (1884), t. 4, non Lindley", as the type but since a specimen already existed it is the type. This name was previously listed as a synonym of *D. elastica* (George, 1971). Dist: Wda, Wav.

*Drakaea elastica* sensu Fitzg., Austral. orch. 2(1): [t. 4] (1884), non Lindley (1840).

*D. lucida* J. Drummond = *Drakaea elastica*.

**D. thynniphila** A. S. George, Nuytsia 5(1): 60, f. 3, F-K (1984). Type: 'Gull Rock Road, E of Oyster Harbour, Western Australia', 1 Oct. 1971, A.S. George 11099 (holo PERTH!, iso CANB!). Notes: Illustrated on page 222 of Hoffman & Brown (1984). Dist: Wda.

## DRYADORCHIS

*Dryadorchis* Schltr. = *Thrixspermum*.

*D. barbellata* Schltr. = *Thrixspermum barbellatum*.

## DRYMOANTHUS

**Drymoanthus** Nicholls, Victorian Naturalist 59: 173-5, f. (1943). Type species: *Drymoanthus minutus* Nicholls.

**D. minutus** Nicholls, Victorian Naturalist 59: 175, f. (1943). Type: cult. Melbourne, Dec. 1935, W.H. Nicholls ex 'Queensland (North), Mt. Fox (via Ingham)', 1934, A. Glindeman s.n. (holo MEL). Dist: Qkn, Qco.

## ELYTHRANTHERA

*Elythranthera* (Endl.) A.S. George, West Australian Naturalist 9: 6 (1963). Type species: *Glossodia brunonis* Endl.

**E. brunonis** (Endl.) A.S. George, West Australian Naturalist 9: 7 (1963). Dist: Wir, Wda, Wav, Wro, Wey.

*Glossodia brunonis* Endl., Nov. stirp. dec. 2: 16 (1839); *Caladenia brunonis* (Endl.) H.G. Reichb., Beitr. Syst. Pflanzenk. 67 (1871). Type: 'King George Sound', Huegel s.n. (lectotype W! here designated).

**E. emarginata** (Lindley) A.S. George, West Australian Naturalist 9: 7 (1963). Dist: Wir, Wda, Wav, Wro, Wey.

*Glossodia emarginata* Lindley, Gen. sp. orchid. pl. 424 (1840); *Caladenia emarginata* (Lindley) H.G. Reichb., Beitr. Syst. Pflanzenk. 67 (1871). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L!).

**E. X intermedia** (Fitzg.) M. Clements, hybrid comb. nov.

*Glossodia intermedia* Fitzg., Gard. Chron. (new ser.) 17: 462 (1882). Type: 'Western Australia', R.D. Fitzgerald s.n. (holo not found; lectotype Fitzgerald's plate CBG! here designated). Notes: There is little doubt that the plant illustrated by Fitzgerald is a hybrid between the two *Elythranthera* species. This hybrid is frequently found where the two species occur together in large numbers. Dist: Wda.

## EPHEMERANTHA

*Ephemerantha* P. Hunt et Summerh. = *Flickingeria*.

*E. comata* (Blume) P. Hunt et Summerh. = *Flickingeria comata*.

*E. convexa* (Blume) P. Hunt et Summerh. = *Flickingeria convexa*.

*E. pectinatum* (Ridley) P. Hunt et Summerh. = *Flickingeria nativitatis*.

*E. thysanochila* (Schltr.) P. Hunt et Summerh. = *Flickingeria comata*.

## EPHIPPIUM

*Ehippium* Blume = *Bulbophyllum*.

*E. ciliatum* Blume = *Bulbophyllum blumei*.

## EPIBLEMA

*Epiblema* R. Br., Prod. 315 (1810). Type species: *Epiblema grandiflorum* R. Br.

*E. grandiflorum* R. Br., Prod. 315 (1810). Type: 'In paludosus prope Portus Regis Georgii III', Dec. 1801, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! E! K-L! P!). Dist: Wda, Wey.

## EPIDENDRUM

*Epidendrum* L., Sp. Pl. ed. 2, 1347 (1763) (nom. cons.). Type species: *Epidendrum nocturnum* Jacq.

*E. aristotelea* Raeuschel = *Spiranthes sinensis*.

*E. caninum* Burm. f. = *Dendrobium crumenatum*.

*E. distichum* G. Forst. = *Trachoma papuanum*.

*E. X obrienianum* Rolfe, Gard. Chron. (ser. 3) 3: 770, f. 103 (1888). Type: cult. (holo K). Notes: An exotic hybrid between *E. erectum* and *E. radicans*, that has become naturalised in various sites in Brisbane, usually in cuttings along railway lines. It is commonly grown as a garden plant especially in Brisbane and Sydney where it reproduces readily either from seed (fruit sets freely on plants) or from aerial plantlets, which are often produced in great abundance. Dist: Qmo; PE, EC?

*E. spatulatum acut.* non. Burm. f. = *Dendrobium crumenatum*.

*E. triste* G. Forst. = *Luisia teretifolia*.

*E. umbellatum* G. Forst. = *Bulbophyllum longiflorum*.

## EPIPACTIS

*Epipactis* Zinn, Cat. Pl. Gott. 85: 20 (1757) (nom. cons.). Type species: *Serapias helleborine* L. (type cons.).

*E. caudata* (R. Br.) Poiret = *Acianthus caudatus*.

*E. carinata* Roxb. = *Nervilia aragoana*.

*E. cordata* (Lindley) Eaton = *Goodyera viridiflora*.

*E. cucullata* Labill. = *Eriochilus cucullatus*.

*E. exserta* (R. Br.) Poiret = *Acianthus exsertus*.

*E. flabelliformis* Ham. = *Nervilia aragoana*.

*E. fornicate* (R. Br.) Poiret = *Acianthus forniciatus*.

*E. glauca* (J.J. Smith) Eaton = *Goodyera viridiflora*.

*E. grandis* (King et Pantl.) Eaton = *Goodyera grandis*.

*E. plicata* Roxb. = *Nervilia plicata*.

*E. porrifolia* Sw. = *Microtis unifolia*.

*E. reflexa* Labill. = *Chiloglottis reflexa*.

*E. rubicunda* (Blume) Eaton = *Goodyera grandis*.

*E. viridiflora* (Blume) Ames = *Goodyera viridiflora*.

## EPIPHANES

*Epiphanes* Blume = *Gastrodia*.

*E. pallens* (Griffith) H.G. Reichb. = *Didymoplexis pallens*.

## EPIPOGIUM

*Epipogium* Gmelin ex Borkhausen, Tent. Disp. Pl. German. 139 (1792) (*Epipogum*, *Epipogom*, orth. var.). Type species: *Satyrium epipogium* L. (*Epipogium aphyllum* Sw.). Notes: I have followed the work of Cribb (1984) for the treatment of this genus in Africa and Garay & Sweet (1974) for the list of synonyms of *E. roseum*.

*Galera* Blume, Bijdr. 6: t. 1, f. 3; 8: 415 (1825); Tab. Plat. Jav. Orch. f. 3 (1825). Type species: *Galera nutans* Blume.

*Ceratopsis* Lindley, Gen. sp. orchid. pl. 383-4 (1840). Type species: *Limodorum roseum* D. Don.

*Podanthera* Wight, Icon. Pl. Ind. Orch. 5, t. 1759 (1852). Type species: *Podanthera pallida* Wight.

*E. africanum* Schltr. = *Epipogium roseum*.

*E. dentilabellum* Ohtani et Suzuki = *Epipogium roseum*.

*E. guilfoylii* Benth. = *Epipogium roseum*.

*E. japonicum* Makino, Tokyo Bot. Mag. 18: 131-2 (1904). Notes: This taxon has been erroneously listed by some authors as a synonym of the widespread *E. roseum*, but the two are quite distinct species. Both species are illustrated in Hashimoto (1981).

*E. kusukusense* (Hayata) Schltr. = *Epipogium roseum*.

- E. makinoanum* Schltr. = Epipogium roseum.
- E. nutans* (Blume) H.G. Reichb. = Epipogium roseum.
- E. nutans* sensu Rolfe = Epipogium roseum.
- E. pooneranthum* Fukuyama = Epipogium roseum.
- E. roseum*** (D. Don) Lindley, J. Proc. Linn. Soc., Bot. 1: 177 (1857). Dist: Nnc, Qmo, Qkn, Qco; NC, VU, SB, WS, PG, ID, MY, BN, TH, BU, VN, CN, TW, JP, IN, NP, UG, KE, GH, NE, CM, ZR, MW, AO.  
*Limodorum roseum* D. Don, Prodr. fl. Nepal 30 (1825); *Ceratopsis rosea* (D. Don) Lindley, Gen. sp. orchid. pl. 384 (1840); *Galera rosea* (D. Don) Blume, Mus. Bot. 2: 188 (1856). Type: 'In Nepalia superiore', N. Wallich s.n. (holo BM!, iso K-L!).  
*Galera nutans* Blume, Bijdr. 416 (1825); *Epipogum nutans* (Blume) H.G. Reichb., Bonplandia 5: 36 (1857). Type: 'Java, Mt. Salak', Zollinger 506 (holo W!).  
*Podantha pallida* Wight, Icon. Pl. Ind. Orient 5: t. 1759 (1852). Type: (holo K-L!, icon t. 1759!).  
*Epipogium* sp. F. Muell., Fragm. 8: 30 (1872); *Epipogum guilfoyliae* Benth, Fl. Austral. 6: 308 (1873), pro. syn. Type: Tweed River, Guiffoyle s.n. (MEL not found).  
*Epipogum tuberosum* Duthie, Ann. Roy. Bot. Gard. (Calcutta) 9: 151 (1906). Types: 'Kashmir, in the Sind Valley at 6,000 feet', C.B. Clarke 31230 (syn ?CAL); 'Liddar Valley 8-9,000 feet', Sep. Duthie's collector 25386 (syn ?CAL).  
*Epipogium africanum* Schltr., Bot. Jahrb. Syst. 45: 399 (1911); *Epipogum nutans* sensu Rolfe in Dyer, Fl. Trop. E. Africa 7: 188 (1897), non H.G. Reichb. Type: Cameroun, Ambas Bay, Feb. 1861, Mann 784 (holo K!, iso K-L!).  
*Galera rolfei* Hayata, J. Coll. Sci. Imp. Uni. Tokyo 30: 348 (1911); Icon. pl. formos. 2: 121, f. 64 (1914). Type: 'Okinawu: a saprophyte in mountain forests', S. Tanaka 157 (holo TAI, iso TNS).  
*Galera kusukusense* Hayata, Icon. pl. formos. 4: 121, t. 70 (1914); *Epipogium kusukusense* (Hayata) Schltr., Repert. Spec. Nov. Regni Veg. Beih. 4: 153 (1919). Type: 'Kusukusu', Jul. 1912, B. Hayata & S. Sasaki s.n. (holo ?TAI).  
*Epipogium makinoanum* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 4: 153 (1919). Type: (not found).  
*Gastrodia schinziana* Kraenzl. in Vierteljahrsschr. Nat. Ges. Zurich 74: 66 (1929). Type: New Caledonia, 19 Dec. 1924, A.U. Daeniker 822 (holo Z!), syn. nov.  
*Epipogium sinicum* Tso in Sunyatsenia 1: 132 (1933). Type: (not found).  
*Epipogium pooneranthum* Fukuyama, Trans. Nat. Hist. Soc. France 32: 243 (1942). Type: 'Iriote: Uranchi-gawa, Yadibira', Fukuyama 7123 (holo TAI).  
*Epipogium dentilabellum* Ohtani et Suzuki, Sci. Rep. Yokosuka City Mus. 6: 28, t. 4 (1961). Type: (not found).
- E. sinicum* Tso = Epipogium roseum.
- E. tuberosum* Duthie = Epipogium roseum.
- E. sp.* F. Muell. = Epipogium roseum.

## ERIA

- Eria*** Lindley in Edwards's, Bot. Reg. 11: t. 904 (1825) (nom. cons.). Type species: *Eria stellata* Lindley.  
*Pinalia* Lindley, Orch. Scel. 14, 21, 23, (1826). Type species: *non designatus*.  
*Bryobium* Lindley, Nat. Syst. (ed. 2) 446 (1836); Edwards's, Bot. Reg. 24, Misc. 79 (1838). Type species: *Bryobium pubescens* Lindley.  
*Dendrolirium* Blume, Bijdr. 6: t. 5, f. 69; 7: 343 (1825). Type species: *non designatus*.  
*Conchidium* W. Griffith, Notul. Pl. Asist. 3: 321, t. 310 (1851). Type species: *Conchidium pusillum* Griffith.  
*E. ambasiensis* Bailey = *Eria kingii*.  
*E. australiensis* Bailey = *Podochilus australiensis*.  
*E. braddonii* Rolfe, Orchid Rev. 15: 248 (1907). Notes: Walters (1971) reported flowering a single plant of a 'new' *Eria* in cultivation in Townsville that had reportedly been collected in the Daintree River area by W. Doran. This plant has since been determined as *E. braddonii* a species endemic to the Malay peninsula. The Daintree River collection, on investigation, was obviously a hoax.  
*E. carinata* (Blume) H.G. Reichb. = *Thelasis carinata*.  
*E. diphylla* Schltr. = *Eria eriaeoides*.

**E. dischorensis** Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 666 (1912). Type: 'Kaiser-Wilhelms-Land: On trees in the forest of the Dischore Range (Waria District), alt. c. 1200 m', Jun. 1909, R. Schlechter 19697 (holo B†). Dist: Qco; PG.

*Eria intermedia* Dockr., Austral. Pl. 3: 120-128, f. (1965). Type: 'Whitfield Range, North Queensland', 26 Dec. 1961, A.W. Dockrill s.n. (holo BRI!).

*E. dolichocarpa* Schltr. = *Eria fitzalanii*.

**E. eriaeoides** (Bailey) Rolfe, Orchid Rev. 17: 95 (1909). Dist: Qkn, Qco; SB, PG.

*Dendrobium eriaeoides* Bailey, Syn. Queensl. fl. Suppl. 2:56 (1888); *Callista eriaeoides* (Bailey) Kuntze, Revis. gen. pl. 2: 654 (1891). Type: cult. Bowen Park, Queensland ex 'Johnstone River, Queensland', 9 Apr. 1908, T.L. Bancroft s.n. (holo BRI!, iso K!).

*Eria diphyllo* Schltr., Repert. Spec. Nov. Regni Veg. 1: 663 (1914). Type: 'Kaiser-Wilhelms-Land: On trees in the forests on the upper Mudjene River, (Minjem District), alt. c. 200 m', Sep. 1907, R. Schlechter 16582 (holo B†, iso AMES, E, K! L, NSW, S), syn. nov.

**E. fitzalanii** F. Muell., S. Sci. Rec. 2: 252-3 (1882). Type: 'Mulgrave-River', *E. Fitzalan* s.n. (holo MEL not found); Massey Creek on eastern fall of MacIlwraith Ranges, c. 16 km up stream from the upper crossing on Silver Plains Station, 4 Sep. 1979, J.R. Clarkson 2604 (neotype BRI! here designated). Dist: Qkn, Qco; PG, SB. *Eria solomonensis* Rolfe, Kew Bull. 63 (1909). Type: cult. Kew ex 'Solomon Islands', C.M. Woodford 11 (holo K!).

*Eria dolichocarpa* Schltr., Repert. Spec. Nov. Regni Veg. 9: 105 (1911). Type: 'Savaii: Am Fuluasoa', 28 Jul. 1906, Vaupel 564 (holo B†). Notes: Cribb & Lewis have provisionally placed this species under *E. fitzalanii* in their treatment of Solomon Island orchids (Cribb pers. comm.).

*E. hollandiae* J.J. Smith = *Eria kingii*.

*E. inornata* Hunt = *Eria kingii*.

*E. intermedia* Dockr. = *Eria dischorensis*.

**E. irukandjiana** St. Cloud, North Queensland Naturalist 23(111): 1-2, f. (1955). Type: 'Growing on Casuarina species, 1500 ft., Nesbit Range, Trinity Bay, North Queensland', Nov. 1954, S.F. St. Cloud s.n. (holo QRS!). Notes: This species may well occur outside Australia. Dist: Qco.

*Eria johnsonii* Hunt, Muelleria 1: 21-23, f. IV (1956). Type: cult. Ipswich, Oct. 1950, T.E. Hunt 107 ex 'Queensland-Cook District: Mt. Islay, at 3,000 feet', 7 May 1950, A. Johnson s.n. (holo BRI!).

*E. johnsonii* Hunt = *Eria irukandjiana*.

**E. kingii** F. Muell., S. Sci. Rec. 2 (4): 71-2 (1882). Type: 'In Boneta, one of the Solomon-Islands', Goldfinch s.n. (holo MEL!). Dist: Qkn; Qco; SB, PG, ID.

*Eria moluccana* Schltr. et J.J. Smith in J.J. Smith, Orch. Ambon. 74 (1905). Type: Amboin, R. Schlechter (holo B†, iso K!).

*Eria ambasiensis* Bailey, Queensland Agric. J. 19: 273 (1907). Type: 'Ambasi, British New Guinea', 1909, Copland King s.n. (holo BRI!), syn. nov.

*Eria hollandiae* J.J. Smith, Bull. Dep. Agric. Ind. neerl. 65: 7 (1911). Type: 'New Guinea, Biwak Hollandia', 8 Aug. 1910, K. Gjellerup 302 (holo BO?, iso K!), syn. nov.

*Eria wollastonii* Ridley, Trans. Linn. Soc. London 9: 191 (1916). Type: cult. Ashton Wald, Rundle, 17 Oct. 1915, N.C. Rothschild, ex 'New Guinea', Wollaston s.n. (holo K!, iso BM!), syn. nov.

*Eria inornata* Hunt, Orchid J. 1: 190, f. 142 (1952). Type: cult. Brisbane, 14 Nov. 1950, T.E. Hunt 243 ex 'Queensland (Australia): Cook District, Babinda' [Bellenden Ker Range], May 1949, J.H. Wilkie s.n. (holo & iso BRI!), syn. nov.

*Eria linariiflora* Rupp, Austral. Orchid Rev. 18: 67 (1953). Type: cult. Castlecrag, New South Wales, Dec. 1952, N.F. Loader ex 'Babinda; North Queensland', Aug. 1952, N.F. Loader & J.H. Wilkie s.n. (holo NSW!), syn. nov.

*Eria liparoides* Hunt, Queensland Naturalist 15: 33-36, f. (1954). Type: cult. Cairns, Oct. 1953 ex 'North Queensland, Cook District: Garradunga Swamp, Victory Creek, a tributary of the Johnstone', Nov. 1951, S.F. Goessling-St. Cloud s.n. (holo BRI not found), syn. nov.

*E. limenophylax* (Endl.) H.G. Reichb. = *Phreatia limenophylax*.

*E. linariiflora* Rupp = *Eria kingii*.

*E. liparoides* Hunt = *Eria kingii*.

*E. moluccana* Schltr. et J.J. Smith = *Eria kingii*.

*E. paleata* H.G. Reichb. = *Phreatia paleata*.

*E. pusilla* Teijsm. et Binned. = *Eria retusa*.

**E. queenslandica** Hunt, North Queensland Naturalist 15(85): 14 (1947). Type: 'North Queensland: Bellenden-Ker', Sep. 1946, J.H. Wilkie s.n. (holo BRI!). Notes: This common widespread species from northern Queensland may well also occur in New Guinea. Dist: Qco.

**E. retusa** (Blume) H.G. Reichb., Bonplandia 5: 54 (1857). Dist: Christmas Island; NC, SB, PG, ID.

*Dendrolirium retusum* Blume. Bijdr. 351 (1825); *Phreatia retusum* (Blume) Lindley, Gen. sp. orch. pl. 64 (1830); *Pinalia retusa* (Blume) Kuntze, Revis. gen. pl. 2: 679 (1891). Type: 'Java, in altis montis Salak, C. Blume s.n. (holo L!, iso BOG)'.

*Bryobium pubescens* Lindley in Edwards's, Bot. Reg. 24: Misc. 145 (1838). Type: 'Java', Feb. 1834, Bateman s.n. (lecto K-L!).

*Eria pusilla* Teijsm. et Binnend., Natuurk. Tijdschr. Ned.-Indie. 24: 8 (1862). Type: 'Java, habi. in sylvis mont, Pantjar prope Bogor', [Anon] (holo BOG).

*Phreatia congesta* Rolfe, J. Proc. Linn. Soc., Bot. 25: 358 (1890). Type: 'Christmas Island', Sep.-Oct. 1887, J.J. Lister s.n. (holo K!).

*E. richardiana* H.G. Reichb = *Rhynchophratia micrantha*.

*E. solomonensis* Rolfe = *Eria fitzalanii*.

*E. wollastonii* Ridley = *Eria kingii*.

## ERIOCHILUS

*Eriochilus* R. Br., Prod. 323 (1810). Type species: *Eriochilus autumnalis* R. Br. Notes: D. Jones is currently researching material in preparation for a revision of the genus.

**E. autumnalis** R. Br., Prod. 323 (1810). Type: 'Port Jackson; between Sydney and Parramatta', Mar.-May 1805, R. Brown s.n. (lectotype specimen (a) BM! here designated; isolectotype AD! BM! G! K! K-L! L! P! W!); Syntypes: Port Phillip, R. Brown s.n. (BM! K!); Port Dalrymple, R. Brown s.n. (BM! K!); Sydney, R. Brown s.n. (BM! K!). Notes: There are illustrations of this taxon by Bauer at the BM and Wein. It is quite distinct from others species in the genus. The other syntypes are specimens of either *E. cucullatus* or an undescribed species. *E. autumnalis* is slender in habit, has a small, dark green, hairy, caudate leaf that is purple on the underside and present at flowering and small delicate flowers that are predominantly white. This species is an inhabitant of mossy ledges on Hawkesbury sandstone or damp heath areas along the coast. Dist: Nct, Nec, Nnc?, Qmo.

**E. cucullatus** (Labill.) H.G. Reichb., Beitr. Syst. Pflanzenk. 27 (1871). Dist: Sls, Ski, Sse, Vwp, Vwh, Vnp, Vgi, Veh, Tas, Nsc, Nst, Can, NSS, Ncc, Nct, Ncs, Nnc, Nnt, Nns, Qmo, Qdd, Qwb.

*Epipactis cucullata* Labill., Nov. Holl. pl. 2: 61, t. 211 (1806). Type: Van Diemens Land, J. Labillardiere s.n. (holo FI!, iso FI! W!).

**E. dilatatus** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. liii (1840). Type: 'Swan River', J. Mangles s.n. (holo K-L!). Notes: I have not seen living material of this species but consider that Lindley was correct in describing it as distinct from the widespread *E. multiflorus* as it differs from that species in a number of significant points in its morphology; in particular, the possession of linear leaves and in having a narrower labellum on which there are fewer cilia. Further study on this and related taxa is currently in progress. Dist: Wda?

*E. dilatatus* Lindley var. *brevifolius* Benth. = *Eriochilus multiflorus*.

*E. dilatatus* Lindley var. *latifolius* (Lindley) Benth. = *Eriochilus multiflorus*.

*E. fimbriatus* (Lindley) F. Muell. = *Leporella fimbriata*.

*E. latifolius* Lindley = *Eriochilus multiflorus*.

*E. lindleyi* Endl. = *Eriochilus scaber*.

**E. multiflorus** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. liii (1840). Type: 'Swan River', 1839, J. Drummond 858 (holo K-L!, iso G! K!). Notes: This is the common widespread species found in Western Australia that has been called *E. dilatatus*. Illustrated on page 352 of Hoffman & Brown (1984) as *E. dilatatus*. Dist: Wir, Wda, Wav, Wro, Wey, Wco.

*Eriochilus latifolius* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. liii (1840); *Eriochilus dilatatus* Lindley var. *latifolius* (Lindley) Benth., Fl. Austral. 6: 373 (1873). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L!, iso W!), syn. nov. Notes: The types do not differ significantly in floral structure from those of *E. multiflorus*.

*Eriochilus dilatatus* Lindley var. *brevifolius* Benth., Fl. Austral. 6: 373 (1873). Type: 'Murchinson River', Oldfield s.n. (lecto K!); Syntype: 'Swan River', J. Drummond s.n. (K!), syn. nov.

**E. scaber** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. liii (1840). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L!, iso K! W!). Notes: Illustrated on page 350 of Hoffman & Brown (1984). Dist: Wda, Wav, Wro, Wey.

*Eriochilus lindleyi* Endl. in Lehm., Pl. Preiss. 2: 10 (1846); *Eriochilus scaber* Lindley var. *lindleyi* (Endl.) H.G. Reichb., Beitr. Syst. Pflanzenk. 62 (1871). Type: 'Near Canning River', 22 Jul. 1839, Preiss 2206 (lecto W!, isolectotype G! P! W!).

*E. scaber* Lindley var. *lindleyi* (Endl.) H.G. Reichb. = *Eriochilus scaber*.

**E. tenuis** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. liii (1840). Type: 'Swan River', 1839, J. Drummond 859 (holo K-L!, iso G! W!). Notes: This species differs from *E. scaber* in having flowers that are white rather than pink, a more slender habit and a glabrous leaf. It also usually inhabits wet peaty areas whilst *E. scaber* can be found in a range of habitats. Dist: Wda, Wey.

*Eriochilus tenuis* Lindley var. *robustior* H.G. Reichb., Beitr. Syst. Pflanzenk. 62 (1871). Type: King George Sound, Maxwell s.n. (holo W!).

*E. tenuis* Lindley var. *robustior* H.G. Reichb. = *Eriochilus tenuis*.

## ERYTHRORCHIS

**Erythrorchis** Blume in Rumphia 1: 200 (1837). Type species: *Cyrtosia altissima* Blume. Notes: In a recent revision of the tribe *Vanilleae*, Garay (1986) proposed changes in the interpretation of a number of genera including *Galeola*. The revision is primarily based on his belief that plants with sclerotic seeds all belong to the tribe *Vanilleae*. That this condition might have evolved more than once in the family has not been treated as an option. I refer here in particular to the placement of *Rhizanthella* in the tribe *Vanilleae* when clearly there is a suite of other characters that would equally indicate its relationship is not with this group of plants. There are a number of other such oversights in the paper. Notwithstanding these deficiencies, the proposal to recognize the genus *Erythrorchis* as separate from *Galeola* and a new genus he names as *Pseudovanilla*, has some merit. Therefore, for the purposes of this paper I have chosen to recognize these genera, two of which have representatives in Australia. However, considerable research is still required on the phylogeny of this and other supposedly closely related groups of species.

*Ledgeria* F. Muell., Fragm. 2: 167 (1861). Type species: *Ledgeria aphylla* F. Muell.

*E. aphylla* (F. Muell.) F. Muell. = *Erythrorchis cassythoides*.

**E. cassythoides** (Cunn. ex Lindley) Garay, Bot. Mus. Leafl. 30(4): 234 (1986). Dist: Ncc, Nnc, Nnt, Qdd, Qmo.

*Dendrobium cassythoides* Cunn. ex Lindley in Edwards's, Bot. Reg. 21: sub t. 1828 (1836); *Galeola cassythoides* (Cunn. ex Lindley) H.G. Reichb., Xenia Orchid. 2: 77 (1862). Type: 'New South Wales', A. Cunningham s.n. (holo K!).

*Ledgeria aphylla* F. Muell., Fragm. 1: 239 (1859); *Erythrorchis aphylla* (F. Muell.) F. Muell., Fragm. 2: 167 (1861). Type: 'Ad flumen Hastings in silvis', H. Beckler s.n. (lectotype MEL! here designated); Syntype: 'In insula Moreton Island', F. Mueller s.n. (MEL!).

*E. foliata* (F. Muell.) F. Muell. = *Pseudovanilla foliata*.

## ETAERIA

*Etaeria* Blume = *Hetaeria*.

*E. oblongifolia* Blume = *Hetaeria oblongifolia*.

*E. polygonoides* (F. Muell.) Dockr. = *Zeuxine polygonoides*.

*E. rubicunda* H.G. Reichb. = *Hetaeria oblongifolia*.

*E. tenuis* F. Muell. = *Hetaeria oblongifolia*.

## EUCOSIA

*Eucosia* Blume = *Goodyera*.

*E. carnea* Blume = *Goodyera viridiflora*.

## EULOPHIA

**Eulophia** R. Br. ex Lindley in Edwards's, Bot. Reg. 8: t. 686 (1823) (nom. cons.). Type species: *Eulophia guineensis* Lindley (type cons.). Notes: I have, for the most part, followed Seidenfaden (1983) in his treatment of species in this genus.

*Graphorkis* Thouars, Nouv. Bull. Sci. Soc. Philom. Paris 1: 318 (1809) (nom. rej. vs *Eulophia*). Type species: *Limodorum scriptum* Thouars.

*Lissochilus* R. Br. in Edwards's, Bot. Reg. 7: t. 573 (1821). Type species: *Lissochilus speciosus* R. Br. (nom. rej. vs *Eulophia*).

*Cyrtopera* Lindley, Gen. sp. orchid. pl. 189 (1833). Type species: *Cyrtopodium woodfordii* Sims.

*E. agrostophylla* Bailey = *Eulophia venosa*.

*E. bicallosa* (D. Don) P. Hunt et Summerh., Kew Bull. 20: 60 (1966). Dist: Qkn, Qco, Ddg, Wga; PG, ID, MY, TH, TW, BU, NE, IN.

*Bletilla bicallosa* D. Don., Prodr. fl. Nepal 30 (1825); *Graphorchis bicallosa* (D. Don) Kuntze, Revis. gen. pl. 2: 622 (1891). Type: 'Nepal: Patgang', Hamilton ex N. Wallich 7363 (holo K-WALL!, iso K-L!).

*Cyrtopera bicarinata* Lindley, Gen. sp. orch. pl. 190 (1833); *Eulophia bicarinata* (Lindley) J.D. Hook., Fl. Brit. Ind. 6: 6 (1890); *Graphorchis bicarinata* (Lindley) Kuntze, Rev. gen. pl. 2: 622 (1891). Type: 'India orientali; Patgang', Hamilton ex N. Wallich 7363 (holo K!, iso K-WALL!).

*Eulophia fitzalanii* Benth., Fl. Austral. 6: 300 (1873); *Graphorchis fitzalanii* (F. Muell.) Kuntze, Revis. gen. pl. 2: 622 (1891). Type: 'Queensland, Mount Dryander', Jan. 1871, Fitzalan s.n. (holo MEL!, iso K!). Notes: I have examined the types of *Eulophia bicallosa*, *E. fitzalanii* and *E. venosa* and compared flowers from each. *E. bicallosa* and *E. fitzalanii* are without doubt representative of the same species while *E. venosa* is not (see below for more details on *E. venosa*).

*Cyrtopodium parkinsonii* F. Muell. ex Kraenzl., Oestr. Bot. Zeit. 44: 256 (1894). Type: Neu-Pommern: Near Ralum, Parkinson 56 (holo B†).

*Cyrtopera formosana* Rolfe, Kew Bull. 198 (1896); *Eulophia formosana* (Rolfe) Rolfe in Forbes & Hemsley, Enum. Pl. China, Orchids 28 (1903). Type: 'Taiwan: South Cape', Henry 1974 (holo K!).

*Cyrtopera papuana* Kraenzl., Notizbl. Berlin 2: 104 (1898), non Ridley (1896); *Eulophia papuana* (Kraenzl.) Schltr. in Schum & Laut., Fl. Schutzeg. Sudsee, Nachtr. 148 (1905), non (Ridley) J.J. Smith (1909); *Eulophia venosa* (F. Muell.) Benth. var. *papuana* (Kraenzl.) Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 416, f. 545 (1913). Types: Near Kelans, not far from Finschhafen, Jul. 1886, Holltrung 201 (holo B†).

*Eulophia neo-pommeranica* J.J. Smith, Nova Guinea 8: 26 (1908). Type: 'Neu-Pommern: in Grassland on volcanic soil near Rulum', Oct. 1896, Dahl 90 (holo B†).

*Eulophia versteegii* J.J. Smith, Bull. Dep. Agric. Indes neerl. 19: 24 (1908). Types: 'Merauke', Versteeg 1952 (syn BO?); 'bei Kampoeng Gelieb', B. Branderhorst 166 (syn BO?).

*Eulophia brachycantha* Hayata, Icon. pl. form. 4: 72, F. 36a (1914). Type: 'Taito: Shinkagai', Jun. 1906, Z. Kobayashi s.n. (holo ?TAI).

*E. bicarinata* (Lindley) J.D. Hook. = *Eulophia bicallosa*.

*E. brachycantha* Hayata = *Eulophia bicallosa*.

*E. carrii* C. White = *Eulophia zollingeri*.

*E. emarginata* Blume = *Oeceoclades pulchra*.

*E. fitzalanii* Benth. = *Eulophia bicallosa*.

*E. formosana* (Rolfe) Rolfe = *Eulophia bicallosa*.

*E. holtzei* F. Muell. = *Pachystoma pubescens*.

*E. macrorhiza* Blume = *Eulophia zollingeri*.

*E. macrorhiza* Blume var. *papuana* (Ridley) Schltr. = *Eulophia zollingeri*.

*E. macrostachys* Lindley = *Oeceoclades pulchra*.

*E. neo-pommeranica* J.J. Smith = *Eulophia bicallosa*.

*E. papuana* (Ridley) J.J. Smith = *Eulophia zollingeri*.

*E. papuana* (Kraenzl.) Schltr. = *Eulophia bicallosa*.

*E. papuana* Bailey = *Oeceoclades pulchra*.

*E. pulchra* (Thouars) Lindley = *Oeceoclades pulchra*.

*E. sanguinea* (Lindley) J.D. Hook. = *Eulophia zollingeri*.

*E. striata* Rolfe = *Oeceoclades pulchra*.

*E. rouxii* Kraenzl. = *Oeceoclades pulchra*.

*E. venosa* (F. Muell.) Benth., Fl. Austral. 6: 300 (1873). Dist: Qco, Ddg.

*Dipodium venosum* F. Muell., Fragm. 1: 61-62 (1858); *Graphorkis venosa* (F. Muell.) Kuntze, Rev. gen. pl. 2: 622 (1891). Type: 'In pratis dumosis prope Providence Hill et Macadam Range', [Fitzmaurice River], Oct. 1855, F. Mueller s.n. (holo K!, iso K-L!). Notes: I have examined the types of *Eulophia bicallosa*, *E. fitzalanii* and *E. venosa* and compared flowers from each. *E. bicallosa* and *E. fitzalanii* are without doubt representative of the same species. However, the flowers of *E. venosa* are smaller and differ in the configuration of the labellum calli which are not as pronounced.

*Eulophia agrostophylla* Bailey, Proc. Roy. Soc. Queensland 11: 16 (1895). Type: 'On sandy land in shady localities of the Mackay district', L.J. Nugent 1 (holo BRI!), syn. nov. Notes: I have examined the Type of this species and consider it representative of *E. venosa*.

*E. venosa* (F. Muell.) Benth. var. *papuana* (Kraenzl.) Schltr. = *Eulophia bicallosa*.

*E. versteegii* J.J. Smith = *Eulophia bicallosa*.

***E. zollingeri*** (H.G. Reichb.) J.J. Smith, Flore Buitenzorg 6: 228 (1905); *Cyrtoptera zollingeri* H.G. Reichb., Bonplandia 5: 38 (1857). Type: Java, Zollinger (holo W!). Dist: Qco; PG, ID, MY, BU?, IN, JP.

*Cyrtoptera sanguinea* Lindley, J. Proc. Linn. Soc., Bot. 3: 32 (1858); *Eulophia sanguinea* (Lindley) J.D. Hook., Fl. Brit. India 6: 8 (1890). Type: 'Sikkim', J.D. Hooker 223 (holo K-L!).

*Eulophia macrorhiza* Blume, Fl. Javae Orch. 155, t. 63, f. 2 (1859). Type: Java, C. Blume s.n. (holo ?BO).

*Cyrtoptera papuana* Ridley, J. Bot. 24: 354 (1886); *Eulophia papuana* (Ridley) J.J. Smith, Nova Guinea 8: 26 (1909), non (Kraenzl.) Schltr. (1906); *Eulophia macrorhiza* Blume var. *papuana* (Ridley) Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 417 (1912). Type: 'New Guinea, Sogere', H.O. Forbes 391 (holo BM!).

*Eulophia carrii* C. White, Proc. Roy. Soc. Queensland 47: 82 (1936). Type: 'Julatten, North Queensland', T. Carr s.n. (holo BRI not found); 'Cooktown, edge of rainforest; granite', Dec. 1981, V. Scarth-Johnson 1286A (neotype BRI! here designated).

## EULOPHIDIUM

*Eulophidium* Pfitzer = *Oeceoclades*.

*E. pulchrum* (Thouars) Summerh. = *Oeceoclades pulchra*.

## FITZGERALDIA

*Fitzgeraldia* F. Muell. = *Lyperanthus*.

*F. forrestii* F. Muell. = *Lyperanthus forrestii*.

## FLICKINGERIA

***Flickingeria*** A. Hawkes, Orchid Weekly 2: 251 (1961). Type species: (*Desmotrichum angulatum* Blume here designated) substitute name for *Desmotrichum* Blume 1825 (nom. rej.), non Kuetzing 1845 (nom. cons.). Notes: I have referred to Seidenfaden (1980) for his treatment of taxa in this genus.

*Desmotrichum* Blume, Bijdr. 7: 329, t. 35 (1825). Type species: *Desmotrichum angulatum* Blume, nom. rej. vs *Desmotrichum* Kutzng (1845) (nom. cons.).

*Ephemerantha* P. Hunt et Summerh., Taxon 10: 101 (1961). Type: *Desmotrichum angulatum* Blume.

***F. comata*** (Blume) A. Hawkes, Orquidea 27: 302 (1965). Dist: Qco; PG, NC, SB, ID.

*Desmotrichum comatum* Blume, Bijdr. 230 (1825); *Dendrobium comatum* (Blume) Lindley, Gen. sp. orchid. pl. 76 (1830); *Callista comata* (Blume) Kuntze, Revis. gen. pl. 2: 654 (1891); *Ephemerantha comata* (Blume) P. Hunt et Summerh., Taxon 10: 103 (1961). Type: 'Java', Kuhl & van Hasselt s.n. (holo L!, iso P!).

*Dendrobium criniferum* Lindley in Edwards's, Bot. Reg. 30: Misc. 41 (1844); *Desmotrichum criniferum* (Lindley) Kraenzl. in Engler, Pflanzenr. Orch.-Mon.-Dendr. 1: 348 (1910). Type: 'Ceylon', MacRae s.n. (holo K-L!).

*Dendrobium thysanochilum* Schltr. in K. Schum. et Laut., Fl. Schutzgeb. Sudsee, Nachtrage 152 (1905); *Ephemerantha thysanochila* (Schltr.) P. Hunt et Summerh., Taxon 10: 106 (1961). Type: 'Neu-Pommern: auf Felsen und an Baumstammen am Fube des Beining-Gebirges zwischen Massawa und Kap Lambert, alt. c. 20 m', Nov. 1901, R. Schlechter 13720 (holo B†).

*Dendrobium fasciculatum* Bailey, The Garden 201 (1905), nom. nud. Type: cult. Melbourne Botanic Gardens, Jan. 1905, W.R. Guiffoyle ex 'Woodlart Island, New Guinea', E.B. Cox s.n. (holo BRI!), syn. nov.

*Desmotrichum scopula* Kraenzl. in Engler, Pflanzenr. Orch.-Mon.-Dendr. 1: 349 (1910). Types: 'Provinz der Philippinen: Luzon', Loddiges s.n. (syn not found); 'Celebes', Sarrasin 812 (syn not found); 'Papuanische Provinz: Neu-Guinea, Cape Frere', Copland Kings.s.n. (syn not found); 'Samoa', Powell 363 (syn not found); 'Somoa', Vaupel 283 (syn not found); 'Admiralitatis-Inseln', Mosdays.s.n. (syn not found); 'Neu-Pommern', R. Schlechter 13720 (syn not found).

***F. convexa*** (Blume) A. Hawkes, Orquidea 27: 302 (1965). Dist: Qco; SB, PG, ID.

*Desmotrichum convexum* Blume, Bijdr. 1: 330 (1825); *Dendrobium convexum* (Blume) Lindley, Gen. sp. orchid. pl. 76 (1830); *Callista convexa* (Blume) Kuntze, Revis. gen. pl. 2: 654 (1891); *Ephemerantha convexa* (Blume) P. Hunt et Summerh., Taxon 10: 103 (1961). Type: 'Java, Mt. Salag', Apr., C. Blume s.n. (holo L!).

***F. nativitatis*** (Ridley) J.J. Wood, Orchadian 7(6): 145 (1982). Dist: Christmas Island; ID.

*Dendrobium nativitatis* Ridley, J. Straits Branch Roy. As. Soc. 48: 107 (1907); *Dendrobium macraei* sensu Rendle in Andr. Mono. Christ. Is. 190 (1900), non Lindley (1830); *Dendrobium* sect. *Cadetia* sp. sec Ridley, J. Straits Branch Roy. As. Soc. 126, 134 (Jun. 1891); *Dendrobium pectinatum* Ridley, J. Straits Branch Roy. As. Soc. 45: 232 (1906), non Finet (1903); *Ephemerantha pectinatum* (Ridley) P.F. Hunt et Summerh., Taxon 10: 105 (1961). Type: 'Christmas Island, abundant on trees on Phosphate Hill and the Plateau', Oct. 1904, H.N. Ridley s.n. (lecto K!, isolectotype BM!).

## FLOS

*Flos*. Notes: Not a recognised generic name but one used before 1 May 1753 for many plants.

*F. triplicatus* Rumph = *Calanthe triplicata*.

## GALEOLA

*Galeola* Lour., Fl. Cochinch 2: 520 (1790). Type species: *Galeola nudifolia* Lour. Notes: See note under *Erythrorchis* for more details on the status of this genus.

*G. altissima* F. Muell. = *Pseudovanilla foliata*.

*G. cassythoides* (Cunn. ex Lindley) H.G. Reichb. = *Erythrorchis cassythoides*.

*G. ledgeriana* F. Muell. = *Pseudovanilla foliata*.

*G. ledgeri* Fitzg. = *Pseudovanilla foliata*.

*G. foliata* (F. Muell.) F. Muell. = *Pseudovanilla foliata*.

*G. montigena* Schltr. = *Pseudovanilla foliata*.

## GALERA

*Galera* Blume = *Epipogium*.

*G. kusukusense* Hayata = *Epipogium roseum*.

*G. nutans* Blume = *Epipogium roseum*.

*G. rolfei* Hayata = *Epipogium roseum*.

*G. rosea* (D. Don) Blume = *Epipogium roseum*.

## GASTRODIA

*Gastrodia* R. Br., Prod. 330 (1810). Type species: *Gastrodia sesamoides* R. Br.

*Epiphantes* Blume, Bijdr. 6: t. 1, f. 4; 8: 421 (1825). Type species: *Epiphantes javanica* Blume.

*G. ovata* Bailey = *Cheirostylis ovata*.

*G. pallens* (Griffith) F. Muell. = *Didymoplexis pallens*.

*G. queenslandica* Dockr., North Queensland Naturalist 32(136): 6-8 (1964). Type: 'Little Mulgrave River, North Queensland', 6 Jan. 1962, A. W. Dockrill s.n. (holo BRI!). Dist: Qco.

*G. sesamoides* R. Br., Prod. 319 (1810). Type: 'Port Jackson; near Sydney (Bagley's Lagoon)', Oct. 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM!). Dist: Wda, Ski, Sls, Sse, Vwp, Vwh, Vgi, Veh, Tas, Nsc, Nst, Can, Nss, Ncc, Nct, Ncs, Nnc, Nnt, Qmo.

*G. schinziana* Kraenzl. = *Epipogium roseum*.

## GASTROGLOTTIS

*Gastroglossis* Blume = *Malaxis*.

*G. montana* Blume = *Malaxis latifolia*.

## GENOPLESIUM

*Genoplesium* R. Br., Prod. 319 (1810). Type species: *Genoplesium baueri* R. Br.

*G. baueri* R. Br., Prod. 310 (1810). Type: 'Port Jackson', R. Brown s.n. (holo not found; icon Bauer's painting BM!). Dist: Nsc, Ncc.

*Prasophyllum baueri* (R. Br.) Poiret, Encycl. Suppl. 4: 547 (1816).

*Prasophyllum deaneanum* Fitzg., Austral. orch. 2(3): [t. 1] (1888). Type: 'New South Wales, Gladesville', Mar., H. Deane s.n. (holo BM!).

## GEODORUM

*Geodorum* Jackson, Bot. Repos. 10: t. 626 (1811). Type species: *Geodorum citrinum* Jackson. Notes: There has been considerable confusion surrounding the identity of the solitary *Geodorum* species found in Australia. For years this species was known either as *G. pictum* or, more rarely, *G. dilatatum*. Both names were reportedly based on collections from Australia. However, it was also known that this and similar species were distributed over much of S.E. Asia.

It was therefore of no great surprise when Garay & Sweet (1974), following studies of the types of many of these species, proposed that most were representative of a single taxon the oldest name being *G. densiflorum*. They considered there was no difference between the Australian plants and those found elsewhere in SE Asia. In 1983 a new interpretation of the name *G. densiflorum* was proposed (Seidenfaden, 1983). This threw matters into confusion because it was suggested that the name for the Australian species might be *G. neocaledonicum* rather than one used previously. The proposed change was adopted and reported in at least one publication, viz. Lavarack & Gray (1984).

In order to resolve the situation, I examined herbarium material of *Geodorum* collected from the Malabar coast in India, which is where the type of *G. densiflorum* was originally collected. This material was then compared with the type of *G. densiflorum*, viz Rheede's illustration. All material at Kew, collected from the Malabar coast, was representative of a single species, and it matched the type. It would appear from this study that Seidenfaden has erred in his interpretation of *G. densiflorum*, as the specimen he illustrated under that name does not match that of the type or specimens collected from the Malabar coast.

Having established the identity of *G. densiflorum*, the Indian material of *G. densiflorum* was compared with material collected in Australia and the western Pacific (including the types of *G. pacificum*, *G. neocaledonicum* and *G. pictum*). They all are representative of a single slightly variable species the correct name of which is *G. densiflorum*.

Several other taxa listed as synonyms of *G. densiflorum* by Garay & Sweet (1974), have not been included in this treatment, as I have some doubts about the identity of each.

*Otandra* Salisb., Trans. Hort. Soc. London 1: 298 (1812). Type species: *non designatus*.

*Cistella* Blume, Bijdr. 6: t. 5, f. 55; 7: 293, t. 55 (1825) (*nom. rej.*). Type species: *Malaxis cernua* Willd. *vs.* *Cistella* Quelet (*nom. cons.*).

*Ortmannia* Opiz, Flora 17: 592 (1834). = *Cistella* Blume (*nom. rej.*).

***G. densiflorum* (Lam.) Schltr.**, Repert. Spec. Nov. Regni Veg. Beih. 4: 259 (1919). Dist: Nnc, Qmo, Qkn, Qco, Ddg, Wkm; NC, SB, PF, PG, ID, MY, TH, BU, KH, VN, PH, TW, CN, HK, JP, IN, LK.

*Limodorum densiflorum* Lam., Encyl. 3: 516 (1792); *Malaxis cernua* Willd., Sp. pl. 4: 93 (1805); *Otandra cernua* (Willd.) Salisb., Trans. Hort. Soc. 1: 298 (1812); *Cistella cernua* (Willd.) Blume, Bijdr. 7: 293 (1825); *Ortmannia cernua* (Willd.) Opiz, Flora 17: 592 (1834). Type: Malabar Coast, [Anon] (holo, Rheede's plate, Hort. Malab. 11: t. 35!).

*Cymbidium pictum* R. Br., Prod. 331 (1810); *Geodorum pictum* (R. Br.) Lindley, Gen. sp. orchid. pl. 175 (1833). Type: 'N. coast of New Holland, N.T.', Dec. 1802-Mar. 1803, R. Brown s.n. (lectotype BM! here designated), *non* Link et Otto (1821).

*Geodorum fuscatum* Lindley in Edwards's, Bot. Reg. 1835: t. 1687 (1835). Type: cult. Chiswick, Jul. ex Ceylon, 1832, Watson s.n. (holo illus. t. 1687!).

*Geodorum semicristatum* Lindley, Fol. orchid; Geod. 2 (1854). Type: Philippines, Cuming s.n (holo K-L!).

*Geodorum pacificum* Rolfe, Kew Bull. 71 (1908). Types: 'Polynesia: Vava, Tonga Islands', C.S. Crosby s.n. (*syn* K!); 'Solomon Islands', C.M. Woodford s.n. (*syn* K!), *syn. nov.*

*Geodorum neocaledonicum* Kraenzl., Vierteljahrsschr. Naturf. Ges. Zurich 74: 82 (1929). Type: New Caledonia, pentes du Tiebaghi, Paagoumene, 12 Mar. 1925, A.U. Daeniker 1384 (holo & iso Z!).

*G. dilatatum* R. Br. in W. Aiton et W.T. Aiton, Hort. Kew. (ed. 2) 5: 207 (1813). Notes: Seidenfaden reported that the name *G. dilatatum* "is a nomenclatural synonym [of *Limodorum recurvum* Roxb. = *Geodorum recurvum* (Roxb.) Alston], coined in accordance with the 'Kew rule', his short description does not differ from Roxburgh's".

*G. formosanum* Rolfe, Ann. Bot. (London) 9: 157 (1895). Notes: Included as a synonym of *G. densiflorum* by Garay & Sweet (1974), but doubtfully that species.

*G. fuscatum* Lindley = *Geodorum densiflorum*.

*G. neocaledonicum* Kraenzl. = *Geodorum densiflorum*.

*G. nutans* (Presl.) Ames, Orchidaceae 2: 164 (1908). Notes: *G. nutans* has not been included as a synonym of *G. densiflorum* as suggested by Garay & Sweet (1974) as there is some doubt about the interpretation of this taxon following examination of the iconotype. Seidenfaden (1983), had earlier come to the same conclusion when he had examined the type.

*G. pacificum* Rolfe = *Geodorum densiflorum*.

*G. pallidum* Llanos, Mem. Roy. Acad. Madr. 4: 507 (1859). Notes: The name is no longer considered applicable to an Australian taxon (Seidenfaden, 1983).

*G. pictum* (R. Br.) Lindley = *Geodorum densiflorum*.

*G. purpureum* R. Br. in W. Aiton et W.T. Aiton, Hort. Kew. (ed. 2) 5: 207 (1813). Notes: The name is no longer considered applicable to the Australian taxon (Seidenfaden, 1983).

*G. semicristatum* Lindley = *Geodorum densiflorum*.

## GEORCHIS

*Georchis* Lindley = *Goodyera*.

*G. cordata* Lindley = *Goodyera viridiflora*.

*G. viridiflora* (Blume) F. Muell. = *Goodyera viridiflora*.

## GLOSSODIA

*Glossodia* R. Br., Prod. 325 (1810). Type species: *Glossodia major* R. Br. (here designated).

*G. brunonis* Endl. = *Elythranthera brunonis*.

*G. emarginata* Lindley = *Elythranthera emarginata*.

*G. intermedia* Fitzg. = *Elythranthera X intermedia*.

***G. major*** R. Br., Prod. 326 (1810). Type: 'Port Jackson', R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! E! Fl! L! MEL!). Dist: Sln, Sls, Smb, Sse, Vwp, Vwh, Vnp, Vgi, Veh, Tas, Nsc, Nst, Can, Nss, Ncc, Nct, Ncs, Nnc, Nnt, Nns, Qmo, Qdd, Qwb.

*Caladenia major* (R. Br.) H. G. Reichb., Beitr. Syst. Pflanzenk. 67, in obs (1871).

*Glossodia major* R. Br. var. *alba* McKibbin, S. Sci. Rec. 3: 102 (1883). Type: *non designatus*.

*G. major* R. Br. var. *alba* McKibbin = *Glossodia major*.

***G. minor*** R. Br., Prod. 326 (1810). Type: 'Port Jackson', Sep.-Oct. 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated); Syntype: 'Port Jackson', Sep. 1804, R. Brown s.n. (BM!). Dist: Nsc, Ncc, Nnc, Qmo, Qwb.

*Caladenia minor* (R. Br.) H.G. Reichb., Beitr. Syst. Pflanzenk. 67, in obs. (1871).

*Glossodia orientalis* F. Muell., Fragm. 5: 97 (1865), *nom. prov., illeg.*

*Glossodia minor* R. Br. var. *alba* Bailey, Queensland Agric. J. 13(4): 346 (1903). Type: Wellington Point, C. Kefford s.n. (holo BRI).

*G. minor* R. Br. var. *alba* Bailey = *Glossodia minor*.

*G. orientalis* F. Muell. = *Glossodia minor*.

## GOADBYELLA

*Goadbyella* R. Rogers = *Microtis*.

*G. gracilis* R. Rogers = *Microtis alba*.

## GOODYERA

*Goodyera* R. Br. in W. Aiton et W.T. Aiton, Hort. Kew. (ed. 2) 5: 197 (1813). Type species: *Satyrium repens* L. Notes: For the purposes of this paper I have followed Seidenfaden (1978a) in his treatment of *G. viridiflora*.

*Eucusia* Blume, Bijdr. 6: t. 1, f. 18; 8: 415 (1825). Type species: *Eucusia carneae* Blume.

*Georchis* Lindley in Edwards's, Bot. Reg. 19: ad. t. 1618 (1833). Type species: *Georchis biflora* Lindley (*nom. invalid*).

*Physurus* Lindley, J. Proc. Linn. Soc., Bot. 1: 108 (1857). Type species: *non designatus*.

*Orchiodes* Kuntze, Revis. gen. pl. 2: 674 (1891), *nom.*

*Perarium* Salisb. ex J.M. Coulter, Contr. U.S. Natl. Herb. 2: 425 (1894). Type species: *Epipactis gigantea* Douglas ex Hook.

*G. carneae* (Blume) Schltr. = *Goodyera viridiflora*.

*G. cordata* (Lindley) Nicols. = *Goodyera viridiflora*.

*G. cyrtoglossa* Hayata = *Goodyera grandis*.

*G. erimae* Schltr. = *Hetaeria oblongifolia*.

*G. finetiana* Kraenzl. = *Goodyera viridiflora*.

*G. glauca* J.J. Smith = *Goodyera viridiflora*.

***G. grandis*** (Blume) Blume, Fl. Javae nov. ser. 36 (1858). Dist: Qkn, Qco; PG, ID, MY, BU, TH, VN, LA, TW, JP;

*Neottia grandis* Blume, Bijdr. 8: 107 (1825); *Orchiodes grande* (Blume) Kuntze, Revis. gen. pl. 2: 675 (1891);

*Goodyera grandis* King et Pantl., Ann. Bot. Gard. Calc. 8: 284 (1898), *nom. superfluous*; *Epipactis grandis* (King et Pantl.) Eaton, Proc. Biol. Soc. Wash. 21: 64 (1908). Type: 'Java', C. Blume s.n. (holo L!, iso P!).

*Neottia rubicunda* Blume, Bijdr. 8: 108 (1825); *Goodyera rubicunda* (Blume) Lindley in Edwards's, Bot. Reg. 25: Misc. 61 (1839); *Aetheria rubicunda* (Blume) H.G. Reichb., Bonplandia, 3: 214 (1855); *Rhamphidia rubicunda* (Blume) F. Muell., Fragm. 7: 30 (1869); *Orchiodes rubicundum* (Blume) Kuntze, Revis. gen. pl. 2: 675 (1891); *Epipactis rubicunda* (Blume) Eaton, Proc. Biol. Soc. Wash. 21: 64 (1908). Type: 'Java, Salak', C. Blume s.n. (holo L!).

*Goodyera rubens* Blume, Fl. Javae nov. ser. 36, t. 9d, f. 1 (1858). Type: 'Java', C. Blume s.n. (holo L!).

*Goodyera cyrtoglossa* Hayata, Icon. pl. formos. 4: 113-4, f. 60 (1914). Type: 'Kappamzan', Mar. 1910, U. Mori & Y. Shimada s.n. (holo TAI?).

*Goodyera longibracteata* Hayata, Icon. pl. formos. 4: 114-5, f. 61, A-H (1916); *Perarium longibracteata* (Hayata) Makino, J. Jap. Bot. 6: 35 (1929). Type: 'Kusukusu', Jan. 1913, Y. Tashiro s.n. (holo TAI?).

*Goodyera longicollumna* Hayata, Icon. pl. formos. 6: 92 (1916). Type: 'Urai', Apr. 1910, S. Sasaki s.n. (holo TAI?).

*Goodyera hispidula* R. Rogers et C. White, Trans. Roy. Soc. South Australia 44: 112-4, t. 6 (1920). Type: 'New Guinea: Dilava', Jul.-Aug. 1918, C.T. White 603 (holo AD, iso BRI!).

*G. grandis* King et Pantl., nom. superfluous = *Goodyera grandis*.

*G. hispidula* R. Rogers et C. White = *Goodyera grandis*.

*G. longibracteata* Hayata = *Goodyera grandis*.

*G. longirostrata* Hayata = *Goodyera viridiflora*.

*G. longicollumna* Hayata = *Goodyera grandis*.

*G. ogatai* Yamamoto = *Goodyera viridiflora*.

*G. polygonoides* F. Muell. = *Zeuxine polygonoides*.

*G. rosans* J.J. Smith = *Goodyera viridiflora*.

*G. rubens* Blume = *Goodyera grandis*.

*G. rubicunda* (Blume) Lindley = *Goodyera grandis*.

*G. schlechtendaliana* H.G. Reichb. var. *ogotai* (Yamamoto) Hiroe = *Goodyera viridiflora*.

*G. subuniflora* Ohwi = *Goodyera viridiflora*.

**G. viridiflora** (Blume) Blume, Coll. Orch. Arch. Ind. 41, t. 9 (1858). Dist: Qkn, Qco: SB, VU, PG, ID, MY, BN, TH, VN, LA, TW, JP.

*Neottia viridiflora* Blume, Bijdr. 8: 408 (1825); *Physurus viridiflorus* (Blume) Lindley, J. Proc. Linn. Soc., Bot. 1: 180 (1857); *Georchis viridiflora* (Blume) F. Muell., Fragm. 8: 29 (1873); *Orchiodes viridiflora* (Blume) Kuntze, Revis. gen. pl. 2: 675 (1891); *Epipactis viridiflora* (Blume) Ames, Orch. 2: 61 (1908). Type: 'Java; Salak', C. Blume s.n. (holo BO?, iso P!).

*Eucosia carnea* Blume, Bijdr. 8: 415 (1825); *Goodyera carnea* (Blume) Schltr., Bot. Jahrb. Syst. 39: 56 (1906). Type: Java; Salak, C. Blume s.n. (holo not found).

*Georchis cordata* Lindley, Gen. sp. orchid. pl. 496 (1840); *Goodyera cordata* (Lindley) Nicols., Dist. Gard. 2: 81 (1885); *Orchiodes cordatum* (Lindley) Kuntze, Revis. gen. pl. 2: 675 (1891); *Epipactis cordata* (Lindley) Eaton, Proc. Biol. Soc. Wash. 21: 64 (1908). Type: 'Ceylon', MacRae s.n. (holo K-L!).

*Goodyera glauca* J.J. Smith, Bull. Dept. Agr. Ind. Neerl. 13: 17-18 (1907); *Epipactis glauca* (J.J. Smith) Eaton, Proc. Biol. Soc. Wash. 21: 64 (1908). Type: 'Java, Loemadjang', E. Connell s.n. (holo BO?).

*Goodyera longirostrata* Hayata, Icon. pl. formos. 4: 115, f. 61 (1914); *Perarium longirostrata* (Hayata) Makino, J. Jap. Bot. 6: 35 (1929). Type: Taiwan; Akoshio, Sasaki s.n. (holo TAI).

*Goodyera ogatai* Yamamoto, Suppl. Icon. pl. formos. 3: 9, f. 3 (1927); *Perarium ogatai* (Yamamoto) Makino, J. Jap. Bot. 6: 36 (1929); *Goodyera schlechtendaliana* H.G. Reichb var. *ogotai* (Yamamoto) Hiroe, Orch. Fl. 2: 70 (1971). Type: Taiwan; Mt. Sozan, Ogata s.n. (holo TAI).

*Goodyera rosans* J.J. Smith, Bull. Jard. Bot. Buitenzorg. (ser. 3) 9: 35, t. 3 (1927). Type: 'Java; Loemadjang', E. Cornell s.n. (holo BO?).

*Goodyera finetiana* Kraenzl., Not. Syst. 4: 138 (1928). Types: New Caledonia, Pembat, 994 m, Sep. 1909, Le Rat 899 (syn B†); New Caledonia, 1870, Pancher 643 (syn P).

*Goodyera subuniflora* Ohwi, Acta Phytotax. & Geobot. 6: 47 (1937). Type: Ryukyu Isalnds, [Anon] (not found).

## GRAPHORKIS

*Graphorkis* Thouars = *Eulophia*.

*G. bicallosa* (D. Don) Kuntze = *Eulophia bicallosa*.

- G. bicarinata* (Lindley) Kuntze = *Eulophia bicallosa*.  
*G. blumeana* Kuntze = *Oeceoclades pulchra*.  
*G. fitzalanii* (F. Muell.) Kuntze = *Eulophia bicallosa*.  
*G. macrostachya* (Lindley) Kuntze = *Oeceoclades pulchra*.  
*G. pulchra* (Thouars) Kuntze = *Oeceoclades pulchra*.  
*G. venosa* (F. Muell) Kuntze = *Eulophia venosa*.

## GRASTIDIUM

- Grastidium* Blume = *Dendrobium*.  
*G. baileyi* (F. Muell.) Rauschert = *Dendrobium baileyi*.  
*G. cancrioides* (Hunt) Rauschert = *Dendrobium cancrioides*.  
*G. luteocilium* (Rupp) Rauschert = *Dendrobium luteocilium*.

## GUNNIA

- Gunnia* Lindley = *Sarcochilus*.  
*G. australis* Lindley = *Sarcochilus australis*.  
*G. picta* Lindley = *Sarcochilus australis*.

## HABENARIA

- Habenaria** Willd., Sp. pl. 4(1): 5, 44 (1805). Type species: (*Orchis habenaria* L.) *Habenaria macroceratitis* Willd.  
*Leucorchis* E. Meyer, Preuss. Pflanzeng. 50 (1839). Type species: *Satyrium albidum* L.
- H. anomala* Dockr. = *Habenaria xanthantha*.  
*H. arnhemica* F. Muell., nom. ined. = *Habenaria ferdinandi*.  
*H. banfieldii* Bailey = *Peristylus banfieldii*.  
*H. divaricata* R. Rogers et C. White, Proc. Roy. Soc. Queensland 32: 136 (1931). Type: 'Dunk Island off the North East Coast of Queensland', E.J. Banfield s.n. (holo BRI!, iso AD!). Dist: Qkn, Qco.  
*H. elongata* R. Br., Prod. 313 (1810). Type: 'Arnhem S. Bay, Point U 1', 6 Feb. 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated); Syntypes: 'Capentaria: Island Y1, Y2, Z1, Z2', 1802-3, R. Brown s.n. (BM! K! K-L!). Dist: Qco, Ddg; PG, ID?.  
*Habenaria millari* Bailey, Bot. Bull. Dept. Agric. Queensland 3: 18 (1891). Type: Walsh River, T. Barclay Millar s.n. (holo BRI!).  
*H. eurystoma* Schltr. = *Habenaria ochroleuca*.  
*H. ferdinandi* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 10: 249 (1912). Dist: Ddg.  
*Habenaria muelleriana* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 9: 435 (1911), non Cogn. (1893). Type: 'Nord-Australien: Bei Port Darwin', M. Holtze 1057 (holo B†, iso MEL!).  
*Habenaria arnhemica* F. Muell., nom. ined.; *Habenaria graminea* Lindley var. *arnhemica* Benth., Fl. Austral. 6: 394 (1873); *Habenaria ferdinandi* Schltr. var. *arnhemica* (Benth.) Dockr., Orchadian 1: 149 (1965). Types: 'Port Darwin', 1869, Schultz 188 ex R. Schombergh (syn K!, isosyn G!); 'Port Darwin', Schultz 162 (syn MEL!); 'Port Essington', Mar. 1839, Armstrong 430 (syn K!, isosyn BM!), syn. nov.  
*H. ferdinandi* sensu Dockr. = *Habenaria propinquior*.  
*H. ferdinandi* Schltr. var. *arnhemica* (Benth.) Dockr. = *Habenaria ferdinandi*.  
*H. geoffrayi* Gagnep = *Peristylus candidus*.  
*H. graminea* sensu Benth. = *Habenaria propinquior*.  
*H. graminea* sensu F. Muell. = *Habenaria propinquior*.  
*H. graminea* Lindley var. *arnhemica* Benth. = *Habenaria ferdinandi*.  
*H. holtzei* F. Muell. = *Habenaria rumphii*.  
*H. hymenophylla* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 9: 212 (1911). Type: 'Nord-Australien: Bei Port Darwin', 1888, M. Holtze 799 (holo B†). Notes: Doubtfully distinct from *H. mesophylla*. Dist: Qkn, Qco, Ddg.  
*Habenaria trinervis* sensu Benth., Fl. Austral. 6: 394 (1873), non Wight (1851). Type: 'Port Darwin', Schultz 828 (holo K!).  
*H. lacertifera* Ridley = *Peristylus candidus*.  
*H. longibianensis* Gagnep. = *Peristylus candidus*.

**H. macraithii** Lavarack, Orchadian 7(12): 278-9 (1984). Type: 'Cook District; Cape York Peninsula, Brown Creek near the crossing of the Portland Roads road', Sep. 1983, Australian Orchid Foundation 58 (holo & iso BRI!). Dist: Qco.

**H. mesophylla** Kraenzl., Orchid. gen. sp. 1: 204 (1898). Type: 'Australia. Victoria', Aug. [18]73, herb. F. Mueller s.n. (holo MEL not found). Notes: The type is no longer in MEL and I have been unable to locate it elsewhere. I assume the type has either been lost or sent on loan but never returned to MEL. The description of *H. mesophylla* is similar in many respects to that of *H. hymenophylla* the only real differences being in size of the flowers, which are larger in *H. mesophylla* and the labellum spur which is very much shorter to that commonly found in *H. hymenophylla*. It seems likely that *H. mesophylla* may be conspecific with *H. hymenophylla* but its true identity will remain a mystery until the type can be found. The most likely source of the type of *H. mesophylla* is Darwin. Holtze was actively collecting material from Darwin and sending it to Mueller about that time. During that period he sent many specimens of *Habenaria* to Mueller. Dist: Ddg?

*H. millari* Bailey = *Habenaria elongata*.

*H. muelleriana* Schltr. = *Habenaria ferdinandi*.

**H. ochroleuca** R. Br., Prod. 313 (1810). Type: 'North Coast, Island Y2', 18 Feb. 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated); Syntypes: 'North Coast, Island Y1, Z1, Z2', Feb. 1803, R. Brown s.n. (BM! K! K-L!). Dist: Ddg, Wga.

*Habenaria eurystoma* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 10: 248 (1912). Type: 'Newcastle Range', 1875, Armit 390 (syn B†; lectotype MEL! here designated); Syntype: 'Nord-Australien: Port Darwin', 1886, Holtze s.n. (B†), syn. nov.

*H. ovoidea* R. Rogers et C. White = *Peristylus candidus*.

*H. papuana* Kraenzl. = *Peristylus papuanus*.

**H. propinquior** H.G. Reichb., Beitr. Syst. Pflanzenk. 53 (1871). Type: 'Rockingham's Bay', J. Dallachy ex F. Mueller s.n. (holo W!, iso K! MEL!). Dist: Qks, Qkn, Qco.

*Habenaria graminea* sensu F. Muell., Fragm 7: 16 (1869), non Lindley (1835); *Habenaria graminea* sensu Benth, Fl. Austral. 6: 394-5 (1873), non Lindley (1835); *Habenaria ferdinandi* sensu Dockr., Austral. Indig. Orchids 1: 42, f. (1969), non Schltr. (1912). Type: 'Rockingham's Bay', J. Dallachy ex F. Mueller s.n. (holo K!).

**H. rumphii** (Brogn.) Lindley, Gen. sp. orchid. pl. 320 (1835). Dist: Qkn, Qco, Ddg; PG, ID, MY, TH.

*Platanthera rumphi* Brogn. in Duperrey, Voyage Phan. 9: 104, t. 38, f. A (1829). Type: 'Amboyne', L. D'Urville s.n. (holo P!).

*Orchis amboinica minor* Rumph., Herb. Amb. 5: 287 (1747) (pre 1753).

*Flos susannae minor* Rumph., Herb. Amb. 5: 287 (1747) (pre 1753).

*Habenaria stauroglossa* Kraenzl. in Schum., Fl. Kaiser Wilh. Land 35 (1889). Type: 'Finschhafen', Aug., Hollrung 319 (holo B†).

*Habenaria dahliana* Kraenzl in Schum., Fl. Neu Pommern 106 (1898). Type: Neu-Pommer, Dahl (holo ?B†).

*Habenaria holtzei* F. Muell., J. & Proc. Roy. Soc. New South Wales 24: 128 (1891). Type: 'Armheim's Land', Holtze s.n. (holo MEL!), syn. nov.

*H. sumatrana* (Schltr.) Schltr. = *Peristylus candidus*.

*H. trinervis* Benth. = *Habenaria hymenophylla*.

**H. triplonema** Schltr., Repert. Spec. Nov. Regni Veg. Beih. 9: 435 (1911). Type: 'Nord-Australien: Bei Port Darwin', 1889, M. Holtze 979 (holo B†). Dist: Qco, Ddg; PG.

**H. xanthantha** F. Muell., Fragm. 7: 16 (1869). Type: 'In locis humidis circum Rockingham's Bay', J. Dallachy s.n. (holo K!, iso AD!). Dist: Qkn, Qco.

*Habenaria anomala* Dockr., Orchadian 12: 150 (1965). Type: 'Proserpine, north Queensland', 31 Mar. 1964, K. Macpherson s.n. (holo BRI!).

## HERMINIUM

*Herminium* L., Opera Varia 251 (1758). Type species: *Orchis monorchis* L.

*H. annamense* Gagnep = *Peristylus candidus*.

## HETAERIA

**Hetaeria** Blume, Fl. Javae 1: Praef. vii (1828) (orth. var. of *Etaeria* Blume). Type species: *Hetaeria oblongifolia* (Blume) Blume vide Adams (1987). Notes: For this genus I have followed the work of Seidenfaden (1978a). There is a problem concerning the correct spelling of the generic name (Adams, 1987). Blume (1825) first used

the spelling *Etaeria* but three years later corrected it to the etymologically more accurate *Hetaeria*. Most authors have subsequently adopted the spelling *Hetaeria* preferring to treat *Etaeria* as an orthographic variant of *Hetaeria*. Unfortunately the situation became more complicated when Endlicher (1936) published the name *Hetaeria* for an altogether separate genus in the family Philydraceae. Under the articles of the ICBN the name *Etaeria* should be used for the genus in Orchidaceae as it was the first one legitimately published for that genus. However, because the name *Hetaeria* is commonly used for the orchidaceous genus and the fact that there are associated problems with its use elsewhere, Adams has proposed the name *Hetaeria* be conserved in Orchidaceae. To avoid possible confusion at this time I have chosen to treat the Australian members of the genus under *Hetaeria* in anticipation of the successful application for the conservation of the name in the Orchidaceae.

*Etaeria* Blume, Bijdr. 6: t. 1, f. 14; 8: 409 (1825). Type species: *non designatus*.

*Aetheria* Endl., Gen. Pl. 214 (1836) (*orth. var.*).

*Rhamphidia* (Lindley) Lindley, J. Proc. Linn. Soc., Bot. 1: 181 (1857). Type species: *Goodyera elongata* Lindley.

*H. erimae* (Schltr.) Schltr. = *Hetaeria oblongifolia*.

*H. helferi* J.D. Hook. = *Hetaeria oblongifolia*.

**H. oblongifolia** (Blume) Blume, Coll. Orch. Arch. Ind. 102, t. 32 (1858). Dist: Qkn, Qco: NC, SB, VU, PG, ID, MY, TH.

*Etaeria oblongifolia* Blume, Bijdr. 410, t. 14 (1825); *Aetheria oblongifolia* (Blume) Lindley, Gen. sp. orchid. pl. 491 (1840). Type: Java, C. Blume s.n. (holo L!).

*Etaeria rubicunda* H.G. Reichb., Bonplandia 3: 214 (1855); *Rhamphidia rubicunda* (H.G. Reichb.) H.G. Reichb. in Seemann, Fl. Vitiensis 294 (1865). Type: Philippines, Cuming 2109 (holo BM).

*Rhamphidia tenuis* Lindley, J. Proc. Linn. Soc., Bot. 1: 182 (1857); *Etaeria tenuis* (Lindley) Benth., J. Proc. Linn. Soc., Bot. 18: 345 (1880); *Hetaeria tenuis* (Lindley) Bailey, Syn. Queensl. fl. 522 (1883). Type: 'Ins. Philippinae', Cuming s.n. (holo K-L!).

*Hetaeria helferi* J.D. Hook., Fl. Brit. Ind. 6: 115 (1890). Type: Island in the Andaman Sea, *Helfer* 464 (holo K).

*Goodyera erimae* Schltr. in K. Schum. et Laut., Fl. Schutzgeb. Sudsee, Nachtrage 93 (1905); *Hetaeria erimae* (Schltr.) Schltr., Repert. Spec. Nov. Regni Veg. 9: 88 (1910). Type: 'Kaiser-Wilhelms-Land: In humus in the forests near Erimahafen, alt. c. 20 m', Oct. 1901, R. Schlechter 13676 (holo B†).

*Hetaeria similis* Schltr., Repert. Spec. Nov. Regni Veg. 9: 88 (1910). Type: 'Samoa, Manono', 23 Aug. 1905, F. Vaupel 657 (holo B†, iso K!).

*Hetaeria pauciseta* J.J. Smith, Repert. Spec. Nov. Regni Veg. 11: 134 (1912). Type: New Guinea, Gjellerup 736 (holo B†).

*Hetaeria raymundii* Schltr., Bot. Jahrb. Syst. 56: 453 (1921). Type: Palau Island: Koror, *Raymund* s.n. (holo B†).

*H. pauciseta* J.J. Smith = *Hetaeria oblongifolia*.

*H. polygonoides* (F. Muell.) Dockr. = *Zeuxine polygonoides*.

*H. raymundii* Schltr. = *Hetaeria oblongifolia*.

*H. similis* Schltr. = *Hetaeria oblongifolia*.

*H. tenuis* (Lindley) Bailey = *Hetaeria oblongifolia*.

## HYSTERIA

*Hysteria* Reinw. = *Corymborkis*.

*Hysteria veratrifolia* Reinw. = *Corymborkis veratrifolia*.

## KATHERINEA

*Katherinea* A. Hawkes = *Dendrobium*.

*K. carrii* (Rupp et C. White) Brieg. = *Dendrobium carrii*.

## LATOURREA

*Latourea* Blume = *Dendrobium*.

*L. oncidiochila* (Kraenzl.) Kraenzl. = *Dendrobium bifalce*.

## LATOURORCHIS

*Latourorchis* Brieg. = *Dendrobium*.

## LEDGERIA

*Ledgeria* F. Muell. = *Erythrorchis*.

*L. aphylla* F. Muell. = *Erythrorchis cassythoides*.

*L. foliata* F. Muell. = *Pseudovanilla foliata*.

## LEPORELLA

*Leporella* A.S. George, Nuytsia 1(2): 18 (1971). Type species: *Leptoceras fimbriata* Lindley.

*Leptoceras* Fitzg., Austral. orch. 2(4): [t. 4] (1889), non (R. Br.) Lindley (1840).

*L. fimbriata* (Lindley) A.S. George, Nuytsia 1(2): 183 (1971). Dist: Wda, Wav, Wro, Wey, Sep, Sls, Ski, Sse, Vwp, Vgi, Tas.

*Leptoceras fimbriata* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. liii (1840); *Caladenia fimbriata* (Lindley) H.G. Reichb., Beitr. Syst. Pflanzenk. 65 (1871); *Eriochilus fimbriatus* (Lindley) F. Muell., S. Sci. Rec. 2: 152 (1882). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L!, iso Fl! W!).

*Leptoceras pectinata* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. liii (1840). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L!).

## LEPTOCERAS

*Leptoceras* (R. Br.) Lindley = *Caladenia*.

*L. fimbriata* Lindley = *Leporella fimbriata*.

*L. macrophylla* (R. Br.) Lindley = *Caladenia menziesii*.

*L. menziesii* (R. Br.) Lindley = *Caladenia menziesii*.

*L. oblonga* Lindley = *Caladenia menziesii*.

*L. pectinata* Lindley = *Leporella fimbriata*.

*L. sulphureum* (Cunn.) Lindley = *Lyperanthus suaveolens*.

## LEPTOCERAS

*Leptoceras* Fitzg. = *Leporella*.

## LEPTORCHIS

*Leptorchis* Thouars = *Leptorkis*.

*L. coelogynoides* (F. Muell.) Kuntze = *Liparis coelogynoides*.

*L. habenarina* (F. Muell.) Kuntze = *Liparis habenarina*.

*L. reflexa* (R. Br.) Kuntze = *Liparis reflexa*.

## LEUCORCHIS

*Leucorchis* E. Meyer = *Habenaria*.

*L. sylvatica* Blume = *Didymoplexis pallens*.

## LIMODORUM

*Limodorum* Boehmer in C.G. Ludwig, Def. Gen. ed. Boehmer. 358 (1760) (*nom cons.*). Type species: *Orchis abortiva* L.

*L. candidum* Roxb., Hort. Beng. 63 (1814), *nom. nud.*; Fl. Ind. (ed. 2) 3: 470 (1832). Notes: This species has been treated by many authors as a synonym of *Geodorum dilatatum*. Seidenfaden (1983) does not agree and places it under a separate species, *G. attenuatum* Griffith. I have studied the material at Kew on which Seidenfaden made an assessment of *G. candidum* and agree with him. *G. attenuatum* does not occur in Australia.

*L. densiflorum* Lam. = *Geodorum densiflorum*.

*L. incarvillei* Pers. = *Phaius tankervilleae*.

*L. incarvillei* Blume = *Phaius tankervilleae*.

*L. pulchrum* Thouars = *Oeceoclades pulchra*.

*L. recurvum* Roxb., Pl. Corom. 1: 33 (1795). Notes: Garay & Sweet (1974) and other authors have listed this taxon as a synonym of *Geodorum densiflorum* but Seidenfaden (1983) does not agree. In a comprehensive study of the genus he recognized *G. recurvum* as a distinct species. I have studied the type of this species and agree with him. *G. recurvum* does not occur in Australia.

*L. roseum* D. Don = *Epipogium roseum*.

*L. tancarvilliae* Banks in L' Herit. = *Phaius tankervilleae*.

*L. veratrifolium* Willd. = *Calanthe triplicata*.

*L. ventricosum* Steud. = *Calanthe triplicata*.

## LIPARIS

*Liparis* Rich., Orch. Eur. Annot. 21, 30, 38 (1817); Mem. Mus. Paris 4: 43, 52, 60 (1818) (nom. cons.). Type species: *Ophrys loeselii* L.

*Leptorchis* Thouars, Hist. Pl. Orch. Prem. Tabl. Esp. t. 25 (1822) (orth. var.) = *Leptorkis* Thouars.

*Sturmia* H.G. Reichb., Icon. Bot. Pl. Crit. 4: 39 (1826), non Hoppe (1799). Type species: *Ophrys loeselii* L.

*L. angustilabris* (F. Muell.) Blaxell, Telopea 1: 357 (1978). Dist: Qkn, Qco.

*Sturmia angustilabris* F. Muell., Fragn. 4: 164 (1864). Type: 'In montibus silvatis ad sinum Rockingham's Bay', J. Dallachy s.n. (holo K!, iso BM!).

*Liparis cuneilabris* F. Muell. ex Benth., Fl. Austral. 6: 273 (1873), nom. illeg.; *Liparis reflexa* (R. Br.) Lindley var. *cuneilabris* (F. Muell. ex Benth.) Ridley, J. Proc. Linn. Soc., Bot. 22: 287 (1886). Type: 'Queensland; Rockingham Bay', J. Dallachy s.n. (holo K!).

*L. bernaysii* (F. Muell.) Bailey = *Malaxis latifolia*.

*L. bracteata* Hunt, North Queensland Naturalist 14(81): 9, f. (1946). Type: 'Mt. Bartle Frere', Sep. 1946, J.H. Wilkie s.n. (holo BRI!). Dist: Qkn, Qco.

*L. coelogynoides* (F. Muell.) Benth., Fl. Austral. 6: 273 (1873). Dist: Nnc, Nnt, Qmo, Qdd, Qwb, Qco.

*Sturmia coelogynoides* F. Muell., Fragn. 2: 71 (1860); *Leptorchis coelogynoides* (F. Muell.) Kuntze, Revis. gen. pl. 2: 671 (1891). Type: 'In silvis primaeris ad flumen Clarence River', H. Beckler s.n. (holo K!).

*Liparis mowbulana* Bailey, Queensland Agric. J. 2(3): 197, t. 16 (1898). Type: 'Mowbulan, or Bunya Mountains', J.F. Bailey s.n. (holo BRI!, iso K!).

*L. condylobulbon* H.G. Reichb., Hamb. Gartenz 18: 34 (1862). Type: cult. ex Batavia, Schiller s.n. (holo W!). Dist: Qco; NC, FJ, SB, VU, PG, ID, MY!, PH.

*Liparis nesophila* H.G. Reichb. in Otia., Bot. Hamburg. 1: 56 (1878). Type: Viti or Fiji Islands, Kakadrove, 1860, B. Seemann 614 (holo K!).

*Liparis confusa* J.J. Smith, Orch. Java 275, f. 211 (1908). Type: Java, J.J. Smith s.n. (holo L!).

*Liparis longipes* auct. non Lindley in Seem., Fl. Vit. 302 (1868).

*L. confusa* J.J. Smith = *Liparis condylobulbon*.

*L. cuneilabris* F. Muell. ex Benth. = *Liparis angustilabris*.

*L. fleckeri* Nicholls, North Queensland Naturalist 6(53): 1, f. (1938). Type: 'Growing on rocks, Bellenden Ker-about 4,000 feet above sea level', Apr. 1937, H. Flecker 3080 (holo MEL!). Dist: Qkn, Qco.

*L. foliosa* Lindley = *Liparis reflexa*.

*L. habenarina* (F. Muell.) Benth., Fl. Austral. 6: 273 (1873). Dist: Nnc, Qmo, Qwb, Qpc, Qks, Qkn, Qco, Ddg.

*Sturmia habenarina* F. Muell., Fragn. 4: 131 (1864); *Leptorchis habenarina* (F. Muell.) Kuntze, Revis. gen. pl. 2: 671 (1891). Type: 'In pratis humidis ad sinum Rockingham's Bay', J. Dallachy s.n. (holo K!).

*L. krempfii* Gagnep. = *Malaxis latifolia*.

*L. longipes* auct. non Lindley = *Liparis condylobulbon*.

*L. mowbulana* Bailey = *Liparis coelogynoides*.

*L. nesophila* H.G. Reichb. = *Liparis condylobulbon*.

*L. nugentiae* Bailey, Bot. Bull. Dept. Agric. Queensland 14: 11 (1896). Type: 'Mountain range near Cairns', L.J. Nugent s.n. (holo BRI!). Dist: Qkn, Qco.

*L. reflexa* (R. Br.) Lindley in Edwards's, Bot. Reg. 11: sub t. 882 (1825). Dist: Nsc, Ncc, Nct, Nnc, Nnt.

*Cymbidium reflexum* R. Br., Prod. 331 (1810); *Sturmia reflexa* (R. Br.) F. Muell., Fragn. 2: 72 (1860); *Leptorchis reflexa* (R. Br.) Kuntze, Revis. gen. pl. 2: 671 (1891). Type: 'Rocks, Port Jackson', 1802-4, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! K! MEL!).

*Liparis foliosa* Lindley in Edwards's, Bot. Reg. 11, t. 882 (1825). Type: cult. ex 'Hab. in Mauritio, et Nova Hollandia ad Portum Jackson', [Anon.] (holo K-L!), syn. nov.

*L. reflexa* (R. Br.) Lindley var. *cuneilabris* (F. Muell. ex Benth.) Ridley = *Liparis angustilabris*.

*L. reflexa* (R. Br.) Lindley var. *parviflora* Nicholls = *Liparis swenssonii*.

*L. simmondsii* Bailey, Bot. Bull. Dept. Agric. Queensland 3: 18 (1891). Type: 'Eudlo Creek', Mar. 1891, F.M. Bailey & Field Naturalists s.n. (holo BRI!). Dist: Qwb, Qpc, Qks.

*L. swenssonii* Bailey, Queensland Agric. J. 16(9): 564 (1906). Type: 'Emu Vale', K. Swensson s.n. (holo BRI!). Dist: Nnc, Nnt, Qmo.

*Liparis reflexa* (R. Br.) Lindley var. *parviflora* Nicholls, Victorian Naturalist 57: 113, f. C, D (1940).  
Type: 'Night Cap Ridge', May 1940, W.H. Nicholls s.n. (holo MEL!), syn. nov.

*L. turfosa* Gagnep. = *Malaxis latifolia*.

## LISSOCHILUS

*Lissochilus* R. Br. = *Eulophia*.

*L. pulcher* (Thouars) H. Perrier = *Oeceoclades pulchra*.

## LISTERA

*Listera* R. Br. in W. Aiton et W.T. Aiton, Hort. Kew. (ed. 2) 5: 201 (1813) (*nom. cons.*). Type species: *Ophrys ovata* L.

*L. amplexicaulis* (Bailey) Bailey = *Acianthus amplexicaulis*.

## LUISIA

*Luisia* Gaud. in Freycinet, Voy. Uranie 426, t. 37 (1826). Type species: *Luisia teretifolia* Gaud.

*L. teretifolia* Gaud. in Freycinet, Voy. Uranie 427, t. 37 (1826). Type: Amboyne, Gaudichaud 37 (holo P!). Dist: Qco, Ddg; NC, PG, ID.

*Epidendrum triste* G. Forst., Fl. ins. aust. prod. 60 (1786); *Luisia tristis* (G. Forst.) Kuntze, Revis. gen. pl. 672 (1891), non J.D. Hook. (1890). Type: 'New Caledonia', 8 Sep. 1774, G. Forster s.n. (lectotype BM! here designated, icon BM!). Notes: *Luisia teretifolia* is the first available name in the genus for this taxon.

*L. tristis* (G. Forst.) Kuntze = *Luisia teretifolia*.

## LYPERANTHUS

*Lyperanthus* R. Br., Prod. 325 (1810). Type species: *Lyperanthus suaveolens* R. Br. (here designated). Notes: The generic description was primarily based on the description of *L. suaveolens*.

*Fitzgeraldia* F. Muell., S. Sci. Rec. 2: 56, in obs. (1882). Type species: *Fitzgeraldia forrestii* F. Muell.

*L. burnettii* F. Muell. = *Burnettia cuneata*.

*L. ellipticus* R. Br. = *Rimacola elliptica*.

*L. forrestii* F. Muell., S. Sci. Rec. 2(3): 55 (1882). Type: 'Near the Stirling Range', J. Forrest s.n. (holo K!). Dist: Wda, Ski?

*Fitzgeraldia forrestii* (F. Muell.) F. Muell., S. Sci. Rec. 2: 56, in obs. (1882).

*L. nigricans* R. Br., Prod. 325 (1810). Type: 'Port Jackson; Sydney', Oct. 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated); Syntypes: 'Port Jackson; South Head road', 1805, R. Brown s.n. (BM! E! L! P!). Notes: There is a Travers' collection from New Zealand of this species at Wien. This is the first and only record of this species from New Zealand. Dist: Wir, Wda, Wav, Wro, Wey, Sep, Syp, Sls, Ski, Sse, Smb, Vwp, Vwh, Vgi, Tas, Nsc, Ncc, Nnc; NZ.

*Caladenia nigricans* (R. Br.) H.G. Reichb., Beitr. Syst. Pflanzenk. 67 (1871).

*Lyperanthus nigricans* R. Br. forma typica Domin, J. Proc. Linn. Soc., Bot. 41: 250 (1912), nom. illeg.

*Lyperanthus nigricans* R. Br. forma *pumila* Domin, J. Proc. Linn. Soc., Bot. 41: 251 (1912). Type: 'Mt. Toolbrunup', 1909, A. Dorrien-Smith s.n. (holo K!).

*L. nigricans* R. Br. forma typica Domin = *Lyperanthus nigricans*.

*L. nigricans* R. Br. forma *pumila* Domin = *Lyperanthus nigricans*.

*L. serratus* Lindley, Gen. sp. orchid. pl. 393 (1840). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L!, iso BM! FI! W!). Dist: Wda, Wav, Wro, Wey.

*Caladenia serrata* (Lindley) H.G. Reichb., Beitr. Syst. Pflanzenk. 67 (1871).

*L. suaveolens* R. Br., Prod. 325 (1810). Type: 'Port Jackson', R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype AD! BM! E! L! P! W!); Syntype: 'Port Jackson', 1803-4, Paterson s.n. (BM!). Dist: Vgi, Tas, Nsc, Nst, Can, Nec, Ncs, Nnc, Nnt, Qmo.

*Caladenia suaveolens* (R. Br.) H.G. Reichb., Beitr. Syst. Pflanzenk. 67 (1871).

*Caladenia sulphurea* Cunn. in Field, Geogr. Mem. N.S.W. 361 (1825); *Leptoceras sulphureum* (Cunn.) Lindley, Gen. sp. orchid. pl. 416 (1840). Type: 'Sandy Forest near Bathurst', Oct., A. Cunningham 94, 95 (holo K!, iso BM!). Notes: From Cunningham's notes it would appear that the description applied to a single colony of yellow flowered plants, found amongst typical representatives of the species.

## MACDONALDIA

*Macdonaldia* Lindley = *Thelymitra*.

*M. antennifera* Lindley = *Thelymitra antennifera*.

*M. concolor* Lindley = *Thelymitra flexuosa*.

*M. cyanea* Lindley = *Thelymitra cyanea*.

*M. smithiana* Gunn ex Lindley = *Thelymitra flexuosa*.

*M. spiralis* Lindley = *Thelymitra spiralis*.

*M. variegata* Lindley = *Thelymitra variegata*.

*M. venosa* (R. Br.) Lindley = *Thelymitra venosa*.

## MACROSTYLIS

*Macrostylis* Breda = *Corymborkis*.

*M. disticha* Breda = *Corymborkis veratrifolia*.

## MALAXIS

**Malaxis** Solander ex Sw., Prodr. 8: 119 (1788). Type species: *Malaxis spicata* Sw.

*Microstylis* (Nuttall) Eaton, Manual Bot. (ed. 3): 115, 347, 353 (1822) (nom. et orth. cons.). Type species: *Microstylis ophioglossoides* (Willd.) Eaton, nom. illeg. (*Malaxis ophioglossoides* Willd., nom. illeg. *M. unifolius* A. Michaux, *Microstylis unifolius* (A. Machaux) N.L. Britton, Stern et Poggendorf).

*Dienia* Lindley in Edwards's, Bot. Reg. 10: sub t. 825 (1824). Type species: *Dienia congesta* Lindley.

*Gastroglossis* Blume, Bijdr. 6: t. 2; 8: 397 (1825). Type species: *Gastroglossis montana* Blume.

*Anaphora* Gagnep., Bull. Mus. Hist. Nat. (Paris) (ser. 2) 4: 592 (1932). Type species: *Anaphora lipariooides* Gagnep.

**M. acuminata** D. Don, Prodr. fl. Nepal. 29 (1825). Type: 'Habitat in Gosaingthan Nepalensium', N. Wallich 1940 (holo K-WALL!, iso K-L!). Notes: This species was first reported from Australia by Hill & Blaxell (1985). For the purpose of this paper I have followed the work of Seidenfaden (1978b) for synonyms of this species. Dist: Ddg; ID, MY, TH, VN, BU, IN, NP.

*Microstylis wallichii* Lindley, Wall. Cat. no. 1938 (1828), nom. nud.; Gen. sp. orchid. pl. 20 (1830); *Malaxis wallichii* (Lindley) Deb, Bull. Bot. Surv. Ind. 3: 128 (1962). Type: 'Hab. in Napalia et Sillet, Indiae Orientalis', N. Wallich 1938 (holo K-L!, iso K-WALL!).

*Microstylis biloba* Lindley, Wall. Cat. no. 1940/1 (1828), nom. nud.; Gen. sp. orchid. pl. 20 (1830); *Microstylis wallichii* Lindley var. *biloba* (Lindley) J.D. Hook., Fl. Brit. Ind. 5: 686 (1890); *Malaxis biloba* (Lindley) Ames, Orchidaceae 2: 112 (1908); *Malaxis acuminata* D. Don var. *biloba* (Lindley) Ames, Bur. Sci. Publ. 18: 302 (1925); *Malaxis acuminata* D. Don forma *biloba* (Lindley) Tuyama in Hara, Fl. E. Him., Orchid. 443 (1966). Type: 'Hab. in Napalia et Ava, Indiae Orientalis', N. Wallich 1940 (holo K-L!, iso K-WALL!).

*Microstylis purpurea* auct. non Lindley, Gen. sp. orchid. pl. 20 (1930); H.G. Reichb., Bonplandia 5: 58 (1857).

*Denia carinata* H.G. Reichb., Bonplandia 3: 223 (1855); *Microstylis carinata* (H.G. Reichb.) H.G. Reichb. in Walp., Ann. bot. syst. 6: 207 (1861); *Malaxis carinata* (H.G. Reichb.) Kuntze, Revis. gen. pl. 2: 673 (1891). Type: 'Philippines', Cuming 2144 (holo W!).

*Microstylis wallichii* Lindley var. *omphalooides* Parish ex Ridley, J. Proc. Linn. Soc., Bot. 24: 338 (1888). Type: 'Moulmein', Parish s.n. (holo not found).

*Microstylis pierrei* Finet, Bull. Soc. Bot. France 54: 534-5 (1907); *Malaxis pierrei* (Finet) Tang et Wang, Act. Phytotax. Peking 1(1): 74 (1951). Types: 'Java', Zollinger 2536 (syn P); 'Indo-Chine-Cochinchine, Cai-cong', A Regnier 360 (syn P); 'Monts Dinh', Sep. 1867; 28 Apr. 1866, Pierre s.n. (syn P); 'Cambodge: monts Knang-Krepeuh', May 1870, Pierre s.n. (syn P).

*Microstylis trigonocardia* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 4: 62 (1919). Type: 'China: Szemao, Yunnan, 4,000 ft.', A. Henry s.n. (holo B†).

*Microstylis siamensis* Rolfe ex Downie, Kew Bull. 368-9 (1925); *Malaxis siamensis* (Rolfe ex Downie) Seidenf. et Smitin., Orch. Thail. 2(1): 150 (1959). Type: 'Doi Seitep, 720 m', Kerr 100 (holo K!).

non *Microstylis wallichii* Lindley var. *biloba* King et Pantl., Ann. Roy. Bot. Gards. Calc. 8: 16, t. 19 (1898).

non *Microstylis acuminata* Ridley, Trans. Linn. Soc. London 9: 159 (1916) = *Malaxis ridleyana*.

non *Malaxis biloba* Seidenf. et Smitin., Orch. Thail. 2(1): f. 567 (1959) = *Malaxis calophylla*.

*M. acuminata* D. Don var. *biloba* (Lindley) Ames = *Malaxis acuminata*.

- M. acuminata* D. Don forma *biloba* (Lindley) Tuyama = *Malaxis acuminata*.  
*M. biloba* (Lindley) Ames = *Malaxis acuminata*.  
*M. carinata* (H.G. Reichb.) Kuntze = *Malaxis acuminata*.  
*M. carnosula* (Rolle ex Downie) Seidenf. et Smitin. = *Malaxis latifolia*.  
*M. cernua* Willd. = *Geodorum densiflorum*.  
*M. congesta* (Lindley) Deb = *Malaxis latifolia*.  
*M. curranii* Ames = *Malaxis latifolia*.  
***M. fimbriata*** Lavarack, Austrobaileya 1(4): 383-4, f. 23b (1981). Type: cult. ex 'Cook district: Leo Creek, Cape York Peninsula', Feb. 1977, P.S. Lavarack 1768 (holo BRI!). Dist: Qco.  
*M. kizanensis* (Masamune) Hatsusima = *Malaxis latifolia*.  
***M. latifolia*** Smith in Rees, Cyclop. 22: sub *Malaxis* n. 3 (1812). Type: 'Upper Nepal', 1806, *Buchanan in herb.* J.E. Smith 1396.3 (holo LINN!). Notes: I have studied a number of the types and agree with Seidenfaden (1978b) about their placement as synonyms of this species. Dist: Qkn, Qco; PG, NC, ID, MY, TH, CN, JP, BU, IN, NP.  
    *Microstylis latifolia* (Smith) J.J. Smith, Bull. Inst. Bot. Buitenzorg (6): 248, f. 185 (1905).  
    *Dienia congesta* Lindley in Edwards's, Bot. Reg. 10, sub t. 825 (1824); *Microstylis congesta* (Lindley) H.G. Reichb. in Walp., Ann. bot. syst. 6: 206 (1861); *Malaxis congesta* (Lindley) Deb, Bull. Bot. Surv. India 3: 128 (1961). Type: 'Nepalia, Narainhetty', 1821, N. Wallich 1936 (holo K-L!).  
    *Gastroglossis montana* Blume, Bijdr. 6: t. 2; 9. 397 (1825). Type: Java, C. Blume s.n. (holo L!).  
    *Neottia plantaginea* D. Don, Prodr. fl. Nepal 27 (1825); *Spiranthes plantaginea* (D. Don) Spreng., Syst. 3: 708 (1827). Type: 'Hab. in Gosaingthan Nepalensium', N. Wallich s.n. (holo not found).  
    *Dienia fusca* Lindley, Gen. sp. orchid. pl. 22 (1830); *Microstylis fusca* (Lindley) H.G. Reichb. in Walp., Ann. bot. syst. 6: 207 (1861); *Microstylis congesta* (Lindley) H.G. Reichb. var. *fusca* (Lindley) Ridley, J. Proc. Linn. Soc., Bot. 24: 335 (1888); *Microstylis latifolia* (Smith) J.J. Smith var. *fusca* (Lindley) J.J. Smith, Bull. Inst. Bot. Buitenzorg (6): 249 (1905); *Microstylis latifolia* (Smith) J.J. Smith var. *fusca* (Lindley) Ames, Phil. J. Sci. 6: 44 (1911), nom. superfl. Type: 'Ceylon', 1829, MacRae 7 (holo K-L!).  
    *Malaxis plicata* Roxb., Fl. Indica 3: 456 (1832). Type: cult. ex 'Sumatra', Roxburgh s.n. (not found).  
    *Microstylis rheedii* auct. non H.G. Reichb., Bonplandia 5: 58 (1857), non Lindley.  
    *Microstylis trilobulata* Kurz, Andaman Rep., App. B: 19 (1870). Type: (not found).  
    *Microstylis bernaysii* F. Muell., Fragm. 11: 21 (1878); *Liparis bernaysii* (F. Muell.) Bailey, Syn. Queensl. fl. 508 (1883). Type: 'In montibus pone Trinity-Bay ad truncos arborem emortuos', 1878, F.M. Bailey s.n. (holo MEL!).  
    *Malaxis curranii* Ames, Phil. J. Sci. 6: 44 (1911). Type: Philippines, Luzon, Curran 12721 (holo AMES).  
    *Microstylis carnosula* Rolfe ex Downie, Kew Bull. 368 (1925); *Malaxis carnosula* (Rolfe ex Downie) Seidenf. et Smitin., Orch. Thail. 2 (1): 146 (1959). Type: Thailand, Doi Suthep, Kerr 278 (holo K).  
    *Liparis krempfii* Gagnep., Bull. Soc. Bot. France 76: 514 (1929). Type: Vietnam, Tonhasui, Krempf 1570 (holo P).  
    *Liparis turfosa* Gagnep., Bull. Soc. Bot. France 76: 515 (1929). Type: Vietnam, Nhatrang, Poilane 6822 (holo P).  
    *Anaphora liparioides* Gagnep., Bull. Mus. Hist. Nat. (Paris) 2(ser. 4): 592 (1929). Type: Vietnam, Tourane, Poilane 7941 (holo P).  
    *Microstylis finetii* Gagnep., Bull. Soc. Bot. France 79: 167 (1932). Type: (holo P).  
    *Microstylis kizanensis* Masamune, Ann. Rep. Kaihoku Bot. Gard. 3: 75 (1933); *Malaxis kizanensis* (Masamune) Hatsusima, Fl. Ryukyus 863 (1971). Type: (not found).  
    *Microstylis ishigakensis* Ohwi, J. Jap. Bot. 13: 439, f. 1 (1937). Type: Ryuku, Ishigaki, Koidzuma s.n. (holo KYO).  
    *Microstylis dalatensis* Guill., Bull. Mus. Hist. Nat. (Paris) (ser. 2) 27, 5: 397 (1955). Type: Vietnam, Dalat, Grillet 229 (holo P).  
    non *Malaxis latifolia* Blume, Bijdr. 393 (1825) = *Liparis latifolia* (Blume) Lindley.  
    non *Gastroglossis montana* H.G. Reichb., Xenia Orchid. 2: 96 (1874) = *Pholidota nervosa*.  
    non *Malaxis carnosula* Cumberlege, 161, f. 19 (1963) = *Malaxis chamaeorchis*.  
***M. lawleri*** Lavarack et B. Gray, Orchadian 8(1): 6, f. (1984). Type: 'Cook District, near Rossville, 30 km south of Cooktown', Jun. 1984, B. Gray 3378 (holo QRS!). Dist: Qco.

**M. marsupichila** Upton, Orchadian 5(3): 32, f. (1976). Type: cult. Sydney, 16 May 1970, 'McIlwraith Range, North Queensland', Apr. 1969, J. Walker s.n. (holo NSW!). Dist: Qco, Ddg; SB.

**M. palmicola** (F. Muell.) F. Muell. = Oberonia titania.

**M. pierrei** (Finet) Tang et Wang = Malaxis acuminata.

**M. plicata** Roxb. = Malaxis latifolia.

**M. siamensis** (Rolfe ex Downie) Seidenf. et Smitin. = Malaxis acuminata.

**M. subulata** Labill. = Cryptostylis subulata.

**M. wallichii** (Lindley) Deb = Malaxis acuminata.

**M. xanthochila** (Schltr.) Ames et Schweinf. in Ames, Orchidaceae 5: 67 (1915). Dist: Qco; PG, ID.

*Microstylis xanthochila* Schltr. in K. Schum. et Laut., Fl. Schutzgeb. Sudsee, Nachtrage 102 (1905). Type: 'Kaiser-Wilhelms-Land: In humus in the forest near Erimahafen, alt. c. 10 m', Oct. 1901, R. Schlechter 13678 (holo B†).

*Microstylis sordida* J.J. Smith, Bull. Dept. Agric. Ind. Neerl. 19: 30 (1908). Type: 'An der Noordrivier sudlich des Geluksheuveel', Versteeg 1333 (holo L?).

## MESODACTYLIS

**Mesodactylis** Wallich = Apostasia.

**M. deflexa** Wallich = Apostasia wallichii.

## MICROPERA

**Micropera** Lindley in Edwards's, Bot. Reg. 18: t. 1522 (1832). Type species: *Aerides pallida* Roxb.

*Camarotis* Lindley, Gen. sp. orchid. pl. 219 (1833). Type species: *Camarotis purpurea* Lindley. Notes: The name *Camarotis* has widely been used for plants belonging to the genus *Micropera* Lindley. However, since the name *Micropera* antedates that of *Camarotis* by approximately a year, then it is the correct name to use for these plants (Garay, 1972).

**M. fasciculata** (Lindley) Garay, Bot. Mus. Leafl. 23 (4): 186 (1972). Dist: Qkn, Qco; PG, ID.

*Saccolabium fasciculatum* Lindley, London J. Bot. 2: 238 (1843). Type: 'New Guinea', Hind s.n. (lectotype flowers in a packet K-L! here designated). Notes: The original description was based on the flowers of a sarcanthine orchid and the inflorescence of what appears to be a *Dendrobium* sp. both on the same sheet. Garay (1972) made no mention of this nor did he choose a lectotype from this mixed collection to stabilise the application of the name.

*Cleisostoma keffordii* Bailey, Rep. Queensland Accli. Soc. 9 (1884); *Camarotis keffordii* (Bailey) J.J. Smith, Natuurk. Tijdschr. Ned.-Indie 72: 97 (1913). Type: 'Johnstone River', W.R. Keffordii s.n. (holo BRI!).

*Saccolabium coplandii* Bailey, Queensland Agric. J. 19: 274 (1907). Type: 'Ambasi, Brit. New Guinea', Copland King 2 (holo BRI!).

*Sarcanthus papuanus* J.J. Smith, Bull. Dep. Agric. Indes Neerl. 39: 19-20 (1910). Type: 'An dem Noord-Fluss, auf Baumen in Sumpfen', von Romer 200 (holo ?BO).

## MICROSTYLYS

**Microstylis** (Nuttall) Eaton = Malaxis.

**M. amplexicaulis** Bailey = Acianthus amplexicaulis.

**M. bernaysii** F. Muell = Malaxis latifolia.

**M. biloba** Lindley = Malaxis acuminata.

**M. carinata** (H.G. Reichb.) H.G. Reichb. = Malaxis acuminata.

**M. carnosula** Rolfe ex Downie = Malaxis latifolia.

**M. congesta** (Lindley) H.G. Reichb. = Malaxis latifolia.

**M. congesta** (Lindley) H.G. Reichb. var. *fusca* (Lindley) Ridley = Malaxis latifolia.

**M. finetii** Gagnep. = Malaxis latifolia.

**M. fusca** (Lindley) H.G. Reichb. = Malaxis latifolia.

**M. kizanensis** Masamune = Malaxis latifolia.

**M. ishigakensis** Ohwi = Malaxis latifolia.

**M. dalatensis** Guill. = Malaxis latifolia.

**M. latifolia** (Smith) J.J. Smith = Malaxis latifolia.

**M. latifolia** (Smith) J.J. Smith var. *fusca* (Lindley) J.J. Smith = Malaxis latifolia.

**M. latifolia** (Smith) J.J. Smith var. *fusca* (Lindley) Ames = Malaxis latifolia.

## MICROSTYLIS

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- M. pierrei* Finet = *Malaxis acuminata*.  
*M. purpurea* auct. non Lindley = *Malaxis acuminata*.  
*M. rheedii* auct. non H.G. Reichb. = *Malaxis latifolia*.  
*M. siamensis* Rolfe ex Downie = *Malaxis acuminata*.  
*M. sordida* J.J. Smith = *Malaxis xanthochila*.  
*M. trigonocardia* Schltr. = *Malaxis acuminata*.  
*M. trilobulata* Kurz = *Malaxis latifolia*.  
*M. wallichii* Lindley = *Malaxis acuminata*.  
*M. wallichii* Lindley var. *biloba* (Lindley) J.D. Hook. = *Malaxis acuminata*.  
*M. wallichii* Lindley var. *omphalooides* Parish ex Ridley = *Malaxis acuminata*.  
*M. xanthochila* Schltr. = *Malaxis xanthochila*.

## MICROTIS

*Microtis* R. Br., Prod. 320 (1810). Type species: *Microtis rara* R. Br.

*Goadbyella* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 51: 294 (1927). Type: *Goadbyella gracilis* R. Rogers.

*M. aemula* Schltr. = *Microtis parviflora*.

***M. alba*** R. Br., Prod. 321 (1810). Type: 'King George Sound; Prope Oyster Harbour', Dec. 1801, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! K!). Dist: Wda, Wey.

*Goadbyella gracilis* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 51: 294 (1927). Type: 'Western Australia, Pindalup', Nov. 1926, P.J. Barwise s.n. (holo AD!).

***M. arenaria*** Lindley, Gen. sp. orchid. pl. 306 (1840). Type: 'Tasmania, Sandy hills, Circular Head', Jan. 1837, R. Gunn 916 (holo K-L!, iso AD! K! P! W!). Dist: Vwp, Vgi, Tas.

*Microtis pulchella* Lindley var. *vivax* Lindley, Gen. sp. orchid. pl. 395 (1840), pro parte max. Type: 'In solo arenaceo argillaceo, [Circular Head, Tasmania]', Nov. 1836, R. Gunn 915 (lectotype specimens marked (4a) K-L! here designated, isolectotype E! Fl! K! P!); Syntypes: 'Tasmania, in locis humidis', Dec. 1836, R. Gunn 918 (Fl! K! W!), syn. nov.

*Microtis biloba* Nicholls, Victorian Naturalist 66: 93, f. J-L (1949). Type: 'Moe, Victoria', 1946, N. Holmes s.n. (holo MEL), syn. nov. Notes: The illustration of this taxon by Nicholls is an excellent representation of Lindley's *M. arenaria*.

***M. atrata*** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. liv (1840). Type: 'Swan River', 1838, J. Drummond s.n. (holo K-L!, iso BM! K!). Dist: Wda, Wey, Sls, Sse, Vwp, Vgi, Tas.

*Microtis minutiflora* F. Muell., Fragn. 1: 90 (1859). Type: 'In planitibus uliginosis apud montem Abrupt' [Near Mt. Abrupt, Victoria], F. Mueller s.n. (lectotype MEL!, isolectotype K-L! K!); Syntype: 'prope flumen Glenelg et in terra Gipps Land juxta paludes Moe Swamp', F. Mueller s.n. (MEL!).

*Microtis atrata* Lindley var. *viridula* H.G. Reichb., Beitr. Syst. Pflanzenk. 62 (1871). Type: 'Swan River', Preiss 2403 (lecto W!); Syntype: 'Austr. felix', F. Mueller s.n. (W!).

*M. atrata* Lindley var. *viridula* H.G. Reichb. = *Microtis atrata*.

*M. banksii* J.D. Hook. = *Microtis unifolia*.

*M. benthamiana* H.G. Reichb. = *Microtis parviflora*.

*M. biloba* Nicholls = *Microtis arenaria*.

*M. bipulvinaris* Nicholls = *Microtis parviflora*.

***M. brownii*** H.G. Reichb., Beitr. Syst. Pflanzenk. 24 (1871). Type: King George Sound, Western Australia, Dec. 1801, R. Brown s.n. (lecto K!, isolectotype E!). Notes: The affinities of this taxon appear to be with *M. alba* rather than the eastern Australian species *M. rara* with which it has erroneously been placed (Bates, 1984). A distinct taxon that can be readily distinguished from other taxa from dried specimens as well as living plants. It can be distinguished from *M. oblonga* by virtue of the disproportionately large flower compared to the size of the ovary, the porrect rather than erect dorsal sepal and the prominent large callus at the base of widely spreading apical lobes of the labellum. Dist: Wda, Wey.

*Microtis truncata* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 44: 326 (1920). Type: 'Diamond Tree School, near Jarnadup', Dec. 1918, I. Knox-Peden s.n. (lectotype AD! here designated); Syntypes: 'Greenbushes', 8 Dec. 1917, R. Pulleine s.n. (AD!); 'Albany', 4 Dec. 1919, A. Syme s.n. (AD!).

***M. densiflora*** (Benth.) M. Clements, stat. nov.

*Microtis parviflora* R. Br. var. *densiflora* Benth., Fl. Austral. 6: 348 (1873). Type: 'Western Australia', 1849, J. Drummond 117 (holo K!, iso MEL). Notes: A distinctive species that appears closely allied to *M. media*

and *M. alba*. It is distinguished from both of these by the dense inflorescence, small flowers in which the labellum is narrower at the apex and has granular margins, having the appearance of pollen grains. Probably one of the species that inhabits swampy ground, appearing in flower only the year following a burn, but then usually in great numbers. Dist: Wda?

*M. formosana* Schltr. in Engl., Bot. Jahrb. Syst. 45: 382 (1911), nom.

*M. frutetorum* Schldl. = *Microtis unifolia*.

***M. globula*** R. Bates, J. Adelaide Bot. Gard. 7 (1): 60 (1984). Type: '15 km west of Walpole (Western Australia)', 22 Dec. 1982, R. Bates 2922 (holo AD!, iso PERTH). Dist: Wda.

*M. gymnadenioides* Diels = *Microtis pulchella*.

*M. holmesii* Nicholls = *Microtis parviflora*.

*M. javanica* H.G. Reichb. = *Microtis parviflora*.

*M. longifolia* Colenso = *Microtis unifolia*.

*M. magnadenia* R. Rogers = *Microtis rara*.

***M. media*** R. Br., Prod. 321 (1810). Type: 'King George Sound, Western Australia', Dec. 1801, R. Brown s.n. (lecto BM!, isolectotype BM!). Dist: Wda.

*M. minutiflora* F. Muell. = *Microtis atrata*.

***M. oblonga*** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 47: 339 (1923). Type: 'Victoria, Ringwood', 19 Nov. 1920, A.B. Braine ex R.S. Rogers 2206 (lecto AD!, isolectotype AD!); Syntypes: 'Cravensville via Tallangatta, Victoria', 25 Dec. 1919, A.B. Braine s.n. (AD!); 'Healesville', 1 Jan. 1922, E. Coleman s.n. (AD!); 'Hall's Gap, Grampians', Dec. 1920, C.W. D'Alton s.n. (AD!); 'Myponga, South Australia', R.S. Rogers s.n. (CANB!). Notes: This species was reduced to a synonym of *M. rara* by Bates (1984) but the two species are quite distinct morphologically and in habitat preference. *M. oblonga* has flowers with a labellum that is pressed closely to and is approximately equal to the length of the ovary. In comparison, *M. rara* has a labellum that is held away from the ovary. The ovary also exceeds the length of the labellum. In addition, *M. oblonga* is an inhabitant of damp or swampy ground while *M. rara* primarily inhabits forests. Dist: Sl, Sse, Vwp, Vwh, Vgi, Veh, Tas, Nst, Can.

*Microtis porrifolia* sensu Fitzg., Austral. orch. 2(1): [t. 10] (1884), non (Sw.) R. Br. ex Spreng. (1826).

***M. orbicularis*** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 31: 63 (1907). Type: 'South Australia, Myponga, 2 Nov. 1906, R.S. Rogers 2213 (holo AD!, iso BM! K!). Dist: Wda, Wey, Wav, Sl, Sse, Vwp.

*M. papillosa* Colenso = *Microtis unifolia*.

***M. parviflora*** R. Br., Prod. 320 (1810). Type: 'Tropical Australia; Port II [Port Clinton, Queensland]', 22 Aug. 1802, R. Brown s.n. (lecto BM!, isolectotype P!). Dist: Wav, Wro, Wey, Sl, Sse, Vwp, Vwh, Vgi, Veh, Tas, Nsc, Nst, Can, Nss, Nec, Nct, Ncs, Nnc, Nnt, Nns, Qmo, Qdd, Qpc, Qwb, Qks, Qkn, Qco, Lord Howe Island; NZ, NC, VU, ID.

*Microtis javanica* H.G. Reichb., Bonplandia 5: 36 (1857). Type: 'Tennger, Java, In Gramminosis montis Jdjn 6000 feet', 28 Apr. 1845, in herb H.G. Reichenbach 859 (holo W!, iso P!), syn. nov.

*Microtis benthamiana* H.G. Reichb., Beitr. Syst. Pflanzenk. 24 (1871). Type: 'Sydney, Port Jackson', Oct. 1802, R. Brown s.n. (holo BM!, iso MEL! P!).

*Microtis porrifolia* (Sw.) R. Br. ex Spreng. var. *parviflora* (R. Br.) Rodway, Tasm. Fl. 159 (1903).

*Microtis aemula* Schltr., Bot. Jahrb. Syst. 39: 37 (1906). Type: New Caledonia, Yaouke, 20 Sep. 1902, R. Schlechter 14724 (holo B†, iso BM! BRI! K! M! P! PR, S), syn. nov.

*Microtis bipulvinaris* Nicholls, Victorian Naturalist 66: 92-4, f. A-F (1949). Type: 'Quail Island (NW corner Western Port Bay, Victoria)', Sep. 1943, P.F. Morris s.n. (holo MEL).

*Microtis holmesii* Nicholls, Victorian Naturalist 66: 93, f. G-I (1949). Type: 'Moe, Victoria', 1946, N. Holmes s.n. (holo MEL).

*M. parviflora* R. Br. var. *densiflora* Benth. = *Microtis densiflora*.

*M. porrifolia* (Sw.) R. Br. ex Spreng. = *Microtis unifolia*.

*M. porrifolia* sensu Fitzg. = *Microtis oblonga*.

*M. porrifolia* (Sw.) R. Br. ex Spreng. var. *parviflora* (R. Br.) Rodway = *Microtis parviflora*.

***M. pulchella*** R. Br., Prod. 321 (1810). Type: 'In paludosus ad Portum Georges III', Dec. 1801, R. Brown s.n. (lectotype specimen (a) BM!, isolectotype E! K!). Dist: Wda.

*Microtis pulchella* Lindley var. *vivax* Lindley, Gen. sp. orchid. pl. 395 (1840), pro parte min. Type: 'N Hollandiae ora meridionali', R. Brown s.n. (lectotype BM! here designated); Syntype: 'in sinu Regis Georgii', F. Bauer s.n. (illust. sheet marked (5) K-L!)

*Microtis gymnadenioides* Diels, J. Proc. Mueller Bot. Soc. Western Australia 1(11): 79 (1903). Types: 'On sandy flats north of Albany', Nov. 1901, L. Diels s.n. (holo K!).

*M. pulchella* sensu Lindley = *Microtis unifolia*.

*M. pulchella* Lindley var. *vivax* Lindley, pro parte min. = *Microtis pulchella*.

*M. pulchella* Lindley var. *vivax* Lindley, pro parte max. = *Microtis arenaria*.

**M. rara** R. Br., Prod. 321 (1810). Type: 'Port Jackson', 1804, R. Brown s.n. (lecto BM!, isolectotype AD! K!). Dist: Nsc, Ncc, Nnc, Qmo.

*Microtis unifolia* (G. Forst.) H.G. Reichb. var. *rara* (R. Br.) H.G. Reichb., Beitr. Syst. Pflanzenk. 62 (1871).

*Microtis magnadenia* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 54: 44 (1930). Type: 'Near Lake Wonboyn near Princes Highway', 28 Nov. 1919, A.S. Dwywer s.n. (holo AD!). Dist: Nsc, Ncc, Nnc.

*M. truncata* R. Rogers = *Microtis brownii*.

**M. unifolia** (G. Forst.) H.G. Reichb., Beitr. Syst. Pflanzenk. 62 (1871). Dist: Wir, Wda, Wav, Wro, Wey, Wco, Sep, Sfr, Syp, Sln, Sls, Ski, Smb, Sse, Vma, Vnp, Vwh, Vwp, Vgi, Veh, Tas, Nsc, Nst, Can, Nss, Nsp, Ncc, Net, Ncs, Nnc, Nnt, Nns, Nnp, Qmo, Qdd, Qwb, Qbn, Qpc, Qle, Qks, Qkn, Qco; NZ, ID, PH, TW, CN, JP.

*Ophrys unifolia* G. Forst., Fl. ins. austr. 59 (1786). Type: New Zealand, G. Forster 189 (lectotype specimen (1) BM! here designated, isolectotype GEOT; icon BM!). Notes: The specimen appears to be the one used for the illustration of the species which is also housed at the BM.

*Epipactis porrifolia* Sw., Kongl. Vetensk. Acad. Nya Handl. 21: 233 (1800); *Microtis porrifolia* (Sw.) R. Br. ex Spreng., Syst. Veget. 3: 713 (1826). Type: New Zealand, G. Forster 189 (lectotype specimen (1) BM! here designated, isolectotype GEOT).

*Microtis banksii* J.D. Hook., Bot. Mag. 62: t. 3377 (1835). Type: New Zealand, 1834, A. Cunningham 311 (holo K!, iso BM!).

*Microtis pulchella* sensu Lindley, Gen. sp. orchid. pl. 395 (1840), non R. Br. (1810).

*Microtis frutetorum* Schldl., Linnaea 20: 568 (1847). Type: South Australia, pine forest by Gawler Town, Oct. 1846, O. Behr s.n. (holo not found; lectotype specimen (3c) K-L! here designated, isolectotype FI! MEL).

*Microtis viridis* F. Muell., Fragm. 5: 97 (1866), nom. illeg.

*Microtis longifolia* Colenso, Trans. & Proc. New Zealand Inst. 17: 247 (1885). Type: 'Skirts of woods near Norsewood, County of Waipa', Feb.-Mar. 1883-4, W. Colenso s.n. (holo K!).

*Microtis papillosa* Colenso, Trans. & Proc. New Zealand Inst. 18: 269 (1886). Type: Kaipara Heads, North Island, New Zealand, Oct. 1884, C.P. Winklemann s.n. (holo K?).

*M. unifolia* (G. Forst.) H.G. Reichb. var. *rara* (R. Br.) H.G. Reichb. = *Microtis rara*.

*M. viridis* F. Muell. = *Microtis unifolia*.

## MOBILABIUM

*Mobilabium* Rupp, North Queensland Naturalist 13(78): 2-4, f. (1946). Type species: *Mobilabium hamatum* Rupp

**M. hamatum** Rupp, North Queensland Naturalist 13(78): 2 (1946). Type: cult. Ipswich, South Queensland, T.E. Hunt ex 'Atherton Tablelands area', Aug. 1945, T.E. Hunt s.n. (holo NSW!). Dist: Qkn, Qco.

## MONADENIA

*Monadenia* Lindley, Gen. sp. orchid. pl. 356 (1838). Type species: *non designatus*.

*M. australiensis* Rupp = *Monadenia bracteata*.

**M. bracteata** (Sw.) Dur. et Schinz, Conspl. Fl. Afr. 5: 111 (1894). Dist: Wda, Wey, Sls (intentional introduction); ZA.

*Disa bracteata* Sw., Kongl. Vetensk. Acad. Nya Handl. 21: 211 (1800). Type: South Africa, Cape B. Spei, Ecklon s.n. (holo W!).

*Monadenia micrantha* Lindley, Gen. sp. orchid. pl. 356 (1838). Types: South Africa, ad Cape. B. Spei, Thom, Burchell 6139 (syn K-L!); 'ad Nieuwekloof, et Ruigtevalei', Drege s.n. (syn K-L!).

*Monadenia australiensis* Rupp, Austral. Orchid Rev. 11(3): 70 (1946) Type: 'Western Australia, Young's Siding', Dec. 1945, D. Sutherland ex C.A. Gardner s.n. (holo NSW!).

*M. micrantha* Lindley = *Monadenia bracteata*.

## MONANTHOS

*Monanthos* (Schltr.) Brieg. = *Dendrobium*.

*M. malbrownii* (Dockr.) Rauschert = *Dendrobium malbrownii*.

## NEMATOCERAS

*Nematoceras* J.D. Hook. = *Corybas*.

*N. macranthus* J.D. Hook. = *Corybas macranthus*.

## NEOTTIA

*Neottia* Guettard, Hist. Acad. Roy. Sci. Mem. Math. Phys. (Paris, 4) (1750): 374 (1754) (nom. cons.). Type species: *Ophrys nidus-avis* L.

*N. australis* R. Br. = *Spiranthes sinensis*.

*N. grandis* Blume = *Goodyera grandis*.

*N. plantaginea* D. Don = *Malaxis latifolia*.

*N. rubicunda* Blume = *Goodyera grandis*.

*N. sinensis* Pers. = *Spiranthes sinensis*.

*N. viridiflora* Blume = *Goodyera viridiflora*.

## NERVILIA

*Nervilia* Commerson ex Gaud. in Freycinet, Voy. Uranie 421, t. 35 (1829) (nom. cons.). Type species: *Nervilia aragoana* Gaud. Notes: For this genus I have followed the work of Seidenfaden (1978b).

*Cordyla* Blume, Bijdr. 6: t. 1; 8: 416 (1825). Type species: *non designatus*.

*Apostellis* A. Rich., Mem. Soc. Nat. Hist. Paris 4: 36 (1828). Type species: *Apostellis ambigua* A. Rich., nom. illeg. (*Arethusa simplex* L.) = *Stellorkis* Thouars (1809).

*Rophostemon* Endl., Gen. Pl. 216 (1837) (orth. var.) = *Roptrostemon* Blume (1828).

*Bolborchis* Zoll. et Moritzi in Moritzi, Syst. Verzeichniss Zollinger 89 (1846). Type species: *Bolborchis crociformis* Zoll. et Moritzi.

*N. aragoana* Gaud. in Freycinet, Voy. Uranie 422, t. 35 (1829). Type: Guam, Gaudichaud s.n. (holo P!). Dist: Qco, Ddg; NC, PG, ID, GU, MY, VN, CN, TH, BU, IN.

*Pogonia flabelliformis* Lindley in Buch., Wall. Cat. n. 7400 (1832), nom. nud.; *Epipactis flabelliformis* Ham. in Buch., Wall. Cat. n. 7400A (1832), nom. nud.; *Apostellis flabelliformis* (Lindley) Ridley, Fl. Malay Pen. 4: 203 (1924); *Nervilia flabelliformis* (Lindley) Tang & Wang, Act. Phytotax. Peking 1 (1): 68 (1951). Type: Nepal, Sukanagar, 13 Jun. 1810, Hamilton 1942 ex Wallich 7400A (holo K!, iso E!).

*Epipactis carinata* Roxb., Fl. Indica 3: 454 (1832); *Pogonia carinata* (Roxb.) Lindley, Gen. sp. orchid. pl. 414 (1840); *Nervilia carinata* (Roxb.) Schltr., Bot. Jahrb. Syst. 45: 404 (1911). Type: Bengal, 'Bengalia', presumably Serampore, Voigt s.n. (holo C).

*Pogonia nervilia* Blume, Mus. Bot. 1: 32 (1849). Type: 'Timor, Lesser Sunda Island', Zipp s.n. (holo L!).

*Pogonia gracilis* Blume, Coll. Orch. Arch. Ind. 155, t. 57 (1858). Type: Java, Waitz s.n. (holo L!).

*Pogonia scottii* H.G. Reichb., Flora 55(18): 276 (1872); *Nervilia scottii* (H.G. Reichb.) Schltr., Bot. Jahrb. Syst. 45: 404 (1911). Type: 'Darjeeling Himalaya', Scott s.n. (holo W).

*Nervilia yaeyamensis* Hayata, Icon. pl. formos. 2: 140 (1912). Type: 'Yaeyama', Jul. 1910, Ishigakshima s.n. (holo TAI?).

*Nervilia tibetensis* Rolfe, Notes Roy. Bot. Gard. Edinburgh 8: 128 (1913). Type: China, Yunnan, Chumutang, Salween River, Kingdon-Ward 151 (holo K).

*N. biflora* (Wight) Schltr. = *Nervilia plicata*.

*N. carinata* (Roxb.) Schltr. = *Nervilia aragoana*.

*N. crispata* (Blume) Schltr. ex Kraenzl. = *Nervilia crociformis*.

*N. crociformis* (Zoll. et Mor.) Seidenf., Dansk Bot. Arkiv 32(2): 151 (1978). Dist: Qco; PG, ID.

*Bolborchis crociformis* Zoll. et Mor. in Moritzi, Syst. Verz. Pl. Zoll. 89 (1846). Type: Java, Tjikoya, Zollinger 762 (holo & iso P!).

*Coelogyne ? javanica* Lindley, Fol. Orch. Coel. 17 (1854). Type: 'Java, near Tjikoya', 11 Oct. 1842, Zollinger s.n. (holo K!).

*Pogonia crispata* Blume, Mus. Bot. 1: 32 (1849); *Nervilia crispata* (Blume) Schltr. ex Kraenzl. in Schum. & Laut., Fl. Schutzgeb. Sudsee 240 (1901). Type: Java, Bantam, Hasselt s.n. (holo BO?).

*Nervilia fimbriata* Schltr. in Schum. & Laut., Fl. Schutzgeb. Sudsee, Nachtrage 82 (1905). Type: 'Kaiser-Wilhelmsland: Im humus der Walder bei Erimahafen, alt. c. 20 m', R. Schlechter 13795 (holo B†).

*N. dallachiana* (Benth.) Schltr. = *Nervilia plicata*.

*N. discolor* (Blume) Schltr. = *Nervilia plicata*.

*N. fimbriata* Schltr. = *Nervilia crociformis*.

*N. flabelliformis* (Lindley) Tang et Wang = *Nervilia aragoana*.

**N. holochila** (F. Muell.) Schltr., Bot. Jahrb. Syst. 39: 48 (1907). Dist: Qkn, Qco, Ddg.

*Pogonia holochila* F. Muell., Fragm. 5: 200 (1866). Type: 'Ad sinum Rockingham's Bay', J. Dallachy s.n. (holo MEL!, iso MO!).

*N. pachystomoides* (F. Muell.) Schltr. = *Didymoplexis pallens*

**N. plicata** (Andr.) Schltr., Bot. Jahrb. Syst. 45: 403 (1911). Dist: Qco, Ddg; PG, ID, MY, TH, PH, TW, HK, CN, JP.

*Arethusa plicata* Andr., Bot. repos. 5: t. 321 (1803); *Epipactis plicata* Roxb., Fl. Indica 3: 454 (1832); *Pogonia plicata* (Roxb.) Lindley, Gen. sp. orchid. pl. 415 (1840). Type: Deccan, Andrew's plate (icon K!) and drawing by Roxburgh 1647 (icon K!).

*Cordyla discolor* Blume, Bijdr. 417 (1825); *Roptrostemon discolor* (Blume) Blume, Fl. Javae Praef. 6 (1828); *Pogonia discolor* (Blume) Blume, Mus. Bot. 1: 32 (1849); *Nervilia discolor* (Blume) Schltr., Bot. Jahrb. Syst. 45: 403 (1911). Type: Java, Mt. Salak, C. Blume 652 (holo L!).

? *Pogonia biflora* Wight, Icon. Pl. Ind. Orient. 5(1): t. 1758 (1851); ? *Nervilia biflora* (Wight) Schltr., Bot. Jahrb. Syst. 45: 403 (1911). Type: Deccan, Wynad, Jerdon s.n. (not found).

*Pogonia dallachiana* Benth., Fl. Austral. 6: 310 (1873); *Nervilia dallachiana* (Benth.) Schltr., Bot. Jahrb. Syst. 39: 48 (1907). Type: Rockingham's Bay, J. Dallachy s.n. (holo MEL!).

*Pogonia velutina* Par. et H.G. Reichb., Trans. Linn. Soc. London 30: 142 (1874); *Nervilia velutina* (Par. et H.G. Reichb.) Schltr., Bot. Jahrb. Syst. 45: 403 (1911); *Apostellis velutina* (Par. et H.G. Reichb.) Ridley, Fl. Malay 4: 204 (1924). Types: Burma, Tenaserim, Parish 182 (syn K!); Burma, Tenaserim, Parish 322 (icon K).

*Pogonia pulchella* Par., Mason 186 (1883). Type: (not found).

*Pogonia pulchella* J.D. Hook., Bot. Mag. 41: t. 6851 (1885), nom. illeg. Type: cult. Kew ex Hongkong, Little Hongkong and Taitam Tuk, Ford s.n. (holo K!).

*Pogonia pudica* Ames, Orchidaceae 2: 44 (1908). Type: Philippines, Luzon, Panay and Mindanao, O. Ames (holo AMES).

*N. scottii* (H.G. Reichb.) Schltr. = *Nervilia aragoana*.

*N. tibetensis* Rolfe = *Nervilia aragoana*.

**N. uniflora** (F. Muell.) Schltr., Bot. Jahrb. Syst. 39: 48 (1907). Dist: Qkn, Qco, Ddg.

*Pogonia uniflora* F. Muell., Fragm. 5: 201 (1866). Type: 'Ad sinum Rockingham's Bay', J. Dallachy s.n. (holo MEL!).

*N. velutina* (Par. et H.G. Reichb.) Schltr. = *Nervilia plicata*.

*N. yaeyamensis* Hayata = *Nervilia aragoana*.

## NIEMEYERA

*Niemeyera* F. Muell. = *Apostasia*.

*N. stylidioides* F. Muell. = *Apostasia wallichii*.

## OBERONIA

*Oberonia* Lindley, Gen. sp. orchid. pl. 15 (1830). Type species: *Oberonia iridifolia* Lindley, nom. illeg. (*Malaxis ensiformis* Smith, *Oberonia ensiformis* (Smith) Lindley) (type cons.).

*Titania* Endl., Prod. Fl. Norfolk 31 (1833). Type species: *Titania miniata* Endl.

**O. attenuata** Dockr., North Queensland Naturalist 29(126): 4, f. (1960). Type: 'North Queensland, Mossman River', 12 Jun. 1960, A.W. Dockrill s.n. (holo BRI!). Notes: There is a need to establish if this species still exists as there are no recent authentic collections and no living material is known in cultivation. Therefore, it can be assumed the species is very rare. It is not unlike a number of others found in New Guinea so it is possible it might also occur in that country. Dist: Qco.

**O. carnosa** Lavarack, Austrobaileya 1: 72-4, f. 6 (1977). Type: 'Cook District: Tozer's Gap, Cape York Peninsula', Aug. 1975, P.S. Lavarack 991 (holo & iso BRI!). Dist: Qco.

**O. complanata** (Cunn.) M. Clements et D. Jones, comb. nov.

*Dendrobium complanatum* Cunn. in Edwards's, Bot. Reg. Misc. 34 (1839). Type: 'Moreton Bay', 1828, A. Cunningham s.n. (type not found); 'Shoalwater Bay Military Reserve, Creek below abandoned sawmill on CSIRO ISOPOD site, c. 3 km NE of Mt Parnassus', 8 Jul. 1977, J.R. Clarkson & T.D. Stanley 832 (neotype BRI! here designated). Notes: There is little doubt as to which species Cunningham was referring when he described the species. A note has been pencilled in the column of the Botanical Register at Kew,

by Joseph Hooker, suggesting the correct placement of the species was in the genus *Oberonia*. No type of *Dendrobium complanatum* has been found so a neotype has been selected from material in the Brisbane Herbarium. Dist: Nnc, Qmo, Qdd, Qwb, Qbn, Qpc, Qks, Qkn, Qco.

*Oberonia iridifolia* F. Muell., Fragm. 5: 96 (1855), non Lindley (1830); *Oberonia muelleriana* Schltr., Bot. Jahrb. Syst. 39: 61 (1907); *Oberonia fitzgeraldiana* Schltr., Bot. Jahrb. Syst. 58: 63 (1923), nom. Type: 'Ad flumen Brisbane River nota', Jul. 1855, F. Mueller s.n. (holo MEL!, iso K-L!), syn. nov.

*O. fitzgeraldiana* Schltr. = *Oberonia complanata*.

*O. iridifolia* F. Muell. = *Oberonia complanata*.

*O. micrantha* A. Rich. = *Rhynchophaeitia micrantha*.

*O. muelleriana* Schltr. = *Oberonia complanata*.

*O. neocaledonica* Schltr. = *Oberonia titanica*.

*O. palmicola* F. Muell. = *Oberonia titanica*.

*O. pusilla* Bailey = *Phreatia baileyanus*.

*O. titanica* Lindley, Fol. Orchid.: Oberonia 1(8) (1859). Type: Norfolk Island, F. Bauer s.n. (holo W!). Notes: The name *O. titanica* was published by Lindley because of his earlier use of the name *O. miniata* Lindley for a species from Hong Kong. Dist: Nnc, Qmo, Qwb, Qbn, Qpc, Qks, Qkn, Qco, Lord Howe Island, Norfolk Island; NC.

*Titania miniata* Endl., Prodr. Fl. Norfolk 31 (1833). Type: Norfolk Island, F. Bauer s.n. (holo W!).

*Oberonia palmicola* F. Muell., Fragm. 2: 24 (1860); *Malaxis palmicola* (F. Muell.) F. Muell., Fragm. 7: 30 (1869). Type: 'In truncis Corypharum ad flavum Hastings', H. Beckler s.n. (holo MEL!, iso K!).

*Oberonia neocaledonica* Schltr., Bot. Jahrb. Syst. 39: 61 (1906). New Caledonia, R. Schlechter 14766 (holo B†, iso K! P! Z!), syn. nov.

## OECEOCLADES

*Oeceoclades* Lindley in Edwards's, Bot. Reg. 1522 (1832). Type species: *Angraecum maculatum* Lindley.

*Eulophidium* Pfitzer, Entw. Nat. Anordn. Orch. 87 (1887). Type species: *Angraecum maculatum* Lindley.

*O. pulchra* (Thouars) Cribb et M. Clements, comb. nov.

*Limodorum pulchrum* Thouars, Orch. Iles Aust. Afr. t. 43-44 (1822); *Eulophia pulchra* (Thouars) Lindley, Gen. sp. orchid. pl. 182 (1833); *Graphorkis pulchra* (Thouars) Kuntze, Revis. gen. pl. 662 (1891); *Lissochilus pulcher* (Thouars) H. Perrier, Fl. Madag. Orch. 2: 41 (1941), non Schltr.; *Eulophidium pulchrum* (Thouars) Summerh., Bull. Bot. Jard. Bruxelles 27: 400 (1957). Type: 'Mauritius', De Petit Thouars s.n. (holo P!). Notes: The habit of the plant, in particular the elongated slender pseudobulbs extending well above the ground surface and features of the flower, are characteristic of species in the genus *Oeceoclades* rather than those of *Eulophia*. It therefore seems best to place this species in the genus *Oeceoclades* which is an earlier name for *Eulophidium* Pfitz. Dist: Qco; NC, PG, ID, LK, MU, MG.

*Eulophia macrostachys* Lindley, Gen. sp. orchid. pl. 183 (1833); *Graphorkis macrostachya* (Lindley) Kuntze, Revis. gen. pl. 66 (1891). Type: 'Ceylon', 1829, MacRae 27 (holo K-L!).

*Graphorkis blumeana* Kuntze, Revis. gen. pl. 663 (1891), nom.

*Eulophia emarginata* Blume, Orch. Archip. Ind. & Jap. 180 (1858). Type: (holo ?BO).

*Eulophia striata* Rolfe, J. Proc. Linn. Soc., Bot. 29: 53 (1891). Type: 'Madagascar; on the ground near Fort Dauphin', [Anon] 2545 (holo K).

*Eulophia papuana* Bailey, Queensland Agric. J.: 274 (1907), non (Ridley) J.J. Smith (1909). Type: 'Ambasi, Brit. New Guinea', 3 Oct. 1907, Copland King 3 (holo BRI!), syn. nov.

*Eulophia rouxii* Kraenzl. in Sar. & Rouxs, Nova Caled. 1: 82 (1914). Type: New Caledonia, Roux 816 (holo B†).

## ONYCHIUM

*Onychium* Blume = *Dendrobium*.

*O. affine* Decne = *Dendrobium affine*.

*O. crumenatum* (Sw.) Blume = *Dendrobium crumenatum*.

## OPHRYS

*Ophrys* L., Sp. pl. 945 (1753). Type species: *Ophrys insectifera* L.

*O. unifolia* G. Forst. = *Microritis unifolia*.

## ORCHIODES

*Orchiodes* Kuntze = *Goodyera*.

*O. cordatum* (Lindley) Kuntze = *Goodyera viridiflora*.

*O. grande* (Blume) Kuntze = *Goodyera grandis*.

*O. polygonoides* (F. Muell.) Kuntze = *Zeuxine polygonoides*.

*O. rubicunda* (Blume) Kuntze = *Goodyera grandis*.

*O. viridiflorum* (Blume) Kuntze = *Goodyera viridiflora*.

## ORCHIS

*Orchis* L., Sp. pl. 939 (1753). Type species: *Orchis militaris* L.

*O. triplicata* Willemet = *Calanthe triplicata*.

## ORNITHOCHILUS

*Ornithochilus* (Lindley) Wallich ex Benth. in Benth. et J.D. Hook. Gen. Pl. 3: 478, 581 (1883). Type species: *Aerides difforme* Wallich ex Lindley.

*O. hillii* (F. Muell.) Benth. = *Peristeranthus hillii*.

## ORTHOERAS

*Orthoceras* R. Br., Prod. 316 (1810). Type species: *Orthoceras strictum* R. Br. Notes: *Orthoceras* is principally an Australian genus and is currently being revised by Jones & Clements. Most of the types of the named taxa have been examined and preliminary taxonomic results of that study are presented here. The genus is here interpreted as consisting of two named species, viz. *O. novae-zealandiae* and *O. strictum*, with possibly several undescribed taxa.

*O. caput-serpentis* Colenso = *Orthoceras novae-zealandiae*.

***O. novae-zealandiae*** (A. Rich.) M. Clements, D. Jones et Molloy, comb. nov.

*Diuris novae-zealandiae* A. Rich., Essai Fl. New Zealand 163, t. 25, f. 1 (1832). Type: 'Crescit in Novae-Zealandiae locis montosis', herb. A Richard 338 (holo P!). Notes: Lindley, in describing *O. solandri*, was clearly of the opinion that his new taxon was distinct from *O. strictum*. On examination of the types and study of living material, it has now been established that Lindley's interpretation of these taxa was correct. The earliest available name for the New Zealand taxon is *Diuris novae-zealandiae* which is here formally transferred to the correct generic name. *O. novae-zealandiae* is considered a New Zealand endemic. Dist: NZ.

*Orthoceras solandri* Lindley, Gen. sp. orchid. pl. 512 (1840). Type: 'On the hills among fern, Bay of Islands, etc., New Zealand', Mar. 1834, R. Cunningham s.n. (holo K-L!), syn. nov.

*Orthoceras rubrum* Colenso, Trans. & Proc. New Zealand Inst. 18: 273 (1886). Types: 'Open ground among fern, high clayey hills between Napier and Mohaka, Hawkes Bay', 18 Oct. 1876, W. Colenso (syn K!?) ; 'Glenross', 1885, D.P. Balfour (syn not found), syn. nov. Notes: There are a number of Colenso collections of this species at Kew, which are almost certainly syntypes.

*Orthoceras caput-serpentis* Colenso, Trans. & Proc. New Zealand Inst. 22: 490 (1890). Type: 'Open ground near River Moawhango, County of East Taupo', 1889, H. Hill s.n. (holo? WELT, iso K!), syn. nov.

*Orthoceras strictum* R. Br. forma *viride* Hatch, Trans. & Proc. Roy. Soc. New Zealand 2: 188 (1963). Type: 'New Zealand, Brown's Bay (Auckland North Shore)', 15 Dec. 1958, P. Bond s.n. (holo AK), syn. nov.

*O. rubrum* Colenso = *Orthoceras novae-zealandiae*.

*O. solandri* Lindley = *Orthoceras novae-zealandiae*.

***O. strictum*** R. Br., Prod. 317 (1810). Type: 'Port Jackson, Parramatta, Hawkesbury and Grose [Rivers]', Dec. 1802, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! E!). Dist: Sfr, Slr, Ski, Sse, Vwp, Vwh, Vgi, Tas, Nsc, Nst, Ncc, Nct, Ncn, Qmo; NC.

*O. strictum* R. Br. forma *viride* Hatch = *Orthoceras novae-zealandiae*.

## ORTMANNIA

*Ortmannia* Opiz = *Cistella*.

*O. cernua* (Willd.) Opiz. = *Geodorum densiflorum*.

## OSYRICERA

*Osyricera* Blume = *Bulbophyllum*.

*O. purpurascens* (Bailey) Deane = *Bulbophyllum macphersonii*.

## OTANDRA

*Otandra* Salisb. = *Geodorum*.

*O. cernua* (Willd.) Salisb. = *Geodorum densiflorum*.

## OXYANTHERA

*Oxyanthera* Brogn. = *Thelasis*.

*O. carinata* (Blume) Schltr. = *Thelasis carinata*.

*O. elata* (J.D. Hook.) J.D. Hook. = *Thelasis carinata*.

*O. papuana* Schltr. = *Thelasis carinata*.

## PACHYCHILUS

*Pachychilus* Blume = *Pachystoma*.

*P. pantanus* Blume = *Pachystoma pubescens*.

*P. pubescens* Blume = *Pachystoma pubescens*.

## PACHYNE

*Pachyne* Salisb. = *Phaius*.

*P. spectabilis* = *Phaius tankervilleae*.

## PACHYSTOMA

*Pachystoma* Blume, Bijdr. 6: t. 3, f. 29; 8: 376 (1825). Type species: *Pachystoma pubescens* Blume. Notes: I have used Seidenfaden (1986) as a guide for synonyms of this species, and where possible studied the types of these taxa. From this study I have concluded that there are two, possibly three species in the genus, viz. the widespread and variable *P. pubescens*, *P. chinense* a species with obtuse rather than acute segments and that seems to inhabit mountainous areas in China, and *P. hirsuta* a recently described species of diminutive habit from southern India with a nearly entire rather than trilobed labellum. *P. chinense* may simply be a variant of *P. pubescens* but for the present I have chosen to maintain it as a distinct species. The distribution of *P. chinense* would also suggest that this species has evolved in cooler subtropical to temperate regions compared to that of *P. pubescens* which is found in the tropics.

*Pachychilus* Blume, Fl. Jav. Praef. 7 (1828), nom. illeg. Type species: non *designatus*.

*Apaturia* Lindley, Gen. sp. orchid. pl. 130 (1831). Type species: non *designatus*.

*P. affine* Schltr. = *Pachystoma pubescens*.

*P. brevilabium* Schltr. = *Pachystoma pubescens*.

*P. edgeworthii* H.G. Reichb. = *Pachystoma pubescens*.

*P. gracile* Schltr. = *Pachystoma pubescens*.

*P. holtzei* (F. Muell.) F. Muell. = *Pachystoma pubescens*.

*P. lindleyana* (Lindley) H.G. Reichb. = *Pachystoma pubescens*.

*P. malabaricum* H.G. Reichb. = *Pachystoma pubescens*.

*P. montanum* (Lindley) H.G. Reichb. = *Pachystoma pubescens*.

*P. papuanum* Schltr. = *Pachystoma pubescens*.

**P. pubescens** Blume, Bijdr. 6: t. 3, f. 29; 8: 376 (1825); *Pachychilus pubescens* Blume, Mus. Bot. 2: 173 (1856), nom. illeg. Type: 'In graminosis prope Tjiradjas Provinciae Krawang', [Java], Jun.-Aug., C. Blume 1529 (holo L!). Dist: Qkn, Qco, Ddg; PG, NC, ID, MY, TH.

*Apaturia senilis* Lindley, Wall. Cat. no. 3739 (1828), nom. nud.; Lindley, Gen. sp. orchid. pl. 130 (1830); *Pachystoma senile* (Lindley) H.G. Reichb., Bonplandia 3: 250 (1855). Type: 'In montibus Sillet', H. Bruce ex N. Wallich 3739 (lectotype K-L! here designated, isolectotype K-WALL!); Syntypes: 'In Uligapur et Kaliguag', W. Hamilton (K! K-L! K-WALL!).

*Apaturia smithiana* Lindley, Gen. sp. orchid. pl. 130 (1830); *Pachystoma smithiana* (Lindley) H.G. Reichb., Bonplandia 3: 250 (1855). Type: 'Kudjurea-ghaut in regno Oude', 1825, N. Wallich 3737 (holo K-L!, iso K-WALL!).

*Apaturia montana* Lindley, Gen. sp. orchid. pl. 131 (1830); *Pachystoma montanum* (Lindley) H.G. Reichb., Bonplandia 3: 250 (1855). Type: 'Ceylon, in monte Nuera Ellia', MacRae 669 (holo K-L!).

*Apaturia lindleyana* Wight, Icon. Pl. Ind. Orient 3, 1662 (1851); *Pachystoma lindleyana* (Lindley) H.G. Reichb., Bonplandia 3: 250 (1855). Type: 'Coorg, Munnuri India', Jerdon s.n. (holo K-L!, icon K!).

*Pachychilus pantanus* Blume, Mus. Bot. 2: 173 (1856). Type: 'In Borneo Padong Pantam locis apertis graminosis', Korths s.n. (holo BO?, iso K!).

## PACHYSTOMA

*Pachystoma malabaricum* H.G. Reichb. in Walp., Ann. bot. syst. 6: 462 (1862). Type: 'Malabar', Jerdon s.n. (holo W!).

*Pachystoma edgeworthii* H.G. Reichb. in Walp., Ann. bot. syst. 6: 463 (1862). Type: 'Khadia near Dyanhar NW India', 1844, Edgeworth 25 (holo K!, illus. K-L!).

*Eulophia holtzei* F. Muell., Victorian Naturalist 6: 55 (1889); *Pachystoma holtzei* (F. Muell.) F. Muell., Victorian Naturalist 8: 180 (1892). Type: 'Port Darwin', M. Holtze s.n. (holo K!), syn. nov.

*Pachystoma gracile* Schltr., Bot. Jahrb. Syst. 39: 66 (1906); *Pachystoma pubescens* Blume var. *gracile* (Schltr.) Halle, Fl. Nouve.-Caledon. Depend. 8: 341 (1977), syn. nov. Type: 'New Caledonia: Nord-Bezirk: an grasigen Abhängen auf den Bergen bei Ou Hinna, c. 200 m', Jan. 1903, R. Schlechter 15752 (holo B†).

*Pachystoma affine* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 413 (1912). Type: 'Kaiser-Wilhelms-Land: On a alang-hill at Jawer, on the Minjem River, alt. c. 150 m', Sep. 1907, R. Schlechter 16573 (holo B†).

*Pachystoma papuanum* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 413 (1912). Type: 'Kaiser-Wilhelms-Land: On grassy hills in the vicinity of the Malia River, at the foot of the Bismark Range, alt. c. 150 m', Oct., R. Schlechter 18472 (holo B†).

*Pachystoma brevilabium* Schltr., Repert. Spec. Nov. Regni Veg. 17: 69 (1920). Type: 'China: Kweitschon: Steppes de Lo kouey, 800 m', Jun. 1912, J. Esquirol s.n. (holo B†).

*P. pubescens* Blume var. *gracile* (Schltr.) Halle = *Pachystoma pubescens*.

*P. senile* (Lindley) H.G. Reichb. = *Pachystoma pubescens*.

*P. smithiana* (Lindley) H.G. Reichb. = *Pachystoma pubescens*.

## PAPILLABIUM

*Papillabium* Dockr., Austral. Sarcanth. 31, t. 7 (1967). Type species: *Cleisostoma beckleri* F. Muell.

*P. beckleri* (F. Muell. ex Benth.) Dockr., Austral. Sarcanth. 31, t. 7 (1967). Dist: Ncc, Nnc, Nnt, Qmo.

*Cleisostoma beckleri* F. Muell. ex Benth., Fl. Austral. 6: 296 (1873); *Sarcochilus beckleri* (F. Muell. ex Benth.) F. Muell., Syst. census Austral. pl. 1: 111 (1882); *Sarcanthus beckleri* (F. Muell. ex Benth.) Rupp, Victorian Naturalist 57: 219 (1941). Type: 'New South Wales, Clarence River', H. Beckler s.n. (holo MEL).

*Saccolabium virgatum* Hunt, Queensland Naturalist 15: 50-2, f (1955). Type: 'South Queensland, Moreton District: Wunburra, near Mudgeeraba', Oct. 1953, D. Hockings ex T.E. Hunt 638 (holo BRI!).

## PARACALEANA

*Paracaleana* Blaxell = *Caleana*.

*P. minor* (R. Br.) Blaxell = *Caleana minor*.

*P. nigrita* (Lindley) Blaxell = *Caleana nigrita*.

*P. sullivanii* (F. Muell.) Blaxell = *Caleana minor*.

## PARASARCOCHILUS

*Parasarcochilus* Dockr. = *Sarcochilus*.

*P. hirticalcar* Dockr. = *Sarcochilus hirticalcar*.

*P. spathulatus* (R. Rogers) Dockr. = *Sarcochilus spathulatus*.

*P. weinthalii* (Bailey) Dockr. = *Sarcochilus weinthalii*.

## PAXTONIA

*Paxtonia* Lindley = *Spathoglottis*.

*P. rosea* Lindley = *Spathoglottis plicata*.

## PEDILONUM

*Pedilonum* Blume = *Dendrobium*.

*P. smilliaeae* (F. Muell.) Rauschert = *Dendrobium smilliaeae*.

## PERAMIUM

*Peramium* Salisb. ex J.M. Coulter = *Goodyera*.

*P. longibracteatum* (Hayata) Makino = *Goodyera grandis*.

*P. longirostrata* (Hayata) Makino = *Goodyera viridiflora*.

*P. ogatai* (Yamamoto) Makino = *Goodyera viridiflora*.

## PERISTERANTHUS

*Peristeranthus* Hunt, Queensland Naturalist 15: 17 (1954). Type species: *Saccolabium hillii* F. Muell.

*P. hillii* (F. Muell.) Hunt, Queensland Naturalist 15: 17 (1954). Dist: Nnc, Qmo, Qwb, Qpc, Qkn, Qco.

*Saccolabium hillii* F. Muell., Fragm. 1: 192 (1859); *Ornithochilus hillii* (F. Muell.) Benth., J. Proc. Linn. Soc., Bot. 18: 334 (1881). Type: 'In locis silvattus ad sinum Moreton Bay', 25 Oct. 1869, W. Hill s.n. (holo MEL!).

## PERISTYLUIS

*Peristylus* Blume, Bijdr. 6: t. 1, f. 30; 8: 404 (1825) (nom. cons.). Type species: *Peristylis grandis* Blume (type cons.).

*P. banfieldii* (Bailey) Lavarack, Austrobaileya 1(4): 38 (1981). Dist: Qkn, Qco.

*Habenaria banfieldii* Bailey, Queensland Agric. J. 16: 564 (1906). Type: 'Queensland, on hilltops, Dunk Island', E.J. Banfield s.n. (holo BRI!, iso AD!).

*P. candidus* J.J. Smith, Orchid. Java 6: 36 (1905). Type: 'Java: Salak, an sonnigen, grosigen Stellen; auch Ambon; Singapore', J.J. Smith s.n. (holo ?BO). Dist: Qco; PG, ID, MY, TH, KH, VN.

*Platanthera sumatrana* Schltr., Bull. Herb. Boissier 6: 296 (1906); *Habenaria sumatrana* (Schltr.) Schltr., Bot. Jahrb. Syst. 45(104): 3 (1911). Type: Sumatra, Padang, Burkitt s.n. (holo B†).

*Habenaria lacertifera* sensu Ridley, Fl. Malay Pen. 4: 230 (1924), non (Lindley) Benth. (1861). Types: 'Common on roadsides and grassy open spots. Singapore, Tanglin; Jurong. Johor, Castlewood. Malacca, Sungei Ujong (Deny); Nyalas. Penang Hills', [Anon] (not found).

*Habenaria ovoidea* R. Rogers et C. White, Proc. Roy. Soc. Queensland 32: 140-1 (1921). Type: 'Dunk Island', E.J. Banfield s.n. (holo BRI!, iso AD!).

*Habenaria geoffrayi* Gagnep., Bull. Soc. Bot. France 78: 69-70 (1931). Types: Cambodia, Pnom-Leo, Geoffray 491 (holo P).

*Habenaria langbianensis* Gagnep., Bull. Soc. Bot. France 78: 71 (1931); *Peristylis langbianensis* (Gagnep.) Tang & Wang, Act. Phytotax. Peking 1, 1: 64 (1951). Type: Vietnam, Langbian, Mt Elephant, Evrard 1219 (holo P).

*Herminium annamense* Gagnep., Bull. Soc. Bot. Fr. 79: 36 (1932). Types: 'Vietnam, Langbian', Eberhardt s.n. (syn P); 'Dalat', Finet 1534 (syn P).

*P. langbianensis* Gagnep = *Peristylus candidus*.

*P. papuanus* (Kraenzl.) J.J. Smith, Nova Guinea 12: 3 (1913). Dist: Qco; SB, PG, ID.

*Habenaria papuana* Kräenzl., Bot. Jahrb. Syst. 18: 188 (1894). Type: 'Sattelberg bei Finschhafen, Essimbni', 10 Apr. 1889, Hellwig 585 (holo B†); 'Neu Mekenburg; Inden Gebirgswaldern bei Punam, 600 m', Jul. 1902, R. Schlechter 14669 (neotype BRI! here designated).

*Peristylus remotifolius* J.J. Smith, Bull. Dep. Agric. Indie Neerl 22: 2 (1909); Nova Guinea 8(149): 134, t. 45 (1909). Type: 'Nieder. Neu-Guinea: Sudlich des Geluks-Huegels', 1907, Djibola 380 (holo ?BO).

*P. remotifolius* J.J. Smith = *Peristylus papuanus*.

## PETALOCHILUS

*Petalochilus* R. Rogers = *Caladenia*.

*P. calyciformis* R. Rogers = *Caladenia minor*.

*P. saccata* R. Rogers = *Caladenia minor*.

## PHAIUS

*Phaius* Lour., Fl. Cochinch. 517, 529 (1790). Type species: *Phaius grandiflorus* Lour.

*Pachyne* Salisb., Trans. Hort. Soc. London 1: 299 (1812). Type species: *non designatus*.

*P. amboinensis* Blume, Mus. Bot. 2: 180 (1856). Type: 'In Amboina', Zippelius s.n. (holo presumed lost; icon. in Rumphius, Herb. Amb. t. 50!). Dist: Ddg; NC, SB, VU, WS, PG, ID, MY.

*Phaius neocaledonicus* Rendle, J. Proc. Linn. Soc., Bot. 45: 249 (1921). Type: New Caledonia, Compton 1408 (holo BM!), syn. nov.

*Phaius graeffei* H.G. Reichb. in Seem., Fl. Vitiensis 299 (1868). Type: Samoa Islands, Graeffe s.n. (holo ?W not found).

*P. australis* F. Muell., Fragm. 1: 42 (1858). Type: 'Lady Elliotts Island off Wide Bay', 1857, E. Fitzalan s.n. (holo MEL!). Dist: Nnc, Qmo, Qwb, Qpc, Qks, Qkn.

*Phaius grandifolius* sensu Benth., Fl. Austral. 6: 304 (1873), pro parte max., non Lour. (1790).

*Phaius grandifolius* Lour. var. *bernaysii* (Rowland ex H.G. Reichb.) Bailey forma *soutteri* Bailey, Queensl. fl. 5: 1544 (1902); *Phaius bernaysii* (Rowland ex H.G. Reichb.) Fitzg. forma *soutteri* (Bailey) Hunt, Census South Queensland Orchids 12 (1947). Type: 'Islands of Moreton Bay', W. Soutter s.n. (holo BRI not found).

*Phaius grandifolius* Lour. var. *rowanae* Bailey, Queensland Agric. J. 28: 74 (1912). Type: 'Murray River, North Queensland', F.C. Rowan s.n. (icon BRI not found). Notes: 'Named from a large painting [prepared] by Mrs F.C. Rowan while on a visit to the native habitat'.

*P. australis* F. Muell. var. *bernaysii* (Rowland ex H.G. Reichb.) Nicholls = *Phaius bernaysii*.

**P. bernaysii** Rowland ex H.G. Reichb., Gard. Chron. 30: 361, t. 1244 (1873). Type: Moreton Bay, [Stradbroke Island], L.A. Bernays s.n. (holo W!, iso MEL!). Notes: This species has been treated as variety of *P. australis* by some authors. However, the yellow flowers found in *P. bernaysii* readily distinguish it from *P. australis* and *P. tankervilleae*. *P. bernaysii* is self-pollinating. In addition, *P. bernaysii* has a smaller stigma and pointed column wings. It also breeds true to type from seed and inhabits a very restricted area near Brisbane, viz Stradbroke Island. With these features it is both morphologically and biologically distinct from other members of the genus and should be treated as a species. Dist: Qmo.

*Phaius blumei* Lindley var. *bernaysii* (Rowland ex H.G. Reichb.) H.G. Reichb. ex J.D. Hook., Bot. Mag. 99: t. 6032 (1873); *Phaius grandifolius* Lour. var. *bernaysii* (Rowland ex H.G. Reichb.) Bailey, Syn. Queensl. fl. 515 (1883); *Phaius australis* F. Muell. var. *bernaysii* (Rowland ex H.G. Reichb.) Nicholls, Victorian Naturalist 67: 13 (1950).

*Phaius grandifolius* Lour. var. *bernaysii* (Rowland ex H.G. Reichb.) Bailey forma *idae* Bailey, Queensl. fl. 5: 1544 (1902); *Phaius bernaysii* (Rowland ex H.G. Reichb.) Fitzg. forma *idae* (Bailey) Hunt, Census South Queensland Orchids 12 (1947). Type: cult. Brisbane, Sep. 1897, E. Grimley ex 'Stradbroke Island', F.M. Bailey s.n.? (holo BRI not found).

*P. bernaysii* (Rowland ex H.G. Reichb.) Fitzg. forma *idae* (Bailey) Hunt = *Phaius bernaysii*.

*P. bernaysii* (Rowland ex H.G. Reichb.) Fitzg. forma *soutteri* (Bailey) Hunt = *Phaius australis*.

*P. blumei* Lindley = *Phaius tankervilleae*.

*P. blumei* Lindley var. *bernaysii* (Rowland ex H.G. Reichb.) H.G. Reichb. ex J.D. Hook. = *Phaius bernaysii*.

*P. caronii* F. Muell. = *Phaius tankervilleae*.

*P. graeffei* H.G. Reich. = *Phaius amboinensis*.

*P. grandifolius* Lour. = *Phaius tankervilleae*.

*P. grandifolius* sens. Benth., *pro parte max.* = *Phaius australis*.

*P. grandifolius* sens. Benth., *pro parte min.* = *Phaius tankervilleae*.

*P. grandifolius* Lour. var. *bernaysii* (Rowland ex H.G. Reichb.) Bailey = *Phaius bernaysii*.

*P. grandifolius* Lour. var. *bernaysii* (Rowland ex H.G. Reichb.) Bailey forma *idae* Bailey = *Phaius bernaysii*.

*P. grandifolius* Lour. var. *bernaysii* (Rowland ex H.G. Reichb.) Bailey forma *soutteri* Bailey = *Phaius australis*.

*P. grandifolius* Lour. var. *rowanae* Bailey = *Phaius australis*.

*P. grandifolius* Lour. var. *superbus* L.B. van Houtte = *Phaius tankervilleae*.

*P. incarvilliae* (Pers.) Kuntze = *Phaius tankervilleae*.

*P. leucophaeus* F. Muell. = *Phaius tankervilleae*.

*P. neocaledonicus* Rendle = *Phaius amboinensis*.

**P. pictus** Hunt, Victorian Naturalist 69: 27 (1952). Type: 'Queensland-Cook District, on Bellenden Ker Range above 2,000 feet', May 1947, J.H. Wilkie ex T.E. Hunt 513 (holo BRI!). Notes: The illustration and description of *Phaius robertsii* F. Muell. in Halle (1977) are very similar to those published by Hunt and it would be of no great surprise if they proved to be representative the same taxon. If that were true, the oldest name for the taxon would be *P. robertsii*. Dist: Qkn, Qco.

**P. tankervilleae** (Banks ex L'Herit.) Blume, Mus. Bot. 2: 177 (1852). Notes: I have followed Seidenfaden (1986) in his interpretation of the spelling and, for the most part, of the synonyms of this species. This species was named after the Countess of Tankerville and the name simply requires the addition of an 'ae' to latinize it. Dist: Nnc, Qmo, Qwb, Qpc, Qkn, Qkn, Qco; NC, PG, ID, MY, BN, PH, TH, VN, LA, KH, BU, HK, CN, TW, JP.

*Limodorum tankervilleae* Banks ex L'Herit., Sert. Angl. 28 (1789); *Bletia tankervilleae* (Banks) R. Br. in W. Aiton et W.T. Aiton, Hort. Kew. (ed. 1) 3: 302, t. 12 (1789); Hort. Kew. (ed. 2) 5: 207 (1813). Type: cult. Kew, 1791, ex 'China', herb. J.E. Smith 1403.1 (lectotype LINN! here designated). Notes: There is a note by Dryander accompanying the illustration of *P. tankervilleae* in the first edition of Hort. Kew, as follows; 'Introduced about 1778 by John Fothergill, M.D. Nat. of China. Fl. Mar. & Apr.'. The specimen labelled *Limodorum tankervilleae* in the Sir J.E. Smith Herbarium, Linnean Society, Burlington House, London

matches that illustrated in Hort. Kew. It appears to have been collected from the plant used in the description of this species and is therefore here selected as the lectotype.

*Phaius grandifolius* Lour., Fl. Cochinch. 529 (1790); *Limodorum incarvillei* Pers., Syn. Pl. Enchir. Bot. 2: 520 (1807); *Phaius incarvilliae* (Pers.) Kuntze, Revis. gen. pl. 675 (1891), (nom. syn.); *Phaius blumei* Lindley, Gen. sp. orchid. pl. 127 (1830). Type: 'Indochina', Loureiro s.n. (holo not found). Notes: *Limodorum incarvillei* is a nomenclatural synonym of *P. grandifolius*. Persoon mistakenly used the name 'incarvillei' based on the belief that the species had been described from a plant collected by a Father Incarville (Persoon vide Seidenfaden, 1986). *P. blumei* is also a nomenclatural synonym of *P. grandifolius*.

*Pachyne spectabilis* Salisb., Trans. Hort. Soc. 1: 299 (1812), nom. illeg.

*Phaius grandifolius* Lour. var. *superbus* L.B. van Houtte, Flora d.s. 7: 259, t. 38 (1851). Type: (not found).

*Phaius carrii* F. Muell., Essay Pl. Exped. Burdekin 19, in obs (1860). Type: 'Burdekin Expedition', [Fitzalan?] (holo MEL!). Notes: The type is a sterile specimen.

*Phaius leucophaeus* F. Muell., Fragm. 4: 163 (1864). Type: 'In locis scaturiginosis valde umbrosis silvarum circum sinum Rockingham Bay', J. Dallachy s.n. (holo MEL).

*P. grandiflora* sensu Benth., Fl. Austral. 6: 304-5 (1873), pro parte min.

## PHALAENOPSIS

*Phalaenopsis Blume*, Bijdr. 7: 294 (1825). Type species: *Epidendrum amabile L.*

*P. amabilis* sensu Nicholls = *Phalaenopsis rosenstromii*.

*P. amabilis* Blume var. *papuana* Schltr. = *Phalaenopsis rosenstromii*.

*P. amabilis* Blume var. *rosenstromii* (Bailey) Nicholls = *Phalaenopsis rosenstromii*.

*P. rosenstromii* Bailey, Queensland Agric. J. 17: 231 (1906). Type: 'On trees, high from the ground, Daintree River', G. Rosenstrom s.n. (holo K!, iso BRI!). Notes: I have compared living material collected in Australia, directly with *P. amabilis* sens. str. from Java. In addition, I have also examined and compared the types of each. Each is recognizably distinct especially in the size of the flower (*P. amabilis* is larger) and the width of the labellum midlobe (*P. rosenstromii* is broader at the base). They also have different chromosome numbers (Sagawa pers. comm.). Based on the criteria followed throughout this paper these taxa should be treated as separate species. Dist: Qkn, Qco; PG, ID.

*Phalaenopsis amabilis* Blume. var. *rosenstromii* (Bailey) Nicholls, Austral. Orchid Rev. 14: 104 (1949).

*Phalaenopsis amabilis* Blume var. *papuana* Schltr., Orchid. Deutsch-N.-Guin. 968 (1911). Type: 'Kaiser-Wilhelms-Land: On trees in the forests on the Malia [River] at the foot of the Bismark Range, alt. c. 150 m', Oct. 1908; R. Schlechter 18409 (syn B†, lectotype K! here designated, isolectotype AMES, E, L, NSW); Syntypes: 'On trees in the mountain forest near Jaduna on the Waria [River], alt. c. 250 m', Apr. 1909, R. Schlechter 19308 (AMES, B† K! L); 'Neu-Mecklenburg: on trees in the mountain forest near Punam, alt. c. 600m', Jul. 1902, R. Schlechter 14660 (B†), syn. nov.

*Phalaenopsis amabilis* sensu Nicholls, North Queensland Naturalist 4(46): 38 (1936), non Blume (1825).

## PHOLIDOTA

*Pholidota* Lindley ex Hook., Exot. Fl. 2, t. 138 (1825). Type species: *Pholidota imbricata* Hook. Notes: I have followed de Vogel (1988) in his recent revision of *Pholidota* and for the list of synonyms of *P. imbricata*.

*Ptilocnema* D. Don, Prod. Fl. Nepal 33 (1825). Type species: *Ptilecnema bracteata* D. Don.

*P. assamica* Regel = *Pholidota imbricata*.

*P. beccarii* Schltr. = *Pholidota imbricata*.

*P. bracteata* (D. Don) Seidenf. = *Pholidota imbricata*.

*P. conchoidea* Lindley = *Pholidota imbricata*.

*P. crotalina* H.G. Reichb. = *Pholidota imbricata*.

?*P. grandis* auct. non Kraenzl. = *Pholidota imbricata*.

*P. henryi* Kraenzl. = *Pholidota imbricata*.

*P. imbricata* Hook., Exot. Fl. 2, t. 138 (1825). Type: cult. Kew, Hort. (1824) ex N. Wallich s.n. (holo not seen, probably not preserved; lecto t. 138! & description in Exot. Fl. (1825)). Dist: Qkn, Qco; NC, SB, VU, FJ, TO?, PG, ID, MY, PH, LA, TH, CN, BU, IN, BD, NP, LK.

*Cymbidium imbricatum* Roxb., Hort. Bengal. 63 (1814), nom. nud.

*Ptilocnema bracteatum* D. Don, Prodr. fl. Nepal. 33 (1825); *Pholidota bracteata* (D. Don) Seidenf., Opera Bot. 89: 100 (1986). Types: 'Nepalia', Hamilton s.n. (not seen); 'Nepalia', N. Wallich s.n. (not seen).

*Pholidota pallida* auct. non Holttum, Orch. Malaya (ed. 3) 237 (1964), non Lindley (1835).

*Pholidota conchoidea* Lindley in Edwards's, Bot. Reg. 26, Misc. 198: 84 (1840); *Coelogyne conchoidea* (Lindley) H.G. Reichb. in Walp., Ann. bot. syst. 6: 237 (1861). Type: cult. Knypersley ex 'Manilla', Oct. 1840, Cuming s.n. (holo K-L!, iso W). Notes: Lindley, when describing the species noted that 'It is very like *P. imbricata*, but its flowers are nearly twice as large, and the keels of the lateral sepals are so deep and concave as to give the lower side of the flower the appearance of the inside of a bivalve shell'. On the basis of Lindley's note, there must be some doubt about the placement of this species as a synonym of *P. imbricata*.

*Pholidota crotalina* H.G. Reichb. in Otto & Dietr., Allg. Gartenzeitung 24: 218 (1856); *Coelogyne crotalina* H.G. Reichb. in Walp., Ann. bot. syst. 6: 238 (1861). Type: 'Bon herrn Consul Schiller aus Java eingefuhrt bluht fte unier herrn Stange's Beitege feit zivei Monaten in Dvelogonne', cult. Stange ex Schiller s.n. (holo W, iso K-L!).

*Pholidota loricata* H.G. Reichb., Bonplandia 5: 43 (1857); *Coelogyne loricata* (H.G. Reichb.) H.G. Reichb. in Walp., Ann. bot. syst. 6: 238 (1861). Type: 'Ad arbores horti Bot. Bog. 1206', Zollinger L982 (holo W, iso K-L!).

*Coelogyne triotos* H.G. Reichb. in Walp., Ann. bot. syst. 6: 238 (1861); *Pholidota triotos* (H.G. Reichb.) Pfitz. et Kraenzl., Pfl. R. Heft 32: 154 (1907). Type: cult. Stange, 'Manilla' ex Schiller s.n. (holo not seen, probably lost).

*Pholidota imbricata* Hook. var. *coriacea* J.D. Hook., Fl. Brit. India 5: 846-7 (1890). Type: Perak, Scortechini, King's Collector 7218 (lecto K!, isolecto AMES).

*Pholidota assamica* Sander ex Regel, Gartenflora 39: 607 (1890). Type: (not found). Notes: The following is all the information that accompanied this name when published; 'Aus Ostindien und noch nirgends beschrieben. Ist sehr nahe verwandt mit der allbekannten *Pholidota imbricata* und unterscheidet sich nur durch fast kugekrunde Schlfeinzwiebeln'.

*Pholidota henryi* Kraenzl., Viertejahrsschr. Naturf. Ges. Zurich 60: 427-8 (1915); *Pholidota imbricata* Hook. var. *henryi* (Kraenzl.) Tang et Wang, Acta Phytotax. Sin. 1: 40, 79 (1951). Type: 'China. Yun-nan. J-Wu', Oct., Henry 13488 (holo K).

*Pholidota imbricata* Hook. var. *longifolia* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 109 (1911). Type: 'Kaiser-Wilhelms-Land: On trees in the forests near the Kaulo Base, alt. c. 200 m', Apr. 1908, R. Schlechter 17535 (holo B†; lecto L, isolecto BO, E, G, K!, L).

*Pholidota imbricata* Hook. var. *montana* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 109 (1911). Type: 'Kaiser-Wilhelms-Land: On trees in the forests of the Kani Range, alt. c. 1000 m', Jan. 1908, R. Schlechter 17367 (holo B†; lecto E).

?*Pholidota imbricata* Hook. var. *platyphylla* Schltr., Repert. Spec. Nov. Regni Veg. 10: 19 (1911). Type: 'Celebes: Auf Baumen in den Waldren am Fusse des Gunong Loken und Guong Empung, C. 1000 m. u.d.M.', Nov. 1909, R. Schlechter 20442 (holo B†).

*Pholidota beccarii* Schltr., Notizbl. Bot. Gart. Berlin-Dahlem. 8: 17-18 (1921). Type: 'Sumatra: In monte Singalong, Padang, 1700 m.s.m.', Jun.-Jul., 1878, O. Beccari s.n. (holo FI not seen, drawing of the type at K).

*Pholidota imbricata* Hook. var. *papuana* J.J. Smith, Nova Guinea 14: 349 (1929). Type: cult. Bogor sub 43 & 51 ex 'Dutch New-Guinea: In the northern part, Mamberamo', W. Feuilletau de Bruyn 8 (lecto BO); Syntypes: cult. Bogor 7, XII B, IX, 62 ex 'Dutch New-Guinea: In the southern part, Upper Digoel', Heyermans s.n. (BO).

?*Pholidota grandis* auct. non Kraenzl., Bull. Soc. Bot. France 76: 301 (1929); *Pholidota spectabilis* Kraenzl. ex Guill., Ann. Inst. Bot.-Geol. Colon. Marseille (ser. 6), 5-6: 15 (1948), nom. Type: 'Nouvelles-Hebrides. Mara', Levat s.n. (not seen).

*P. imbricata* Hook. var. *henryi* (Kraenzl.) Tang et Wang = *Pholidota imbricata*.

*P. imbricata* Hook. var. *longifolia* Schltr. = *Pholidota imbricata*.

*P. imbricata* Hook. var. *montana* Schltr. = *Pholidota imbricata*.

*P. imbricata* Hook. var. *papuana* J.J. Smith = *Pholidota imbricata*.

?*P. imbricata* Hook. var. *platyphylla* Schltr. = *Pholidota imbricata*.

*P. loricata* H.G. Reichb. = *Pholidota imbricata*.

*P. pallida* Lindley in Edwards's, Bot. Reg. 21: sub.t. 1777 (1835). Notes: de Vogel (1988) has established that the correct application of this name is for a species with a limited Himalayan distribution in Nepal, Sikkim, Bhutan, China, India, Burma, Thailand and Laos.

*P. spectabilis* Kraenzl. ex Guill. = *Pholidota imbricata*.

*P. triotos* (H.G. Reichb.) Pfitz. et Kraenzl. = *Pholidota imbricata*.

## PHREATIA

*Phreatia* Lindley, Gen. sp. orchid. pl. 63 (1830). Type species: *Phreatia elegans* Lindley.

*Plexaure* Endl., Prod. Fl. Norfl. 30 (1833). Type species: *Plexaure limenophylax* Endl.

*P. baileyanus* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 9: 433 (1911). Dist: Qkn, Qco.

*Oheronia pusilla* Bailey in A. Meston, Votes Proc. Legis. Ass. Qd. 4: 1227 (1889) et Rep. Bellenden Kerr Exped. 23 (1889); *Phreatia pusilla* (Bailey) Rolfe, Orchid Rev. 11: 344 (1903), non (Blume) Lindley (1830). Type: 'Bellenden-Ker at about 4,000 ft.', herb. F.M. Bailey s.n. (holo K!).

*P. carinata* (Blume) Miq. = *Thelasis carinata*.

*P. congesta* Rolfe = *Eria retusa*.

*P. crassiuscula* Nicholls, Victorian Naturalist 61: 151-3, f. (1945). Type: 'North Queensland, Mount Bartle Frere, (via Ingham)', A. Glindeman s.n. (holo MEL not found). Notes: I have examined material, including the isotypes, of the New Caledonian species *P. pachyphylla* Schltr. and consider it to be distinct from *P. crassiuscula*. Dist: Qks, Qkn, Qco.

*Phreatia limenophylax* sensu Benth., Fl. Austral. 6: 290 (1873), *pro parte*, non H.G. Reichb. (1857); *Phreatia limenophylax* sensu Bailey, Syn. Queensl. fl. 514 (1883), non H.G. Reichb (1875). Type: 'On the barks of trees, Rockingham's bay', J. Dallachy ex herb. F. Mueller s.n. (holo K!, iso MEL).

*P. limenophylax* (Endl.) H.G. Reichb., Bonplandia 54 (1875). Dist: Norfolk Island; NC, SB.

*Plexaure limenophylax* Endl., Prod. Fl. Norf. 30 (1833); *Eria limenophylax* (Endl.) H.G. Reichb., Xenia Orchid. 97, t. 130 (1863). Type: Norfolk Island, F. Bauer s.n. (holo W!).

*Phreatia neocaldonica* Schltr., Bot. Jahrb. Syst. 39: 78 (1906). Type: [New Caledonia], 'Auf den Bergen am Ngoye', 5 Nov. 1902, R. Schlechter 15228 (lectotype Z!, isolectotype PR, S); Syntype: New Caledonia, Yaouhe, 500 m, 22 Sep. 1902, R. Schlechter 14755 (B†), syn. nov.

*P. limenophylax* sensu Benth. = *Phreatia crassiuscula*.

*P. limenophylax* sensu Bailey = *Phreatia crassiuscula*.

*P. lysteri* Rolfe, J. Proc. Linn. Soc., Bot. 25: 358 (1890). Type: 'Christmas Island', Sep.-Oct. 1887, J.J. Lister s.n. (holo K!). Dist: Christmas Island.

*P. macrophylla* Schltr. = *Rhynchophratia micrantha*.

*P. macrophyloides* Kraenzl. = *Rhynchophratia micrantha*.

*P. micrantha* (A. Rich.) Schltr. = *Rhynchophratia micrantha*.

*P. neocaldonica* Schltr. = *Phreatia limenophylax*.

*P. paleata* H.G. Reichb., Linnaea 41: 653 (1877). Dist: Norfolk Island, Lord Howe Island; NC, SB.

*Eria paleata* H.G. Reichb., Linnaea 41: 87 (1877). Type: New Caledonia, Kanala, 500 m., 1855-60, Vieillard 1331 (holo P!).

*Phreatia pholidotoides* Kraenzl., Not. Syst. 4: 140 (1928). Type: New Caledonia, Mt. Arago, 700 m., Apr. 1901, Cribs 1217 (holo P!).

*P. pholidotoides* Kraenzl. = *Phreatia paleata*.

*P. pusilla* (Bailey) Rolfe = *Phreatia baileyanus*.

*P. retusum* (Blume) Lindley = *Eria retusum*.

*P. richardiana* (H.G. Reichb.) Kraenzl. = *Rhynchophratia micrantha*.

*P. robusta* R. Rogers = *Rhynchophratia micrantha*.

*P. samoensis* (Kraenzl.) Schltr. = *Rhynchophratia micrantha*.

## PHYLLORCHIS

*Phyllorchis* Thouars = *Bulbophyllum*.

*P. aurantiacum* (F. Muell.) Kuntze = *Bulbophyllum schillerianum*.

*P. baileyi* (F. Muell.) Kuntze = *Bulbophyllum baileyi*.

*P. blumei* (Lindley) Kuntze = *Bulbophyllum blumei*.

*P. chloroptera* (H.G. Reichb.) Kuntze = *Dendrobium bifalce*.

*P. clavigera* (Fitzg.) Kuntze = *Bulbophyllum longiflorum*.

*P. elisae* (F. Muell.) Kuntze = *Bulbophyllum elisae*.

*P. exigua* (F. Muell.) Kuntze = *Bulbophyllum exiguum*.

*P. minutissima* (F. Muell.) Kuntze = *Bulbophyllum minutissimum*.

*P. nematopoda* (F. Muell.) Kuntze = *Bulbophyllum nematopodium*.

## PHYLLORCHIS

*P. punctata* (Fitzg.) Kuntze = *Bulbophyllum baileyi*.

*P. shepherdii* (F. Muell.) Kuntze = *Bulbophyllum shepherdii*.

## PHYSURUS

*Physurus* Lindley = *Goodyera*.

*P. viridiflorus* (Blume) Lindley = *Goodyera viridiflora*.

## PINALIA

*Pinalia* Lindley = *Eria*.

*P. retusa* (Blume) Kuntze = *Eria retusa*.

## PLATANTHERA

*Platanthera* Rich, Mem. Mus. Paris, 4: 48 (1818). Type species: *Orchis bifolia* L.

*P. sumatrana* Schltr. = *Peristylus candidus*.

## PLECTORRHIZA

*Plectorrhiza* Dockr., Austral. Sarcanth. 27 (1967). Type species: *Cleisostoma tridentata* Lindley.

*P. brevilabris* (F. Muell.) Dockr., Austral. Sarcanth. 28, t. 12 (1967). Dist: Qmo, Qwb, Qpc, Qks, Qkn, Qco.

*Cleisostoma brevilabre* F. Muell., Fragm. 11: 87 (1880); *Sarcochilus brevilabris* (F. Muell.) F. Muell., Syst. census Austral. pl. 1: 111 (1882); *Sarcochilus brevilabris* (F. Muell.) Bailey, Syn. Queensl. fl. 520 (1883), nom. illeg.; *Saccolabium brevilabre* (F. Muell.) Rupp, Victorian Naturalist 57: 219 (1941). Type: 'In monte Dryandri', [Mount Dryandra near Proserpine, Queensland], E. Fitzalan s.n. (holo MEL!).

*Saccolabium loaderianum* Rupp, North Queensland Naturalist 20(101): 17 (1952). Type: cult. Castlecrag, 15 Dec. 1951, N. Loader ex 'Bambaroo, 60 miles N. of Townsville, Queensland', Jul. 1951, A. Johnson s.n. (holo NSW!).

*P. erecta* (Fitzg.) Dockr., Austral. Sarcanth. 28, t. 13 (1967). Dist: Lord Howe Island.

*Cleisostoma erectum* Fitzg., Austral. orch. 1(4): [t. 5] (1878); *Sarcochilus erectus* (Fitzg.) F. Muell., Syst. census Austral. pl. 1: 111 (1882); *Sarcochilus tridentatus* (Lindley) H.G. Reichb. var. *erecta* (Fitzg.) Bailey, Syn. Queensl. fl. 519 (1883); *Sarcanthus erectus* (Fitzg.) Rupp, Victorian Naturalist 57: 218 (1941). Type: 'On a rock in Howe's Island', Dec. 1877, R.D. Fitzgerald s.n. (holo not found; lectotype Fitzgerald's plate, here designated).

*P. tridentata* (Lindley) Dockr., Austral. Sarcanth. 27, t. 14 (1967). Dist: Vgi, Nsc, Nec, Nct, Nnc, Nnt, Qmo, Qdd, Qwb, Qbn, Qpc, Qkn, Qco.

*Cleisostoma tridentata* Lindley in Edwards's, Bot. Reg. 24: Misc. 33 (1838); *Sarcochilus tridentatus* (Lindley) H.G. Reichb. in Walp., Ann. bot. syst. 6: 500 (1861); *Thrixspermum tridentatum* (Lindley) H.G. Reichb., Xenia Orchid. 2: 122 (1874); *Sarcanthus tridentatum* (Lindley) Rupp, Victorian Naturalist 57: 218 (1941); *Thrixspermum tridentatum* (Lindley) Hunt, Queensland Naturalist 16: 27 (1958), nom. illeg. Type: 'New Holland', Loddiges s.n. (holo K-L!).

*Saccolabium calcaratum* F. Muell., Fragm. 1: 192 (1859); *Sarcochilus calcaratus* (F. Muell.) F. Muell., Fragm. 2: 181, 194 (1861). Type: 'In silvis circum Moreton Bay', Oct.-Nov., W. Hill s.n. (holo MEL!).

*Cleisostoma cornutum* Rupp, North Queensland Naturalist 57: 218 (1941). Type: ?Bellenden Ker Range, 1935, H. Flecker s.n. (holo NSW). Notes: No actual details of the type specimen were provided with the description of the species. However, since most of the specimens referred to in the same paper were collected by Flecker in the Bellenden Ker Range, it seems reasonable to assume the same was true for *C. cornutum*.

## PLEXAURE

*Plexaure* Endl. = *Phreatia*.

*P. limenophylax* Endl. = *Phreatia limenophylax*.

## PODANTHERA

*Podanthera* Wight = *Epipogium*.

*P. pallida* Wight = *Epipogium roseum*.

## PODOCHILUS

*Podochilus* Blume, Bijdr. 6: t. 5, f. 12; 7: 295 (1825). Type species: *Podochilus lucescens* Blume.

*P. australiensis* (Bailey) Schltr., Repert. Spec. Nov. Regni Veg. Beih. 3: 316 (1907). Dist: Qks, Qco; PG.

*Eria australiensis* Bailey, Occas. Pap. Queensl. fl. 1: 8 (1886). Type: 'Queensland, Johnstone River', T.L. Bancroft s.n. (holo BRI!).

## POGONIA

*Pogonia* A.L. Juss, Gen. 65 (1789). Type species: *Arethusa ophioglossoides* L.

? *P. biflora* Wight = *Nervilia plicata*.

*P. carinata* (Roxb.) Lindley = *Nervilia aragoana*.

*P. crispata* Blume = *Nervilia crociformis*.

*P. dallachiana* F. Muell. ex Benth. = *Nervilia plicata*.

*P. discolor* (Blume) Blume = *Nervilia plicata*.

*P. flabelliformis* Lindley = *Nervilia aragoana*.

*P. gracilis* Blume = *Nervilia aragoana*.

*P. holochila* F. Muell. = *Nervilia holochila*.

*P. nervilia* Blume = *Nervilia aragoana*.

*P. pachystomoides* F. Muell. = *Didymoplexis pallens*.

*P. plicata* (Roxb.) Lindley = *Nervilia plicata*.

*P. pudica* Ames = *Nervilia plicata*.

*P. pulchella* Par. = *Nervilia plicata*.

*P. pulchella* J.D. Hook. = *Nervilia plicata*.

*P. scottii* H.G. Reichb. = *Nervilia aragoana*.

*P. uniflora* F. Muell. = *Nervilia uniflora*.

*P. velutina* Par. et H.G. Reichb. = *Nervilia plicata*.

## POMATOCALPA

*Pomatocalpa* Breda, Kuhl et Hasselt in Breda, Gen. sp. Orchid. Asclp. (29), t. [15] (1829). Type species: *Pomatocalpa spicatum* Breda.

*P. macphersonii* (F. Muell.) Hunt, Queensland Naturalist 16: 27 (1958). Dist: Qkn, Qco; PG.

*Saccolabium macphersonii* F. Muell., Fragn. 7: 96 (1870); *Cleisostoma macphersonii* (F. Muell.) Benth., Fl. Austral. 6: 297 (1873); *Sarcochilus macphersonii* (F. Muell.) F. Muell., Fragn. 8: 248 (1874); *Sarcanthus macphersonii* (F. Muell.) Rupp, Victorian Naturalist 57: 219 (1941). Type: 'Ad sinum Rockingham', J. Dallachy s.n. (holo MEL!, iso K!).

*P. marsupiale* (Kraenzl.) J.J. Smith, Natuurk. tijdschr. Ned.-Indie 72: 105 (1912). Dist: Qco; SB, PG, ID.

*Cleisostoma marsupiale* Kraenzl. in K. Schum. et Hollr., Die Flora van Kaiser Wilhelms Land 34-5 (1889). Type: 'Epiphytisch auf Manilton Schefferi K. Sch. im Vorlande der II. Augusta-Station', Sep., Hollrung 743 (holo B†).

*Saccolabium sphaeroceras* Schltr. in K. Schum. et Laut., Fl. Schutzeb. Sudsee, Nachtrage 230 (1905); *Pomatocalpa sphaeroceras* J.J. Smith, Natuurk. tijdschr. Ned.-Indie 72: 106 (1912). Type: 'Kaiser-Wilhelmsland: Auf Baurmer in den Walden am oberen Ramu, c. 100 m', Jan. 1902, R. Schlechter 14092 (holo B†).

*Pomatocalpa orientale* J.J. Smith, Natuurk. tijdschr. Ned.-Indie 72: 36 (1912), nom.

*P. orientale* J.J. Smith = *Pomatocalpa marsupiale*.

*P. sphaeroceras* J.J. Smith = *Pomatocalpa marsupiale*.

## PRASOPHYLLUM

*Prasophyllum* R. Br. Prod. 317 (1810). Type species: *Prasophyllum australe* R. Br. (here designated). Notes: Jones and Clements have a paper in press on the taxonomy and relationships between *Prasophyllum* sect. *Prasophyllum*, *Prasophyllum* sect. *Bifida* and *Genoplesium*. Typifications of taxa in *P.* sect. *Bifida* will be included in that paper.

*Corunastylis* Fitzg., Austral. orch. 2(3): [t. 1] (1888). Type species: *Corunastylis apostasioides* Fitzg.

*Anticheirostylis* Fitzg., Austral. orch. 2(4): back cover (Mar. 1888) superfluous substitute name for *Corunastylis apostasioides* Fitzg.

*P. acuminatum* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 51: 291-2 (1927). Types: 'New South Wales, Alum Mountain, Bulladelah', May 1923, H.M.R. Rupp s.n. (syn AD! K!); 'Paterson', H.M.R. Rupp s.n. (syn AD!). Dist: Ncc, Nnc.

## PRASOPHYLLUM

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**P. affine** Lindley, Gen. sp. orchid. pl. 516 (1830). Type: 'Port Jackson, between South Head and Botany Bay', Nov. 1803, R. Brown s.n. (holo K-L!, iso BM!, E!). Notes: This taxon was previously listed as a synonym of *P. fuscum* (Clements, 1982). However, recent research in the field and the rediscovery of *P. affine* in New South Wales, has established the two as separate species. Dist: Vgi, Nsc, Ncc.

*Prasophyllum appendiculatum* Nicholls, Victorian Naturalist 66: 212, f. F-J (1950). Type: 'Victoria, Genoa Creek', 13 Nov. 1949, N.A. Wakefield s.n. (holo MEL), syn. nov. Notes: Specimens from the Mallacoota area, Victoria have a more slender habit than those found in New South Wales, but in all other respects they are the same.

*P. albiglans* Rupp = *Prasophyllum nudiscapum*.

**P. album** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 33: 211, t. XA, f. 1-9 (1909). Type: 'Recorded from Victor Harbour and Grunthal', [Grunthal is Verdun, c. 18 Km S.E. of Adelaide], 15 Nov. 1907, R.S. Rogers s.n. (lectotype AD! here designated); Syntype: Victor Harbour, R.S. Rogers? s.n. (not found). Notes: The distribution of this species remains uncertain due to confusion between it and other closely related taxa. Dist: Sls, Ski? Sse? Vwp?

*Prasophyllum odoratum* R. Rogers var. *album* (R. Rogers) R. Rogers in Black, Fl. S. Austral. ed. 1, 126 (1922).

**P. alpinum** R. Br., Prod. 318 (1810). Type: 'In summitato Montis Tabularis prope fl. Derwent' [Top of Table Mountain near Derwent River, Tasmania], R. Brown s.n. (lectotype specimen (a) BM! here designated). Dist: Veh, Tas, Nst.

*Prasophyllum fuscum* R. Br. var. *alpinum* (R. Br.) C. Moore et Betche, Handb. fl. N.S.W. 396 (1893).

*Prasophyllum frenchii* F. Muell. var. *tadgellianum* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 46: 153-4 (1922). Type: 'Victoria, Mount Hotham (5,100 ft.)', 4 Dec. 1914, A.J. Tadgell in herb. R. Rogers 2954a (lectotype AD! here designated); Syntype: 'New South Wales, Mount Kosciusko (7,300 ft.)', 29 Dec. 1921, Green s.n. (AD!).

*Prasophyllum tadgellianum* R. Rogers, Trans. & Proc. Soc. South Australia 47: 338-9 (1923). Type: 'Victoria, Mount Bogong (6,500 ft.)', 7 Feb. 1923, A.J. Tadgell s.n. (lectotype AD! here designated, isolectotype BM! K! MEL!); Syntype: 'Mount Hotham (5,100 ft.)', 4 Dec. 1914, A.J. Tadgell in herb. R. Rogers 2954a (AD!); 'New South Wales, Mount Kosciusko (7,300 ft.)', 29 Dec. 1921, Green s.n. (AD!).

*P. anomalum* Rupp = *Prasophyllum apostasiooides*.

*P. ansatum* Fitzg. = *Prasophyllum nudiscapum*.

**P. antennatum** M. Clements et D. Jones, nom. nov.

*Prasophyllum gracile* Endl. in Lehm., Pl. Preiss. 2: 12 (1840), non Lindley (1840), nec R. Rogers (1909); *Prasophyllum gracile* Lindley var. *ringens* H.G. Reichb., Beitr. Syst. Plfantenk. 60 (1871); *Prasophyllum macrostachyum* R. Br. var. *ringens* (H.G. Reichb.) A.S. George, Nuytsia 1(2) 188 (1971). Type: 'In solo limoso prope oppidulum York', 4 Sep. 1840, Preiss 2198? (holo W!). Notes: This species differs markedly from *P. macrostachyum* in a number of features, including having a more slender habit and generally being of a smaller stature; the flowers, in particular the lateral sepals, have acuminate rather than acute segments. *P. antennatum* most frequently inhabits wet seepage areas on granite outcrops over much of the south-west of Western Australia, while *P. macrostachyum* is found in peaty soil in swampy regions nearer the coast. The name *P. gracile* Endl. is a later homonym of another taxon. Since the name *P. macrostachyum* var. *ringens* is also based on the name *P. gracile* Endl. it was considered best to rename the taxon. The specific epithet is an allusion to the lateral sepals resembling a set of antelope horns. One form of this taxon is illustrated on page 264 of Hoffman & Brown (1984). Dist: Wir, Wda, Wav, Wro, Wey, Wco, Sep, Syp.

*Prasophyllum nigricans* sensu Endl. in Lehm., Pl. Preiss. 2: 12 (1840), non R. Br. (1810). Type: 'In turfosa-humidis prope montem Wuljenup, Plantagenet', 20 Oct. 1840, Preiss 2199 (holo W!). Notes: Endlicher's description is a copy of Brown's original but the specimens he cites are not those of *P. nigricans* R. Br. rather they are a form of *P. antennatum*.

**P. apostasiooides** (Fitzg.) F. Muell., Second Syst. Census Austral. pl. 190 (1889). Dist: Nsc, Ncc.

*Corunastylis apostasiooides* Fitzg., Austral. orch. 2(3): [t. 1] (1888); *Anticheirostylis apostasiooides* Fitzg., Austral. orch. 2(4): cover (1888), nom. illeg. sup. Type: 'At Berrima, New South Wales', Jun. [1887], G.H. Sheaffe s.n. (holo BM!). Notes: There has been some confusion as to the significance of the floral structure found in representatives of this taxon. Free staminodes have been interpreted as a primitive characteristic [possibly] possessed by progenitors of the tribe Diurideae. It has therefore been postulated that *Corunostylis* is the most 'primitive' species in the tribe and perhaps the kind of plant all related taxa may have evolved from. *P. apostasiooides* is an apomictic taxon possibly derived from the closely related *P. fimbriatum*.

*Prasophyllum anomalum* Rupp, Victorian Naturalist 65: 142, f. 1-7 (1948). Type: 'Woodford and Hazelbrook, Blue Mountains, N.S.W.', Mar.-Apr. 1948, I. Bowden s.n. (holo & iso NSW!).

*Prasophyllum bowdeniae* Rupp, Victorian Naturalist 65: 144, f. 8-9 (1948). Type: 'Woodford and adjoining localities on the eastern fall of the Blue Mountains, N.S.W.', Mar. 1948, I. Bowden s.n. (holo & iso NSW!).

*P. appendiculatum* Nicholls = *Prasophyllum affine*.

**P. archeri** J.D. Hook., Fl. Tasman. 2: 14, t. 113, f. B (1858). Type: 'Light soil near Cheshunt', W. Archer s.n. (holo K!, iso K! K-L! NSW!). Dist: Sls, Sse, Vwp, Vwh, Veh, Vgi, Tas, Nsc, Nst, Can, Ncc, Ncw, Nnc, Qmo.

*Prasophyllum intricatum* Benth., Fl. Austral. 6: 346 (1873). Type: 'Southport', C. Stuart s.n. (holo K!).

*Prasophyllum ciliatum* Ewart & B. Rees, Proc. Roy. Soc. Victoria (new ser.) 25: 111, t. 6, f. d-g (1912). Type: 'Green Valley, County of Talbot, Victoria', 19 Jun. 1910, F.M. Reader s.n. (holo MEL).

*Prasophyllum archeri* J.D. Hook. var. *deirdrae* Nicholls, Victorian Naturalist 49: 114 (1932). Type: Maryborough, Victoria, Apr. 1932, A. Chisholm s.n. (holo MEL, icon Nicholls plate 159, c, j & m!).

*P. archeri* J.D. Hook. var. *deirdrae* Nicholls = *Prasophyllum archeri*.

*P. attenuatum* Fitzg. (1882) = *Prasophyllum nudum*.

*P. attenuatum* Fitzg. (1885) = *Prasophyllum ovale*.

*P. aureoviride* Rupp = *Prasophyllum pumilum*.

*P. aureoviride* Rupp var. *elmae* (Rupp) Rupp et Hunt = *Prasophyllum pumilum*.

**P. australe** R. Br., Prod. 318 (1810). Type: Adventure Bay, Van Diemens Land, 26-30 Jan. 1777, D. Nelson s.n. (lectotype BM! here designated, isolectotype BM!). Dist: Sls, Ski, Sse, Vwp, Vgi, Tas, Nsc, Ncc, Nnc, Nmo.

*Prasophyllum lutescens* Lindley, Gen. sp. orchid. pl. 514 (1840). Type: 'Tasmania, Rocky Cape', Dec. 1837, R. Gunn 922 (lectotype specimen (20a) K-L!, isolectotype BM! Fl! P!).

*Prasophyllum australe* R. Br. var. *viscidum* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 46: 154 (1922). Type: 'Alberton, Gippsland, Victoria', Jan. 1922, A.J. Tadgell s.n. (holo AD!).

*P. australe* R. Br. var. *sargentii* Nicholls = *Prasophyllum sargentii*.

*P. australe* R. Br. var. *viscidum* R. Rogers = *Prasophyllum australe*.

*P. baueri* (R. Br.) Poiret = *Genoplesium baueri*.

*P. beagleholei* Nicholls = *Prasophyllum nudum*.

*P. bowdeniae* Rupp = *Prasophyllum apostasiooides*.

**P. brachystachyum** Lindley, Gen. sp. orchid. pl. 513 (1840). Type: 'Tasmania, Rocky Cape & Circular Head', Dec. 1837 & Feb 1838, R. Gunn 930 (lecto K-L!, isolectotype K! MEL! NSW! P!). Dist: Tas.

*P. bracteatum* Nubling = *Prasophyllum filiforme*.

*P. braunei* R. Rogers = *Prasophyllum lindleyanum*.

**P. brevilabre** (Lindley) J.D. Hook., Fl. Tasman. 2: 11, t. 110, f. A. (1858). Dist: Vwh, Veh, Vgi, Tas, Nsc, Nst, Can, Ncc, Nnt, Qmo.

*Prasophyllum lutescens* Lindley var. *brevilabre* Lindley, Gen. sp. orchid. pl. 514 (1840). Type: 'Tasmania, Rocky Cape', Dec. 1837, R. Gunn 923 (lectotype specimen (7a) K-L!, isolectotype P!).

**P. brownii** H.G. Reichb., Beitr. Syst. Pflanzenk. 16 (1871). Type: 'Ad portum Regis Georgii III in paludibus' [King George Sound, Western Australia], Dec. 1801, R. Brown s.n. (lecto BM!). Dist: Wda.

*Prasophyllum ellipticum* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 44: 325 (1920). Type: 'Diamond Tree School near Jarnadup, Western Australia', 21 Dec. 1918, I. Knox-Pedan s.n. (holo AD!).

**P. buftonianum** J.H. Willis, Pap. & Proc. Roy. Soc. Tasmania 87: 81 (1953). Type: 'Port Davey (Bathurst Harbour), Tasmania', early 1893, J. Bufton s.n. (holo MEL, iso NSW! HO). Dist: Tas.

*P. ciliatum* Ewart et B. Rees = *Prasophyllum archeri*.

*P. colemaniæ* R. Rogers = *Prasophyllum odoratum*.

**P. concinnum** Nicholls, Victorian Naturalist 64: 232, f. A-E (1948). Type: 'Tasmania, at Blackman's Bay, on sandy heath land', 30 Nov. 1947, W.M. Curtis s.n. (holo MEL!). Dist: Tas.

**P. constrictum** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 33: 213-4, t. 13 B, f. 1-5 (1909). Type: 'South Australia, Tailem Bend', 9 Oct. 1906, R.S. Rogers s.n. (holo AD!). Dist: Sep, Sls, Smb, Sse, Vwp, Vwh, Vnp, Veh, Vgi, Tas.

*Prasophyllum gracile* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 33: 213, t. 12a (1909), non Lindley (1840), nec Endl. (1840). Type: 'Sander Grove [c. 10 km N.W. of Milang]', 1 Nov. 1908, J. Tucker s.n. (holo AD!), syn nov.

**P. cucullatum** H.G. Reichb., Beitr. Syst. Pflanzenk. 59 (1871). Type: 'Stirling Terrace' [Albany], 22 Sep. 1840, Preiss 2211 (lecto W!, isolectotype Fl! G! L! MEL! P! W!). Notes: George (1971) reduced this species to

## PRASOPHYLLUM

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a synonym of *P. gibbosum*, but the two are distinct, differing in its diminutive habit, some details of the flower. Further study is needed to determine the exact distribution of this taxon. Dist: Wda, Wro.

**P. cyphochilum** Benth., Fl. Austral. 5: 340 (1873). Type: 'Upper Kalgan', Oldfield 593 (lecto K!, isolectotype MEL!); Syntype: 'Porongurup', Oct. 1867, F. Mueller s.n. (MEL!). Dist: Wir, Wda, Wav, Wro, Wey.

*P. deaneanum* Fitzg. = *Genoplesium baueri*.

*P. densiflorum* Nubling = *Prasophyllum nudiscapum*.

*P. densum* Fitzg. = *Prasophyllum nudiscapum*.

**P. despectans** J.D. Hook., Fl. Tasman. 2: 13, t. 113, f. A. (1858). Types: 'Sandy soil: near Hobarton', Sep., J.D. Hooker s.n. (syn K!); 'Cheshunt?', W. Archer s.n. (syn K!, isosyn K-L!). Dist: Sse, Vwp, Vwh, Vgi, Veh, Tas.

*Prasophyllum despectans* J.D. Hook. var. *intermedia* Ewart et B. Rees, Proc. Roy. Soc. Victoria (new ser.) 23: 113 (1910). Type: 'Warrandyte, Upper Yarra, Victoria', 9 Aug. 1896, C. Walter s.n. (holo MEL, iso BM!).

*P. despectans* J.D. Hook. var. *intermedia* Ewart et B. Rees = *Prasophyllum despectans*.

**P. diversiflorum** Nicholls, Victorian Naturalist 59: 8, 12, f. A-L (1942). Type: 'Gorae West', 12 Jan. 1942, C. Beaglehole in herb W.H. Nicholls 762, 763 (holo & iso MEL!). Notes: An extremely rare and threatened species. Dist: Vwp.

*P. dixonii* F. Muell. = *Prasophyllum pumilum*.

**P. drummondii** H.G. Reichb., Beitr. Syst. Pflanzenk. 69 (1871). Type: 'Swan River', J. Drummond 181 (lecto W!, isolectotype BM! W!). Dist: Wda.

*Prasophyllum muelleri* C.R.P. Andrews, J. Proc. Mueller Bot. Soc. Western Australia (9): 19 (1902); *Prasophyllum elatum* R. Br. var. *muelleri* (C.R.P. Andrews) Nicholls, Victorian Naturalist 65: 270 (1949). Type: 'Guildford', Nov., C.R.P. Andrews s.n. (holo PERTH, iso K! PERTH).

*Prasophyllum paludosum* Nicholls, Victorian Naturalist 64: 172 (1948). Types: 'Western Australia, Bayswater', Oct. 1946, W.H. Nicholls s.n. (holo MEL!, iso PERTH).

**P. elatum** R. Br., Prod. 318 (1810). Type: 'Port Jackson', Sep.-Oct. 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype E! K! P!). Dist: Wir, Wda, Wey, Sep, Syp, Sfr, Syp, Sln, Sls, Ski, Smb, Sse, Vwp, Vwh, Vgi, Veh, Tas, Nsc, Nec, Nct, Nnc, Qmo, Qwb.

*P. elatum* R. Br. var. *muelleri* (C.R.P. Andrews) Nicholls = *Prasophyllum drummondii*.

*P. ellipticum* R. Rogers = *Prasophyllum brownii*.

*P. elmae* Nubling = *Prasophyllum pumilum*.

*P. elmae* Rupp = *Prasophyllum pumilum*.

**P. eriochilum** Fitzg., J. Bot. 23: 135 (1885). Type: 'Mount Wilson, in the Blue Mountains (New South Wales)', Nov., R.D. Fitzgerald s.n. (holo NSW!). Dist: Nct.

*Prasophyllum wilsonense* Rupp, Victorian Naturalist 59: 126, f. E, 1-4 (1942). Type: 'Mt. Wilson, Blue Mountains of N.S.W.', Dec. 1927, E. Nubling s.n. (holo & iso NSW!).

**P. exiguum** Rupp, Victorian Naturalist 65: 142 (1948). Dist: Ncc.

*Prasophyllum rufum* sensu Fitzg., Austral. orch. 2(4): [t. 6] (1888), non R. Br. (1810). Type: 'New South Wales', Jun.-Jul., R.D. Fitzgerald s.n. (holo BM!).

**P. filiforme** Fitzg., J. Bot. 23: 137 (1885). Type: 'Bargo Brush, near Picton, New South Wales', Mar., R.D. Fitzgerald s.n. (holo not found). Dist: Ncc.

*Prasophyllum bracteatum* Nubling, Austral. Orch. Rev. 5: 59 (1940). Notes: Nubling states " In some respects resembling *P. nublingii*, but differs much in others. Its outstanding feature is, in this genus and section, unusually long basal flower bract, which extends the ovary and a good deal even the tips of the lateral sepals".

**P. fimbria** H.G. Reichb., Beitr. Syst. Pflanzenk. 60 (1871). Type: 'Swan River', J. Drummond 848 (lecto W!, isolectotype W!). Dist: Wir, Wda, Wey.

*Prasophyllum reichenbachii* F. Muell., Second Syst. census Austral. pl. 190 (1889), nom. illeg. Types: 'Greenbough Flat, W.A.', 1869, Gray s.n. (syn MEL!); 'Sandy coast, meadows of King George's Sound', Oct. 1867, [Anon] (syn MEL!).

**P. fimbriatum** R. Br., Prod. 319 (1810). Type: 'Port Jackson, [Parramatta]', 1805, F. Bauer s.n. (holo & iso BM!). Dist: Vgi, Nsc, Nec, Nct, Nnc, Nnt, Qmo, Qdd.

*P. fimbriatum* sensu Ewart = *Prasophyllum morrisii*.

**P. firthii** Cady, Orchadian 4(1): 8, f. 9, A-K (1971). Type: 'Friedly Beach road, Bicheno, Tasmania', 15 Jan. 1968, J. Firth & B. Alford s.n. (holo NSW!). Dist: Tas.

- P. fitzgeraldii* Deane ex Tate, Trans. & Proc. Roy. Soc. South Australia 19: 82 (1895), nom. nud. Type: Mount Lofty, R.D. Fitzgerald s.n. (holo NSW).
- P. fitzgeraldii* R. Rogers et Maiden, Trans. & Proc. Roy. Soc. South Australia 33: 216, IX, t. 9A, F. 1-8 (1909). Type: 'Found blooming in alluvial soil in Oct. and early November in National Park, and in other parts of the Mount Lofty Ranges, Belair', 24 Oct. 1908, R.S. Rogers s.n. (holo AD!). Dist: Sep, Sfr, Sne, Syp, Sln, Sls, Ski, Smb.
- P. flavidum* R. Br., Prod. 318 (1810). Type: 'Port Jackson; between Sydney towards South Head', Nov. 1804, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! E!). Dist: Vgi, Tas, Nsc, Ncc, Nct, Nnc.
- P. frenchii* F. Muell., Victorian Naturalist 6: 126 (1889). Type: 'Near Dandenong Ranges', Nov. 1889, G. French s.n. (lectotype MEL! here designated, isolectotype K!); Syntype: 'Between the Yarra and Dandenong', Nov. 1889, G. French s.n. (MEL!). Dist: Sls, Sse, Vwp, Vgi, Veh.
- Prasophyllum hartii* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 51: 8 (1927). Type: 'Bairnsdale, Victoria', 9 Nov. 1925, T.S. Hart s.n. (holo AD!; iso AD!), syn. nov.
- P. frenchii* F. Muell. var. *tadgellianum* R. Rogers = *Prasophyllum alpinum*.
- P. fusco-viride* Reader = *Prasophyllum nigricans*.
- P. fuscum* R. Br., Prod. 318 (1810). Type: 'Moist meadows towards George's River', Oct. 1803., R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype AD! BM! MEL! P!). Dist: Nsc, Ncc.
- Prasophyllum uroglossum* Rupp, Victorian Naturalist 64: 3 (1947). Type: 'N.S.W., at Burrawang', 17 Nov. 1946, A.W. Dockrill s.n. (holo NSW!, iso MEL!).
- P. fuscum* R. Br. var. *alpinum* (R. Br.) C. Moore et Betche = *Prasophyllum alpinum*.
- P. fuscum* R. Br. var. *grandiflorum* Benth. = *Prasophyllum pruinatum*.
- P. fuscum* R. Br. var. *occidentale* (R. Rogers) J. Weber et R. Bates = *Prasophyllum occidentale*.
- P. fuscum* R. Br. var. *validum* (R. Rogers) J. Weber et R. Bates = *Prasophyllum validum*.
- P. gibbosum* R. Br., Prod. 318 (1810). Type: 'In paludosis ad portum Regis George's III' [King George Sound], Dec. 1801, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! E! K! P! PERTH). Dist: Wda.
- P. giganteum* Lindley in Edwards's, Bot. Reg. 1-23; Swan Riv. Append. liv (1840). Type: 'Swan River', J. Drummond s.n. (holo K-L!, iso Fl! K!). Dist: Wir, Wda.
- Prasophyllum grimwadeanum* Nicholls, Victorian Naturalist 64: 174-5, f. D-F (1948). Type: 'Western Australia; Sand ridges in very heavy scrub at Middleton's Beach, near Albany', Oct. 1946, W.H. Nicholls s.n. (holo MEL!), syn. nov.
- P. goldsackii* J. Weber et R. Bates, J. Adelaide Bot. Gard. 1: 167, f.1 (1978). Type: 'Corny Point, South Australia', 10 Oct. 1954, H. Goldsack 611 (holo AD!). Dist: Sep, Syp.
- P. gracile* Lindley = *Prasophyllum macrostachyum*.
- P. gracile* Endl. = *Prasophyllum antennatum*.
- P. gracile* R. Rogers = *Prasophyllum constrictum*.
- P. gracile* Lindley var. *nigens* H.G. Reichb. = *Prasophyllum antennatum*.
- P. gracillimum* Nicholls, Victorian Naturalist 64: 175, f. G-I (1948). Type: 'W.A., Yarloop', Oct. 1944, E. Scouler s.n. (holo MEL!, iso PERTH). Notes: George (1971) reduced *P. gracillimum* to a synonym of *P. fimbria* but from Nicholls' illustrations of the species there are clearly two taxa involved. *P. gracillimum* has a more slender habit, widely separated flowers, a labellum that is erect rather than reflexed and the margins and callus plates are not fimbriate as in *P. fimbria*. Dist: Wda.
- P. grimwadeanum* Nicholls = *Prasophyllum giganteum*.
- P. hartii* R. Rogers = *Prasophyllum frenchii*.
- P. hartii* R. Rogers var. *parviflorum* R. Rogers = *Prasophyllum parviflorum*.
- P. hartii* R. Rogers var. *parviflorum* Ewart = *Prasophyllum parviflorum*.
- P. hians* H.G. Reichb., Beitr. Syst. Pflanzenk. 59, in obs. 61 (1871). Type: 'Swan River', J. Drummond 851 (lecto W!, isolectotype BM!). Dist: Wda, Wey.
- P. hopsonii* Rupp = *Prasophyllum nudum*.
- P. horburyanum* Rupp = *Prasophyllum nigricans*.
- P. intricatum* Benth. = *Prasophyllum archeri*.
- P. intricatum* sensu Fitzg. = *Prasophyllum nudum*.
- P. laminatum* Fitzg. = *Prasophyllum rufum*.

# PRASOPHYLLUM

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- P. lanceolatum** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 44: 325 (1920). Type: 'Albany', 25 Sep. 1919, A. Syme Johnson s.n. (lectotype AD! here designated). Dist: Wda.
- P. laufferianum** Maury in Morot., J. Bot. (Morot.) 302-3, f. (1888). Type: cult. Hort. Mus. Paris ex 'Australienbus', Laufferianis s.n. (holo P not found), tax. inc. sed.
- P. lindleyanum** H.G. Reichb., Beitr. Syst. Plf. 3: 58 (1871). Type: Tasmania, R. Gunn 929 (holo W!, iso BM! K-L! P!). Notes: A previously overlooked name. Illustrated on page 258 in Jones (1988). Dist: Veh, Vwp, Vgi, Tas.
- Prasophyllum braunei* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 46: 149 (1922). Type: 'Ringwood, Victoria', 22 Oct. 1920, A.B. Braine s.n. (holo MEL!, iso BM!), syn. nov.
- P. longisepalum* Fitzg. = *Prasophyllum nudiscapum*.
- P. longisepalum* Nubling = *Prasophyllum nichollsonianum*.
- P. lutescens* Lindley = *Prasophyllum australe*.
- P. lutescens* Lindley var. *brevilabre* Lindley = *Prasophyllum brevilabre*.
- P. macrostachyum** R. Br., Prod. 318 (1810). Type: 'In paludibus ad portum Regis Georgii III', [King George Sound], Dec. 1801, R. Brown s.n. (lectotype specimen (a) BM! here designated). Dist: Wda, Wey.
- Prasophyllum gracile* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. liv (1840). Type: 'Swan River', J. Drummond s.n. (holo K-L!).
- P. macrostachyum* R. Br. var. *ringens* (H.G. Reichb.) A.S. George = *Prasophyllum antennatum*.
- P. macrotys** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. liv (1840). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L!, iso BM!). Notes: George (1971) listed this species as a synonym of *P. elatum* but the two are quite distinct and appear to occupy separate habitats. *P. macrotys* inhabits the wheat-belt of Western Australia. Dist: Wav, Wro.
- P. mollissimum** Rupp, Victorian Naturalist 65: 146, f. 16 (1948). Type: 'Heathcote, National Park, N.S.W.', Apr. 1948, I. Bowden s.n. (holo NSW!). Dist: Ncc.
- P. morganii** Nicholls, Victorian Naturalist 46: 179, t. 7 (1930). Type: 'Cobungra, Victoria', Nov. 1929, H. Morgan ex W.H. Nicholls s.n. (holo MEL!). Notes: This distinctive species was thought to be extinct as all efforts to relocate it at the type locality had failed. However, it has been recently discovered in N.S.W. where it has been seen in hundreds at one locality. Dist: Veh, Nst.
- P. morrisii** Nicholls var. **morrisii** Victorian Naturalist 48: 108, 111, f. d-g, i, j, n, o, r, s. (1931). Types: 'Victoria, Springvale-Clayton, Mt. Waverley, Ringwood-Bayswater, Lockwood, Oakleigh-Cheltenham, Cravensville', Dec.-May, A.B. Braine s.n.; 'Pyrete Ranges', Dec.-May, G. Lyell & E. Bond s.n.; 'Monbulk', Dec.-May, D. Matthews s.n.; 'Ballarat North', Dec.-May, W.H. Nicholls s.n.; 'Airey's Inlet', Dec.-May, M. Sutherland s.n.; 'Wonderland Range, Grampians', Dec.-May, C.W. D'Alton s.n. (syn MEL). Dist: Sse, Vwp, Vwh, Vgi Veh, Tas, Nsc, Nst, Ncc, Nct.
- Prasophyllum morrisii* Nicholls var. *contortum* Nicholls, Victorian Naturalist 59: 14 (1942). Type: 'Pyrete Range (via Gisborne)', Dec.-May, G. Lyell s.n. (holo MEL).
- var. **intermedium** Rupp, Victorian Naturalist 65: 147, f. 17 (1948). Types: 'Woodford', Feb.-Mar. 1948, I. Bowden s.n. (syn NSW!); 'Blue Mountains, N.S.W.; Mt. Irvine', Feb. 1942, J. & G. Scrivener s.n. (syn NSW!). Dist: Ncc, Nct.
- Prasophyllum morrisii* Nicholls var. *contortum* Nicholls = *Prasophyllum morrisii* var. *morrisii*.
- P. mucronatum** Rupp, Victorian Naturalist 65: 145, f. 10-11 (1948). Types: 'Woodford, Blue Mountains, N.S.W.', Mar. 1948, I. Bowden s.n. (syn NSW!); cult ex 'Wahroonga', Mar. 1948, J.D. McComish s.n. (syn NSW!). Dist: Ncc.
- P. muelleri* C.R.P. Andrews = *Prasophyllum drummondii*.
- P. nichollsonianum** Rupp, Victorian Naturalist 59: 123 (1942). Type: 'Loftus, near National Park, N.S.W.', May, 1929, E. Nubling s.n. (holo NSW!). Dist: Ncc, Nct.
- P. nigricans** R. Br., Prod. 319 (1810). Type: 'South Coast Bay X [Port Lincoln, South Australia]', 3 Mar. 1802, R. Brown s.n. (holo BM!). Notes: "Type consists of a study set only, remainder lost in transit" is written on the sheet but in an unknown hand. Dist: Wda, Wro, Wey, Wco, Weu, Sep, Syp, Sln, Ski, Smb, Sse, Vma, Vnp.
- Prasophyllum tepperi* F. Muell. ex. Tepper, Trans. & Proc. Roy. Soc. South Australia 3: 32-33 (1880). Type: 'Ardrossan', O. Tepper (type not found).
- Prasophyllum fusco-viride* Reader, Victorian Naturalist 14: 163 (1898). Type: 'Victoria, Lowan, Dimboola Shire', 11 Jul. 1892, F. Reader s.n. (holo MEL!).
- Prasophyllum tepperi* F. Muell. ex R. Rogers, Trans. & Proc. Roy. Soc. South Australia 33: 206, t. 7B, f. 1-8 (1909). Type: 'Ardrossan, Yorke Peninsula, South Australia', 17 May 1906, J. Rogers ex R.S. Rogers 2958

(holo AD!). Notes: *P. tepperi* as described by Rogers is based on the false assumption that “no botanical description has hitherto appeared”, but by the articles of the ICBN, Tepper (1880) did describe the species in sufficient detail for it to be recognized thereafter.

*Prasophyllum horburyanum* Rupp, Victorian Naturalist 59: 122 (1942). Type: ‘Kumarl, Western Australia’, May 1938, L. Horbury s.n. (holo NSW!, iso PERTH!).

*P. nigricans* Endl. = *Prasophyllum antennatum*.

*P. nigricans* sensu Fitzg., Austral. orch. 1(5): [t. 1] (1879), tax. inc. sed.

*P. nublingii* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 51: 293-294 (1927). Type: ‘New South Wales, National Park, Waterfall Creek’, 22 Mar. 1927, E. Nubling s.n. (holo AD!). Dist: Ncc.

*P. nudiscapum* J.D. Hook., Fl. Tasman. 2: 13 (1858). Type citation: ‘Sandy soil: near Hobarton’, J.D.H. - (Fl. Aug.). Type: Tasmania, Hill E of Mt. Wellington, on sandy soil, 9 Feb. 1840, J.D. Hooker s.n. (holo K!). Notes: Although there is a discrepancy between the original type citation, and the collection details on the type specimen there is no doubt this is the material on which the name was based. Illustrated on page 278 in Jones (1988). Dist: Vgi, Tas, Nsc, Nst, Ncc, Nct, Nnc, Nnt, Qmo.

*Prasophyllum densum* Fitzg., J. Bot. 23: 135 (1885). Type: ‘New South Wales, Mt. Wilson’, Jan., E. Meriwether s.n. (holo not found).

*Prasophyllum ansatum* Fitzg., J. Bot. 23: 135 (1885). Type: ‘New South Wales, Mt. Wilson’, Jan., E. Meriwether s.n. (holo & iso BM!).

*Prasophyllum longisepalum* Fitzg., J. Bot. 23: 136 (1885). Type: ‘Mount Wilson, Blue Mountains, New South Wales’, Mar. [24 Jun. 1884 on sheet], R.D. Fitzgerald s.n. (holo & iso BM!).

*Prasophyllum longisepalum* Nubling, Austral. Orchid Rev. 5: 59 (1940), nom. nud., non Fitzg. (1885).

*Prasophyllum densiflorum* Nubling, Austral. Orchid Rev. 5: 59 (1940), nom. illeg. Type: ‘Near Waterfall, the top track to Flat Rock Crossing’, E. Nublings.s.n. (holo NSW, not found), syn. nov. Notes: Nubling states “resembling Fitzgerald’s *P. densum* from Mount Wilson. A real pygmy, usually from 2.25 to 3 inches high, though sometimes up to about 4.5 inches, with a crowded head of dark purple red, small flowers”. The plants he described have a number of characteristics that correspond with those found only in *P. nudiscapum*.

*Prasophyllum albiglans* Rupp, Contr. New South Wales Natl. Herb. 1: 318, f. B, 4-7 (1951). Type: ‘Asquith, New South Wales’, Mar. 1949, I. Bowden s.n. (holo NSW!).

*P. nudum* J.D. Hook., Fl. nov. zel. 1: 242 (1853). Type: ‘New Zealand, Northern Island. Port Nicholson and Taupo Lake’, W. Colenso s.n. (syn K!). Notes: Illustrated on page 279 in Jones (1988). Dist: Vwp, Vgi, Veh, Tas, Nst, Can, Nct; NZ.

*Prasophyllum attenuatum* Fitzg., Gard. Chron. (new ser.) 17: 495 (1882). Type: New South Wales, R.D. Fitzgerald s.n. (holo BM!).

*Prasophyllum intricatum* sensu Fitzg., Austral. orch. 2(4): [t. 6] (1888), non Benth. (1873). Type: ‘Mount Wilson, in the Blue Mountains, New South Wales’, Mar.-Apr., R.D. Fitzgerald s.n. (holo BM!).

*Prasophyllum hopsonii* Rupp, Proc. Linn. Soc. New South Wales 53: 341 (1928). Type: ‘Allyn River track to Barrington Tops, at 3000 ft.’, Jan. 1928, J. Hopson & H.M.R. Rupp s.n. (holo & iso NSW!).

*Prasophyllum beagleholei* Nicholls, Victorian Naturalist 59: 11, f. M-U (1942). Types: ‘Victoria, Gorae West’, Jan-Mar., W. Phillips s.n. (syn MEL); ‘Victoria, two miles west from Gorae West’, Jan.-Mar., C. Beaglehole s.n. (syn MEL).

*P. obovatum* Rupp, Victorian Naturalist 65: 146, f. 12 (1948). Type: ‘Heathcote, National Park, N.S.W.’, Apr. 1948, I. Bowden s.n. (holo NSW!). Dist: Ncc.

*P. occidentale* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 32: 11 (1908) emend Trans. & Proc. Roy. Soc. South Australia 33: 214, Pl. B X II, f. 1-9 (1909). Type: ‘Streaky Bay, South Australia’, 26 Sep. 1907, R.S. Rogers s.n. (lectotype AD! here designated, isolectotype AD! BRI!). Dist: Sep, Sfr, Sln, Syp, Smb, Sse. *Prasophyllum fuscum* R.Br. var. *occidentale* (R. Rogers) J. Weber et R. Bates in Black, Fl. S. Austral. (ed. 3) 1: 430 (1978).

*P. odoratum* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 33: 209, t. 9b, f. 1-9 (1909). Type: Blackwood, South Australia, 13 Oct. 1908, R.S. Rogers s.n. (lectotype AD! here designated). Dist: Wda, Wey, Sep, Syp, Sfr, Sne, Sln, Sls, Ski, Smb, Sse, Vwp, Vwh, Vgi, Veh, Tas.

*Prasophyllum rotundiflorum* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 33: 210 (1909). Type: ‘Cherry Gardens, South Australia’, 12 Oct. 1907, R.S. Rogers s.n. (lectotype AD! here designated); Syntype: ‘Blackwood’, R.S. Rogers s.n. (AD!).

*Prasophyllum colemaniae* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 47: 337 (1923). Type: ‘Bayswater, Victoria’, 12 Nov. 1922, E. Coleman s.n. (holo AD!).

- P. odoratum* R. Rogers var. *album* (R. Rogers) R. Rogers = *Prasophyllum album*.
- P. odoratum* R. Rogers var. *albidiflora* N.A. Wakefield, Victorian Naturalist 65: 219 (1949), nom. nud.
- P. ovale* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. liv (1840). Type: 'Swan River', 1839, J. Drummond s.n. (lecto K-L!, isolectotype BM! FI! W!). Notes: Illustrated on the left hand side of the plate on page 276 of Hoffman & Brown (1984). Dist: Wda, Wav.
- Prasophyllum attenuatum* Fitzg., J. Bot. 23: 136 (May 1885), non Fitzg. (1882). Type: 'Green Mount, Western Australia', Sep., R.D. Fitzgerald s.n. (lecto BM!).
- P. ovale* Lindley var. *triglochin* H.G. Reichb. = *Prasophyllum plumaeforme*.
- P. pallidum* Nicholls, Proc. Roy. Soc. Victoria (new ser.) 46: 33, f. P-U (1933). Type: 'National Park, South Australia', Oct. 1930, R.S. Rogers ex W.H. Nicholls 46 (holo MEL!). Dist: Sfr, Sln, Sls, Smb, Vgi.
- P. paludosum* Nicholls = *Prasophyllum drummondii*.
- P. parvicalbum* Rupp, Queensland Naturalist 12: 52 (1943). Type: 'Mt Greville near Kalbar, S. Queensland', Nov. 1942, E.J. Smith s.n. (holo & iso NSW!). Dist: Qmo.
- P. parviflorum* Nicholls, Victorian Naturalist 57: 191, f. A-I (1941). Type: 'Yarram-Port Albert', 21 Nov. 1928, E. Devonshire ex A.J. Tadgell herb. R.S. Rogers s.n. (lectotype AD! here designated); Syntypes: 'Gorae (via Portland), M. Holmes s.n. (MEL); 'Wonthaggi', N. de Lacy ex E. Homann s.n. (MEL); 'Singapore (Wilson's Promontory)', E. Devonshire s.n. (MEL). Dist: Vwp, Vgi.
- Prasophyllum hartii* R. Rogers var. *parviflorum* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 54: 44 (1930). Type: 'Victoria, Port Albert', 21 Nov. 1928, E. Devonshire ex A.J. Tadgell herb. R.S. Rogers s.n. (lectotype AD! here designated).
- Prasophyllum hartii* R. Rogers var. *parviflorum* Ewart, Fl. Vict. 318 (1931).
- P. parvifolium* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. liv (1840). Type: 'Swan River', 1839, J. Drummond s.n. (lecto K-L!, isolectotype E!). Dist: Wda, Wav, Wey.
- P. patens* R. Br., Prod. 318 (1810). Type: 'Port Jackson', 1803, R. Brown s.n. (lectotype specimen (a) BM!, here designated, isolectotype AD!). Notes: A poorly understood species that appears restricted in its distribution to the central New South Wales coast where it inhabits forest areas. It differs from *P. odoratum*, with which it has been erroneously placed, in being overall a more slender plant, having a labellum in which the callus plates are less prominent, and by not having a very strong odour. Dist: Nsc, Ncc.
- P. patens* R. Br. var. *pruinose* (R. Rogers) R. Rogers = *Prasophyllum pruinose*.
- P. patens* R. Br. var. *robustum* Nicholls = *Prasophyllum robustum*.
- P. plumaeforme* Fitzg., Gard. Chron. (new ser.) 17: 495 (1882). Type: 'King River, Western Australia', Sep., R.D. Fitzgerald s.n. (lecto BM!). Notes: The differences between *P. plumaeforme* (*P. ovale* var. *triglochin*) and *P. ovale* appear stable and are sufficient to be able to separate material on herbarium sheets. In addition the two taxa occupy different ecological areas of Western Australia and favour different soil types. They should be treated as separate species just as is the closely related *P. cytophilum*. These species are illustrated on pages 276 and 278 of Hoffman and Brown (1984). Dist: Wda, Wey.
- Prasophyllum ovale* Lindley var. *triglochin* H.G. Reichb., Beitr. Syst. Pflanzenk. 60 (1871). Type: 'Swan River', J. Drummond 854 (holo W!, iso K! W!), syn. nov.
- P. plumosum* Rupp, Victorian Naturalist 59: 127, f. G, 1-3 (1947). Type: 'Kurnell, Botany Bay', Jan. 1928, E. Nubling s.n. (holo NSW lost). Dist: Ncc.
- P. pruinose* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 33: 211-2, t. 11B, f. 1-8 (1909). Type: 'Found growing in alluvial soil at Blackwood', 18 Oct. 1908, R. Fiveash s.n. (lectotype AD! here designated); Syntypes: 'Blackwood', 28 Oct. 1908, R.S. Rogers 2877 (AD!); '[Belair] National Park', 4 Nov. 1908, R.S. Rogers s.n. (AD!). Dist: Sls.
- Prasophyllum patens* R. Br. var. *pruinose* (R. Rogers) R. Rogers in Black, Fl. S. Austral. (ed. 1) 126 (1922).
- Prasophyllum fuscum* R. Br. var. *grandiflorum* Benth., Fl. Austral. 6: 340 (1873). Type: 'Pine Forest', O. Behr ex herb. F. Mueller s.n. (lectotype K!, here designated, isolectotype K-L!), syn. nov. Notes: At Kew there is one sheet annotated by Benthem with this name. This clearly is one of the collections cited by him and as it matches the brief description of the taxon it has been selected as the lectotype.
- P. pumilum* J.D. Hook., Fl. nov.-zel. 1: 242 (1853). Types: 'Northern Island, New Zealand', Edgerly s.n. (syn K!); 'East Coast, New Zealand', W. Colenso s.n. (syn K!). Notes: Illustrated on page 280 in Jones (1988). Dist: Vgi, Nsc, Ncc, Nnc, Qmo; NZ.
- Prasophyllum tunicatum* J.D. Hook., Fl. nov.-zel. 1: 242 (1853). Type: 'Northern Island. East Coast, New Zealand', W. Colenso 84 (holo K!, iso K-L!).
- Prasophyllum viride* Fitzg., J. Bot. 23: 135 (1885). Type: 'Springwood, on the Blue Mountains', Mar., R.D. Fitzgerald s.n. (holo & iso BM!).

*Prasophyllum variegatum* Colenso, Trans. & Proc. New Zealand Inst. 20: 208 (1888). Type: 'Glenross, county of Hawke's Bay', 1887, D.P. Balfour s.n. (holo K!).

*Prasophyllum dixonii* F. Muell., Victorian Naturalist 9: 44 (1892). Type: 'Near Kardinia Creek', May 1892, C. French & J.E. Dixon s.n. (holo MEL).

*Prasophyllum aureoviride* Rupp, Victorian Naturalist 58: 22 (1941). Types: 'Oxford Falls (between French's Forest and Narrabeen)', Mar. 1938, M. Moodie s.n. (syn NSW!); 'Oxford Falls (between French's Forest and Narrabeen) and French's Forest', May 1940, C.A. Messmer and H.M.R. Rupp s.n. (syn NSW!); 'Castlecrag, Middle Harbour, Port Jackson', May 1940, H.M.R. Rupp s.n. (syn NSW!, isosyn NSW!).

*Prasophyllum elmae* Nubling, Austral. Orchid Rev. 5: 59 (1940), nom. illeg.

*Prasophyllum elmae* Rupp, Victorian Naturalist 59: 122 (1942); *Prasophyllum aureoviride* Rupp var. *elmae* (Rupp) Rupp et Hunt, Austral. Orchid Rev. 11: 92 (1946). Type: 'National Park, Port Hacking', Apr. 1927, E. Nubling s.n. (holo & iso NSW!).

*P. pyriforme* E. Coleman, Victorian Naturalist 49: 195, t. 14 (1932). Type: 'Wonga Park, Doncaster', Oct. 1931, F. Bullock s.n. (holo MEL!). Dist: Veh, Vgi.

*P. reflexum* Fitzg., J. Bot. 23: 137 (1885). Types: 'Jamberoo Mountain and at Dural, New South Wales', Jun.-Jul., G.H. Sheaffe s.n. (syn not found). Dist: Ncc.

*P. regium* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 42: 27 (1918). Type: 'A little south of Manjimup, not far from Forest Diamond Tree, Western Australia', Dec. 1917, R. Pulleine s.n. (holo AD!). Dist: Wda.

*P. reichenbachii* F. Muell. = *Prasophyllum fimbria*.

*P. robustum* (Nicholls) M. Clements et D. Jones, stat. nov.

*Prasophyllum patens* R. Br. var. *robustum* Nicholls, Victorian Naturalist 57: 84 (1940). Type: 'Smithton, Tasmania', Oct.-Nov., Atkinson s.n. (holo MEL). Notes: One of a number of taxa closely related to the *P. odoratum-patens-truncatum* group that, from the illustration and description, is deserving of specific status. Compared to *P. patens*, the plants of this species have a much more robust habit, a very large ovary for the size of the flower, widely spreading segments, narrow linear petals, and a narrow acute labellum and narrow callus plates. Dist: Tas.

*P. rogersii* Rupp, Proc. Linn. Soc. New South Wales 53: 340 (1928). Type: 'Barrington Tops, at about 5,000 ft.', Jan. 1928, H.M.R. Rupp & J. Hopson s.n. (holo NSW!, iso K! NSW!). Dist: Veh, Tas, Nnt.

*P. rostratum* Lindley, Gen. sp. orchid. pl. 516 (1840). Type: 'Tasmania', R. Gunn 353 (lecto K-L!, iso K!). Dist: Tas. *P. rotundiflorum* R. Rogers = *Prasophyllum odoratum*.

*P. rufum* R. Br., Prod. 319 (1810). Type: 'Port Jackson; In humidus subumbra fruticum prope Wallamolilla', Mar.-Apr. 1805, R. Brown s.n. (holo BM!, iso BM! K!). Dist: Nsc, Ncc.

*Prasophyllum laminatum* Fitzg., J. Bot. 23: 136 (1885). Type: 'Bowral, New South Wales', May, G.H. Sheaffe s.n. (holo BM!), syn. nov.

*P. rufum* sensu Fitzg. = *Prasophyllum exiguum*.

*P. rufum* R. Br. var. *intermedium* Benth., Fl. Austral. 6: 344 (1873). Types: 'Port Jackson', W. Woolls s.n. (syn not found); 'Port Jackson', Daintree s.n. (syn not found). Notes: The description is so brief as to render it impossible to determine the taxon without viewing the types., taxon inc. sed.

*P. ruppii* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 51: 292-3 (1927). Type: 'New South Wales, Paterson', Feb. 1927, H.M.R. Rupp s.n. (holo AD!). Dist: Ncc, Nnc.

*Prasophyllum ruppii* R. Rogers var. *menaiense* Rupp, Victorian Naturalist 59: 160 (1943). Type: 'Between Menai and George's River, South of Sydney', Apr. 1928, E. Nubling s.n. (holo NSW).

*P. ruppii* R. Rogers var. *menaiense* Rupp = *Prasophyllum ruppii*.

*P. sagittiferum* Rupp, Victorian Naturalist 59: 125 (1942). Type: 'Road from Bell to Mt. Wilson, Blue Mountains of N.S.W.', Mar. 1930, E. Nubling s.n. (holo & iso NSW!). Dist: Nct.

*P. sargentii* (Nicholls) A.S. George, Nuytsia, 1(2): 189 (1971). Dist: Wir, Wav, Wro, Wey, Wco.

*Prasophyllum australe* R. Br. var. *sargentii* Nicholls, Victorian Naturalist 65: 268, f. F-J (1949). Type: 'Near Beverley', Sep. 1948, W.H. Nicholls s.n. (holo MEL!).

*P. striatum* R. Br., Prod. 318 (1810). Type: 'Port Jackson; Paludos prope Sydney', Apr.-May-Jun. 1802-5, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! E! FI! P!). Dist: Nsc, Ncc.

*P. subbisectum* Nicholls, Victorian Naturalist 53: 72, f. A-H (1936). Type: 'Pomonal, South-West Victoria', Oct.-Nov., W.H. Nicholls s.n. (holo MEL). Dist: Vwh (possibly extinct).

*P. suttonii* R. Rogers et B. Rees, Proc. Roy. Soc. Victoria (new ser.) 25: 112, t. 6, f. A-C (1912). Type: 'Buffalo Plateau, Victoria', Dec. 1902, Sutton s.n. (holo MEL!). Dist: Vwh, Veh, Tas, Nst, Can.

*P. tadgellianum* R. Rogers = *Prasophyllum alpinum*.

## PRASOPHYLLUM

- P. tepperi* F. Muell. ex Tepper = *Prasophyllum nigricans*.  
*P. tepperi* F. Muell. ex R. Rogers = *Prasophyllum nigricans*.  
**P. transversum** Fitzg., J. Bot. 23: 135 (1885). Type: 'Mount Wilson', Apr., R.D. Fitzgerald s.n. (holo not found). Dist: Ncc.  
**P. triangulare** Fitzg., Gard. Chron. (new ser.) 17: 495 (1882). Type: 'Albany, Western Australia', Oct. R.D. Fitzgerald s.n. (lecto BM!). Dist: Wda.  
**P. trifidum** Rupp, Victorian Naturalist 58: 21 (1941). Type: 'Castlecrag, Middle Harbour, Port Jackson', May 1940, H.M.R. Rupp s.n. (holo NSW!). Dist: Ncc.  
**P. truncatum** Lindley, Gen. sp. orchid. pl. 513 (1840). Type: 'Circular Head, Tasmania', Dec. 1837, R. Gunn 924 (lecto K-L!, isolectotype BM!). Dist: Sse, Vwp, Vgi, Tas.  
*P. tunicatum* J.D. Hook. = *Prasophyllum pumilum*.  
**P. unicum** Rupp, Victorian Naturalist 59: 124, f. (1942). Type: 'Normanhurst, near Sydney', Jun. 1942, E. Nubling s.n. (holo & iso NSW!). Dist: Ncc.  
*P. uroglossum* Rupp = *Prasophyllum fuscum*.  
**P. validum** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 51: 7 (1927). Type: 'Melrose, South Australia', 27 Oct. 1906, J.B. Cleland s.n. (holo AD!). Dist: Sfr.  
    *Prasophyllum fuscum* R. Br. var. *validum* (R. Rogers) J. Weber et R. Bates, Fl. S. Austral. (ed. 3) 1: 431 (1977).  
*P. variegatum* Colenso = *Prasophyllum pumilum*.  
*P. viride* Fitzg. = *Prasophyllum pumilum*.  
*P. wilsoniense* Rupp = *Prasophyllum eriochilum*.  
**P. woollsii** F. Muell., Fragm. 5: 100 (1865). Type: 'Blue Mountains' [Bent's Basin, New South Wales], Woolls s.n. (holo MEL not found). Notes: The original diagnosis is very brief which has led to much confusion as to the correct identity of this species. Dist: Ncc.

## PSEUDOVANILLA

**Pseudovanilla** Garay, Bot. Mus. Leafl. 30(4): 214 (1986). Type species: *Ledgeria foliata* F. Muell. Notes: See note under *Erythrorchis* for the basis for acceptance of this genus.

**P. foliata** (F. Muell.) Garay, Bot. Mus. Leafl. 30(4): 235 (1986). Dist: Ncc, Nnc, Nnt, Qmo, Qdd, Qwb, Qpc, Qks, Qkn, Qco; PG.

*Ledgeria foliata* F. Muell., Fragm. 2: 167 (1861); *Erythrorchis foliata* (F. Muell.) F. Muell., Fragm. 2: 167 (1861); *Galeola foliata* (F. Muell.) F. Muell., Fragm. 8: 31 (1873). Type: 'In arboribus ad flumen Pine River Australiae orientalis calidioris', A. Fitzalan s.n. (holo MEL!).

*Galeola ledgeriana* F. Muell., Fragm. 11: 127, in obs. (1881), nom. illeg.

*Galeola ledgeriana* Fitzg., Austral. orch. 2(2): [t. 4] (1885). Type: 'Macleay and Bellinger Rivers', Nov., R.D. Fitzgerald s.n. (holo not found; lectotype Fitzgerald's plate here designated).

*Galeola altissima* F. Muell., Fragm. 7: 135 (1871), nom. illeg.

*Galeola montigena* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 29 (1911), syn. nov. Type: 'Kaiser-Wilhelms-Land: In the forests of the Torricelli Range, in humus, alt. c. 800 m', Sep. 1909, R. Schlechter 20167 (holo B†).

## PTEROERAS

*Pteroceras* Hasselt ex Hasskarl, Flora 25 (2): Beibl. 6 (1842) et Tijdschr. Natuurw. Gesch. Physibl. 9: 142 (1842). Type species: *Pteroceras radicans* Hasskarl.

*P. hirticalcar* (Dockr.) Garay = *Sarcochilus hirticalcar*.

*P. spatulatus* (R. Rogers) Garay = *Sarcochilus spatulatus*.

## PTEROSTYLIS

**Pterostylis** R. Br., Prod. 326 (1810) (nom. cons.). Type species: *Pterostylis curta* R. Br. (type cons.).

*Diplodium* Sw., Ges. Naturf. Freunde Berlin Mag. Neuesten Entdeck. Gesammten Naturk 4: 84 (Jul. 1810). Type species: *Disperis alata* Labill., nom. rej. vs *Pterostylis* R. Br. (1-7 Apr. 1810) (nom. cons.).

**P. abrupta** D. Jones, Orchadian 8(6): 122-3, f. (1985). Type: 'Barrington Tops, northern New South Wales', 20 Jan. 1985, D.L. Jones 1798, A. Barton & T.D. Jones (holo NSW, iso BRI, MEL). Dist: Nnt.

**P. aciculiformis** (Nicholls) M. Clements et D. Jones, stat. nov.

*Pterostylis pusilla* R. Rogers var. *aciculiformis* Nicholls, Victorian Naturalist 52: 167, f. D-F (1936). Type: 'Victoria: Clydesdale', Sep. 1935, M. Ritter in herb. W.H. Nicholls 691 (lectotype MEL! here designated); Syntype: 'Clydesdale', 1932, M. Ritter herb. W.H. Nicholls s.n. (MEL!). Notes: Differs from *P. rufa* in having acuminate lateral sepals that are decidedly inrolled rather than flat, a labellum that is narrower and rectangular; and from *P. pusilla* in being more robust, and having a labellum with many more prominent setae. Each species inhabits distinct environments, with *P. aciculiformis* being found in dry *Eucalyptus* woodlands mainly on the western side of the Great Dividing Range. Illustrated on page 626 in Jones (1988). Dist: Vwh, Veh, Nst, Can, Nss, Nst, Ncs.

*Pterostylis rufa* R. Br. subsp. *aciculiformis* (Nicholls) Blackmore et Clemesha, Orchadian 2(12): 164-6 (1968), syn. nov.

*Pterostylis mitchellii* sensu Fitzg., Austral. orch. 1(6): [t. 6] (1880), non Lindley (1843).

*P. acuminata* R. Br., Prod. 326 (1810). Type: 'Port Jackson, near Sydney', Mar., 1803-5, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype AD! BM! E! P! W!). Notes: Records of this taxon occurring naturally outside Australia are erroneous. Dist: Ncc, Nnc, Qmo, Qwb, Qpc, Qks, Qco.

*P. acuminata* R. Br. var. *ingens* Rupp = *Pterostylis X ingens*.

*P. aestiva* D. Jones, Muelleria 2(3): 151-4, f. 50 (1972). Type: 'About 6 miles directly NNW of Wulgulmerang Post Office, NE. Gippsland, Victoria', 8 Jan. 1971, A.C. Beaglehole 35911 (holo MEL!, iso K! NSW!). Dist: Vgi, Ncs.

*P. alata* (Labill.) H.G. Reichb., Beitr. Syst. Pflanzenk. 70 (1871). Dist: Ski, Sls, Sse, Vwp, Vwh, Vgi Veh, Tas, Nst, Nss, Nct, Nes, Nnt, Nns.

*Disperis alata* Labill., Nov. Holl. pl. 2: 59, t. 210 (1806); *Diplodium alata* (Labill.) Sw., Ges. Naturf. Freunde Berlin Mag. 4: 84 (1810). Type: 'Terra Diemen', *Labillardere* 33, 38 (syn Fl!).

*Pterostylis praecox* Lindley, Gen. sp. orchid. pl. 388 (1840). Type: Tasmania, Circular Head, 1837, R. Gunn 751 (holo K-L!, iso P! W!).

*Pterostylis striata* Fitzg., Austral. orch. 1(3): [t. 5] (1877). Type: 'New South Wales, Yass', May, S.A. Fox s.n. (holo not found; lectotype Fitzgerald's plate here designated).

*Pterostylis reflexa* R. Br. var. *intermedia* Ewart, Proc. Roy. Soc. Victoria (new ser.) 20(1): 84-5 (1907). Type: 'Victoria, Mentone', Jun. 1907, J.R. Tovey & C. French s.n. (lectotype MEL! here designated); Syntypes: 'Cheltenham', 1893, J. McKibbin s.n. (syn MEL); 'Brighton', Jun., C. French s.n. (syn MEL); 'Wedderburn', 1880, F. Colvin s.n. (syn MEL); 'near Beaumaris', Jun. 1882, C. French s.n. (syn MEL).

*P. alata* (Labill.) H.G. Reichb. var. *robusta* (Ewart) Tovey et P. Morris = *Pterostylis robusta*.

*P. alata* (Labill.) H.G. Reichb. var. *robusta* (R. Rogers) J. Weber et R. Rates = *Pterostylis robusta*.

*P. allantoidea* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 64: 139 (1940). Type: 'Kumarl, near Salmon Gums, Western Australia', Sep. 1938, L. Horbury s.n. (holo AD!). Dist: Wey, Wro, Wco.

*P. alpina* R. Rogers, Proc. Roy. Soc. Victoria (new ser.) 28: 1089, t. 9 (1915). Type: 'Victoria, Fernshaw', 27 Sep. 1912, C. French s.n. (lectotype AD! here designated, isolectotype AD!); Syntypes: 'Summit of Mt. Dandenong', Nov. 1914, C. French s.n. (not found); 'Watts River, Healesville', 23 Sep. 1915, C. French and E.E. Pescott s.n. (AD!); 'Condah', 2 Oct. 1906, F.M. Reader s.n. (AD!). Notes: It has been established, through study of the types and with field work, that this species is distinct from *P. scabrida*, with which it was recently placed (Clements, 1982). Dist: Vwh, Veh, Tas.

*P. alveata* Garnet, Victorian Naturalist 59: 91-4, f. (1939). Type: 'Snake Island, a small island off Corner Inlet, Wilson's Promontory, Victoria', Jun. 1939, E. Rossiter ex J.R. Garnet s.n. (holo & iso MEL!). Notes: Clements (1982) listed *P. alveata* as a synonym of *P. obtusa*, based on Willis (1962). However, following examination of the types of these two species and from studies of fresh material of these and other taxa in this group, it became obvious that *P. alveata* should be recognized as a distinct species. Dist: Vgi, Nsc, Ncc, Nnc.

*Pterostylis crypta* Nicholls, Victorian Naturalist 61: 207 (1948). Type: 'Hoddle Ranges, Toora S.-East Victoria', May 1941, R. Clark ex A.J. Tadgell in herb. W.H. Nicholls 1031 (holo MEL!), syn. nov. Notes: A freak form of the species in which the labellum is rigid and lid-like.

*P. angusta* A.S. George, Nuytsia 1(2): 164 (1971). Type: 'West of Mt. Trio, Stirling Range, W.A., in clay-quartzite soil in Wandoo woodland', 2 Aug. 1969, A.S. George 9480 (holo PERTH!, iso K! MEL! NSW!). Dist: Wda, Wav, Wro.

*P. aphylla* Lindley, Gen. sp. orchid. pl. 392 (1840). Type: 'Tasmania, Circular Head', Dec. 1837, R. Gunn 903 (holo K-L!, iso E! W!). Dist: Tas, Vwh.

*Pterostylis parviflora* R. Br. var. *aphylla* (Lindley) Ewart et J. White, Proc. Roy. Soc. Victoria 24: 71 (1911), syn. nov.

# PTEROSTYLIS

**P. arenicola** M. Clements et J. Stewart, sp. nov.

Ad *Pterostylidem boormanii* Rupp affinis, a qua sepalis lateralibus minus conspicue alatiformibus apicibus filamentosis longioribus, et setis brevibus in lobo basali labelli, differt. Type: cult. ANBG, 10 Oct. 1986, M.A. Clements ex South Australia, under trees in *Calitris* forest, c. 10 km S. of Tailem Bend, Sep. 1986, M.A. Clements 4327 & J. Stewart (holo CBG!, iso AD! K!). Dist: Sls, Smb.

**P. aspera** D. Jones et M. Clements, sp. nov.

affinis *Pterostylis robustae* R. Rogers a qua rosula confertiore, foliis sagittatis aeruginosis, sino valde scabroso et plus vittatis, et sepalo dorsali ad apicem acuminate usque apiculato sed non filamentoso differt. Type: Eaton, north-east of Bunbury, Western Australia, 33° 19'S 115° 42'E, in sand in Jarrah-Marri-Agonis woodland, 26 June 1977, A.S. George 14606 (holo PERTH!, iso CBG!). Dist: Wda, Wav.

**P. baptistii** Fitzg., Austral. orch. 1(1): [t. 2] (1875). Type: 'Sydney, Hen and Chickens Bay', R.D. Fitzgerald s.n. (holo & iso BM!). Dist: Vgi, Nsc, Ncc, Nnc, Qmo, Qwb, Qkn, Qco.

*Pterostylis curta* R. Br. var. *grandiflora* Benth., Fl. Austral. 6: 355 (1873). Type: 'Queensland, Brisbane River, Moreton Bay', F. Mueller s.n. (lectotype K! here designated, isolectotype MEL!); Syntypes: 'Queensland', Leichhart s.n. (not found); 'New South Wales, Parramatta', Woolls s.n. (not found), syn. nov.

**P. barbata** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append liii (1840). Type: 'Swan River', 1839, J. Drummond 159 (holo K-L!, iso BM! E! K! W!). Dist: Wda, Wav, Wro.

*Pterostylis turfosa* sensu Fitzg., Aust. orch. 2(2): [t. 9] (1885), non Endl. (1846).

**P. bicolor** M. Clements et D. Jones, Proc. Roy. Soc. Queensland 98: 126-8, f. 3 (1987). Type: 'New South Wales, 24 km north of Cowra on Forbes road', 16 Oct. 1984, M.A. Clements 3539 (holo CBG!, iso BRI! K! NSW!). Dist: Vnp, Nsc, Nst, Nss, Ncc, Nct, Nes, Nnc, Nnt, Nns, Qmo, Qdd, Qwb, Qbn, Qle, Qpc.

*Pterostylis mutica* sensu Fitzg., Austral. orch. 1(2): [t. 7] (1876), non R. Br. (1810).

**P. bicornis** D. Jones et M. Clements, Proc. Roy. Soc. Queensland 98: 124-6, f. 4 (1987). Type: 'Queensland, Mount Maroon', 27 Jun. 1978, J. Clarkson & M. Olsen s.n. (holo BRI!). Notes: Illustrated on page 174 in Jones (1988). Dist: Qmo.

**P. biseta** Blackmore et Clemesha, Orchadian 2: 152 (1968). Type: 'Blackwood, South Australia', 24 Nov. 1906, R.S. Rogers s.n. (holo NSW!, iso AD!). Dist: Sgt, Sep, Sfr, Sne, Sln, Syp, Sls, Smb, Sse, Vma, Vnp, Vwh, Veh, Tas, Nss, Ncs, Nsp, Nnp.

**P. boormanii** Rupp, Orchids New South Wales 98 (1943). Type: 'New South Wales, Peak Hill', Oct. 1906, J.L. Boorman s.n. (holo NSW!, iso AD! NSW!). Dist: Sep, Sfr, Syp, Sln, Vnp, Nss, Ncs, Nsp, Nns.

**P. calceolus** M. Clements, sp. nov.

Ad *Pterostylidem hamatam* Blackmore et Clemesha affinis, a qua floribus minoribus uniformite rufo-brunneis et labello latiore rufo-brunneo, differt. Type: 'Bungonia Gorge, New South Wales', 13 Oct. 1985, M.A. Clements 3850, B. Whitehead & R.G. Tunstall (holo CBG!, iso K! NSW!). Notes: Illustrated on page 627 in Jones (1988). So named because the outline of the lip is similar to that of a slipper or shoe, of the type worn in the middle-ages. Dist: Nct.

*P. carinata* Dockr. = *Pterostylis depauperata*.

*P. celans* Rupp = *Pterostylis nana*.

*P. ceriflora* Blackmore et Clemesha = *Pterostylis gibbosa*.

**P. chaetophora** M. Clements et D. Jones, sp. nov.

Ad *Pterostylidem gibbosam* R. Br. affinis, a qua sepalis et petalis longe acuminatis rufo-brunneis, et labello obovato marginibus ciliatis, differt. Type: cult. ANBG, 21 Nov. 1982, M.A. Clements 2485 ex 'New South Wales, Neath', D. McAlpine s.n. (holo CBG!). Notes: Illustrated on page 629 in Jones (1988). Dist: Ncc, Nnc, Qmo.

*Pterostylis gibbosa* R. Br. subsp. *mitchellii* sensu Blackmore et Clemesha, Orchadian 2: 161 (1968), non Lindley (1848).

**P. ciliata** M. Clements et D. Jones, sp. nov.

Ad *Pterostylidem boormanii* Rupp affinis, a qua habitu graciliore, floribus viridibus ad virido-brunneis, sepalis et petalis ciliatis, et labelli lobo basali subtiliter setoso, differt. Type: 'Western Australia, Darling District; c. 28 km along Brookton Highway towards Perth', 15 Oct. 1988, D.L. Jones 3095 & M.A. Clements (holo CBG!, iso PERTH!). Notes: Illustrated on page 306, plate 4 of Hoffman & Brown (1984) as *Pterostylis* sp. Dist: Wda, Wey, Wav.

**P. clavigera** Fitzg., J. Bot. 23: 138 (1885). Type: New South Wales, [Anon] (holo & iso BM!). Notes: Previously listed as a synonym of *P. nana* but the two species are quite distinct. Further research is being undertaken on this and other taxa in the *P. nana* complex. Dist: Nct.

**P. cobarensis** M. Clements, sp. nov.

Ad *Pterostylidem mitchellii* Lindley affinis, a qua habitu robustiore et labello latoire carnosiore sine lobo basali prominenti, differt. Type: 'New South Wales, 7.5 km SE of Cobar, 31° 33, S 145° 53, E, 300 m', 10 Sep. 1978, M.D. Crisp 4296 (holo CBG!, iso NSW!). Notes: Illustrated on page 629 in Jones (1988). Dist: Nsp, Nnp.

**P. coccina** Fitzg., Austral. orch. 1(4): [t. 3] (1878). Type: 'On a swampy talus at the base of "Hassan's Walls", Bowenfels, and also from the "Guy Faux" pass, near Grafton', Feb., R.D. Fitzgerald s.n. (syn not found; lectotype Fitzgerald's plate CBG! here designated). Notes: The original spelling for this species was 'coccina', which appeared 5 times at various points in the text and therefore must have been deliberate. Although 'coccina' is an uncommonly used form of the latin word, it is correct (L.A.S. Johnson pers. comm. via B. Wallace) and the later use of the spelling 'coccinea', by Fitzgerald and other authors, is incorrect under the articles of the ICBN. Dist: Veh, Nst, Can, Nct, Nnt.

**P. collina** (Rupp) M. Clements et D. Jones, stat. nov.

*Pterostylis ophioglossa* R. Br. var. *collina* Rupp, Proc. Linn. Soc. New South Wales 54: 552 (1929). Type: 'Hungry Hill, Paterson, New South Wales', Jun. 1926, H.M.R. Rupp s.n. (holo NSW!). Notes: Differs from *P. ophioglossa* in having shiny rosette leaves, flowers that are predominantly green in colour but with reddish-brown suffusions, and widely divergent apical lobes of the labellum. *P. collina* inhabits wet forests and the edges of rainforests in mountainous areas of northern New South Wales. Illustrated on page 629 in Jones (1988). Dist: Nnt.

**P. concava** D. Jones et M. Clements, sp. nov.

Ad *Pterostylidem vittatum* Lindley affinis a qua floribus majoribus rufo-brunneis, sepalis lateralibus profunde concavis et labello multo majoribus, differt. Type: 'Between Boyup Brook and Cranbrook, 34° 01, S 116° 40, E', 6 Jul. 1969, A.S. George 9385 (holo PERTH!, iso CBG! K! NSW!). Notes: Illustrated on page 312 of Hoffman & Brown (1984) as *P. vittata* var. *subdifformis* and on page 630 in Jones (1988). Dist: Wda.

*Pterostylis vittata* Lindley var. *subdifformis* Nicholls, Victorian Naturalist 49: 253 (1933). Type: 'Boyup Brook', May 1925, E. Crocker s.n. (holo MEL!, syn NSW!), syn. nov.

**P. concinna** R. Br., Prod. 326 (1810). Type: 'Port Jackson, Bennelong Point Sydney Cove', 18 Aug. 1803, R. Brown s.n. (lectotype specimen (a) BM!, here designated, isolectotype E! K! K-L! P! W!). Dist: Sse, Vwp, Vwh, Vgi, Tas, Nsc, Ncc, Nct, Nnc.

*P. concinna* R. Br. X *P. reflexa* R. Br. var. *intermedia* Ewart = *Pterostylis* X *toveyanana*.

**P. X conoglossa** Upton, Orchadian 2: 114 (1967). Type: 'Swansea, N.S.W.', 18 Jun. 1967, W.T. Upton s.n. (holo NSW!). Dist: Ncc.

*P. constricta* O. Sarg. = *Pterostylis* *scabra*.

*P. crypta* Nicholls = *Pterostylis* *alveata*.

**P. cucullata** R. Br., Prod. 327 (1810). Type: 'Tasmania, Port Dalrymple', Paterson s.n. (lectotype specimen (a) BM!, here designated). Dist: Sls, Vwp, Veh, Vgi, Tas, Nnt.

*Pterostylis mackibbinii* F. Muell., Victorian Naturalist 9: 93 (1892). Types: 'Near St. Vincent-Gulf', [South Australia], 1848, F. Mueller s.n. (syn MEL!); 'Cardinia-Creek', C. French s.n. (syn MEL); 'Southern Tasmania', Gulliver s.n. (syn MEL!); 'On King's Island and Swan Island', Nov. 1888, J. MacKibbin s.n. (syn MEL!, isosyn K! NSW!); 'Near Brighton-Bluff', Sep. 1892, S. Hart s.n. (syn MEL!).

**P. curta** R. Br., Prod. 326 (1810). Type: 'Port Jackson', 1803, R. Brown s.n. (lectotype specimen (a) BM!, isolectotype BM! K-L! P! W!). Dist: Sfr, Slx, Sse, Vwp, Vwh, Vgi, Veh, Tas, Nsc, Nst, Can, Ncc, Nct, Nnc, Nnt, Qmo, Qwb.

*P. curta* R. Br. var. *grandiflora* Benth. = *Pterostylis baptistii*.

**P. cycnocephala** Fitzg., Austral. orch. 1(2): [t. 7] (1876). Type: 'Molong', Ross s.n. (lectotype BM! here designated); Syntype: 'Boorawa', G.H. Sheaffe s.n. (not found). Dist: Wir, Sep, Sfr, Sln, Syp, Slx, Smb, Sse, Vnp, Vwh, Vwp, Veh, Tas, Nst, Can, Nss, Ncc, Nct, Ncp, Nnt, Nns, Nnp, Qdd, Qbn.

**P. daintreana** Benth., Fl. Austral. 6: 360 (1873). Type: 'New South Wales. Near Sydney', Daintree [Daintrey] s.n. (holo K!). Dist: Nsc, Ncc, Nct, Nnt, Qmo.

**P. decurva** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 47: 339-40, t. 27 (1923). Type: 'Victoria: Fern-tree Gully', 20 Nov. 1920, E.E. Pescott & A.N. Burns s.n. (lectotype AD! here designated); Syntypes: 'Ringwood and Belgrave', E.E. Pescott s.n. (AD! MEL!). Dist: Veh, Vgi, Tas, Nst, Can, Nct, Nnt.

**P. depauperata** Bailey, Bot. Bull. Dept. Agric. Queensland 4: 18 (1891). Type: 'Queensland; Near Cairns', 1890, C.J. Wild s.n. (lectotype specimen (a) BRI! here designated). Dist: Qkn, Qco.

*Pterostylis carinata* Dockr., North Queensland Naturalist 23(110): 4 (1955). Type: 'Ravenshoe District, North Queensland', 16 Apr. 1954, W.W. Abell & W.G. McPherson s.n. (holo NSW!).

## PTEROSTYLIS

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*P. despectans* (Nicholls) M. Clements et D. Jones, stat. nov.

*Pterostylis rufa* R. Br. var. *despectans* Nicholls, Victorian Naturalist 66: 215, f. D (1950). Type: 'Maryborough, Victoria', Nov. 1947, W.H. Nicholls s.n. (holo MEL!). Notes: This species is quite distinct from others in *P. sect. Squamatae* by virtue of its diminutive habit, and in the details of the labellum which has an acute rather than an obtuse apex and which is less membranous than that of *P. biseta* (to which it appears closely related). *P. despectans* is perhaps one of our most endangered orchids, being presently known only from three widely scattered small colonies. Dist: Sln, Vwh.

*P. dicheata* F. Muell. ex H. G. Reichb., Beitr. Syst. Pflanzenk. 69 (1871), nom. nud.

*P. dilatata* A.S. George, Nuytsia 5(1): 61 (1984). Type: 'Below N. side of Bluff Knoll, Stirling Range, Western Australia', 6 Jul. 1969, A.S. George 9390 (holo PERTH!, iso CANB!). Notes: Illustrated on page 300 of Hoffman & Brown (1984). Dist: Wir, Wda, Wav, Wro, Wey, Wco.

*P. dolichochila* D. Jones et M. Clements in Jessop and Toelken, Fl. S. Austral. Part IV: 2117-2118, f. 982B (1986). Type: 'South Australia, 20km E. of Bowhill, in sand dunes under *Callitris*', 10 Jun. 1981, R. Bates 959 (holo AD!, iso AD! BRI! CBG!). Dist: Sep, Syp, Smb, Sse, Vnp, Vwp.

*P. dubia* R. Br., Prod. 328 (1810). Type: 'Tasmania, Derwent', Apr. 1804, R. Brown s.n. (lectotype BM! here designated). Notes: Distinguished from other related taxa in having virtually no basal rosette, short erect lateral sepals and an aqua-green labellum. Dist: Veh, Tas, Nst, Can.

*Pterostylis oreophila* Clemesha, Orchadian 4: 110 (1974). Type: 'Kiandra N.S.W. On the bank of a small permanent stream', 18 Dec. 1967, S.C. Clemesha & B. Whitehead s.n. (holo & iso NSW!).

*P. erecta* Hunt, Proc. Roy. Soc. Queensland 69: 89, f. (1958). Type: 'Queensland.-Moreton District: Cedar Creek, near Samford', Sep. 1956, A.J. Russel & T.E. Hunt 718 (holo BRI!, iso MEL!). Dist: Nsc, Ncc, Nnc, Qmo, Qwb.

*P. erythroconcha* M. Clements et D. Jones in Jessop and Toelken, Fl. S. Austral. Part IV: 2118, f. 983 (1986). Type: 'South Australia, Corny Point', 9 Aug. 1956, H. Goldsack 683 (holo AD!, iso AD! BRI! CBG!). Dist: Sep, Syp, Smb, Ski, Sse.

*P. excelsa* M. Clements in Jessop and Toelken, Fl. S. Austral. Part IV: 2118, f. 983 (1986). Type: cult. ANBG ex 'South Australia, Eyre Peninsula, Koongawa, Waddikee Rocks', 28 Nov. 1978, M.A. Clements 1600E (holo CBG!, iso AD!). Dist: Sep, Sfr, Syp, Sln, Sls, Smb, Sse, Vwh.

*Pterostylis squamata* R. Br. var. *valida* Nicholls, Victorian Naturalist 58: 115, f. A-E (1941). Type: 'Mt Tarrengower, Maldon, Victoria', 23 Oct. 1941, J. von Bibra s.n. (holo & iso MEL!), syn. nov.

*P. falcata* R. Rogers = *Pterostylis furcata*.

*P. fischii* Nicholls, Victorian Naturalist 67: 45, f. A-J (1950). Type: 'Woodside, Victoria', 30 May 1950, P. Fisch s.n. (holo MEL!). Dist: Vgi, Nct, Nnt, Qdd.

*P. foliata* J.D. Hook., Fl. nov.-zel. 1: 249 (1853). Type: 'New Zealand, Northern Island. Marshy places, East coast, and Ruahine Mountains', W. Colenso 1906 (lectotype specimen (a) K! here designated; isolectotype K!); Syntypes: 'New Zealand, Northern Island. Marshy places, East coast, and Ruahine Mountains', W. Colenso 1913 (K!); 'New Zealand, Northern Island. Marshy places, East coast, and Ruahine Mountains', W. Colenso 1915 (K!). Dist: Sls, Vwp, Vwh, Veh, Tas, Nst; NZ.

*Pterostylis gracilis* Nicholls, Victorian Naturalist 43: 324-6, F. (1927). Type: 'Wilson's Promontory', Sep. 1926, R.S. Rogers & E. Coleman s.n. (lectotype MEL! here designated); Syntypes: 'Victoria; Fern Tree Gully', Aug. 1923, W.H. Nicholls & F. Bishop s.n. (MEL); 'Greensborough', Sep. 1925, A.B. Braine s.n. (MEL); 'Healseville', Oct. 1926, E. Coleman s.n. (MEL); 'Wandin', Oct. 1926, D. Blair s.n. (MEL); 'Tasmania, Devonport to Smithton, N.W. Coast', Aug.-Oct. 1926, H.B. Atkinson s.n. (MEL).

*Pterostylis vereenae* R. Rogers, Trans & Proc. Roy. Soc. South Australia 38: 360-1, f. 18(2) (1914). Type: 'Cherry Gardens, South Australia', Sep., V. Jacobs s.n. (holo AD not found).

*P. furcata* Lindley, Gen. sp. orchid. pl. 390 (1840). Type: Tasmania; in wet places a few miles from Launceston, R. Gunn 602 (holo K-L!, iso K!). Dist: Sse, Vwp, Vwh, Vgi, Veh, Tas, Nsc, Nst, Can, Nct, Nnt; NZ.

*Pterostylis micromega* J.D. Hook., Fl. nov.-zel. 1: 248 (1853). Type: 'New Zealand, Northern Island', Edgerly s.n. (syn K!, isosyn K-L!); 'New Zealand, East coast', W. Colenso s.n. (syn K!, W!), syn. nov.

*Pterostylis polyphila* Col., Trans. Roy. Soc. New Zealand 22: 489 (1890). Type: New Zealand, W. Colenso s.n. (holo not seen).

*Pterostylis falcata* R. Rogers, Proc. Roy. Soc. Victoria (new ser.) 28(1): 106, t. 9 (1915). Type: 'Dandenong Creek near Oakleigh, Victoria', Oct. 1911, C. French s.n. (lectotype AD! here designated, isolectotype MEL!); Syntypes: 'Victoria, Upper Yarra', C. Walter s.n. (MEL!); 'Orbost', E.E. Pescott s.n. (MEL not found); 'near Dandenong Ranges', 9 Nov. 1890, C. French s.n. (MEL!). Notes: The lectotype was chosen as it was the only specimen in Rogers' herbarium with a description accompanying it.

*Pterostylis furcata* Lindley var. *typica* Hatch, Trans. Roy. Soc. New Zealand 77: 243 (1949), nom. illeg.

*P. furcata* Lindley var. *typica* Hatch = *Pterostylis furcata*.

**P. X furcillata** Rupp, Proc. Linn. Soc. New South Wales 55: 415 (1930). Type: 'Found in Melaleuca scrub not very far from the Kurri Kurri Hospital grounds', H.M.R. Rupp s.n. (holo NSW). Dist: Nnc.

**P. gibbosa** R. Br., Prod. 328 (1810). Type: 'Port Jackson', 1804, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM!, W!, icon BM! Bauer's plate). Notes: There is a colour plate by F. Bauer in the BM Botanical Library labelled as this species. I have consistently taken the stand that the material Bauer painted is representative of the type of whichever species is involved. Therefore the species later described as *P. ceriflora* is the same as *P. gibbosa*. One of our rarest species. Dist: Nsc, Ncc.

*Pterostylis ceriflora* Blackmore et Clemesha, Orchadian 2: 156-8, f. A (1968). Type: 'Lake Illawarra N.S.W.', 27 Sep. 1967, J.A.P. Blackmore s.n. (holo NSW!).

*P. gibbosa* R. Br. subsp. *mitchellii* (Lindley) Blackmore et Clemesha = *Pterostylis mitchellii*.

*P. gracilis* Nicholls = *Pterostylis foliata*.

**P. grandiflora** R. Br., Prod. 327 (1810). Type: 'Port Jackson', 1804, F. Bauer s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! P! W!); Syntypes: Port Jackson, North Brush, May 1805, Caley s.n. (BM!); Port Jackson, North Brush, Jun. 1804, Caley s.n. (BM!, isosyn W!). Dist: Vgi, Nsc, Ncc, Nct, Nnc, Nnt, Qmo, Qdd, Qwb, Qpc, Qkn, Qco.

**P. hamata** Blackmore et Clemesha, Orchadian 2: 154-6, f. (1968). Type: 'Koorawatha N.S.W.', 29 Oct. 1966, B. Whitehead s.n. (holo NSW!). Notes: The type material was in fact collected from c. 3 km SE of Crowther which is 10 km S. of Koorawatha (B. Whitehead pers. comm.). Dist: Vnp, Veh, Can, NSS, Ncs, Nnt, Nns, Qdd. *Pterostylis squamata* sensu Nicholls, Victorian Naturalist 53: 135-6, f. (1936), non R. Br. (1810).

**P. hamiltonii** Nicholls, Victorian Naturalist 50: 89-91, f. D-G (1933). Type: 'Western Australia: Boyup Brook', Jul. 1930, E. Crocker s.n. (holo & iso MEL!). Dist: Wda, Wav.

**P. hildae** Nicholls, Queensland Naturalist 10: 39, t. 3 (1937). Type: 'Queensland, Tamborine Mountain', 9 Sep. 1924, H. Geissman s.n. (holo MEL, found in AD!). Notes: The type specimens were not located in Melbourne (MEL), where Nicholls lodged most of the material for taxa he described, but were later found in Adelaide (AD) amongst Dr. Rogers' collections. It must therefore be assumed that it, along with the types of a number of other taxa, were borrowed for study but never returned. Despite the time which has elapsed since the original borrowing date, I believe the material should be returned to the original place of deposition. Dist: Nsc, Ncc, Nnc, Qmo, Qwb, Qco.

**P. hispidula** Fitzg., Austral. orch. 1(6): [t. 5] (1880). Type: 'Springwood on the Blue Mountains', May, R.D. Fitzgerald s.n. (syn not found; lectotype Fitzgerald's plate here designated); Syntype: 'Hunter's Hill, near Sydney', May, R.D. Fitzgerald s.n. (not found); Dist: Nsc, Ncc, Nct, Ncn.

*Pterostylis nutans* R. Br. var. *hispidula* (Fitzg.) C. Moore et Betche, Handb. fl. N.S.W. 399 (1893).

**P. X ingens** (Rupp) D. Jones, Orchadian 5: 54 (1976). Dist: Vwp, Veh, NSS.

*Pterostylis acuminata* R. Br. var. *ingens* Rupp, Proc. Linn. Soc. New South Wales 53: 558 (1928). Type: 'Victoria, Healesville', 1926, A.J. Tadgell ex W.H. Nicholls s.n. (holo NSW). Notes: The place of publication has been given as Rupp (1933), but this is incorrect.

**P. insectifera** M. Clements, sp. nov.

Ad *Pterostylidem setiferam* M. Clements, I.G. Matthias et D. Jones affinis a qua floribus atro-brunneo-rufis, pedicellis brevioribus, sepalis lateralibus angustioribus, labello angustiore ad medium constricto lobo basali sine setis, differt. Type: cult. ANBG, 13 Nov. 1980, M.A. Clements 2234 ex Western Australia, c. 88 km E of Hyden towards Norseman, just S. of Lake Cronin, Aug. 1980, M.A. Clements 1773A (holo CBG!). Dist: W/co, Wro.

**P. laxa** Blackmore, Orchadian 3: 2 (1968). Type: 'Upper Grose Valley', 10 Mar. 1962, J.A.P. Blackmore s.n. (holo NSW!, iso BRI! MEL! P!). Dist: Vwh, Vgi, Veh, Nst, Can, NSS, Nct, Ncs, Nns.

**P. leptochila** M. Clements et D. Jones, sp. nov.

Ad *Pterostylidem excelsam* M. Clements affinis, a qua habitu robusto, floribus nutantibus, galea grandi sed labello comparate parvo angusto, differt. Type: 'Western Australia, 8 km E of Ravensthorpe', 21 Oct. 1988, D.L. Jones 3386 & M. A. Clements (holo CBG!, iso K! PERTH!). Dist: Wey, Wro.

**P. lingua** M. Clements, sp. nov.

Ad *Pterostylidem chaetophoram* M. Clements et D. Jones affinis, a qua floribus carnosioris, sepalis lateralibus latioribus crassioribus non ad ovarium reflexis, et labello crassiore lobo basali prominente, differt. Type: 'New South Wales, Southern end of Cocopara National Park, near Mt. Caley on Barry Scenic Drive', 12 Oct. 1986, R.G. Tunstall 94 (holo CBG!, iso NSW! K!). Dist: Nsp, Ncs.

*Pterostylis squamata* sensu Fitzg., Austral. orch. 1(6): [t. 6] (1880), non R. Br. (1810).

## PTEROSTYLIS

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- P. longicurva** Rupp, Contr. New South Wales Natl. Herb. 1: 125 (1941). Type: 'Nandewar Range, between Mt. Kaputar and the Gwydir Falls on the Horton River, N.S.W.', Apr. 1914, H.M.R. Rupp s.n. (holo & iso NSW!). Dist: Nnt, Nns, Qdd.
- P. longifolia** R. Br. Prodr. 327 (1810). Type: 'Port Jackson, North Brush', Jun. 1804, G. Caley s.n. (lectotype specimen (a) BM! here designated, isolectotype AD! W!). Syntype: 'Near Paldtor? farm', May 1805, G. Caley s.n. (BM!). Dist: Sep, Sln, Syp, Sls, Ski, Smb, Sse, Vnp, Vwp, Vwh, Vgi, Veh, Tas, Nsc, Nst, Can, Nss, Ncc, Nct, Ncs, Nnc, Nnt, Nns, Qmo, Qwb.
- P. longipetala** Rupp, Proc. Linn. Soc. New South Wales 68: 9 (1943). Type: 'Bateman's Bay, N.S.W.', Jun. 1931, E. Nubling s.n. (holo NSW!). Dist: Vgi, Nsc, Ncc, Nnc.
- P. matthewsii** Cheesem. = *Pterostylis nutans*.
- P. mackibbinii** F. Muell. = *Pterostylis cucullata*.
- P. macrocalymma** M. Clements et D. Jones, sp. nov.  
Ad *Pterostylidem spathulatum* M. Clements affinis, a qua habitu robustiore et floribus majoribus, differt. Type: 'Western Australia, Murchison River, NW Coastal Highway', 2 Sep. 1960, A.S. George 1509 (holo PERTH!, iso CBG! K!). Notes: A very rare species known only from two herbarium collections. Illustrated on page 308 of Hoffman & Brown (1984) as *Pterostylis* sp. Dist: Wir.
- P. maxima** M. Clements et D. Jones, sp. nov.  
Ad *Pterostylidem bisetum* Blackmore et Clemesha affinis, a qua habitu robustiore, floribus atro-brunneis et perianthio breviore, differt. Type: 'Victoria, Skylark Dam, Whistick Scrub, Bendigo', 10 Nov. 1973, W. Perry s.n. (holo MEL!, iso CBG!). Dist: Sse, Vnp, Nss.
- P. micromega** J.D. Hook. = *Pterostylis furcata*.
- P. mitchellii** Lindley, J. Exped. Trop. Australia 365 (1848). Type: 'Sub-Tropical New Holland, No. 569 Range S.E. of Camp 27' [Mount Kennedy, N. of Mitchell, Queensland], Sep. 1846, T.L. Mitchell s.n. (holo K-L!, iso K!, W!). Notes: All references to this species occurring outside Queensland and northern New South Wales are thought to relate to other taxa. Dist: Nnp, Qdd, Qma, Qle, Qbn, Qpc, Qco.
- Pterostylis rufa* R. Br. var. *mitchellii* (Lindley) Fitzg., Handb. fl. N.S.W. 401 (1893); *Pterostylis gibbosa* R. Br. subsp. *mitchellii* (Lindley) Blackmore et Clemesha, Orchadian 2: 161 (1968).
- P. mitchellii** sensu Fitzg. = *Pterostylis aciculiformis*.
- P. mutica** R. Br., Prod. 328 (1810). Type: 'Port Jackson, raceground', Sep.-Oct. 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM!); Syntype: 'Port Dalrymple', Paterson s.n. (BM!). Notes: The lectotype was chosen from amongst the numerous syntypes in order to preserve the current usage of the name and because clearly the description could apply equally to any one of three closely related taxa viz., *P. mutica*, *P. cycnocephala* and the recently described *P. bicolor*. Brown collected many more specimens of *P. bicolor* than he did of *P. mutica*, and it is representatives of the former that are more commonly scattered throughout various European herbaria than *P. mutica* sens. str. Dist: Wir, Wav, Wro, Wey, Wco, Weu, Snu, Sep, Sfr, Sne, Sln, Syp, Ski, Sls, Smb, Sse, Vma, Vnp, Vwh, Vwp, Vgi, Veh, Tas, Nsc, Nst, Can, Nss, Nsp, Ncc, Nct, Ncs, Nnc, Nnt, Nns, Nnp, Qdd, Qbn, Qle.
- P. mutica* sensu Fitzg. = *Pterostylis bicolor*.
- P. nana** R. Br., Prod. 327 (1810). Type: Tasmania, Port Dalrymple, Paterson s.n. (lectotype specimen (a) BM! here designated). Dist: Sep, Sfr, Sln, Syp, Sls, Ski, Smb, Sse, Vnp, Vwh, Vwp, Vgi, Veh, Tas, Nss, Nsp, Ncs, Nnp, Nns.
- Pterostylis nana* R. Br. var. *typica* Domin, J. Linn. Soc. Bot. 41: 250, in obs. (1912), nom. illeg.
- Pterostylis celans* Rupp, Victorian Naturalist 61: 106-7, f. (1944). Type: 'Portland, Victoria', Oct. 1944, G. Bennett & K. Mellblom s.n. (holo MEL!, iso NSW!).
- P. nana* R. Br. var. *pyramidalis* (Lindley) Domin = *Pterostylis pyramidalis*.
- P. nana* R. Br. var. *pyramidalis* (Lindley) Ewart = *Pterostylis pyramidalis*.
- P. nana* R. Br. var. *typica* Domin = *Pterostylis nana*.
- P. nigricans** D. Jones et M. Clements, Austrobaileya 2(5): 550-1, f. 2 E, F & G (1988). Type: 'Queensland. Moreton District: Stradbroke Island, open forest and heathland', 26 May 1987, D.L. Jones 2482 (holo BRI!, iso AD! AMES! BRI! CBG! K! MO! NSW! US!). Dist: Nnc, Qmo.
- P. nutans** R. Br. Prod. 326 (1910). Type: 'Port Jackson; North Rocks', Jul. 1804, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! P! W!); Syntype: 'Port Jackson, half way on the Sydney road from Parramatta', Jul. 1804, R. Brown s.n. (BM!). Dist: Sls, Sse, Vwp, Vwh, Vgi, Veh, Tas, Nsc, Nst, Can, Ncc, Nct, Ncs, Nnc, Nnt, Nns, Qmo, Qdd, Qwb.
- Pterostylis matthewsii* Cheesem., Trans. & Proc. New Zealand Inst. 47: 46 (1915). Type: 'North Island: Mangonui County, crest of ridge leading to Pukemiro Hill, near Kiataia', H.B. Matthews s.n. (holo K!).

- P. nutans* R. Br. var. *hispida* (Fitzg.) C. Moore et Betche = *Pterostylis hispida*.
- P. obtusa* R. Br., Prod. 327 (1810). Type: 'Port Jackson', 1804, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! E! FI! P! W!). Dist: Vwh, Vgi, Veh, Tas, Nsc, Nst, Can, Ncc, Nct, Nns, Nnt, Qmo, Qdd.
- P. ophioglossa* R. Br., Prod. 326 (1810). Type: 'Port Jackson, vicinity of Sydney Cove', 1803-5, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! E! P!). Syntypes: 'Port Curtis', R. Brown s.n. (BM!); 'East coast Port I', R. Brown s.n. (BM!). Dist: Ncc, Nnc, Qmo, Qwb, Qle, Qbn, Qpc.
- P. ophioglossa* R. Br. var. *collina* Rupp = *Pterostylis collina*.
- P. ophioglossa* R. Br. var. *collina* sensu Dockr. = *Pterostylis taurus*.
- P. ophioglossa* R. Br. subsp. *fusca* Clemesha = *Pterostylis taurus*.
- P. oreophila* Clemesha = *Pterostylis dubia*.
- P. ovata* M. Clements in Jessop and Toelken, Fl. S. Austral. Part IV: 2124, f. 989 (1986). Type: cult. Canberra ex 'South Australia, Gawler Ranges, hills and S.E. edge of Lake Acraman', 17 Oct. 1977, M.A. Clements 2458 (holo CBG!, iso AD! K! PERTH!). Dist: Sgt, Sep.
- P. parviflora* R. Br., Prod. 327 (1810). Type: 'Port Jackson; between Sydney and Parramatta near Aiten's Bridge', Apr. 1805, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! W!). Dist: Vwp, Vgi, Tas, Nsc, Nst, Ncc, Ncs, Nnc, Nnt, Qmo.
- Pterostylis whitei* Bailey, Queensland Agric. J. 25(1): 11 (1910). Type: 'Glasshouse Mountains' [Top of Mt. Ngun Ngun], May 1910, C.T. White s.n. (holo BRI!, iso K!).
- P. parviflora* R. Br. var. *aphylla* (Lindley) Ewart et J. White = *Pterostylis aphylla*.
- P. pedoglossa* Fitzg., Austral. orch. 1(3): [t. 5] (1877). Type: 'Long Bay, Sydney', Jun. 1873, R.D. Fitzgerald s.n. (holo not found; lectotype Fitzgerald's plate here designated). Dist: Vgi, Tas, Nsc, Ncc.
- P. pedunculata* R. Br., Prod. 327 (1810). Type: Tasmania, Port Dalrymple, Jun., Paterson s.n. (lectotype specimen (a) BM!, isolectotype BM!). Dist: Syp, Slc, Ski, Sse, Vwh, Vwp, Vgi, Veh, Tas, Nsc, Nst, Can, Ncc, Nct, Nnc, Nnt.
- Pterostylis semirubra* F. Muell., Fragn. 8: 249 (1874). Type: 'In truncis arboris filicum prope Apollo-Bay' [on tree ferns near Apollo Bay, Victoria], C. Walter s.n. (holo MEL!).
- P. picta* M. Clements, sp. nov.  
Ad *Pterostylidem excelsam* M. Clements affinis, a qua habitu robustiore, sepalis brevioribus et labello latiore crassiore, differt. Type: 'Moora, Western Australia', 7 Oct. 1980, M.A. Clements 2223 (holo CBG!, iso CBG! K! PERTH!). Notes: Illustrated on page 304 of Hoffman & Brown (1984) as *P. aff. rufa*. Dist: Wir, Wda, Wav, Wro, Wey, Wco.
- P. plumosa* Cady, Austral. Pl. 5(39): 138, f. B-P (1969). Type: 'Road to Abercrombie Caves', Oct. 1961, W. Brinsley s.n. (holo NSW!). Dist: Sep, Sfr, Sln, Syp, Slc, Ski, Smb, Sse, Vnp, Vwh, Vwp, Vgi, Veh, Tas, Ncc, Nct, Ncs; NZ.
- Pterostylis barbata* sensu Fitzg., Aust. orch. 1(7): [t. 7] (1882), non Lindley (1840).
- P. polyphila* Col. = *Pterostylis furcata*.
- P. praecox* Lindley = *Pterostylis alata*.
- P. praecox* Lindley var. *robusta* Ewart = *Pterostylis robusta*.
- P. praetermissa* M. Clements et D. Jones, sp. nov.  
Ad *Pterostylidem rufam* R. Br. affinis, a qua habitu graciliore, floribus rufo-brunneis et viridibus, sepalis et petalis gracillimis et labello setosiere, differt. Type: 'New South Wales, in forests adjacent to Mount Kaputar National Park', 17 Oct. 1986, R.G. Tunstall 146 (holo CBG!, iso BRI! K! NSW!). Notes: Illustrated on page 633 in Jones (1988). Dist: Nnt, Nns, Qdd, Qbn, Qle, Qpc.
- P. procera* D. Jones et M. Clements, sp. nov.  
affinis *Pterostylis baptistii* Fitzg. a qua sino gibboso minori, petalis brevioribus abrupte acuminatis usque apiculatis, et labello subacuto breviore multo differt. Type: Moomin, Queensland, 2 May 1988, L. Lawler 12 (holo CBG). Dist: Qco.
- P. puberula* J.D. Hook., Fl. nov.-zel. 1: 249 (1853). Notes: This species was listed as a synonym of *P. nana* but the two are distinct with *P. puberula* being here considered a New Zealand endemic.
- P. pulchella* Messmer, Proc. Linn. Soc. New South Wales 58: 429 (1933). Type: 'Growing on rocks in the moist shade of the gorge of Fitzroy Falls, N.S.W.', 1933, P. Messmer s.n. (holo NSW!). Dist: Ncc.
- P. pusilla* R. Rogers, Trans. & Proc. Roy Soc. South Australia 42: 26 (1918). Type: 'South Australia, Geranium', 3-12 Oct. 1917, N. E. Jacobs s.n. (lectotype AD! here designated, isolectotype K!). Dist: Wey, Wro, Sep, Sfr, Sln, Syp, Smb, Vnp, Vwh.

## PTEROSTYLIS

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*P. pusilla* R. Rogers var. *aciculiformis* Nicholls = Pterostylis aciculiformis.

*P. pusilla* R. Rogers var. *prominens* Rupp = Pterostylis rufa.

**P. pyramidalis** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. liii (1840). Type: 'Swan River', 1839, J. Drummond 163. (holo K-L!, iso K! W!). Notes: George (1971) reduced this species to a synonym of *P. nana* but the two are quite distinct in a range of critical characters. Dist: Wda, Wav, Wro.

*Pterostylis nana* R. Br. var. *pyramidalis* (Lindley) Ewart, Proc. Roy. Soc. Victoria 24: 72 (1911); *Pterostylis nana* R. Br. var. *pyramidalis* (Lindley) Domin, J. Proc. Linn. Soc., Bot. 41: 250, in obs (1912), nom. illeg., syn. nov.

**P. recurva** Benth., Fl. Austral. 6: 360 (1873). Type: 'Swan River', J. Drummond s.n. (lectotype K!); Syntypes: 'Upper Hay River', Warburton s.n. (K! MEL!). Dist: Wir, Wda, Wav, Wro, Wey.

**P. reflexa** R. Br., Prod. 327 (1810). Type: 'Port Jackson', 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype AD! BM! P! W!); Syntype: 'Port Jackson, northern boundary', Jun. 1804, R. Brown s.n. (BM!); 'Port Jackson, N. rocks', Apr.-May 1804, R. Brown s.n. (BM!). Dist: Nsc, Nst, Ncc.

*P. reflexa* R. Br. var. *constricta* (O. Sarg.) Ewart, White et Tovey = *Pterostylis scabra*.

*P. reflexa* R. Br. var. *intermedia* Ewart = *Pterostylis alata*.

**P. revoluta** R. Br., Prod. 327 (1810). Type: 'Port Jackson', 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype AD! BM! Fl! K! P! W!); Syntypes: Port Jackson, Parramatta, 1805, R. Brown s.n. (BM! E! W!). Dist: Vwh, Vnp, Veh, Nsc, Nst, Can, NSS, Ncc, Nct, Nes, Nsp, Nnc, Nnt, Nns, Nnp, Qmo, Qdd, Qwb.

*Arethusa tetrapetala* R. Brown ex J. Britten, Illus. Bot. Cook's Voy. 94, t. 302B (1909). Type: New Holland, J. Banks 79 (holo BM!).

*Pterostylis speciosa* Hunt, Queensland Naturalist 16: 7 (1958), non Colenso (1890). Type: 'Stradbroke Island between Dunwich and Myara', 4 Apr. 1958, W. Bristow & T.E. Hunt s.n. (holo BRI!).

**P. robusta** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 51: 296 (1927). Type: National Park, Belair, South Australia, 28 May 1905, R.S. Rogers s.n. (lectotype AD!). Dist: Syp, Sln, Sfr, Slc, Ski, Sse, Vwp, Vwh, Vnp, NSS.

*Pterostylis scabra* Lindley var. *robusta* (R. Rogers) A.S. George, Nuytsia 1(2): 191 (1971); *Pterostylis alata* (Labill.) H.G. Reichb. var. *robusta* (R. Rogers) J. Weber et R. Bates, Fl. S. Austral. ed.3, 1:437 (1978), nom. illeg.

*Pterostylis praecox* Lindley var. *robusta* Ewart, Proc. Roy. Soc. Victoria (new ser.) 28(1): 234, in obs. (1916); *Pterostylis alata* (Labill.) H.G. Reichb. var. *robusta* (Ewart) Tovey et P. Morris, Proc. Roy. Soc. Victoria (new ser.) 35(1): 87 (1922). Type: 'Encounter Bay, S.A.', 1896, Hussey s.n. (holo MEL).

**P. roensis** M. Clements et D. Jones, sp. nov.

Ad *Pterostylidem pictam* M. Clements affinis, a qua habitu graciliore, sepalis lateralibus angustis glabris, galea angusta, et floribus atro-brunneis minus notatis, differt. Type: 'Western Australia, Roe District; Dundas Rocks c. 20 km S of Norseman on Esperance road', 11 Oct. 1988, D. Jones 2973 & M.A. Clements (holo CBG!, iso CBG! K! PERTH!). Dist: Wro, Wco.

**P. rogersii** E. Coleman, Victorian Naturalist 46: 100 (1929). Type: 'Busselton', Jun. 1928 and Jul. 1929, E. Bryant s.n. (lectotype MEL!); Syntype: 'W.A. Collie-Bunbury', Jul. 1929, I. Banks s.n. (MEL!). Dist: Wda, Wey.

**P. rufa** R. Br., Prod. 327 (1810). Type: 'Port Jackson, Cow pasture plains', Oct. 1803, R. Brown s.n. (lectotype specimen (a) BM!, here designated, isolectotype BM! E! Fl! G! K! L! P! W!). Dist: Veh, Vgi, Nsc, Nst, Can, Ncc, Nnc.

*Pterostylis pusilla* R. Rogers var. *prominens* Rupp, Proc. Linn. Soc. New South Wales 56: 137 (1931). Type: Weston, New South Wales, Oct. 1930, Minchell & H.M.R. Rupp s.n. (holo NSW!).

*P. rufa* R. Br. subsp. *aciculiformis* (Nicholls) Blackmore et Clemesha = *Pterostylis aciculiformis*.

*P. rufa* R. Br. var. *despectans* Nicholls = *Pterostylis despectans*.

*P. rufa* R. Br. var. *mitchellii* (Lindley) Fitzg. = *Pterostylis mitchellii*.

*P. rufa* R. Br. var. *squamata* (R. Br.) Fitzg. = *Pterostylis squamata*.

*P. rupestris* J. Drummond in Hooker's, J. Bot. 2: 367 (1840), tax. inc. sed.

**P. russellii** Hunt, Orchid, 1(1): 42 (1952). Type: cult. Brisbane, Aug. 1984, T.E. Hunt 189 ex 'Queensland; Moreton District, Cedar Creek', Aug. 1944, A.J. Russell & T.E. Hunt s.n. (lectotype BRI! here designated, isolectotype MEL! NSW!). Dist: Nnc, Nnt, Qmo, Qdd.

**P. sanguinea** D. Jones et M. Clements, sp. nov.

affini *Pterostylis vittata* Lindley a qua floribus majoribus fuscibus rubiginosibus, sepalis lateralibus latoioribus, labello majore rubiginoso trichomatibus dense, et stigmate latiore multo differt. Type: Belair

Recreation Reserve, 70 acre Flora Reserve, behind Pines Oval, South Australia, 9 July 1986, M.A. Clements 4097 & A.S. Clements (holo CBG, iso AD, K). Dist: Wda, Wav, Wey, Wro, Sep, Syp, Sln, Sls, Ski, Smb, Sse, Vwp, Vwh, Veh, Vgi.

**P. sargentii** C.R.P. Andrews, J. Western Australian Nat. Hist. Soc. 2(2): 57 (1905). Type: 'Western Australia, York', Aug. 1904, O.H. Sargent ex W.E. Blackall s.n. (lectotype PERTH!); Syntypes: 'Cut Hill near York', 7 Aug. 1904, O.H. Sargent s.n. (NSW! PERTH!); 'York', Jul. 1904, O.H. Sargent ex C. Andrews s.n. (NSW!). Dist: Wav, Wro, Wey, Wco.

**P. scabra** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. liii (1840). Type: 'Swan River', 1839, J. Drummond 847 (holo K-L!, K!, W!). Dist: Wit, Wav, Wro, Wey, Wco.

*Pterostylis constricta* O. Sarg., J. Western Australian Nat. Hist. Soc. 2(4): 24 (1907); *Pterostylis reflexa* R. Br. var. *constricta* (O. Sarg.) Ewart, White et Tovey, Trans. Roy. Soc. New South Wales 42: 193 (1908). Type: 'Kindelans Road, near York', 21 Jul. 1907, O.H. Sargent s.n. (lectotype PERTH!); Syntype: Sandy humus near Cut Hill, York, Western Australia, 18 Jun. 1905, O.H. Sargent 306 (BM!).

*P. scabra* Lindley var. *robusta* (R. Rogers) A.S. George = *Pterostylis robusta*.

**P. scabrida** Lindley, Gen. sp. orchid. pl. 389 (1840). Type: Tasmania, Black River Circular Head, Nov. 1837, R. Gunn 906 (holo K-L!, iso K!). Dist: Veh, Tas, Nst, Can, Nnt.

*P. semirubra* F. Muell. = *Pterostylis pendunculata*.

**P. setifera** M. Clements, I.G. Matthias et D. Jones, Kew Bull. 40(1): 77-80 (1985). Type: 'New South Wales, Ingalba Nature Reserve, Temora', 31 Oct. 1978, L. Thompson s.n. (holo CBG!). Dist: Smb, Vnp, Nss, Ncs, Nns.

**P. spathulata** M. Clements, sp. nov.

Ad *Pterostylidem hamatum* Blackmore et Clemesha affinis, a qua floribus nutantibus, sepalis attenuatis et labello spathulato, differt. Type: 'Western Australia, Moora', 7 Oct. 1980, M.A. Clements 2222 (holo CBG!, iso K! PERTH!). Dist: Wda, Wav, Wro, Wey, Wco.

*P. speciosa* Hunt = *Pterostylis revoluta*.

**P. squamata** R. Br., Prod. 327 (1810). Type: 'Tasmania, Table Mountain', 1805, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype [a single flower] W!). Notes: An extremely rare and distinctive species that appears confined to the southern part of Tasmania. Dist: Tas.

*Pterostylis rufa* R. Br. var. *squamata* (R. Br.) Fitzg. in Moore and Betch, Handb. Fl. New South Wales 401 (1893).

*P. squamata* sensu Fitzg. = *Pterostylis lingua*.

*P. squamata* sensu Nicholls = *Pterostylis hamata*.

*P. squamata* R. Br. var. *valida* Nicholls = *Pterostylis excelsa*.

*P. striata* Fitzg. = *Pterostylis alata*.

**P. stricta** Clemesha et B. Gray, Orchadian 4 (2): 18 (1972). Type: 'Near Ravenshoe, N. Queensland', 15 Apr. 1969, B. Gray s.n. (holo NSW!). Dist: Qkn, Qco.

**P. taurus** M. Clements et D. Jones, sp. nov.

Ad *Pterostylidem ophioglossam* R. Br. affinis, a qua foliis caesiis, floribus minoribus angustioribus rufo-brunneis, labello majore et sepalis lateralibus porrectis, differt. Type: cult. ANBG, 7 Jun. 1985, M.A. Clements 3667, ex 'Queensland, Cook District, Ravenshoe', 16 Jul. 1979, M.A. Clements 1661 (holo CBG!, iso BRI! K!). Notes: Illustrated on page 634 in Jones (1988). Dist: Qkn, Qco.

*Pterostylis ophioglossa* R. Br., var. *collina* sensu Dockr., Aust. indig. orch. 1: 148, f. (1969), non Rupp (1929), syn nov.

*Pterostylis ophioglossa* R. Br. subsp. *fusca* Clemesha, Orchadian 7(1): 13 (1981). Type: 'Near Herberton, north Queensland', 7 Jun. 1973, B. Gray s.n. (holo BRI!), syn. nov.

**P. tenuicauda** Kraenzl., Neu-Caledon. orchid. 63 (1909). Notes: Previously listed as a synonym of *P. ophioglossa* but recent research by D. Jones and M. Clements has shown that there are a number of taxa involved in this group of species viz. *P. collina*, *P. taurus* and *P. ophioglossa*. It is therefore thought that, for the present, *P. tenuicauda* should be treated as being a New Caledonian endemic as the type does not match those of any Australian taxa.

**P. tenuissima** Nicholls, Victorian Naturalist 67: 46-8, f. K-P (1950). Type: Long Swamp, Nelson, far S.W. Victoria, Oct. 1946, C. Beaulehole s.n. (holo MEL!). Dist: Sse, Vwp, Vgi.

**P. X toveyana** Ewart et Sharman, Proc. Roy. Soc. Victoria (new ser.) 28(2): 235 (1916). Types: 'Victoria, Mentone', 1907, 1909, 1913, 1914, 1915, J.R. Tovey s.n. (syn MEL). Dist: Vwp, Vgi, Tas

*Pterostylis concinna* R. Br. X *Pterostylis reflexa* R. Br. var. *intermedia* Ewart, Proc. Roy. Soc. Victoria (new ser.) 20(2): 134 (1908).

## PTEROSTYLIS

*P. tristis* Colenso, Trans. & Proc. New Zealand Inst. 18: 271 (1886). Notes: Formerly listed as a synonym of *P. mutica* but the two are quite distinct and *P. tristis* is now considered a New Zealand endemic.

*P. truncata* Fitzg., Austral. orch. 1(4): [t. 3] (1878). Type: 'New South Wales, Mittagong', Apr., E. Daintrey s.n. (holo not found; lectotype Fitzgerald's plate here designated). Dist: Vwp, Nsc, Nst, Can, Ncc, Nct.

*P. tunstallii* D. Jones et M. Clements, sp. nov.

affinis *Pterostylis longifoliae* R. Br. a qua labello brunneo ubique cellulis acicularibus perpaucis et tumulo basali fuliginoso et callo fuliginoso differt. Type: Nowra-Braidwood road, 200 m north of Tomerong intersection, June 1987, R.G. Tunstall 202 (holo CBG!). Dist: Nec, Nsc.

*P. turfosa* Endl. in Lehm., Pl. Preiss 2: 5 (1846). Type: Stirling Terrace [Albany, Western Australia], 20 Sep. 1840, Preiss 2632 (holo LD!). Notes: Illustrated on page 322 of Hoffman & Brown (1984) as *P. plumosa*. Dist: Wda, Wey.

*P. turfosa* sensu Fitzg. = *Pterostylis barbata*.

*P. vereenae* R. Rogers = *Pterostylis foliata*.

*P. vittata* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. liii (1840). Type: 'Interior of King George Sound', A. Collie s.n. (lecto K-L!, isolectotype K!). Notes: Illustrated on the right hand side of page 310 of Hoffman & Brown (1984). Dist: Wda, Wav, Wro, Wey, Sep, Sln, Syp, Sls, Ski, Smb, Sse, Vwp, Vwh, Vgi, Tas.

*Pterostylis vittata* Lindley var. *viridiflora* Nicholls, Victorian Naturalist 49: 254 (1933). Type: 'Boyup Brook', May 1915, E. Crocker s.n. (holo MEL!).

*P. vittata* Lindley var. *major* Endl. in Lehm., Pl. Preiss 2: 5 (1846), nom. nud.

*P. vittata* Lindley var. *minor* Endl. in Lehm., Pl. Preiss 2: 5 (1846), nom. nud.

*P. vittata* Lindley var. *subdiformis* Nicholls = *Pterostylis concava*.

*P. vittata* Lindley var. *viridiflora* Nicholls = *Pterostylis vittata*.

*P. whitei* Bailey = *Pterostylis parviflora*.

*P. woollsii* Fitzg., Austral. orch. 1(2): [t. 8] (1876). Type: 'Richmond, New South Wales', Woolls s.n. (lectotype BM! here designated); Syntypes: 'Boorawa', G.H. Sheaffe s.n. (BM! MEL!). Dist: Vnp, Ncc, Ncs, Nnt, Nns, Qdd, Qle.

*P. xerophila* M. Clements in Jessop and Toelken, Fl. S. Austral. Part IV: 2130, f. 996 (1986). Type: cult. Adelaide ex 'Wynbring, Great Victorian Desert, South Australia; on rocky outcrops', 22 Oct. 1978, R. Bates s.n. (holo AD!). Dist: Sgt, Sep, Smu, Vma.

## RENANTHERA

*Renanthera* Lour., Fl. Cochinch 2: 516, 521 (1790). Type species: *Renanthera coccinea* Lour.

*R. ramuana* Kraenzl. in K. Schum. et Laut., Fl. Schutzgeb. Sudsee, Nachtrage 252 (1901). Notes: This species has been listed as a synonym of *Sarcocilus moorei*, but on analysis of the original description I am inclined to treat *R. ramuana* as a distinct species.

## RHAMPHIDIA

*Rhamphidia* (Lindley) Lindley = *Hetaeria*.

*R. rubicunda* (Blume) F. Muell. = *Goodyera grandis*.

*R. rubicunda* (H.G. Reichb.) H.G. Reichb. = *Hetaeria oblongifolia*.

*R. tenuis* Lindley = *Hetaeria oblongifolia*.

## RHINERRHIZA

*Rhinorrhiza* Rupp, Victorian Naturalist 67: 206 (1951). Type species: *Sarcochilus divitiflora* Benth.

*R. divitiflora* (F. Muell. ex Benth.) Rupp, Victorian Naturalist 67: 206 (1951). Dist: Nnc, Nnt, Qmo, Qdd, Qwb, Qpc, Qbn, Qks, Qkn, Qco.

*Sarcochilus divitiflorus* F. Muell. ex Benth., Fl. Austral. 6: 292 (1873); *Thrixspermum divitiflorum* (F. Muell. ex Benth.) H.G. Reichb., Gard. Chron. (new ser.) 7: 750 (1877). Type: 'Macleay River', 1870, R.D. Fitzgerald s.n. (holo K!, iso NSW! W!).

*Thrixspermum freemanii* H.G. Reichb., Gard. Chron. (new ser.) 7: 750 (1877); *Sarcochilus freemanii* H.G. Reichb., Gard. Chron. (new ser.) 7: 750 (1877); *Rhinorrhiza freemanii* (H.G. Reichb.) Garay, Bot. Mus. Leafl. 23 (4): 194 (1972). Notes: There obviously has been a mix-up with the collection details associated with the type of this species as it is unquestionably *R. divitiflora* a species endemic to Australia. Type: cult. Chelsea, London, W. Bull 2081 (holo W!), syn. nov.

*R. freemanii* (H.G. Reichb.) Garay = *Rhinorrhiza divitiflora*.

*R. moorei* (H.G. Reichb.) M. Clements, B. Wallace et D. Jones, comb. nov.

*Thrixspermum moorei* H.G. Reichb., Gard. Chron. (new ser.) 13: 104 (1880); *Sarcochilus moorei* (H.G. Reichb.) Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 967 (1912). Type: cult. London ex 'New Briton', C. Moore s.n. (holo W!). Notes: *Rhinorrhiza moorei* has always seemed out of place in the genus *Sarcochilus*. The robust, coarse vegetative form and the fugaceous synchronous many-flowered flowering habit and colour of the flowers are all atypical of that genus but are very similar to *Rhinorrhiza divitiflora*. With these important biological features *Sarcochilus moorei* is best placed in *Rhinorrhiza*. Dist: Qco; SB, PG, ID.

*Thrixspermum beccarii* H.G. Reichb., Bot. Centralbl. 28: 343 (1886); *Sarcochilus beccarii* (H.G. Reichb.) F. Muell., Descr. notes Papuan pl. 2(9): 66 (1890). Type: 'Papuanae', Beccari s.n. (holo W). Notes: This taxon is retained as a synonym of *R. moorei* but it is doubtful if it is the same taxon.

*Sarcochilus papuanus* Kraenzl., Fl. Kaiser Wilh. Land 34 (1889). Type: 'Insel Patakai bei Hatzfeldthafen', Nov., Holzbrung 416 (holo not found).

*Sarcochilus engleriana* Kraenzl. in K. Schum. et Laut., Fl. Schutzgeb. Sudsee 252 (1901). Type: 'Kaiser Wilhelmsland: Bismarck-Ebene, 100 m und 600 m', Lauterbach 2477 & 3355 (syn B<sup>†</sup>).

*Sarcochilus solomonensis* Rolfe, Kew Bull. 72 (1908). Type: 'Solomon Islands, Tulagi', C.M. Woodford s.n. (holo K!).

## RHIZANTHELLA

*Rhizanthella* R. Rogers, J. Roy. Soc. West Australia 15: 1 (1928). Type species: *Rhizanthella gardneri* R. Rogers.

*Cryptanthemis* Rupp, Proc. Linn. Soc. New South Wales 57: 58 (1932). Type species: *Cryptanthemis slateri* Rupp.

**R. gardneri** R. Rogers, J. Roy. Soc. West Australia 15: 1 (1928). Type: 'Corrigin, 175 miles E. of Perth, Western Australia', 23 May 1928, J. Trott s.n. (lectotype AD!, isolectotype BM! PERTH!); Syntypes: 'Shackleton', Jun. 1928, J.H. Plant s.n. (AD not seen); 'Goomalling', Jun. 1928, [Anon] (AD! PERTH!). Dist: Wav, Wey.

**R. slateri** (Rupp) M. Clements et Cribb, Kew Mag. 1(2): 84-91 (1984). Dist: Nec, Nct, Nnc, Qmo.

*Cryptanthemis slateri* Rupp, Proc. Linn. Soc. New South Wales 57: 58 (1932). Type: 'New South Wales, Alum Mt., Bulladelah', Nov. 1931, E. Slater s.n. (holo NSW!, iso K!).

## RHYNCHOPHREATIA

*Rhynchophreatia* Schltr., Bot. Jahrb. Syst. 56: 488 (1921). Type species: *non designatus*.

**R. micrantha** (A. Rich.) N. Halle, Fl. Nouve.-Caledon. Depend. 8: 341 (1977). Dist: Qkn, Qco; NC, SB, VU, PG, ID.

*Oberonia micrantha* A. Rich., Voy. Astrol., Bot. t. 3 (1833) 7 (1834); *Eria richardiana* H.G. Reichb. in Seem., Fl. Vitiensis 300 (1868); *Phreatia richardiana* (H.G. Reichb.) Kraenzl. in Engler, Pflanzenr. Orch.-Mon. 50: 26 (1911); *Phreatia micrantha* (A. Rich.) Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 919 (1913). Type: Vanikoo, échantillon perdu, A. Richard s.n. (holo P, iso W!, icon P!).

*Thelasis samoensis* Kraenzl., Bot. Jahrb. Syst. 25: 607-8 (1898); *Phreatia samoensis* (Kraenzl.) Schltr., Mem. Herb. Boissier 21: 75 (1900). Types: 'Upolu: Lapua', May 1895, [Anon] 652 (syn ?); 'Westlichdavon', [Anon] 606 (syn?).

*Phreatia macrophylla* Schltr., Bot. Jahrb. Syst. 39: 78 (1908). Type: 'New Caledonia, Nord-Bezirk: auf Bäumen in den Walden der Berges bei Oubatche', Dec. 1902, R. Schlechter 15465 (holo B<sup>†</sup>, iso BM! P! PR, S).

*Phreatia macrophyloides* Kraenzl. in Vieteljahrsschr. Nat. Ges. Zurich 74: 93 (1929). Type: Ins Loyauts, Iufon, 26 Nov. 1925, A.U. Daeniker 2483 (holo & iso Z!).

*Phreatia robusta* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 54: 39-40 (1930). Type: cult. Brisbane, Jan. 1930, C.T. White, ex 'Queensland; Near Cairns', Jan. 1930, A. Beck s.n. (holo AD!).

## RIMACOLA

*Rimacola* Rupp, Victorian Naturalist 58: 188 (1942). Type species: *Lyperanthus ellipticus* R. Br.

**R. elliptica** (R. Br.) Rupp, Victorian Naturalist 58: 188 (1942). Dist: Nec.

*Lyperanthus ellipticus* R. Br., Prod. 325 (1810); *Caladenia elliptica* (R. Br.) H.G. Reichb., Beitr. Syst. Pflanzenk. 67 (1871). Type: Port Jackson; Moist rocks towards the head of Middle Harbour, Feb. 1805, G. Caley s.n. (lectotype specimen (a) BM! here designated); Syntype: Port Jackson; Moist rocks towards the head of Middle harbour, Nov. 1804, G. Caley s.n. (BM! W!).

## ROBIQUETIA

*Robiquetia* Gaud. in Freycinet, Voy. Monde Bot. 426 (1829). Type species: *Robiquetia ascendens* Gaud.

**R. gracilistipes** (Schltr.) J.J. Smith in Natuurk. Tijdschr. Nederl. Ind. 72: 43 (1912). Dist: Qco; SB, PG.

*Saccolabium gracilistipes* Schltr. in K. Schum. & Laut., Fl. Schutzgeb. Sudsee, Nachtrage 227 (1905). Type: 'Kaiser-Wilhelmsland: Auf Baumen in den Walden des Bismarck-Gebirges, c. 800 m', Jan. 1902, R. Schlechter 13948 (holo B†).

*Saccolabium tierneyana* Rupp, Queensland Naturalist 12:18-20, f. (1942); *Robiquetia tierneyana* (Rupp) Dockr., Austral. Sarcanth. 7, t. 18 (1967). Type: 'Pine Creek near Cairns', Apr. 1934, W.F. Tierney s.n. (holo NSW not found), *syn. nov.*

*R. rectifolia* Dockr. = *Saccolabiopsis rectifolia*.

*R. tierneyana* (Rupp) Dockr. = *Robiquetia gracilistipes*.

**R. wassellii** Dockr., Austral. Sarcanth. 7, t. 19 (1967). Type: cult. Melbourne Bot. Gdns, ex 'Central Cape York Peninsula, Rocky River, McIlwraith Range', 22 Jun. 1958, J.L. Wassell s.n. (holo MEL!). Dist: Qco.

## ROPHOSTEMON

*Rophostemon* Endl. = *Nervilia*.

*R. discolor* (Blume) Blume = *Nervilia plicata*.

## YNCHANTHERA

*Rynchanthera* Blume = *Corymborkis*.

*Rynchanthera paniculata* Blume = *Corymborkis veratrifolia*.

## SACCOLABIOPSIS

*Saccolabiopsis* J.J. Smith, Bull. Jard. Bot. Buitzenorg 26: 93 (1918). Type species: *Saccolabiopsis bakhuizenii* J.J. Smith.

**S. armitii** (F. Muell.) Dockr., Austral. Sarcanth. 30, t. 20 (1967). Dist: Qpc, Qks, Qkn, Qco; PG.

*Sarcochilus armitii* F. Muell., Fragn. 9: 49 (1875); *Cleisostoma armitii* (F. Muell.) Bailey, Queensl. fl. 5: 1555 (1902); *Saccolabium armitii* (F. Muell.) Rupp, Proc. Linn. Soc. New South Wales 76: 56 (1951). Type: 'Ad lacum Luciae prope origines fluminis Burdekin River' [Lake Leruts], G. F. Armit 91 (holo MEL!).

*Cleisostoma nugentii* Bailey, Proc. Roy. Soc. Queensland 11: 17 (1895). Type: 'Black Gin's Leap', Dec. 1894, L.J. Nugent 3 (holo BRI!). Notes: I have studied the type of *C. nugentii* very carefully and compared the remaining floral material (consisting of two partly damaged flowers) with flowers on the type of *C. orbiculare*. Features of the flowers of *C. nugentii* in particular the saccate labellum, very short short mid-lobe and distinctive purplish anther cap are almost identical with those found in the type of *C. orbiculare*. From a study of the descriptions and examination of the Types I have absolutely no doubt that these taxa are conspecific and that they in turn are conspecific with *S. armitii*. Black Gin's Leap "a mountain 16 miles north of Mackay" is in an area where *S. armitii* is commonly found.

*Cleisostoma orbiculare* Rupp, North Queensland Naturalist 2 (7): 13 (1934); *Saccolabium orbiculare* (Rupp) Rupp, Victorian Naturalist 57: 220 (1941). Type: 'Mount Dryander, near Proserpine, N.Q.' [North Queensland], Nov. 1933, K. Macpherson s.n. (holo NSW!, iso BRI!).

**S. rectifolia** (Dockr.) Garay, Bot. Mus. Leafl. 23(4): 198 (1972). Dist: Qco.

*Robiquetia rectifolia* Dockr., Austral. Sarcanth. 8, t. 17 (1967). Type: 'Babinda, North Queensland', 20 Aug. 1961, A.W. Dockrill s.n. (holo BRI!).

## SACCOLABIUM

*Saccolabium* Blume, Bijdr. 6: t. 5, f. 50; 7: 292 (1825) (*nom. cons.*). Type species: *Saccolabium pusillum* Blume.

*S. armitii* (F. Muell.) Rupp = *Saccolabiopsis armitii*.

*S. archytas* Ridley = *Brachypeza archytas*.

*S. brevilabre* (F. Muell.) Rupp = *Plectorrhiza brevilabris*.

*S. calcaratum* F. Muell. = *Plectorrhiza tridentata*.

*S. chionanthum* Lindley = *Schoenorchis micrantha*.

*S. coplandii* Bailey = *Micropora fasciculata*.

*S. fasciculatum* Lindley = *Micropora fasciculata*.

*S. gracilistipes* Schltr. = *Robiquetia gracilistipes*.

*S. hillii* F. Muell. = *Peristeranthus hillii*.

*S. loaderianum* Rupp = *Plectorrhiza brevilabris*.

*S. macphersonii* F. Muell. = *Pomatocalpa macphersonii*.

*S. orbiculare* (Rupp) Rupp = *Saccolabiopsis armitii*.

*S. papuanum* Schltr. = *Trachoma papuanum*.

- S. rhopalorrhachis* (H.G. Reichb.) J.J. Smith = *Trachoma rhopalorrhache*.  
*S. sphaeroceras* Schltr. = *Pomatocalpa marsupiale*.  
*S. subluteum* Rupp = *Trachoma papuanum*.  
*S. tierneyanum* Rupp = *Robiquetia gracilistipes*.  
*S. virgatum* Hunt = *Papillilabium beckleri*

## SARCANTHUS

- Sarcanthus* Lindley = *Cleisostoma*.  
*S. beckleri* (Benth.) Rupp = *Papillilabium beckleri*.  
*S. erectus* (Fitzg.) Rupp = *Plectorrhiza erecta*.  
*S. gemmatus* (Rupp) Rupp = *Schistotylus purpuratus*.  
*S. macphersonii* (F. Muell.) Rupp = *Pomatocalpa macphersonii*.  
*S. papuanus* J.J. Smith = *Micropera fasciculata*.  
*S. purpuratus* (Rupp) Rupp = *Schistotylus purpuratus*.  
*S. tridentatus* (Lindley) Rupp = *Plectorrhiza tridentata*.

## SARCOCHILUS

*Sarcochilus* R. Br., Prod. 332 (1810). Type species: *Sarcochilus falcatus* R. Br.

*Gunnia* Lindley in Edwards's, Bot. Reg. 20: sub t. 1699 (1834). Type species: *Gunnia australis* Lindley.

*Parasarcochilus* Dockr., Austral. Sarcanth. 22 (1967). Type species: *Sarcochilus spathulatus* R. Rogers, syn. nov.

*S. armitii* F. Muell. = *Saccolabiopsis armitii*.

*S. australis* (Lindley) H.G. Reichb. in Walp., Ann. bot. syst. 6: 501 (1861). Dist: Vwp, Vgi, Tas, Nsc, Ncc, Nnt.

*Gunnia australis* Lindley in Edwards's, Bot. Reg. (new ser.) 7: sub t. 1699 (1835); *Thrixspermum australe* (Lindley) H.G. Reichb., Beitr. Syst. Pflanzenk. 71 (1871). Type: 'Tasmania, Circular Head', 3 Dec. 1836, R. Gunn 436 (lectotype specimen (a) K-L! here designated, isolectotype K!); Syntypes: 'Abundant on stumps at Emu Bay, Van Diemens Land', 1833, R. Gunn 436 (K! K-L! W!).

*Gunnia picta* Lindley in Edwards's, Bot. Reg. 24, misc. 77 (1838); *Sarcochilus pictus* (Lindley) H.G. Reichb. in Walp., Ann. bot. syst. 6: 501 (1861); *Thrixspermum pictus* (Lindley) H.G. Reichb. in Walp., Ann. bot. syst. 6: 501 (1861). Type: 'From the neighbourhood of Sydney', May 1838, Loddiges s.n. (holo K-L!), syn. nov.

*Sarcochilus barklyanus* F. Muell., Fragm. 1: 89 (1859). Type: Apollo Bay, Victoria, F. Mueller s.n. (holo MEL, iso W!).

*Sarcochilus gunnii* F. Muell., Fragm. 1: 90 (1859), nom. illeg.

*S. bancroftii* Bailey = *Sarcochilus dilatatus*.

*S. barklyanus* F. Muell. = *Sarcochilus australis*.

*S. beccarii* (H.G. Reichb.) F. Muell. = *Rhinorrhiza moorei*.

*S. beckleri* (Benth.) F. Muell. = *Papillilabium beckleri*.

*S. borealis* (Nicholls) M. Clements et D. Jones, stat. nov.

*Sarcochilus olivaceus* Lindley var. *borealis* Nicholls, North Queensland Naturalist 8(60): 1 (1939). Type: 'Millaa Millaa, Queensland', 2 May 1939, B. Sparvell & H. Flecker s.n. (holo MEL!). Notes: This species differs significantly in many characters from *S. olivaceus*, in particular the labellum midlobe and calli. It also has a more slender habit than *S. olivaceus* and the two inhabit separate areas along the east coast of Australia. Dist: Qkn, Qco.

*S. brachyglossis* J.D. Hook., Fl. Brit. Ind. 6: 34 (1890). Notes: Garay (1972) lists this taxon as a synonym of *Trachoma rhopalorrhache*, a species here not considered to occur in Australia.

*S. brevilabris* (F. Muell.) F. Muell. = *Plectorrhiza brevilabris*.

*S. brevilabris* (F. Muell.) Bailey = *Plectorrhiza brevilabris*.

*S. brevirhachis* Upton = *Thrixspermum barbellatum*.

*S. calcaratus* (F. Muell.) F. Muell. = *Plectorrhiza tridentata*.

*S. carinatifolius* Ridley = *Thrixspermum carinatifolium*.

## SARCOCHILUS

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*S. ceciliae* F. Muell., Fragm. 5: 42, t. 42 (1865). Type: 'Castle Mountain on rocky hill 600 ft. high, immediately on the shore of Cleveland Bay [Townsville]', Bowman s.n. (holo MEL!). Dist: Nnt, Nnc, Qmo, Qdd, Qwb, Qpc, Qbn, Qle, Qks, Qkn, Qco.

*Thrixspermum ceciliae* (F. Muell.) H.G. Reichb., Beitr. Syst. Pflanzenk. 71 (1871).

*Sarcochilus eriochilus* Fitzg., J. Bot. 29: 153 (1891). Type: 'Tweed River, New South Wales', R.D. Fitzgerald s.n. (holo BM!).

*Sarcochilus ceciliae* F. Muell. var. *albus* Hunt, Austral. Orchid Rev. 10: 29 (1945). Type: 'Tamborine Mountain, South Queensland', T.E. Hunt s.n. (holo BRI!), syn. nov. Notes: To formally recognise this white flowered colour form of the species, at the rank of variety, and not those that exist in many other taxa, would be inconsistent.

*S. ceciliae* F. Muell. var. *albus* Hunt = *Sarcochilus ceciliae*.

*S. ceciliae* F. Muell. subsp. *roseus* Clemesha = *Sarcochilus roseus*.

*S. dilatatus* F. Muell., Fragm. 1: 191 (1859). Type: 'In arboribus ad sinum Moreton Bay', W. Hill s.n. (holo MEL, found in AD!). Notes: There is a note on the type sheet at Melbourne "sent to Rogers, 1/4/27". The type specimen was subsequently located in Adelaide amongst Dr. Rogers' herbarium so it must be assumed it has never been returned to Melbourne where it was originally deposited and rightfully belongs. Dist: Nnt, Qdd, Qbn, Qwb.

*Thrixspermum dilatatum* (F. Muell) H.G. Reichb., Xenia Orchid. 2: 122 (1874).

*Sarcochilus bancroftii* Bailey, Queensland Agric. J. 28: 477 (1912). Type: 'Eidsvold, Queensland', Nov. 1912, T.L. Bancroft s.n. (holo BRI!, iso AD! K!).

*S. divitiflora* Benth. = *Rhinorrhiza divitiflora*.

*S. engleriana* Kraenzl. = *Rhinorrhiza moorei*.

*S. erectus* (Fitzg.) F. Muell. = *Plectorrhiza erecta*.

*S. eriochilus* Fitzg. = *Sarcochilus ceciliae*.

*S. falcatus* R. Br., Prod. 332 (1810). Type: 'Port Jackson; harbour, Patersons, Williams River or Newcastle', 1804, R. Brown s.n. (lectotype specimen (a) BM! here designated, syn BM! E! K! K-L!). Dist: Vgi, Nsc, Ncc, Nct, Nnc, Nnt, Qmo, Qdd, Qwb, Qbn, Qkn, Qco.

*Thrixspermum falcatum* (R. Br.) H.G. Reichb., Xenia Orchid. 2: 122 (1874).

*Sarcochilus montanus* Fitzg., Austral. orch. 1(5): [t. 3] (1879); *Sarcochilus falcatus* R. Br. var. *montanus* (Fitzg.) C. Moore et Betche, Handb. fl. N.S.W. 387 (1893). Type: 'Mt. Wilson, Mt. Tomah, Mt. Banda-banda and the mountains at the head of the Bellinger', Nov., R.D. Fitzgerald s.n. (syn not found; lectotype Fitzgerald's plate CBCG! here designated).

*S. falcatus* R. Br. var. *montanus* (Fitzg.) C. Moore et Betche = *Sarcochilus falcatus*

*S. fitzgeraldii* F. Muell., Fragm. 7: 115 (1870). Type: 'Naroo Falls, Bellinger River', R.D. Fitzgerald s.n. (holo MEL!, iso BM! K!). Dist: Nnc, Nnt, Qmo.

*Sarcochilus fitzgeraldii* F. Muell. var. *alba* Schultz, Hort. ex Schmidt, Orchid Rev. 35: 225 (1927). Type: cult. (not found).

*Sarcochilus fitzgeraldii* F. Muell. var. *aemulus* Rupp, Proc. Linn. Soc. New South Wales 69: 73 (1944). Type: cult. Northbridge, N.S.W. ex 'Gleniffer, Bellinger River, New South Wales', Aug. 1934, D.J. Barr, R. Barr & H.M.R. Rupp s.n. (holo NSW!).

*S. fitzgeraldii* F. Muell. var. *aemulus* Rupp = *Sarcochilus fitzgeraldii*.

*S. fitzgeraldii* F. Muell. var. *alba* Hort. ex Schmidt = *Sarcochilus fitzgeraldii*.

*S. fitzgeraldii* F. Muell. var. *rubricentrum* (Fitzg.) Maiden et Betche = *Sarcochilus hartmannii*.

*S. freemanii* H.G. Reichb. = *Rhinorrhiza divitiflora*.

*S. gurnii* F. Muell. = *Sarcochilus australis*.

*S. hartmannii* F. Muell., Fragm. 8: 248 (1874). Type: 'In montibus silvaticis pone urbem Towomba' [Toowoomba, Queensland], C.H. Hartmann s.n. (holo MEL!). Dist: Nnc, Qmo, Qbn.

*Thrixspermum hartmannii* (F. Muell.) H.G. Reichb., Gard. Chron. (new ser.) 7: 716 (1877).

*Sarcochilus rubricentrum* Fitzg., Gard. Chron. (new ser.) 14: 38 (1880); *Thrixspermum rubrocinctum* (Fitzg.) H.G. Reichb., Gard. Chron. (ser. 3) 1: 346 (1887), orth. error; *Sarcochilus fitzgeraldii* F. Muell. var. *rubricentrum* (Fitzg.) Maiden et Betche, Proc. Linn. Soc. New South Wales 24: 650 (1900). Type: cult. Sydney, Ramsay ex 'Cairns, Queensland', [Anon] (holo BM!).

- S. hillii** (F. Muell.) F. Muell., Fragm. 2: 94 (1860). Dist: Nsc, Ncc, Nct, Nnc, Nnt, Qmo, Qwb, Qbn; NC.  
*Dendrobium hillii* F. Muell., Fragm. 1: 88 (1859); *Thrixspermum hillii* (F. Muell.) H.G. Reichb., Beitr. Syst. Pflanzenk. 71 (1871). Type: 'In ramis arborum ad sinum litoreum Moreton Bay', W. Hill s.n. (holo K!, iso W!).
- S. hillii* (F. Muell.) F. Muell. var. *tricalliatum* Rupp = *Sarcochilus minutiflos*.
- S. hirticalcar** (Dockr.) M. Clements et B. Wallace, comb. nov.  
*Parasarcochilus hirticalcar* Dockr., Austral. Sarcanth. 23, t. 40 (1967); *Pteroceras hirticalcar* (Dockr.) Garay, Bot. Mus. Leafl. 23(4): 193 (1972). Type: 'McIlwraith Range, Cape York Peninsula', 28 Nov. 1966, M. Brown s.n. (holo BRI!). Notes: This species is equivalent to those in *Sarcochilus* except for some details of the labellum. Since these differences probably reflect developments of tissue associated with an adaption to particular pollinator rather than representing a major genetic change, this species is better placed in *Sarcochilus* which is the earlier named genus. Dist: Qco.
- S. harrigiae* Rupp = *Sarcochilus spathulatus*.
- S. longmanii* Bailey = *Sarcochilus weinthalii*.
- S. macphersonii* (F. Muell.) F. Muell. = *Pomatocalpa macphersonii*.
- S. montanus* Fitzg. = *Sarcochilus falcatus*.
- S. moorei* (H.G. Reichb.) Schltr. = *Rhinorrhiza moorei*.
- S. minutiflos** Bailey, Compr. cat. Queensland pl. 845, f. 974 (1913). Type: 'Eidsvold, Queensland', Nov. 1912, T.L. Bancroft s.n. (holo K!, iso AD! BRI! NSW! W!). Dist: Qbn, Qle, Qpc, Qks, Qkn, Qco.  
*Sarcochilus hillii* (F. Muell.) F. Muell. var. *tricalliatum* Rupp, North Queensland Naturalist 4(44): 31 (1936); *Sarcochilus tricalliatum* (Rupp) Rupp, Proc. Linn. Soc. New South Wales 76: 54 (1951). Type: cult. Sydney ex 'Mount Dryander, Queensland', 1935, K. MacPherson s.n. (holo NSW), syn. nov.
- S. newportii* Bailey = *Bulbophyllum newportii*.
- S. olivaceus** Lindley in Edwards's, Bot. Reg. 25: Misc. 32 (1839). Type: 'Sydney', May 1838, Loddiges s.n. (holo K-L!). Dist: Nsc, Ncc, Nnc, Nnt.  
*Thrixspermum olivaceum* (Lindley) H.G. Reichb., Xenia Orchid. 2: 122 (1874).
- S. olivaceus* Lindley var. *borealis* Nicholls = *Sarcochilus borealis*.
- S. papuanus* Kraenzl. = *Rhinorrhiza moorei*.
- S. parviflorus** Lindley in Edwards's, Bot. Reg. 24: Misc. 34 (1838). Type: 'New Holland', Mar. 1838, Loddiges s.n. (holo K-L!). Notes: This taxon has long been regarded as a synonym of *S. australis*. However, the type of *S. parviflorus* represents a specimen of the 'northern' form of *S. olivaceus* found in northern New South Wales and south-east Queensland. Further research is being undertaken to determine the limits of these taxa. Dist: Nnt, Qmo, Qdd. Qbn.  
*Thrixspermum parviflorum* (Lindley) H.G. Reichb., Xenia Orchid. 2: 172 (1874).
- S. phyllorhizus* F. Muell. = *Chiloschista phyllorhiza*.
- S. pictus* (Lindley) H.G. Reichb. = *Sarcochilus australis*.
- S. platystachys* Bailey = *Thrixspermum platystachys*.
- S. ramuanus* (Kraenzl.) Schltr. in K. Schum et Laut., Fl. Schutzgeb. Sudsee, Nachtrage 232 (1905). Notes: Previously listed as a synonym of *Sarcochilus moorei*, but analysis of the original description does not support this claim.
- S. roseus** (Clemesha) Clemesha, Orchadian 3: 35-6 (1969). Dist: Qco.  
*Sarcochilus ceciliae* F. Muell. subsp. *roseus* Clemesha, Orchadian 2: 92 (1967). Type: cult. Concord West, 11 Dec. 1966, S.C. Clemesha ex 'near Tinaroo Falls Dam, Queensland', c. 1957, J.E. Jones s.n. (holo NSW!).
- S. rubricentrum* Fitzg. = *Sarcochilus hartmannii*.
- S. serrulatus** D. Jones, Victorian Naturalist 89: 344, f. 1 (1972). Type: 'East Evelyn Tableland, North Queensland, at 980 metres', 31 Jul. 1972, D.L. Jones, B. Gray & R. Collins s.n. (holo MEL!, iso BRI! MEL!). Dist: Qkn, Qco.
- S. societalis* J.W. Moore = *Trachoma papuanum*.
- S. solomonensis* Rolfe = *Rhinorrhiza moorei*.
- S. spathulatus** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 51: 1 (1927). Type: 'Tamborine Mountain, Queensland', 8 Oct. 1925, H. Geissmann s.n. (holo AD!). Notes: For the same reasons given above under *S. hirticalcar*, this species is best placed in *Sarcochilus*. In addition it should be noted that these two species do not belong in *Pteroceras* since they lack some of the essential characters of plant habit, flower form and phenology found in this Malesian genus. Dist: Nnt, Qmo.

## SARCOCHILUS

*Parasarcocilus spathulatus* (R. Rogers) Dockr., Austral. Sarcanth. 22, t. 8 (1967); *Pteroceras spathulatus* (R. Rogers) Garay, Bot. Mus. Leafl. 23(4): 194 (1972), syn. nov.

*Sarcocilus harriganiae* Rupp, Proc. Linn. Soc. New South Wales 63: 128 (1938). Type: 'Dorrigo, New South Wales', Oct. 1937, W.J. Harrigan s.n. (holo NSW!), syn. nov.

*S. tricalliatum* (Rupp) Rupp = *Sarcocilus minutiflos*.

*S. tridentatus* (Lindley) H.G. Reichb. = *Plectorrhiza tridentata*.

*S. tridentatus* H.G. Reichb. var. *erecta* (Fitzg.) Bailey = *Plectorrhiza erecta*.

**S. weinthalii** Bailey, Queensland Agric. J. 13: 346 (1903). Type: 'Main Range, Queensland', 10 Sep. 1903, F.A. Weinthal s.n. (holo BRI!, iso K!). Dist: Nnc, Qmo, Qdd.

*Parasarcocilus weinthalii* (Bailey) Dockr., Austral. Sarcanth. 23, t. 9 (1967).

*Sarcocilus longmanii* Bailey, Queensland Agric. J. 23(5): 261 (1909). Type: 'Main Range, Toowoomba', Sep. 1909, H.A. Longman s.n. (holo BRI!, iso K!).

## SAYERIA

*Sayeria Kraenzl.* = *Dendrobium*.

*S. bairdiana* (Bailey) Rauschert = *Dendrobium fellowsii*.

*S. bifalcis* (Lindley) Rauschert = *Dendrobium bifalce*.

## SCHISTOTYLUIS

*Schistotylus* Dockr., Austral. Sarcanth. 30, t. 43 (1967). Type species: *Cleisostoma gemmatum* Rupp.

**S. purpuratus** (Rupp) Dockr., Austral. Sarcanth. 30, t. 43 (1967). Dist: Nnt.

*Cleisostoma gemmatum* Rupp, Victorian Naturalist 54: 112-13, f. (1937), non King et Pantling (1898); *Cleisostoma purpuratum* Rupp, Victorian Naturalist 54: 190 (1938); *Sarcanthus gemmatus* (Rupp) Rupp, Victorian Naturalist 57: 219 (1941); *Sarcanthus purpuratus* (Rupp) Rupp, Victorian Naturalist 58: 41 (1941). Type: 'Dorrigo, New South Wales', Oct. 1937, W.J. Harrigan s.n. (holo NSW!).

## SCHOENORCHIS

*Schoenorchis* Blume, Bijdr. 6: t. 3, f. 23; 8: 361 (1825). Type species: *Schoenorchis juncifolia* Blume.

*S. densiflora* Schltr. = *Schoenorchis micrantha*.

**S. micrantha** Reinwardt ex Blume, Bijdr. 1(8): 362 (1825). Type: 'Crescit; in sylvis monitanis Gede, Salak, Java', Mar., Kuhl & von Hasselt s.n. (holo L!). Dist: Qkn, Qco; NC, SB, VU, PG, ID.

*Ascocentrum micranthum* (Reinwardt ex Blume) Holtt., Gard. Bull. Sing. 11: 275 (1917).

*Saccolabium chionanthum* Lindley, J. Proc. Linn. Soc., Bot. 3: 35 (1859). Type: 'Java', Reinwardt s.n. (icon K-L!).

*Schoenorchis densiflora* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 986 (1912). Type: 'Kaiser-Wilhelms-Land: On trees in the forests on the Djamu [River], alt. c. 600 m', 21 Feb. 1908, R. Schlechter 17316 (holo B†; iso K! here designated as the lectotype, isolectotype AMES, E, L, MO! NSW), syn. nov.

**S. sarcophylla** Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 1022 (1914). Type: 'Kaiser-Wilhelms-Land: On trees in the forests above the Djamu Gorge, alt. c. 600 m', R. Schlechter 16815 (holo B†). Dist: Qco; PG.

## SERAPIAS

*Serapias* L., Sp. Pl. 949 (1753) (nom. cons.). Type species: *Serapias lingua* L. (type cons.).

*S. regularis* J. Forst., Insul. Aust. Prodri. 59 (1786), nom. illeg. sup. Notes: This name was listed under *Thelymitra longifolia* J. Forst. et G. Forst., which is now considered to be a New Zealand endemic.

## SPATHOGLOTTIS

*Spathoglottis* Blume, Bijdr. 6: t. 2, f. 76, 8: 400 (1825). Type species: *Spathoglottis plicata* Blume.

*Paxtonia* Lindley in Edwards's, Bot. Reg. 24 Misc. 61 (1838). Type species: *Paxtonia rosea* Lindley.

*S. daenikeri* Kraenzl. = *Spathoglottis plicata*.

*S. lilacina* Griff. = *Spathoglottis plicata*.

**S. paulinae** F. Muell., Fragm. 6: 95 (1867). Type: 'Rockingham's Bay', 25 Mar. 1867, J. Dallachy s.n. (holo MEL!, iso K!). Dist: Qkn, Qco; PG.

*Spathoglottis southeriana* Bailey, Proc. Roy. Soc. Queensland 11: 15 (1895). Type: 'Queensland, Kamerunga', 7 Oct. 1894, E. Cowley 3 (lectotype BRI!); Syntype: 'Queensland, Stoney Creek, Cairns-Herberton railway', 3 Feb. 1893, L.J. Nugent s.n. (BRI not found).

*Spathoglottis rivularis* Schltr., Repert. Spec. Nov. Regni Veg. 1: 397 (1912). Type: 'Kaiser-Wilhelms-Land: In trickling water between clefts in the rocks on the Waria [River], near Gobi, alt. 300 m', R. Schlechter 19555 (holo B†).

*S. plicata* Blume, Bijdr. 401, t. 76 (1825). Type: Java, C. Blume s.n. (holo L!, iso BO, P!). Dist: Qco; NC, SB, TG, WS, PG, ID, MY, PH, TH, BU, IN.

*Bletia angusta* Gaud., Voy. Freyc. Bot. 421 (1829). Type: Moluccas, Rawak, Freycinet s.n. (holo P).

*Paxtonia rosea* Lindley in Edwards's, Bot. Reg. Misc. 61 (1838). Type: Philippine Is., Luzon, Cuming s.n. (holo K). Notes: Lindley (1859), noted that this taxon was merely a 'Peloria of *Spathoglottis*'.

*Spathoglottis lilacina* Griff., Bot. Pl. Asiat. 3: 323 (1851). Type: Malaya, Pulo Bissar (now Pulau Besar), W. Griffith s.n. (holo K!).

*Spathoglottis spicata* Lindley, J. Proc. Linn. Soc., Bot. 3: 9 (1859), *orth. error*.

*Spathoglottis vieillardii* H.G. Reichb., Linnaea 31: 85 (1877). Type: New Caledonia, basse montagne a Balade', 1855-60, Vieillard 1302 (holo P!).

*Spathoglottis daenikeri* Kraenzl., Viert. Nat. Ges. Zurich 74: 80 (1929). Type: 'New Caledonia, des Berges auf der Glalbrusel Pourne', 14 Apr. 1925, A.U. Daeniker 1622 (holo Z!).

*S. rivularis* Schltr. = *Spathoglottis paulinae*.

*S. ? trivalvis* Lindley = *Acriopsis javanica*.

*S. soutteriana* Bailey = *Spathoglottis paulinae*.

*S. spicata* Lindley = *Spathoglottis plicata*.

*S. vieillardii* H.G. Reichb. = *Spathoglottis plicata*.

## SPICULAEA

*Spiculaea* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. lvi (1840). Type species: *Spiculaea ciliata* Lindley.

*S. ciliata* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. lvi (1840). Type: 'Swan River', J. Drummond 325 (holo K-L!, iso BM! FI! G! K!). Dist: Wda, Wav, Wro, Wey, Wco.

*Drakaea ciliata* (Lindley) H.G. Reichb., Beitr. Syst. Pflanzenk. 68 (1871).

*S. huntiana* (F. Muell.) Schltr. = *Arthrochilus huntianus*.

*S. irritabilis* (F. Muell.) Schltr. = *Arthrochilus irritabilis*.

## SPIRANTHES

*Spiranthes* Rich., Orchideis Eur. Annot. 20, 28, 36 (1817); Mem. Mus. Hist. Nat. Paris 4: 42, 50, 58 (1818) (*nom. cons.*). Type species: *Spiranthes autumnalis* Rich., *nom. illeg.* (*Ophrys spiralis* L., *S. spiralis* (L.) K. Koch) (*type cons.*). Notes: I have studied both living and herbarium material (including many of the types), attributed to the name *S. sinensis*. From this study, it would appear that there may be more than a single taxon involved. Consequently, for the purposes of this paper I have only listed a few of the numerous synonyms cited by Garay & Sweet (1974) in their treatment of *S. sinensis*.

*Aristotelea* Lour., Fl. Cochinch. 522 (1790) (*non Aristotelea* Adanson (1763), *nom. rej.*; (*nec Aristotelia* L'Herit. (1785-6), *nom. cons.*). Type species: *Aristotelea spiralis* Lour.

*S. australis* (R. Br.) Lindley = *Spiranthes sinensis*.

*S. australis* (R. Br.) Lindley var. *pudica* (Lindley) Lindley = *Spiranthes sinensis*.

*S. lancea* auct. non. (Thumb. ex Sw.) Back., Bakh. et Steen. = *Spiranthes sinensis*.

*S. neocaldonica* Schltr. = *Spiranthes sinensis*.

*S. novae-zelandiae* J.D. Hook. = *Spiranthes sinensis*.

*S. plantaginea* (D. Don) Spreng. = *Malaxis latifolia*.

*S. pudica* Lindley = *Spiranthes sinensis*.

*S. sinensis* (Pers.) Ames, Orchidaceae 2: 53 (1908). Dist: Sls, Sse, Vwp, Vwh, Vgi, Veh, Tas, Nsc, Nst, Can, Ncc, Nct, Nnc, Nnt, Qmo, Qdd, Qwb, Qpc, Qle, Qks, Qkn, Qco: NZ, NC, PG, ID, MY, PH, TW, JP, KP, KR, CN, HK, LA, TH, BU, NP, IN, PK, LK, IR, IQ.

*Aristotelea spiralis* Lour., Fl. Cochinch. (ed. 1) 2: 552 (1790), *non Spiranthes spiralis* (L.) K. Koch. (1848); *Epidendrum aristotelea* Raeuschel, Nom. (ed. 3), 264 (1797), *nom. illeg.*; *Neottia sinensis* Pers, Syn. pl. 510 (1806). Type: 'Habitat inculta prope Cantonem Sinarum', Loureiro s.n. (holo not found).

*Neottia australis* R. Br., Prod. 319 (1810); *Spiranthes australis* (R. Br.) Lindley in Edwards's, Bot. Reg. 10: sub t. 823 (1824); *Spiranthes sinensis* (Pers.) Ames subsp. *australis* (R. Br.) Kitam., Acta Phytotax. geobot. 21(1-2): 23 (1964). Type: 'Port Jackson, Sydney', Mar. 1802, R. Brown s.n. (lectotype specimen (a) BM! here designated, icon BM!); Syntype: 'Sydney', Feb. 1805, R. Brown s.n. (BM!).

- Spiranthes pudica* Lindley, Coll. Bot. t. 30 (1821); *Spiranthes australis* (R. Br.) Lindley var. *pudica* (Lindley) Lindley, J. Bot. 7: 38 (1855); F. Muell., Fragm. 10: 65 (1876). Type: 'Nepal', N. Wallich s.n. (holo K-L!).  
*Spiranthes novae-zelandiae* J.D. Hook., Fl. nov.-zel. 1: 243 (1853). Type: 'New Zealand', W. Colenso s.n. (holo K!).  
*Spiranthes neocalifornica* Schltr., Bot. Jahrb. Syst. 39: 51 (1906) Type: New Caledonia, R. Schlechter 15594 (holo B†).  
*Spiranthes lancea* auct. non. (Thunb. ex Sw.) Back., Bakh. et Steen., Blumea 6(2): 361 (1950).  
*S. sinensis* (Pers.) Ames subsp. *australis* (R. Br.) Kitam. = *Spiranthes sinensis*.

## STURMIA

- Sturmia* H.G. Reichb. = *Liparis*.  
*S. angustilabris* F. Muell. = *Liparis angustilabris*.  
*S. coelogynoides* F. Muell. = *Liparis coelogynoides*.  
*S. habenaria* F. Muell. = *Liparis habenaria*.  
*S. reflexa* (R. Br.) F. Muell. = *Liparis reflexa*.

## TAENIOPHYLLUM

- Taeniophyllum* Blume, Bijdr. 6: t. 3, f. 70: 8: 355, t. 70 (1825). Type species: *Taeniophyllum obtusum* Blume.  
**T. confertum** B. Gray et D. Jones, Orchadian 8(2): 42-43, f. (1984). Type: 'Cook district: Timber Reserve 146, Mondhouse Tableland logging area', 11 Sep. 1980, B. Gray 1797 (holo QRS!). Dist: Qco.  
*T. cymbiforme* Hunt = *Taeniophyllum muelleri*.  
*T. flavum* Dockr. = *Taeniophyllum lobatum*.  
*T. glandulosum* Blume, Bijdr. 8: 355 (1825). Notes: Garay and Sweet (1974), in their account of the Orchids of the Ryukyu Islands, took a very broad view of the limits of a species. Consequently they reduced many species to synonyms of others. Some of their proposed changes involved Australian species including *T. muelleri* which was reduced to a synonym of *T. glandulosum*. Unfortunately, all of their proposed name changes affecting Australian orchids were adopted without much consideration as to the basis of those changes. On examination of the types and living material of many of these taxa I have re-assessed the status of some Australian species. I find I can support very few of their proposals. The type of *T. glandulosum*, which I have studied, was collected in Java and is a species that does not occur in Australia.  
**T. lobatum** Dockr., Victorian Naturalist 73: 45, f. (1956). Type: 'North Queensland: Mount Spec', Nov. 1955, W.W. Abell s.n. (holo NSW!). Dist: Qco.  
*Taeniophyllum flavum* Dockr., North Queensland Naturalist 28(125): 7-8, f. (1960). Type: 'North Queensland, Ravenshoe District', 6 Sep. 1953, K. Wadsworth, J.H. Wilkie, S.F. St. Cloud, T. Bentley & A. W. Dockrill s.n. (holo BRI!), syn. nov. Notes: From a study of the types and of fresh material of *T. lobatum* and *T. flavum*, collected from the type localities of each, it has been confirmed that these taxa belong to the same species (D. Jones pers. comm.).  
**T. malianum** Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 1022 (1914) and fig., op. cit. t. 363 No. 1404 (1928). Type: 'Kaiser-Wilhelms-Land: On trees in the alang-plains on the Malia [River], near the Saugeueti Base, alt. c. 150 m', Oct. 1908, R. Schlechter 18364 (holo B†). Dist: Qco; PG  
**T. muelleri** Benth., Fl. Austral. 6: 291 (1873). Type: 'Queensland. On trees near Brisbane', 1872, W. Hill, C. Prentice & F.M. Bailey s.n. (holo K!, iso MEL! W!). Dist: Nnc, Qmo, Qwb, Qpc, Qks, Qkn, Qco.  
*Taeniophyllum wilkianum* Hunt, North Queensland Naturalist 14(80): 3, f. (1946). Type: 'Babinda, North Queensland', 20 Jul. 1946, J.H. Wilkie s.n. (holo BRI!).  
*Taeniophyllum cymbiforme* Hunt, North Queensland Naturalist 14(82): 20-21, f. (1947). Type: 'Babinda', Jul. 1946, J.H. Wilkie ex T.E. Hunt 545 (holo BRI!).  
**T. obtusum** Blume, Bijdr. 6: t. 3, f. 70; 8: 355, t. 70 (1825). Type: Java, C. Blume s.n. (holo L). Notes: Recently discovered on Christmas Island and the identity confirmed by J.J. Wood at Kew (pers. comm.). Dist: Christmas Island; ID, MY.  
*T. wilkianum* Hunt = *Taeniophyllum muelleri*.

## TAINIA

- Tainia* Blume, Bijdr. 6: t. 5, f. 48; 7: 354 (1825). Type species: *Tainia speciosa* Blume.  
**T. parviflora** Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 100 (1912). Type: 'Kaiser-Wilhelms-Land: In humus in the forests of the Torricelli Range, alt. c. 700 m', Sep. 1909, R. Schlechter 20132 (holo B†). Dist: Qkn, Qco; PG.

## THELASIS

*Thelasis* Blume, Bijdr. 6: t. 2, f. 75; 8: 385, t. 75 (1825). Type species: *Thelasis carinata* Blume.

*Oxyanthera* Brogn. in Duperrey, Voy. monde 2: 197 (1834). Type species: *Oxyanthera micrantha* Brogn.

**T. capitata** Blume, Bijdr. 8: 386 (1825). Type: 'In truncis montium Salak, Pantjar, etc.', C. Blume s.n. (holo BOG, iso L!). Dist: Christmas Island; ID.

*Thelasis elongata* sensu Ridley, J. Straits Branch Roy. As. Soc. 45: 234 (1906), non Blume (1856).

**T. carinata** Blume, Bijdr. 8: 385 (1825). Type: 'Java, Tjapus River, Mt. Salak', C. Blume 78 (holo L!). Dist: Qco; SB, PG, ID, MY, BN.

*Phreatia carinata* (Blume) Miq., Fl. Ind. Bat. 3: 655 (1859); *Eria carianta* (Blume) H.G. Reichb. in Seemann, Fl. Vitensis 301 (1868); *Oxyanthera carinata* (Blume) Schltr., Mem. Herb. Boiss. 21: 76 (1900).

*Thelasis elata* J.D. Hook., Icon Plant. ined. & Fl. Brit. India 6: 87 (1890); *Oxyanthera elata* (J.D. Hook.) J.D. Hook., Icon Pl. Tibet 2156 (1813). Type: 'Perak, on decaying wood', King s.n. (holo K? not found).

*Oxyanthera papuana* Schltr. in K. Schum et Laut., Fl. Schutzgeb. Sudsee, Nachtrage 126 (1905). Type: 'Kaiser-Wilhelmsland: On trees in the forests of the Torricelli Range, alt. c. 700-800 m', Apr. 1902, R. Schlechter 14330 (holo B†, iso K!), syn. nov. Notes: B. Wallace (pers. comm.) has confirmed through a study of living material collected in Australia and New Guinea, that this taxon is conspecific with *T. carinata*.

*T. elata* J.D. Hook. = *Thelasis carinata*.

*T. elongata* sensu Ridley = *Thelasis capitata*.

*T. samoensis* Kraenzl. = *Rhynchophractia micrantha*.

## THELYCHITON

*Thelychiton* Endl. = *Dendrobium*.

*T. argyropus* Endl. = *Bulbophyllum argyropus*.

*T. brachypus* Endl. = *Dendrobium brachypus*.

*T. macropus* Endl. = *Dendrobium macropus*.

## THELYMITRA

*Thelymitra* J. Forst. et G. Forst., Char. gen. pl. 97, t. 49 (1776). Type species: *Thelymitra longifolia* J. Forst. et G. Forst.

*Macdonaldia* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. I (1840). Type species: *Macdonaldia smithiana* Gunn ex Lindley (here designated). Notes: According to Lindley, the name originated from Gunn and since the only Gunn manuscript name he cited was *M. smithiana*, then it must be taken as the type.

*T. aemula* Cheesem., Trans. & Proc. New Zealand Inst. 51: 94 (1919). Notes: Formerly listed under *T. ixiooides* and *T. X junciflora* but now considered a New Zealand endemic.

**T. angustifolia** R. Br., Prod. 314 (1810). Type: 'Tropical Australia; Port II [Port Clinton, Queensland]', 22 Sep. 1802, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM!). Dist: Qpc.

*T. angustifolia* sensu J.D. Hook. = *Thelymitra nuda*.

**T. antennifera** (Lindley) J.D. Hook., Fl. Tasman. 2: 4 (1858). Notes: Illustrated on page 20 of Hoffman & Brown (1984). Dist: Wir, Was, Wau, Wda, Wav, Wro, Wey, Wco, Sep, Syp, Sls, Ski, Smb, Sse, Vnp, Vwh, Vwp, Vgi, Tas.

*Macdonaldia antennifera* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. I (1840). Type: 'Swan River', J. Drummond s.n. (lecto K-L!, isolectotype BM!).

**T. apiculata** (A.S. George) M. Clements et D. Jones, stat. nov.

*Thelymitra variegata* (Lindley) F. Muell. var. *apiculata* A.S. George, Nuysia 5(1): 62, f. L (1984). Type: '7 miles (11 km) SE of Badgingarra homestead, Western Australia', 19 Jun. 1961, A.S. George 2598 (holo PERTH!). Notes: This taxon is quite distinct from all other taxa in the genus both in floral morphology (possession of apiculate staminodes) and early flowering habit (late May to July). With these important features this taxon is here raised to the rank of species. Illustrated on page 40 of Hoffman & Brown (1984). Dist: Wda.

**T. arenaria** Lindley, Gen. sp. orchid. pl. 519-20 (1840). Type: 'Tasmania, Circular Head', Nov. 1837, R. Gunn 937 (lectotype specimen (6b) K-L! here designated); Syntype: 'Tasmania, Circular Head', Dec.-Jan. 1837, R. Gunn 943a (K-L!). Dist: Tas.

# THELYMITRA

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**T. aristata** Lindley, Gen. sp. orchid. pl. 521 (1840). Type: Tasmania, Wilcorne River near Woolnorth, Nov. 1837, R. Gunn 939 (lecto K-L!); Syntype: Tasmania, Circular Head, Dec. 1837, R. Gunn 941 (K-L!). Dist: Sfr, Sln, Sls, Ski, Sse, Vwh, Vwp, Vgi, Tas, Nsc, Ncc.

*Thelymitra grandiflora* Fitzg., Gard. Chron. (new ser.) 17: 495 (1882). Type: 'Mount Lofty, South Australia', Oct., R.D. Fitzgerald s.n. (holo & iso BM!).

*Thelymitra murdochiae* Nicholls, Victorian Naturalist 50: 219, t. 35 (1934). Type: 'Victoria, Wonthaggi', 7 Nov. 1933, E.H. Homann s.n. (holo MEL!).

*T. aristata* Lindley var. *megcalyptra* (Fitzg.) Nicholls = *Thelymitra megcalyptra*.

**T. azurea** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 4: 342, t. 17 (1917). Type: 'South Australia, found blooming in great numbers between Mount Compass and Victor Harbour', 19 Nov. 1916, R.S. Rogers s.n. (holo AD!, iso AD! MEL!). Notes: George (1971), reduced this species to a synonym of *T. canaliculata* but the two are quite distinct. *T. azurea* has three rod-like lobes on the column compared to the flatter, folded column lobes in *T. canaliculata*. These species also occupy different ecological areas viz. *T. azurea* in sandy mallee and *Eucalyptus* woodlands country and *T. canaliculata* in wet coastal swamps. Dist: Wda, Wav, Wro, Wey, Wco, Sep, Syp, Sls, Ski, Smb, Sse, Vnp, Vwp, Tas.

**T. benthamiana** H.G. Reichb., Beitr. Syst. Pflanzenk. 55 (1871). Type: 'Swan River', J. Drummond 825 (lecto W, isolectotype K!); Syntypes: 'Swan River', J. Drummond 145 (K! W). Notes: This is the common widespread species that has been called *T. fuscolutea*. Illustrated on page 28 of Hoffman & Brown (1984). Dist: Wda, Way, Wro, Wey, Sep, Sls, Ski, Sse, Vwh, Vwp.

*T. caesia* Petrie = *Thelymitra pulchella*.

**T. campanulata** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. lix (1840). Type: 'Swan River', J. Mangles s.n. (lecto K-L!, isolectotype BM!). Notes: Illustrated on page 46 of Hoffman & Brown (1984). Dist: Wir, Wda, Wey.

**T. canaliculata** R. Br., Prod. 314 (1810). Type: 'Found at a swamp in Princes Royals Harbour, King Georges Sound, South west of New Holland', Dec. 1801, F. Bauer s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! E!, icon BM!). Notes: Illustrated on page 44 of Hoffman & Brown (1984). Dist: Wda.

*T. canaliculata* R. Br. var. *media* (R. Br.) Benth. = *Thelymitra media*.

**T. carnea** R. Br., Prod. 314 (1810). Type: 'Port Jackson; Moist meadows towards George's River and near Parramatta', Oct.-Nov. 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! E! P!); Syntypes: 'Port Jackson', 1803-5, R. Brown s.n. (BM! E!). Dist: Sep, Sls, Vwp, Vgi, Veh, Tas, Nsc, Nst, Can, Ncc, Nct, Nnc, Nnt, Qmo; NZ.

*Thelymitra imberbis* J.D. Hook., Fl. nov.-zel. 1: 244 (1853); *Thelymitra carnea* R. Br. var. *imberbis* (J.D. Hook.) Rupp et Hatch, Proc. Linn. Soc. New South Wales 70: 59 (1946). Type: 'New Zealand', W. Colenso s.n. (holo K!). Notes: The flower colour was noted as yellow rather than the typical pink.

*T. carnea* R. Br. var. *robusta* Rodway, Tasman. Fl. 189 (1903), tax. inc. sed. Notes: In the original description it is suggested that the plant being described could have been a hybrid between *T. carnea* and *T. ixoides* or *T. aristata* [*T. nuda*].

*T. carnea* R. Br. var. *imberbis* (J.D. Hook.) Rupp et Hatch = *Thelymitra carnea*.

*T. carnea* R. Br. var. *rubra* (Fitzg.) J. Weber et R. Bates = *Thelymitra rubra*.

**T. X chasmogama** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 51: 4 (1927). Type: 'South Australia, Golden Grove', 23 Oct. 1921, R.S. & J. Rogers 4781 (holo AD!). Notes: There are a number of records of this taxon (a natural hybrid between *T. luteocilium* and *T. nuda*) occurring outside of the known range of one of the parents viz. *T. luteocilium*. These almost certainly represent records for other hybrids with similar appearance to *T. X chasmogama*, but which have arisen independently eg. *T. rubra* x *T. pauciflora*. Dist: Sep, Sfr, Syp, Sln, Sls, Ski, Sse, Vnp, Vwh, Vgi, Tas.

*T. chisholmii* Nicholls = *Thelymitra X mackibbinii*.

**T. circumsepta** Fitzg., Austral. orch. 1(4): [t. 1] (1878). Type: 'Swampy edges round the summit of Mount Tomah', Dec., R.D. Fitzgerald s.n. (holo not found; lectotype Fitzgerald's plate here designated). Notes: The development of the third staminode that covers the stigmatic area, has been used to differentiate this species from other named taxa in the genus, in particular *T. reecta*. However, the development of that organ is not unique to *T. circumsepta*, nor is it consistent within the species. Indeed plants have been observed where the staminodal development varies considerably in the same population and even on the one inflorescence. Dist: Sls, Veh, Tas, Nsc, Nst, Ncc, Nct, Nnt.

*Thelymitra reecta* Rupp, Victorian Naturalist 60: 176 (1944). Type: 'Gravelly Beach, on the Tamar River below Launceston', Dec. 1943, N. Burrows s.n. (holo NSW!), syn. nov.

*T. colensoi* J.D. Hook., Handb. N. Zeal. fl. 271 (1864). Notes: Formerly listed under *T. pauciflora* but now considered a New Zealand endemic.

- T. concinna* Colenso = *Thelymitra pulchella*.
- T. cornicina** H.G. Reichb., Beitr. Syst. Pflanzenk. 54 (1871). Type: King George Sound, Maxwell s.n. (holo W). Notes: Illustrated on page 50 of Hoffman & Brown (1984). Dist: Wda.
- Thelymitra fasciculata* Fitzg., Austral. orch. 2(3): [t. 8] (1888). Type: Western Australia, R.D. Fitzgerald s.n. (holo not found; lectotype Fitzgerald's plate).
- T. cornuta* Colenso, Trans. & Proc. New Zealand Inst. 20: 206 (1888). Notes: Formerly listed under *T. pauciflora* but now considered a New Zealand endemic.
- T. crinita** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. xliv (1840). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L! iso BM! Fl! K-L!). Notes: Illustrated on page 52 of Hoffman & Brown (1984). Dist: Wda, Wey.
- Thelymitra ovata* F. Muell., Fragm. 6: 84 (1867). Type: Heaths at King George Sound, Oct. 1867, F. Mueller s.n. (holo MEL!).
- T. cucullata** Rupp, Austral. Orchid Rev. 11: 71 (1946). Type: 'Youngs Siding', Aug. 1945, Southerland s.n. (holo NSW!). Notes: Illustrated on page 14 of Hoffman & Brown (1984). Dist: Wda.
- T. cyanea** (Lindley) Benth., Fl. Austral. 6: 323 (1873). Notes: This is the species formerly interpreted as *T. venosa* from the highlands of SE Australia, including Tasmania, and from New Zealand. *T. venosa*, as far as is known, only occurs in damp areas on the Hawkesbury Sandstone around Sydney. The name *T. cyanea* has been misapplied to various plants of hybrid origin or Australian populations of *T. pulchella*. Illustrated on page 294 in Jones (1988). Dist: Sl, Vwh, Veh, Tas, Nsc, Nst, Can, Nct, Nnt; NZ.
- Macdonaldia cyanea* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. I (1840); *Thelymitra venosa* R. Br. var. *cyanea* (Lindley) Hatch, Trans. & Proc. Roy. Soc. New Zealand 79: 391 (1952). Type: 'Tasmania, Circular Head', Dec. 1837, R. Gunn 938 (lectotype specimen (12a) K-L! here designated, isolectotype BM! Fl! K! P!). Syntypes: 'Tasmania, Rocky Cape', Dec. 1937, R. Gunn 944 (K-L!).
- Thelymitra uniflora* J.D. Hook., Fl. antarct. 1: 70 (1844). Type: 'New Zealand: Middle and Southern Islands. Milford Sound and Port Preservation', Lyall s.n. (holo K!, iso K-L!).
- T. daltonii* R. Rogers = *Thelymitra mathewssii*.
- T. decora** Cheesem., Man. N. Zealand fl. 1151 (1906). Type: 'New Zealand: North Island.-Summit of Mount Kakaramea, Taupo, and hills near the base of Ngauruhoe, alt. 3000-5000 ft.', Jan., T.F. Cheeseman s.n. (lecto AK). Notes: Molloy (pers. comm.), has confirmed that plants found in the Australian alps are this taxon. This is the first authentic record of the occurrence of this species in Australia. Dist: Veh, Nst, Can; NZ.
- T. decora* sensu J. Weber et R. Bates = *Thelymitra X truncata*.
- T. dedmanae* R. Rogers = *Thelymitra stellata*.
- T. elizabethiae* F. Muell. = *Thelymitra rubra*.
- T. epipactoides** F. Muell., Fragm. 5: 174 (1866). Type: 'Port Phillip', C. French s.n. (holo MEL!). Dist: Sep, Sl, Smb, Sse, Vnp, Vwp.
- T. fasciculata* Fitzg. = *Thelymitra cornicina*.
- T. fimbriata* Colenso = *Thelymitra pulchella*.
- T. flexuosa** Endl., Nov. stirp. dec. 3: 23 (1839). Type: King George Sound, Huegel s.n. (holo W, iso LD). Notes: Illustrated on page 16 of Hoffman & Brown (1984). Dist: Wda, Wav, Wey, Sep, Sl, Ski, Sse, Vwh, Vwp, Vgi, Tas, Nnc?.
- Macdonaldia concolor* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. I (1840), nom. illeg. Type: 'King George Sound', A. Collie s.n. (holo K-L!, iso BM! K!).
- Macdonaldia smithiana* Gunn ex Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. I (1840); *Thelymitra smithiana* (Gunn ex Lindley) J.D. Hook., Fl. Tasman. 2: 4 (1856). Type: 'Tasmania, Circular Head', R. Gunn 945 (holo K-L!, iso K! L! P! W!).
- T. forsteri* Sw., Kongl. Vetensk. Acad. Nya Handl. 21: 228 (1800), nom. illeg. Notes: A substitute name for *Thelymitra longifolia*, a species no longer considered to occur in Australia.
- T. fragrans** D. Jones et M. Clements, Austrobaileya 2(5): 550-52, f. 2 C & D (1988). Type: 'Queensland. Moreton District: 'O'Reilly's property, Green Mountains, in clumps of *Dendrobium kingianum* on exposed escarpments', 14 Sep. 1987, C. Harman s.n. (holo BRI!, iso AD! BRI! CBG! NSW!). Dist: Nnc, Nny, Qmo, Qwb.
- T. fuscolutea** R. Br., Prod. 315 (1810). Type: 'Found in the way going upon the hills from Princess Royal harbour to Bald Head, King George Sound, S.W. coast of New Holland', 2 Jan. 1802, F. Bauer s.n. (lectotype specimen (a) BM! here designated, icon BM!). Notes: Illustrated on page 295 in Jones (1988). Dist: Wda.
- T. fuscolutea* R. Br. var. *stellata* (Lindley) A.S. George = *Thelymitra stellata*.

# THELYMITRA

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- T. graminea** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. xl ix (1840). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L!). Notes: Determined as a form of *T. pauciflora* by some botanists but the two species differ in habit and in *T. graminea* having a more erect midlobe to the column and compact hair tufts at the end of the staminodes. Illustrated on page 54 of Hoffman & Brown (1984) as *T. pauciflora*. Dist: Wda, Wav, Wro, Wey, Wco.
- T. grandiflora* Fitzg. = *Thelymitra aristata*.
- T. grandis* F. Muell. ex Benth. = *Thelymitra nuda*.
- T. holmesii** Nicholls, Victorian Naturalist 49: 263, f. (1933). Type: 'Victoria: Gorae (via Portland)', Dec. 1932, M. Holmes s.n. (holo MEL, iso AD!). Dist: Wda, Sls, Sse, Vwp.  
*Thelymitra pauciflora* R. Br. var. *holmesii* (Nicholls) Nicholls, Victorian Naturalist 60: 56 (1943).
- T. imberbis* J.D. Hook. = *Thelymitra carnea*.
- T. iridioides* Sieb. ex Benth. = *Thelymitra ixiooides* var. *ixiooides*.
- T. X irregularis** Nicholls, Victorian Naturalist 63: 126, f. A-C (1946). Type: 'Wonthaggi, South Gippsland', Nov. 1934, E.H. Homann s.n. (holo MEL!). Dist: Vgi, Nsc.
- T. ixiooides** Sw. var. *ixiooides* Svenska Vet. Akad. Handl. 21: 253, t. III, f. L (1800). Type: 'Port Jackson, New South Wales', J. White s.n. (lecto SUNIV!, isolectotype LINN! LIV!). Notes: There is an excellent colour plate of this species in Smith (1805). The plant illustrated is almost certainly part of the type collection and depicts a flower without spots on any floral segments. Dist: Sls, Sse, Vwh, Vwp, Vgi, Veh, Tas, Nsc, Nst, Ncc, Nct, Nnc, Qmo.  
*Thelymitra lilacina* F. Muell. ex Lindley, Linnaea 26: 242 (1854-55), nom. illeg. Type: 'Victoria, Brighton', F. Mueller s.n. (holo K-L!, iso MEL!).  
*Thelymitra iridioides* Sieb. ex Benth., Fl. Austral. 6: 317-8 (1873), nom. nud. Type: Port Jackson, Sieber 168 (holo K-L!).  
*Thelymitra ixiooides* Sw. var. *camea* Gulfoyle, Australian Plants 353 (1911). Notes: "Flowers pink" is all the information we are given. This colour form is frequent amongst populations of the species particularly in East Gippsland or in areas where the plants are growing in a disturbed site.  
var. *subdiffiformis* Nicholls, Victorian Naturalist 61: 207, f. N (1945). Type: 'Portland', Oct. 1934, F. Mellholm s.n. (syn MEL not found; lectotype t. 8! (Nicholls, 1969) here designated); Syntype: 'Blackburn', Mar. 1940, E. Coleman s.n. (MEL). Dist: Vwp.
- T. ixiooides* Sw. var. *carnea* Gulfoyle = *Thelymitra ixiooides* var. *ixiooides*.
- T. ixiooides* Sw. forma *merraniae* (Nicholls) Nicholls = *Thelymitra merraniae*.
- T. ixiooides* Sw. var. *truncata* (R. Rogers) Nicholls = *Thelymitra X truncata*.
- T. juncifolia** Lindley, Gen. sp. orchid. pl. 522 (1840). Type: 'Tasmania, Circular Head', Nov. 1837, R. Gunn 936 (lectotype specimen (32a) K-L! here designated, isolectotype BM! FI! NSW!); Syntype: 'Tasmania, Circular Head', Dec. 1837, R. Gunn 936 (K-L!). Dist: Sls, Sse, Vwp, Vgi, Tas, Nsc.
- T. X juncifolia* sensu Clements = *Thelymitra X truncata*.
- T. lilacina* F. Muell. ex Lindley = *Thelymitra ixiooides* var. *ixiooides*.
- T. longifolia** J. Forst. et G. Forst., Char. gen. pl., 98, t. 49 (1776). Type: New Zealand, Charlotte's Sound, 13 Nov., G. Forster s.n. (lectotype specimen (1) BM! here designated). Notes: The lectotype was chosen from material at the British Museum (Natural History), as it appears to match the specimen illustrated by Forster. It is doubtful if this species occurs in Australia and it is thought to be a New Zealand endemic.
- T. luteocilium** Fitzg., Gard. Chron. (new ser.) 17: 495 (1882). Type: 'Mount Lofty, South Australia', Oct., R.D. Fitzgerald s.n. (holo BM!). Dist: Sep, Syp, Sln, Slc, Smb, Sse, Vnp, Vwh, Vwp.
- T. X mackibbinii** F. Muell., Chem. & Druggist Aust., Suppl. 42: 44 (1881). Type: 'Quartz gravel on hills along the Upper Loddon River, Maryborough, Victoria', 30 Sep. 1881, J.N. MacKibbin s.n. (holo MEL!, iso K!). Notes: There is some doubt as to the origin of this taxon but from recent research in the field there is a very strong suggestion it is the result of the natural hybridization of *T. nuda* and *T. X macmillanii* (J. Jeanes pers. comm.). Dist: Sls, Vwh.
- Thelymitra chisholmii* Nicholls, Victorian Naturalist 58: 98-101, t. 20, f. (1941). Type: 'Avoca Road, near Maryborough', 19-20 Sep. 1941, W.H. Nicholls s.n. (holo MEL!, iso NSW!).
- T. X macmillanii** F. Muell., Fragn. 5: 93 (1865). Type: Port Phillip Bay, near Mount Eliza and Mount Martha, 1865, T. McMillan s.n. (holo MEL!). Notes: A natural hybrid between *T. antennifera* and *T. luteocilium* or *T. rubra*. *T. X macmillanii* has also been recorded from Western Australia, but plants resembling this taxon from that State are not of the same parentage. The most likely parents of the W.A. hybrid are *T. antennifera* and *T. spiralis*, *T. macrophylla* or *T. graminea*. Dist: Sep, Syp, Slc, Skl, Sse, Vwh, Vwp.

**T. macrophylla** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. ixl (1840). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L!, iso FI! K!). Notes: It remains to be established what are the true relationships between this species, *T. nuda*, *T. graminea* and other members of this very complex group of taxa. I have examined material from Western Australia (living and herbarium) and none of it exactly matches the type of *T. nuda*. Illustrated on page 56 of Hoffman & Brown (1984). Dist: Wir, Wcv, Wau, Wda, Wav, Wro, Wey, Wco.

**T. malvina** M. Clements, *D. Jones et Molloy, sp. nov.*

*Thelymitra nuda* R. Br. affinis sed plantae tenuiores et columna lobo post antheram angusto flavo et caespitibus pilum globosis, malvinis vel roseis. Type: Just south of Wilkin, South West Victoria, 37° 44' 04" S, 141° 13' 10" E about 21 km NNW of Dartmoore, on main north-south road to the west of Glenelg River; at its junction with an unmade road to the east. Victorian plant grid D 38, 28 Oct. 1985, G.W. Carr 10423 (holo MEL! spirit collection 1615B). Dist: Vgi, Tas?, Ncc, Qmo; NZ.

*Thelymitra nuda* sensu Fitzg., Aust. orch. 1(5): [t. 2] (1879), non R. Br. (1810). Notes: Fitzgerald's plate is an excellent representation and clearly shows the diagnostic features of the new species. It was also figured in Nicholls (1969), as *T. nuda*, (plate 31). This striking, tall slender species can be readily distinguished from all others by the presence of the smooth, narrow, yellow mid-lobe to the column and the pink to mauve globose hair tufts on the lateral staminodes. *T. malvina* is an inhabitant of tall forests in well structured clayloams and is usually solitary. A recent discovery in New Zealand. The name refers to the mauve hair tufts.

**T. matthewsii** Cheesem., Trans. & Proc. New Zealand Inst. 43: 177 (1911). Type: 'New Zealand: Mongonui County, low hills between Lake Tongonge and the coast', R.H. Matthews s.n. (holo K!). Dist: Wda, Ski, Smb, Sse, Vwh, Vwp, Vgi; NZ.

*Thelymitra daltonii* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 54: 42-4 (1930). Type: 'Hall's Gap, Grampians', 26 Sep. 1929, A.B. Braine & M. Braine s.n. (lectotype AD!). Syntype: 'Victoria. Hall's Gap, Grampians', Oct. 1922, C.W. D'Alton s.n. (AD!).

**T. media** R. Br. var. **media** Prod. 314 (1810). Type: 'Port Jackson; Parramatta', Nov. 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM!). Dist: Vgi, Nsc, Ncc.

*Thelymitra canaliculata* R. Br. var. *media* (R. Br.) Benth., Fl. Austral. 6: 318 (1873).

var. **carneo-lutea** Nicholls, Victorian Naturalist 60: 56, f. A-D (1943). Type: 'Swamp land Tynong North', Oct. 1941, J. Leppitt s.n. (holo MEL!). Dist: Vgi.

**T. megcalyptra** Fitzg., Austral. orch. 1(5): [t. 2] (1879). Type: 'New South Wales, Deniliquin', Oct., R.D. Fitzgerald s.n. (lectotype specimen (a) BM! here designated); Syntype: 'Lake George', Oct., R.D. Fitzgerald s.n. (BM!). Notes: An inland species that can be readily distinguished from *T. nuda* in having a large column midlobe, flowers in which the segments are large, overlap and have the appearance of being untidy compared to those of *T. nuda* (D. Jones pers. comm.). Dist: Vma, Vnp, Nst, Nss, Nsp, Ncs.

*Thelymitra aristata* Lindley var. *megcalyptra* (Fitzg.) Nicholls in J.M. Black, Fl. S. Austral. ed. 2, 1: 215 (1943).

**T. merraniae** Nicholls, Victorian Naturalist 46: 139 (1929). Type: 'Victoria; Mogg's Creek, Airey's Inlet', 6 Nov. 1929, M. Sutherland s.n. (holo MEL!, iso BM!). Dist: Sls, Vwp, Vgi, Nsc, Ncc, Nct.

*Thelymitra ixiooides* Sw. forma *merraniae* (Nicholls) Nicholls, Orchids Austral. 1, t. 7 (1951).

**T. mucida** Fitzg., Gard. Chron. (new ser.) 17: 495 (1882). Type: 'Wilson's Inlet, Western Australia', Sep. R.D. Fitzgerald s.n. (lectotype BM!, iso NSW!). Notes: Illustrated on page 48 of Hoffman & Brown (1984). Dist: Wda, Sls, Sse, Vwp.

*T. murdochiae* Nicholls = *Thelymitra aristata*.

**T. nuda** R. Br., Prod. 314 (1810). Type: 'In pratis dipritis prope Western arm Port Dalrymple', 5 Jan. 1804, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! E! FI! P!). Notes: The name *T. aristata* Lindley has been misapplied to forms of this widespread species. *T. aristata* Lindley is correctly applied to the species previously known as *T. grandiflora* Fitzg. Dist: Sep, Sfr, Sln, Syp, Sls, Ski, Smb, Sse, Vwp, Vwh, Veh, Vgi, Tas, Nsc, Nst, Can, Ncc, Nct, Nnt, Qkn, Qco.

*Thelymitra nuda* R. Br. var. *grandiflora* Lindley, Gen. sp. orchid. pl. 420 (1840). Type: 'Tasmania, Circular Head', Nov. 1837, R. Gunn 940 (lectotype specimen (20b) K-L! here designated, isolectotype BM! FI! P!).

*Thelymitra versicolor* Lindley, Gen. sp. orchid. pl. 520 (1840). Type: 'Tasmania, Circular Head', Dec. 1837, R. Gunn 943 (holo K-L!), syn. nov..

*Thelymitra angustifolia* sensu J.D. Hook., Fl. Tasman. 2: 5 (1858), non. R. Br. (1810).

*Thelymitra grandis* F. Muell. ex Benth, Fl. Austral. 6: 319 (1873), nom. nud.

*T. nuda* R. Br. var. *grandiflora* Lindley = *Thelymitra nuda*.

## THELYMITRA

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*T. ovata* F. Muell. = *Thelymitra crinita*.

*T. pachyphylla* Cheesem. = *Thelymitra pulchella*.

*T. pardilina* F. Muell. = *Thelymitra villosa*.

**T. pauciflora** R. Br., Prod. 314 (1810). Type: 'Port Jackson; between Sydney and Parramatta, moist meadows', Sep.-Oct. 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! P!); Syntypes: 'Port Jackson; between Sydney and Parramatta, moist meadows', Oct.-Nov. 1803, R. Brown s.n. (BM! E!). Dist: Sep, Sfr, Sls, Ski, Smb, Sse, Vwp, Vwh, Vnp, Veh, Vgi, Tas, Nsc, Nst, Can, NSS, Ncc, Nct, Ncs, Nnc, Nnt, Nns, Qmo, Qdd, Qwb, Qpc, Qkn, Qeo.

*T. pauciflora* R. Br. var. *holmesii* (Nicholls) Nicholls = *Thelymitra holmesii*.

*T. pauciflora* R. Br. var. *pallida* Nicholls, Orchidol. Zeylanica 2: 159 (1935), nom. inval. Notes: Published without a latin diagnosis.

*T. porphyrosticta* F. Muell. = *Thelymitra variegata*.

**T. psammophila** C.R.P. Andrews, J. Western Australia Nat. Hist. Soc. 2 (2): 57-8 (1905). Type: 'On sand plains near the Upper Kalgan River and Stirling Range', Oct. 1903, C.R.P. Andrews s.n. (holo PERTH!, iso NSW! PERTH!). Notes: Illustrated on page 18 of Hoffman & Brown (1984). Dist: Wro, Wey.

**T. pulchella** J.D. Hook., Fl. Nov.-zel. 1: 244 (1853). Type: 'New Zealand; Northern and Middle Island', W. Colenso s.n. (lectotype K! here designated); Syntype: 'Otago', Lyall s.n. (K!). Notes: Recently confirmed (1987) by B. Molloy as an Australian species from examination of living material collected in the Australian alps, New South Wales. Dist: Veh, Nst; NZ.

*Thelymitra concinna* Colenso, Trans. New Zealand Inst. 20: 207 (1888). Type: 'Open country near the east bank of the River Mohaka, north of Napier', 1884, A. Hamilton s.n. (holo not found).

*Thelymitra fimbriata* Colenso, Trans. New Zealand Inst. 22: 490 (1890). Type: 'Fortrose, Invercargill', 1888, W. Colenso s.n. (lecto WELT).

*Thelymitra pachyphylla* Cheesem., Man. New Zealand fl. 1151 (1906). Type: 'Vicinity of Westport', Nov. 1905, W. Townson s.n. (lecto AK, isolectotype CANTY).

*Thelymitra caesia* Petrie, Trans. New Zealand Inst. 51: 107 (1919). Type: 'Birkdale-Glanfield Reserve, Waitamata County', 1 Dec. 1918, H.B. Matthews s.n. (lecto WELT, isolectotype CANTY).

**T. purpurata** Rupp, Proc. Linn. Soc. New South Wales 70: 288, f. 1 (1946). Type: 'New South Wales, Brunswick Heads', Sep. 1945, F. Fordham s.n. (holo NSW!). Dist: Nnc, Qmo, Qwb.

*T. rectecta* Rupp = *Thelymitra circumsepta*.

**T. rubra** Fitzg., Gard. Chron. (new ser.) 17: 495 (1882). Type: 'Mount Lofty, South Australia', 25 Oct., R.D. Fitzgerald s.n. (holo BM!). Dist: Sfr, Sls, Ski, Sse, Vwh, Vwp, Vgi, Tas, Ncc.

*Thelymitra carneae* R. Br. var. *rubra* (Fitzg.) J. Weber et R. Bates, Fl. S. Austral. (ed. 3) 1: 455 (1978).

*Thelymitra uralis* Fitzg., Gard. Chron. (new ser.) 17: 495 (1882). Type: 'Mount Lofty, South Australia', 25 Oct., R.D. Fitzgerald s.n. (holo BM!).

*Thelymitra elizabethiae* F. Muell., Victorian Naturalist 7: 116 (1890). Type: 'Towards the Yarra near Camberwell', Nov. 1890, S. MacKibbin s.n. (holo MEL!), syn. nov.

*Thelymitra rubra* Fitzg. var. *magnanthera* Rupp, Proc. Linn. Soc. New South Wales 68: 9 (1943). Type: 'Jannali, near Como', Aug. 1942, M. Moodie & H.M.R. Rupp s.n. (holo NSW!), syn. nov.

*T. rubra* Fitzg. var. *magnanthera* Rupp = *Thelymitra rubra*.

**T. sanscilia** Irwin ex Hatch, Trans. & Proc. Roy. Soc. New Zealand 79: 397 (1952). Notes: Formerly listed as a synonym of *T. pauciflora* R. Br. but here considered a New Zealand endemic.

**T. sarasiniana** Kraenzl., Neu-Caledon. orchid. 1: 77 (1914). Notes: Listed as a synonym of *T. longifolia* J. Forst. et G. Forst., which is here considered a New Zealand endemic. However, *T. sarasiniana* is possibly a New Caledonia endemic.

**T. sargentii** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 54: 41 (1930). Type: 'Western Australia, Bruce Rock', Oct. 1929, O.H. Sargent s.n. (lecto AD!); Syntypes: 'Bencubbin', Oct. 1929, R.E. Edmonson s.n. (AD!); 'Dalwalinu', Oct. 1929, B.T. Goadby s.n. (AD!). Notes: Illustrated on page 24 of Hoffman & Brown (1984). Dist: Wir, Wau, Wav, Wro.

*T. smithiana* (Gunn ex Lindley) J.D. Hook. = *Thelymitra flexuosa*

**T. spiralis** (Lindley) F. Muell. var. *spiralis*, Fragm. 5: 98 (1865). Dist: Wda, Wav, Wro, Wey.

*Macdonaldia spiralis* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. I (1840). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L! iso BM!). Notes: On examining the holotype of this taxon it became apparent that a new interpretation was needed. The type specimen is of a rather large plant with several flowers on the inflorescence, some spotting on the outer perianth segments and long lateral staminodes.

This material equates to the specimens illustrated under the same name by Nicholls (1969) and not with the taxon *T. spiralis* var. *pulchella* as was suggested by George (1972). Illustrated on page 42 of Hoffman & Brown (1984).

*Thelymitra spiralis* (Lindley) F. Muell. var. *pallida* Nicholls, Victorian Naturalist 66: 55 (1949). Notes: This pale-coloured form is morphologically indistinguishable from the typical representative of the species. Type: 'Yarloop', E. Scouler s.n. (MEL!), syn. nov.

*Thelymitra spiralis* (Lindley) F. Muell. var. *punctata* Nicholls, Victorian Naturalist 66: 55 (1949). Type: 'Yarloop', E. Scouler s.n. (MEL!), syn. nov. Notes: This is merely a highly-spotted form of the species.

*Thelymitra spiralis* (Lindley) F. Muell. var. *scoulerae* Nicholls, Victorian Naturalist 66: 55 (1949). Type: 'Yarloop', E. Scouler s.n. (MEL!), syn. nov. Notes: Yet another form of the species which in this case has brightly coloured flowers with slightly broader segments.

var. *pulchella* Nicholls, Victorian Naturalist 66: 56 (1949). Type: 'Open plains or sand covered gravel, near Bolgart', Aug. 1934 & 1949, R. Erickson s.n. (syn MEL). Notes: This is the only variety Nicholls described that differs significantly in floral morphology from the typical variant. The plant is slender and up 15 cm high, usually with a single flower, pink-spotted, somewhat flaccid perianth segments, and narrow column in which the lateral staminodes are almost orbicular and orange. Dist: Wda.

*T. spiralis* (Lindley) F. Muell. var. *pallida* Nicholls = *Thelymitra spiralis* var. *spiralis*.

*T. spiralis* (Lindley) F. Muell. var. *punctata* Nicholls = *Thelymitra spiralis* var. *spiralis*.

*T. spiralis* (Lindley) F. Muell. var. *scoulerae* Nicholls = *Thelymitra spiralis* var. *spiralis*.

**T. stellata** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. xlxi (1840). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L!, iso BM! FI! K!). Notes: Illustrated on page 30 of Hoffman & Brown (1984) and on page 304 in Jones (1988). Dist: Wda, Wav.

*Thelymitra fuscolutea* R. Br. var. *stellata* (Lindley) A.S. George, Nuytsia 1(2): 194 (1971), syn. nov.

*Thelymitra dedmaniae* R. Rogers, Trans. & Proc. Roy. Soc. South Australia 62: 13 (1938). Type: 'Western Australia. Toodyay', 11 Nov. 1934, *Dedman* s.n. (holo AD!).

**T. tigrina** R. Br., Prod. 315 (1810). Type: 'In paludsus ad Portum Regis Georgii III', Dec. 1801, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM! E!). Notes: Illustrated on page 22 of Hoffman & Brown (1984). Dist: Wda.

**T. X truncata** R. Rogers, Trans. & Proc. Roy. Soc. South Australia 41: 343, t. 17 (1917). Type: 'South Australia; Myponga', 29 Oct. 1917, R.S. Rogers s.n. (holo AD!). Dist: Sls, Sse, Vwh, Vwp, Vgi, Tas.

*Thelymitra ixoides* Sw. var. *truncata* (R. Rogers) Nicholls, Victorian Naturalist 60: 55 (1943).

*Thelymitra decora* sensu J. Weber et R. Bates in Black, Fl. S. Austral. (ed. 3) 1: 456 (1978), non Cheesem. (1906).

*Thelymitra X juncifolia* sensu M. Clements, Prelim. Checkl. Aust. Orchid. 201 (1982), non Lindley (1840).

*T. uniflora* J.D. Hook. = *Thelmitra cyanea*.

*T. urinalis* Fitzg. = *Thelymitra rubra*.

**T. variegata** (Lindley) F. Muell., Fragm. 5: 98 (1865). Dist: Wda, Wey.

*Macdonaldia variegata* Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append. I (1840). Type: 'Swan River', 1838, J. Drummond s.n. (holo K-L! iso BM! K!). Notes: Illustrated on page 38 of Hoffman & Brown (1984).

*Thelymitra porphyrosticta* F. Muell., Fragm. 5: 97-8 (1865). Type: 'Ad margines paludum prope flumen Salt River et in vallis humidis prope Kalgan', Maxwell s.n. (holo MEL! iso K!).

*T. variegata* (Lindley) F. Muell. var. *apiculata* A.S. George = *Thelymitra apiculata*.

**T. venosa** R. Br., Prod. 314 (1810). Type: 'Port Jackson; Marshes towards Botany Bay', Oct.-Nov. 1803, R. Brown s.n. (lectotype specimen (a) BM! here designated, isolectotype BM!). Dist: Nec, Nct.

*Macdonaldia venosa* (R. Br.) Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. I (1840).

*Thelymitra venosa* R. Br. var. *magnifica* Rupp, Austral. Orchid Rev. 4: 81 (1939). Type: 'Wentworth Falls', Nov. 1916, H.M.R. Rupp s.n. (holo NSW!).

*Thelymitra venosa* R. Br. var. *speciosa* Nicholls, Orchidol. Zeylanica 2: 157 (1935), nom. inval.

*T. venosa* R. Br. var. *cyanea* (Lindley) Hatch = *Thelymitra cyanea*.

*T. venosa* R. Br. var. *magnifica* Rupp = *Thelymitra venosa*.

*T. venosa* R. Br. var. *speciosa* Nicholls = *Thelymitra venosa*.

*T. versicolor* Lindley = *Thelymitra nuda*.

- T. villosa** Lindley in Edwards's, Bot. Reg. 1-23: Swan Riv. Append xlix (1840). Type: 'Swan River', 1839, J. Drummond s.n. (holo K-L! iso BM! Fl! K!). Notes: Illustrated on page 26 of Hoffman & Brown (1984). Dist: Wav, Wda, Wey, Wro.  
**Thelymitra pardilina** F. Muell., Fragm. 5: 94 (1865). Type: 'Sandy soil, Esperance Bay and Cape Le Grande', Maxwell s.n. (lecto MEL!); Syntype: 'Fitzgerald Ranges', Maxwell s.n. (MEL!).

## THRIXSPERMUM

**Thrixspermum** Lour., Fl. Cochinch. 2: 519 (1790). Type species: *Thrixspermum centipeda* Lour.

*Dendrocolla* Blume, Bijdr. 6: t. 5, f. 67; 7: 288 (1825). Type species: *Dendrocolla hystrix* Blume.

*Dryadorchis* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 976 (1913). Type species: *Dryadorchis barbellata* Schltr. (here designated), syn. nov.

*T. album* sensu Rupp = *Thrixspermum congestum*.

*T. australe* (Lindley) H.G. Reichb. = *Sarcochilus australis*.

**T. barbellatum** (Schltr.) M. Clements, B. Wallace et D. Jones, comb. nov.

*Dryadorchis barbellata* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 976 (1913). Type: 'Kaiser-Wilhelms-Land: On trees in the forest of the Bismark Range, alt. c. 1300 m', Oct. 1908, R. Schlechter 18550 (syn B†); 'On the trees in the forest of the Finisterre Range, alt. c. 1300 m', Jan. 1909, R. Schlechter 19052 (syn B†). Notes: There is nothing of any significance in Schlechter's description of *Dryadorchis* to differentiate it from that of *Thrixspermum*. After examining living material we propose that *D. barbellata* be transferred to *Thrixspermum*. Dist: Qco?; PG.

*Sarcochilus brevirhachis* Upton, Orchadian 5(3): 34, f. (1976). Type: cult. Sydney ex 'Mount Lewis, South-west of Mossman, North Queensland', Mar. 1971, R. Karnaghan s.n. (holo NSW!). Notes: Doubtfully an Australian species since there appears to be considerable confusion as to the exact circumstance under which the plants were collected.

*T. batuense* J.J. Smith = *Thrixspermum carinatifolium*.

*T. batuense* J.J. Smith var. *javanicum* J.J. Smith = *Thrixspermum carinatifolium*.

*T. beccari* H.G. Reichb. = *Rhinorrhiza moorei*.

**T. carinatifolium** (Ridley) Schltr., Orchis 5: 56 (1911). Dist: Christmas Island; ID.

*Sarcochilus carinatifolius* Ridley, J. Straits Branch Roy. As. Soc. 136 (1891); *Dendrocolla carinatifolius* (Ridley) Ridley, J. Linn. Soc. 32: 382 (1896). Type: 'Christmas Island', H.N. Ridley s.n. (holo SING).

*Thrixspermum batuense* J.J. Smith, Bull. Dep. Agric. Indie. Neerl. 22: 47 (1909). Type: Indonesia: Pulau Pulau Batu Is., Tanah nána, H. Raap s.n. (holo BO).

*Thrixspermum batuense* J.J. Smith var. *javanicum* J.J. Smith, Bull. Jard. Bot. Buitenzorg (ser. 2). 26: 91 (1918). Type: 'Java, sud Priangan, Rawah Apoe near Kali Poetjang, 10m.', C.A. Backer 4475 (holo BO).

*T. ceciliae* (F. Muell.) H.G. Reichb. = *Sarcochilus ceciliae*.

**T. congestum** (Bailey) Dockr., Austral. Sarcanth. 27, t. 35 (1967). Notes: It is almost certain that this is not the correct name for this taxon but until it can be established what that is I have chosen to maintain the use of the name *T. congestum*. Dist: Qkn, Qco, Ddg; PG, ID, SB.

*Cleisostoma congestum* Bailey, Proc. Roy. Soc. Queensland 11: 17 (1895). Type: 'Queensland, Cairns', Aug. 1894, L.J. Nugent 10 (holo BRI!).

*Thrixspermum album* sensu Rupp, North Queensland Naturalist 9 (64): 1 (1940), non (Ridley) Schltr. (1911).

*T. dilatatum* (F. Muell.) H.G. Reichb. = *Sarcochilus dilatatus*.

*T. divitiflorum* (Benth.) H.G. Reichb. = *Rhinorrhiza divitiflora*.

*T. falcatum* (R. Br.) H.G. Reichb. = *Sarcochilus falcatus*.

*T. freemanii* H.G. Reichb. = *Rhinorrhiza divitiflora*.

*T. hartmannii* (F. Muell.) H.G. Reichb. = *Sarcochilus hartmannii*.

*T. hillii* (F. Muell.) H.G. Reichb. = *Sarcochilus hillii*.

*T. moorei* H.G. Reichb. = *Rhinorrhiza moorei*.

*T. neo-hibernicum* Schltr. = *Thrixspermum platystachys*.

*T. olivaceum* (Lindley) H.G. Reichb. = *Sarcochilus olivaceus*.

*T. parviflorum* (Lindley) H.G. Reichb. = *Sarcochilus parviflorum*.

*T. phyllorhizum* (F. Muell.) H.G. Reichb. = *Chiloschista phyllorhiza*.

*T. pictum* (Lindley) H.G. Reichb. = *Sarcochilus australis*.

**T. platystachys** (Bailey) Schltr., Orchis 5: 55 (1911). Dist: Qco; SB, PG.

*Sarcochilus platystachys* Bailey, Syn. Queensl. fl., Suppl. 1: 56 (1886). Type: 'Johnstone River', Aug. 1892, J.L. Bancroft s.n. (holo BRI!, iso K! MEL!).

*Thrixspurmum neo-hibernicum* Schltr. in K. Schum. et Laut., Fl. Schutzgeb. Sudsee, Nachtrage 232 (1905). Type: 'Neu-Mecklenburg: On trees in the village of Lauan, alt. c. 10 m', Jun. 1902, R. Schlechter 14617 (holo B†). Notes: I have examined specimens recently collected in the Solomon Islands under this name and consider they are almost certainly the same as the Australian species *T. platystachys*. Whether *T. platystachys* is the earliest name for the taxon remains to be established as they are also superficially similar to the Indonesian species *T. arachnites* H.G. Reichb.

*T. rubrocinctum* (Fitzg.) H.G. Reichb. = *Sarcochilus hartmannii*.

*T. tridentatum* (Lindley) H.G. Reichb. = *Plectorrhiza tridentata*.

*T. tridentatum* (Lindley) Hunt = *Plectorrhiza tridentata*.

## TITANIA

*Titania* Endl. = *Oberonia*.

*T. miniata* Endl. = *Oberonia titania*.

## TOWNSONIA

*Townsonia* Cheesem. = *Acianthus*.

*T. deflexa* Cheesem. = *Acianthus viridis*.

*T. viridis* (J.D. Hook.) Schltr. = *Acianthus viridis*.

## TRACHOMA

*Trachoma* Garay, Bot. Mus. Leafl. 23: 207 (1972). Type species: *Dendrocolla rhopalorrhachis* H.G. Riechb.

**T. papuanum** (Schltr.) M. Clements, J.J. Wood et D. Jones, comb. nov.

*Saccolabium papuanum* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 978 (1913). Type: 'Kaiser-Wilhelms-Land: On trees in the forests of the Kani Range, alt. c. 1000 m', Dec. 1908, R. Schlechter 18975 (holo B†). Notes: There is little doubt which species Schlechter was referring to when he described this orchid. The description matches that of plants collected in Australia and, in addition, it is the only known *Trachoma* possessing yellow flowers with a white labellum and lip-sac. Dist: Qkn, Qco; NC, SB, TO, FJ, PG.

*Epidendrum distichum* Forst., Fl. Ins. Aust. Prod. (1788), nom. nud.

*Sarcochilus societalis* J.W. Moore, Bull. Bishop Museum 102: 24 (1933). Type: Tahiti, Opua Valley, 11 Dec. 1926, J.W. Moore 411 (holo BISH), syn. nov.

*Saccolabium subluteum* Rupp, North Queensland Naturalist 21 (105): 1 (1953); *Trachoma subluteum* (Rupp) Garay, Bot. Mus. Leafl. 23: 208 (1972). Type: cult. Cairns, Apr., 1953, ex 'Johnstone River, near Upper Daradgee', Oct. 1952, S.F. Goessling-St. Cloud s.n. (holo not found); cult. ANBG, 21 Feb. 1989, M.A. Clements 4806 ex 'Queensland, Cook District, Wallacha Falls, Palmerston Highway', 6 Jun. 1972, J. Wrigley & I. Telford NQ 784A (neotype CBG! here designated), syn. nov. Notes: The following note by Blaxell is on the sheet labelled holotype for *S. subluteum*; "The two flowers are not *S. subluteum* as interpreted and figured by Dockrill (1969). They do not match the figures accompanying the protologue (Rupp, 1953), but since these figures are very poorly drawn it is difficult to be sure. However, the description in the protologue does not apply to these flowers (which appear to be the only type material extant). The flowers do match the description and figure of *S. loaderianum* Rupp. It would therefore appear that Rupp (or someone else) mixed up the labels and specimens. Following examination of the holotype specimen of *S. loaderianum* Rupp from NSW, I now believe that some mix-up of specimens has occurred. The two flowers above (*S. subluteum* Rupp, holotype) match the holotype flowers of *S. loaderianum* Rupp. I also believe that the type flowers, upon which the protologue drawings were made, are no longer extant. Therefore Rupp's plate (erroneously labelled *S. subluteum* [*S. loaderianum* (Mueller) Rupp]) should be taken as the holotype." I agree with all but the final conclusion of Blaxell. Since no actual specimen exists that can be said to be the holotype of *S. subluteum*, and since the illustration is a very poor one which might be representative of a number of taxa, it is best to select a neotype to which the name can be referred.

*T. rhopalorrhache sensu* Dockr., pro parte max., = *Trachoma speciosum*.

*T. rhopalorrhache sensu* Dockr., pro parte min. = *Trachoma stellatum*.

**T. speciosum** D. Jones, B. Gray, M. Clements et J.J. Wood, sp. nov.

Ad *Trachomam rhopalorrhachidem* (H.G. Reichb.) Garay affinis, a qua habitu majore, foliis crassioribus carnosis, rhachidi crassiore multo longiore, floribus majoribus albis odoriferis et labello

uni-flavo-maculato, differt. Type: cult. ANBG, 1985, M.A. Clements 3643, ex Queensland, Cook District, Leo Creek, McIlwraith Range, 26 Jul. 1978, G. Butler 408 (holo CBG!). Dist: Qco; PG.

*Trachoma rhopalorrhache* sensu Dockr., Aust. Sarcanth. 9, t. 41 (1967), *pro parte* (illustration only), non (H.G. Reichb.) Garay (1972), *syn. nov.*

## T. *stellatum* M. Clements, D. Jones, B. Gray et J.J. Wood, *sp. nov.*

Ad *Trachomam speciosum* D. Jones et al. affinis, a qua habitu semi-pendenti, foliis tenuioribus, rhachidi breviore graciliore, floribus stellatis minoribus cremeis ad basim tepalorum fusco-notatis, differt. Type: cult. ANBG, 8 Apr. 1986, M.A. Clements 4038, ex Queensland, Cook District, Upper Massey Creek, 13° 50', S 143° 23', E, B.J. Wallace s.n. (holo CBG including spirit coll.!). Dist: Qco.

*Trachoma rhopalorrhache* sensu Dockr., Aust. Sarcanth. 9, t. 41 (1967), *pro parte* (description), non (H.G. Reichb.) Garay (1972), *syn. nov.*

*T. subluteum* (Rupp) Garay = *Trachoma papuanum*.

# TRACHYRHIZUM

*Trachyrhizum* (Schltr.) Breig. = *Dendrobium*.

*T. agrostophyllum* (F. Muell.) Rauschert = *Dendrobium agrostophyllum*.

# TRICHOGLOTTIS

*Trichoglossis* Blume, Bijdr. 6: t. 3, f. 8, 8: 359 (1825). Type species: *Trichoglossis retusa* Blume.

*T. australiensis* Dockr., Orchadian 2: 106, f. (1967). Type: 'McIlwraith Range, Cape York Peninsula', 18 Mar. 1967, M. Brown s.n. (holo BRI!). Dist: Qco.

# TROPIDIA

*Tropidia* Lindley in Edwards's, Bot. Reg. 19: sub t. 1618 (1833). Type species: *Tropidia curculigoides* Lindley.

*T. curculigoides* Lindley in Edwards's, Bot. Reg. 19: sub t. 1618 (1833). Type: 'Assam; Sylhet', J.D. [Hooker?] & W. Griffith s.n. (holo K!, iso K-L!). Notes: A few small populations of this species were recently discovered in the Northern Territory which is the first record of its occurrence in Australia (D. Jones pers. comm.). Illustrated on page 381 in Jones (1988). Dist: Ddg; ID, MY, TH, BU, IN.

*T. viridifusca* Kraenzl. in Vierteljahrsschr. Naturf. Ges. Zurich 74: 71 (1929). Type: 'New Caledonia, ob der Hermitage, Mt Koglu', 31 Jan 1926, A.U. Daeniker 2720 (holo Z!). Dist: Norfolk Island; NC.

*T. grandis* Hance, J. Proc. Linn. Soc., Bot. 13: 128 (1873). Notes: Previously listed as a synonym of *Geodorum densiflorum*.

# TROPILIS

*Tropilis* Rafin. = *Dendrobium*.

*T. adae* (Bailey) Butzin = *Dendrobium adae*.

*T. adae* (Bailey) Rauschert = *Dendrobium adae*.

*T. aemula* (R. Br.) Rafin. = *Dendrobium aemulum*.

*T. comptonii* (Rendle) Rauschert = *Dendrobium comptonii*.

*T. X delicata* (Bailey) Butzin = *Dendrobium X delicatum*.

*T. X delicata* (Bailey) Rauschert = *Dendrobium X delicatum*.

*T. drake-castilloi* (Kraenzl.) Rauschert = *Dendrobium comptonii*.

*T. falcorostra* (Fitzg.) Butzin = *Dendrobium falcorostrum*.

*T. falcorostra* (Fitzg.) Rauschert = *Dendrobium falcorostrum*.

*T. fleckeri* (Rupp et C.T. White) Butzin = *Dendrobium fleckeri*.

*T. fleckeri* (Rupp et C.T. White) Rauschert = *Dendrobium fleckeri*.

*T. gracilicaulis* (F. Muell.) Butzin = *Dendrobium gracilicaule*.

*T. gracilicaulis* (F. Muell.) Rauschert = *Dendrobium gracilicaule*.

*T. X gracillima* (Rupp) Butzin = *Dendrobium X gracillimum*.

*T. X gracillima* (Rupp) Rauschert = *Dendrobium X gracillimum*.

*T. kingiana* (Bidwell ex Lindley) Butzin = *Dendrobium kingianum*.

*T. kingiana* (Bidwell ex Lindley) Rauschert = *Dendrobium kingianum*.

*T. moorei* (F. Muell.) Butzin = *Dendrobium moorei*.

*T. moorei* (F. Muell.) Rauschert = *Dendrobium moorei*.

*T. rupppiana* (Hawkes) Butzin = *Dendrobium jonesii* subsp. *jonesii*.

- T. ruppiana* (Hawkes) Rauschert = *Dendrobium jonesii* subsp. *jonesii*.  
*T. speciosa* (Smith) Butzin = *Dendrobium speciosum*.  
*T. speciosa* (Smith) Rauschert = *Dendrobium speciosum*.  
*T. suffusa* (Cady) Butzin = *Dendrobium X suffusum*.  
*T. suffusa* (Cady) Rauschert = *Dendrobium X suffusum*.  
*T. tetragona* (Cunn.) Butzin = *Dendrobium tetragonum*.  
*T. tetragona* (Cunn.) Rauschert = *Dendrobium tetragonum*.

## VANDA

- Vanda* W. Jones ex R. Br. in Edwards's, Bot. Reg. 6: t. 506 (1820). Type species: *Vanda roxburghii* R. Br.  
*V. hindsii* Lindley, London J. Bot. 2: 237 (1843). Type: 'New Guinea', Hinds s.n. (holo K-L!). Dist: Qco: SB, PG, ID.  
     *Vanda truncata* J.J. Smith, Bull. Dept. Agric. Indie. Neerl. 14: 38 (1908). Type: cult. Bogor ex New Guinea, [Anon] (holo L!).  
     *Vanda whiteana* D. Herbert et S.T. Blake, Queensland Naturalist 14: 57-60, f. (1951). Type: 'Cook District, near Coen', 4 Nov. 1950, L.J. Wassell s.n. (holo BRI!).  
*V. hindsii* sensu Benth. = *Vanda tricolor*.  
*V. truncata* J.J. Smith = *Vanda hindsii*.  
*V. suaveolens* Blume = *Vanda tricolor*.  
*V. suavis* Lindley, Gard. Chron. 7: 351 (1848). Notes: Formerly included under *V. tricolor* but now considered a separate species by many botanists.  
*V. tricolor* Lindley in Edwards's, Bot. Reg. 33: t. 59 (1847). Type: cult. London ex Java, 4 Oct. 1847, Veitch s.n. (holo K-L!). Notes: Considerable doubt exists about the natural occurrence of this species in Australia. The Australian record is based on a collection sent to F. Mueller that was reported to have been collected in coastal Northern Territory. From recent research it would appear that this could have been an error as Mueller also received material from Timor and Java collected on that same trip. In addition, no other specimen exists of *V. tricolor* (living or herbarium) that has been authentically collected from the wild in Australia. Dist: Ddg?; ID.  
     *Vanda suaveolens* Blume, Rumphia 4: 49 (1849). Type: Java, C. Blume s.n. (holo L!).  
     *Vanda hindsii* sensu Benth., Fl. Austral. 6: 297 (1873), non Lindley (1843).  
*V. whiteana* D. Herbert et S.T. Blake = *Vanda hindsii*.

## VRYDAGZYNEA

- Vrydagzynea* Blume, Collect. Orchidees 71 (1858). Type species: *non designatus*.  
*V. paludosa* J.J. Smith, Bull. Dep. Agric. Indes. Neerl. 19: 39 (1908). Type: 'Niederl. Neu-Guinea: An dem Noord-Fluss sudlich vam Nepenthes-Huegel, am Boden in Pandanus und Metroxylon sumpfen', Jun. 1907, G.M. Versteeg 1244 & Djiedja 101 & 104 (syn L?). Notes: The description of *V. paludosa* best fits plants recently discovered in the Daintree River area (D. Jones pers. comm.). Dist: Qco: PG, ID.

## WAILESIA

- Wailesia* Lindley = *Dipodium*.  
*W. picta* Lindley = *Dipodium pictum*.  
*W. punctata* (Smith) Nichols = *Dipodium punctatum*.

## ZEUXINE

- Zeuxine* Lindley, Coll. Bot. App. (1825). Type species: *Pterygodium sulcatum* Roxb.  
*Z. attenuata* R. Rogers et C. White = *Cheirostylis ovata*.  
*Z. exilis* Ridley, J. Straits Branch Roy. As. Soc. 45: 236 (1906). Type: 'Christmas Island, Murray Hill track', Oct. 1904, H.N. Ridley s.n. (lectotype K!, isolectotype BM!). Dist: Christmas Island (where presumed extinct).  
*Z. novae-hiberniae* Schltr. = *Zeuxine polygonoides*.  
*Z. oblonga* R. Rogers et C. White, Proc. Roy. Soc. Queensland 32: 120-2, f 2 (1921). Type: 'Kamerunga (Barron River)', E. Cowley s.n. (lectotype AD! here designated); Syntypes: 'MacKay', L.J. Nugent s.n. (AD!); 'Daintree River', G. Rosenstrom s.n. (AD!). Dist: Nnc, Qmo, Qkn, Qco.  
*Z. polygonoides* (F. Muell.) Cribb, comb. nov.  
     *Goodyera polygonoides* F. Muell., Fragm. 8: 29 (1873); *Orchiodes polygonoides* (F. Muell.) Kuntze, Revis. gen. pl. 2: 675 (1891); *Etaeria polygonoides* (F. Muell.) Dockr., Austral. Pl. 3: 350, f. (1966); *Hetaeria polygonoides* (F. Muell.) Dockr., Austral. Pl. 3: 350-351 (1966). Type: 'In summitate montis Macallisteri prope

*polygonoides* F. Muell Rockingham's Bay', *J. Dallachy* s.n. (holo MEL). Notes: This species undoubtedly belongs in *Zeuxine* having the characteristic resupinate flower and a fleshy lip with two basal calli. Schlechter recognised this when he described a specimen from New Ireland as *Z. novae-hiberniae* which is reduced here to synonymy in *Z. polygonoides*. This species is common from New Guinea across to the Solomon Islands. Dist: Qco; SB, PG.

*Zeuxine novae-hiberniae* Schltr., Repert. Spec. Nov. Regni Veg. Beih. 1: 86 (1912). Type: 'Neu-Mecklenburg [New Ireland]: In humus in the mountain forests near Punam, alt. c. 600 m', Jul. 1902, R. Schlechter 14695 (holo B†, iso K!), syn. nov.

## ADDENDUM

A comprehensive study of the literature shows clearly that *Dendrobium schroederianum* Hort. ex L. Gentil is a nomen nudum and no other name is applicable at specific rank. Although not an Australian taxon this species is clearly related to *D. bigibbum* Lindley and *D. phalaenopsis* Fitzg. and is here formally described, for the first time, at specific rank.

***Dendrobium striaenopsis* M. Clements et D. Jones, sp. nov.**

affinis *Dendrobium phalaenopsi* Fitzg. a qua floribus majoribus distincte fuscistriatis, et callo labelli perevolutiore callis pluribus linearibus longioribus fuscoribus differt. Type: cult. Darwin, R. Bromwich ex Tanimbar Islands, Indonesia, A. Wall s.n., 5 May 1989, (D.L. Jones 3997) (holo CBG). Dist: ID (Tanimbar Islands). Notes: The specific name is a pseudocompound composed arbitrarily from 'stria' (L., line) and '-aenopsis' (from the epithet *phalaenopsis*).

[*Dendrobium phalaenopsis* auct. non Fitzg.: J.D. Hook., Bot. Mag. 41: t. 6817 (1885)].

*Dendrobium phalaenopsis* Fitzg. var. *schroederianum* Hort. ex W. Watson, Gard. & Forest 4: 521 (4 Nov. 1891), syn. nov. Type: cult. Egham, England, Schroeder ex Taminbar Islands, O. Forbes s.n. (holo not seen, probably never taken). Notes: One plant from the Forbes collection was earlier illustrated under the name *D. phalaenopsis* in Bot. Mag. 41: t. 6817 (1885).

*Dendrobium phalaenopsis* Fitzg. var. *schroederianum* Hort. ex Masters, Gard. Chron. (ser. 3)10: 641-3, f. 89-92 (28 Nov. 1891), non. illeg. Type: 'N.E. New Guinea' [Timor Laut], Micholitz s.n. (holo not found, probably never taken; lectotype f. 90! here designated).

[*Dendrobium schroederianum* Hort. ex L. Gentil, Liste des Pl. Cult. Serres Jard. Bot. Brux. 73 (1907), nom. nud.].

*Dendrobium bigibbum* Lindley subsp. *laratensis* Clemesha, Orchadian 6(2): 27-33 (1978), syn. nov. Type: 'N.E. New Guinea' [Timor Laut], Micholitz s.n. (holo not found; lectotype f. 90! in Gard. Chron. (ser. 3)10: 642 (1891) here designated).

Note: For additional synonyms, all of which were described as varieties or forms of *D. phalaenopsis*, see Blake (1964).

## APPENDIX 1

### List of Herbarium Abbreviations

The following list of Herbarium abbreviations is taken from 'Index Herbariorum' (Holmgren et al, 1981).

AD	Adelaide: State Herbarium of South Australia, Australia.
AK	Auckland: Auckland Institute and Museum (Cheeseman Herbarium), New Zealand.
AMES	Cambridge: Orchid Herbarium of Oakes Ames, Botanical Museum of Harvard University, Massachusetts, USA.
B	Berlin: Botanischer Garten und Botanisches Museum Berlin-Dahlem, Federal Republic of Germany, BRD.
BISH	Honolulu: Herbarium Pacificum, Department of Botany, Bernice P. Bishop Museum, Honolulu, Hawaii, USA.
BM	London: Herbarium, British Museum (Natural History), England, Great Britain.
BO	Bogor: Herbarium Bogoriense, Bogor, Indonesia.
BOG	Bogata: Herbario, Museo del Instituto de La Salle, Bogata, Columbia.
BRI	Brisbane: Queensland Herbarium, Brisbane, Australia.
C	Copenhagen: Botanical Museum and Herbarium, Denmark.
CAL	Calcutta: Central National Herbarium, Botanical Survey of India, India.
CANB	Canberra: Australian National Herbarium, Canberra, Australia.
CANTY	Christchurch: Canterbury Museum—incorporated into CHR.
CBG	Canberra: Herbarium, Australian National Botanic Gardens, Australia.
CHR	Christchurch: Botany Division, Department of Scientific and Industrial Research, New Zealand.
DNA	Darwin: Herbarium of the Northern Territory, Department of Primary Production, Darwin, Australia.
E	Edinburgh: Herbarium, Royal Botanic Garden, Scotland, Great Britain.
FI	Firenze: Herbarium/Universitatis Florentinae, Museo Botanico, Italy.
G	Geneve: Herbarium, Conservatoire et Jardin botaniques de la Ville de Geneve, Switzerland
GOET	Gottingen: Systematisch-Geobotanisches Institut der Universitat Gottingen, Federal Republic of Germany, BRD.
HAL	Halle: Martin-Luther-Universitat, Sektion Biowissenschaften, Wissenschaftsbereich Geobotanik und Botanischer Garten, German Democratic Republic, DDR.
HBG	Hamburg: Herbarium, Institut fur Allgemeine Botanik und Botanischer Garten, Federal Republic of Germany, BRD.
HO	Hobart: Tasmanian Herbarium, University of Tasmania, Australia.
K	Kew: The Herbarium, Royal Botanic Gardens, Kew, England, Great Britain.
K-L	Kew (Lindley herbarium).
K-WALL	Kew (Wallich herbarium);
KYO	Kyoto: Herbarium, Department of Botany, Faculty of Science, Kyoto University, Japan.
L	Leiden: Rijksherbarium, Netherlands.
LD	Lund: Botanical Museum, Sweden.
LE	Lenigrad: Herbarium of the Department of Higher Plants, V.L. Komarov Botanical Institute of the Academy of Sciences of the U.S.S.R., U.S.S.R.
LINN	Herbarium, The Linnean Society of London, England, Great Britain.
LIV	Liverpool: Herbarium, Merseyside County Museum, England, Great Britain.
LY	Villeurbanne: Herbiers de l'Universite de Lyon, Departement de Biologie Vegetale, France.
M	Munchen: Herbarium, Botanische Staatssammlung, Federal Republic of Germany, BRD.
MEL	Melbourne: National Herbarium of Victoria, Royal Botanic Gardens, Victoria Australia.
MO	Saint Louis: Herbarium, Missouri Botanic Garden, U.S.A.
NSW	Sydney: National Herbarium of New South Wales, Australia.
NY	New York: Herbarium, The New York Botanical Garden, New York, U.S.A.
P	Paris: Museum National d'Histoire Naturelle de Phanerogamie, France.
PERTH	Perth: Western Australian Herbarium, Department of Agriculture, Western Australia, Australia.

## APPENDIX 1

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PR	Praha: Botanicke oddeleni Prirodived muzea v Praze (Department of Botany, National Museum in Prague), Czechoslovakia.
QRS	Atherton: Herbarium, Queensland Regional Station, C.S.I.R.O., Division of Forestry Research, Australia.
S	Stockholm: Herbarium, Swedish Museum of Natural History (Naturhistoriska riksmuseet), Sweden.
SING	Singapore: Herbarium and Library, Botanic Gardens, Singapore.
SUNIV	Stockholm: Herbarium, Institute of Botany, University of Stockholm, Sweden.
TAI	Taipei: The Herbarium, Department of Botany, National Taiwan University, Taiwan.
TI	Tokyo: Herbarium, Botanic Gardens Koishikawa, Tokyo, Japan.
TNS	Tokyo: Herbarium, National Science Museum, Department of Botany, Japan.
US	Washington: United States National Herbarium, Department of Botany, Smithsonian Institution, U.S.A.
W	Wien: Naturhistorisches Museum, Botanische Abteilung, Austria.
WELT	Wellington: Herbarium, National Museum of New Zealand, New Zealand.
WU	Wien: Institut fur Botanik und Botanischer Garten der Universitat, Austria
Z	Zurich: Institut fur systematische Botanik der Universitat Zurich, Switzerland.

## APPENDIX 2

### Abbreviation for Australian Botanical Districts

#### Australian Capital Territory: Can

#### Northern Territory: D

Dbt: Barkly Tablelands

Dcn: Central Australia North

Ddg: Darwin & Gulf

Dsn: Central Australia South

Dvr: Victoria River

#### New South Wales: N

Ncc: Central Coast

Ncs: Central-west Slopes

Nct: Central Tablelands

Nnc: North Coast

Nnf: North Far Western Plains

Nnp: North Western Plains

Nns: North-west Slopes

Nnt: Northern Tablelands

Nsc: South Coast

Nsf: South Far Western Plains

Nsp: South Western Plains

Nss: South-west Slopes

Nst: Southern Tablelands

#### South Australia: S

Seb: Eyre Basin

Sep: Eyre Peninsula

Sfr: Flinders Range

Sgt: Gairdner-Torrens

Ski: Kangaroo Island

Sln: Lofty north

Sls: Lofty south

Smb: Murray Basin

Sne: North-east

Snu: Nullarbor

Snw: North-West

Sse: South-east

Syp: Yorke Peninsula

#### Tasmania: Tas

#### Victoria: V

Veh: Eastern Highlands

Vgi: Gippsland

Vma: Mallee

Vnp: Northern Plains

Vwh: Western Highlands

Vwp: Western Plains

#### Queensland: Q

Qbn: Burnett

Qbu: Burke

Qco: Cook

Qdd: Darling Downs

Qgn: Gregory north

Qgs: Gregory south

Qkn: Kennedy north

Qks: Kennedy south

Qle: Leichhardt

Qma: Maronoa

Qmi: Mitchell

Qmo: Moreton

Qpc: Port Curtis

Qwa: Warrego

Qwb: Wide Bay

#### Western Australia: W

Was: Ashburton

Wau: Austin

Wav: Avon

Wca: Carnegie

Wcg: Canning

Wco: Coolgardie

Wcv: Carnarvon

Wda: Darling

Wdm: Dampier

Weu: Eucla

Wey: Eyre

Wft: Fitzgerald

Wfo: Fortescue

Wga: Gardner

Wgi: Giles

Wha: Hall

Whe: Helms

Wir: Irwin

Wke: Keartland

Wmu: Mueller

Wro: Roe

## APPENDIX 3

### International Standards Organisation Common Country Codes (Document ISO-3166)

AO	Angola	JP	Japan	PH	Philippines
AS	American Samoa	KE	Kenya	PK	Pakistan
BD	Bangladesh	KH	Kampuchea, Democratic	RE	Reunion
BN	Brunei	KP	Korea, Democratic People's Republic of	SB	Solomon Islands
BU	Burma	KR	Korea, Republic of	SC	Seychelles
CG	Congo	LA	Lao People's Republic	SG	Singapore
CK	Cook Islands	LK	Sri Lanka	TH	Thailand
CM	Cameroon, United Republic of	MG	Madagascar	TO	Tonga
CN	China	MU	Mauritius	TW	Taiwan
EC	Ecuador	MW	Malawi	TZ	Tanzania
FJ	Fiji	MY	Malaysia	UG	Uganda
GH	Ghana	NC	New Caledonia	VN	Viet Nam
GU	Guam	NE	Niger	VU	Vanuatu
HK	Hong Kong	NP	Nepal	WS	Samoa
ID	Indonesia	NZ	New Zealand	ZA	South Africa
IN	India	PE	Peru	ZR	Zaire
IQ	Iraq	PF	French Polynesia	ZW	Zimbabwe
IR	Iran	PG	Papua New Guinea		

## APPENDIX 4

### Summary of New Taxa and Nomenclatural changes: New names and new combinations

*Caladenia R. Br.*

- C. caesarea* (Domin) M. Clements & Hopper
- C. concinna* (Rupp) D. Jones & M. Clements
- C. eminens* (Domin) M. Clements & D. Jones
- C. falcata* (Nicholls) M. Clements & Hopper
- C. fragrantissima* D. Jones & G.W. Carr
- C. fuscata* (H.G. Reichb.) M. Clements & D. Jones
- C. lindleyana* (H.G. Reichb.) M. Clements & D. Jones
- C. magnifica* (Nicholls) D. Jones & G.W. Carr
- C. picta* (Nicholls) M. Clements & D. Jones
- C. rhomboidiformis* (E. Coleman) M. Clements & Hopper
- C. valida* (Nicholls) M. Clements & D. Jones

*Calassodia* M. Clements

- X *Calassodia tutelata* (R. Rogers) M. Clements

*Dendrobium* Sw.

- D. cacatua* M. Clements & D. Jones
- D. capitisyork* M. Clements & D. Jones
- D. curvicaule* (Bailey) M. Clements & D. Jones
- D. discolor* Lindley var. *broomfieldii* (Fitzg.) M. Clements & D. Jones
- D. dolichophyllum* M. Clements & D. Jones
- D. jonesii* Rendle subsp. *bancroftianum* (H.G. Reichb.) M. Clements & D. Jones
- D. jonesii* Rendle subsp. *blackburnii* (Nicholls) M. Clements & D. Jones
- D. X *lavarackianum* M. Clements
- D. lithocola* D. Jones & M. Clements

## APPENDIX 4

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- D. melaleucophilum** M. Clements & D. Jones
- D. nitidum** (Bailey) M. Clements & D. Jones
- D. nugentii** (Bailey) D. Jones & M. Clements
- D. pedunculatum** (Clemesha) D. Jones & M. Clements
- D. rex** M. Clements & D. Jones
- D. tarberi** M. Clements & D. Jones

**Diuris** Smith

- D. fragrantissima** D. Jones & M. Clements

**Elythranthera** (Endl.) A.S. George

- E. X intermedia** (Fitzg.) M. Clements

**Microtis** R. Br.

- M. densiflorum** (Benth.) M. Clements

**Oberonia** Lindley

- O. complanata** (Cunn.) M. Clements & D. Jones

**Oeceoclades** Lindley

- O. pulchra** (Thouars) Cribb & M. Clements

**Orthoceras** R. Br.

- O. novae-zealandiae** (A. Rich.) M. Clements, D. Jones & Molloy

**Prasophyllum** R. Br.

- P. antennatum** M. Clements & D. Jones

- P. robustum** (Nicholls) M. Clements & D. Jones

**Pterostylis** R. Br.

- P. aciculiformis** (Nicholls) M. Clements & D. Jones

- P. arenicola** M. Clements & J. Stewart

- P. aspera** D. Jones & M. Clements

- P. calceolus** M. Clements

- P. chaetophora** M. Clements & D. Jones

- P. ciliata** M. Clements & D. Jones

- P. cobarensis** M. Clements

- P. collina** (Rupp) M. Clements & D. Jones

- P. concava** D. Jones & M. Clements

- P. despectans** (Nicholls) M. Clements & D. Jones

- P. insectifera** M. Clements

- P. leptochila** M. Clements & D. Jones

- P. lingua** M. Clements

- P. macrocalymma** M. Clements & D. Jones

- P. maxima** M. Clements & D. Jones

- P. picta** M. Clements

- P. pretermissa** M. Clements & D. Jones

- P. procera** D. Jones & M. Clements

- P. roensis** M. Clements & D. Jones

- P. sanguinea** D. Jones & M. Clements

- P. spathulata** M. Clements

- P. taurus** M. Clements & D. Jones

- P. tunstallii** D. Jones & M. Clements

**Rhinorrhiza** Rupp

- R. moorei** (H.G. Reichb.) M. Clements, B. Wallace & D. Jones

**Sarcochilus** R. Br.

- S. borealis** (Nicholls) M. Clements & D. Jones

- S. hirticalcar** (Dockr.) M. Clements & B. Wallace
- Thelymitra** J. Forst. & G. Forst.
- T. apiculata** (A.S. George) M. Clements & D. Jones
- Thrixspermum** Lour.
- T. barbellatum** (Schltr.) M. Clements, B. Wallace & D. Jones
- Trachoma** Garay
- T. papuana** (Schltr.) M. Clements, J.J. Wood & D. Jones
- T. speciosum** D. Jones, B. Gray, M. Clements & J.J. Wood
- T. stellatum** M. Clements, D. Jones, B. Gray & J.J. Wood
- Zeuxine** Lindley
- Z. polygonoides** (F. Muell.) Cribb

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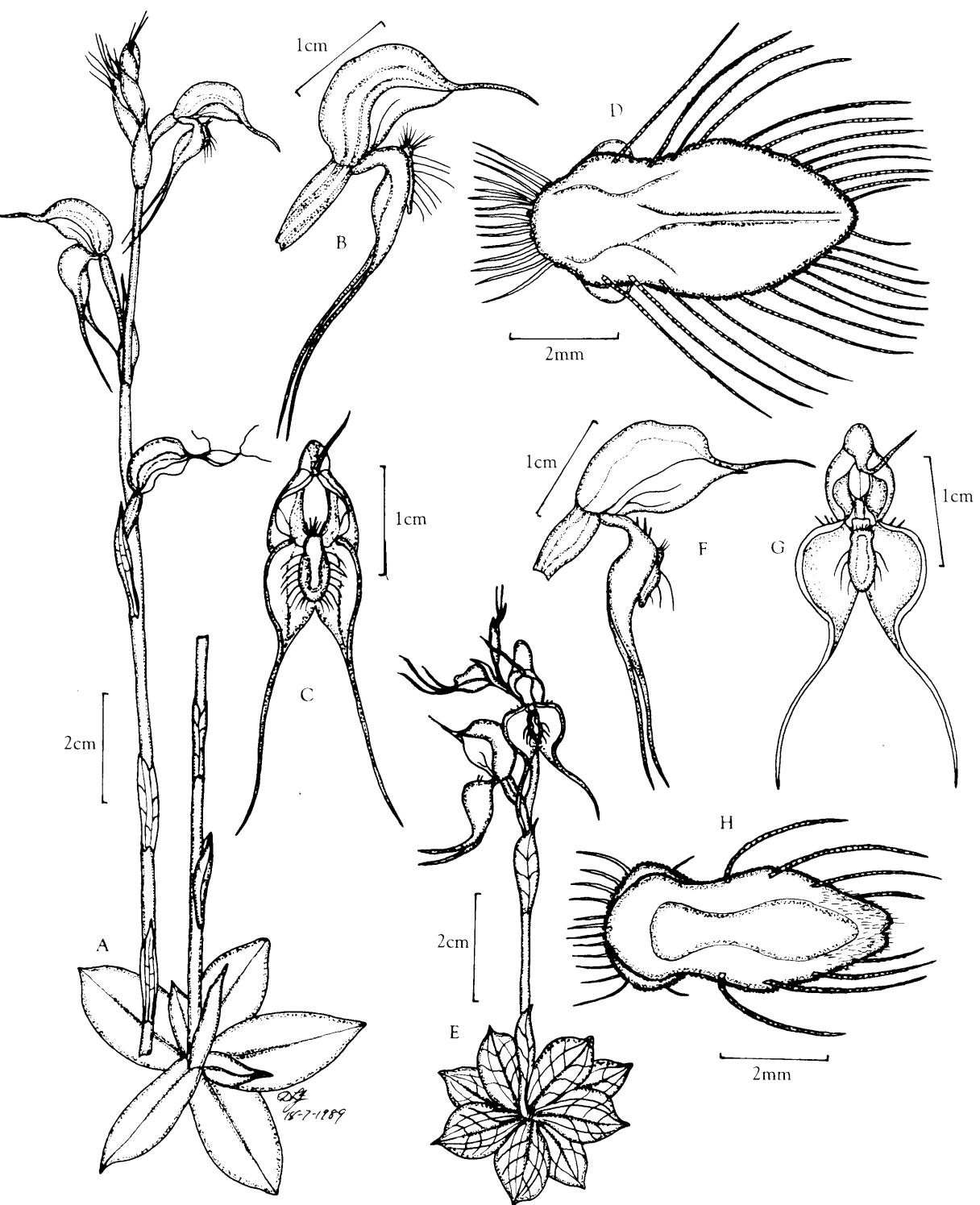


Fig. 2. A-D *Pterostylis chaetophora* M. Clements et D. Jones, A. plant, B. flower from side, C. flower from front, D. labellum from above; E-H *Pterostylis arenicola* M. Clements et J. Stewart, E. plant, F. flower from side, G. flower from front, H. labellum from above.

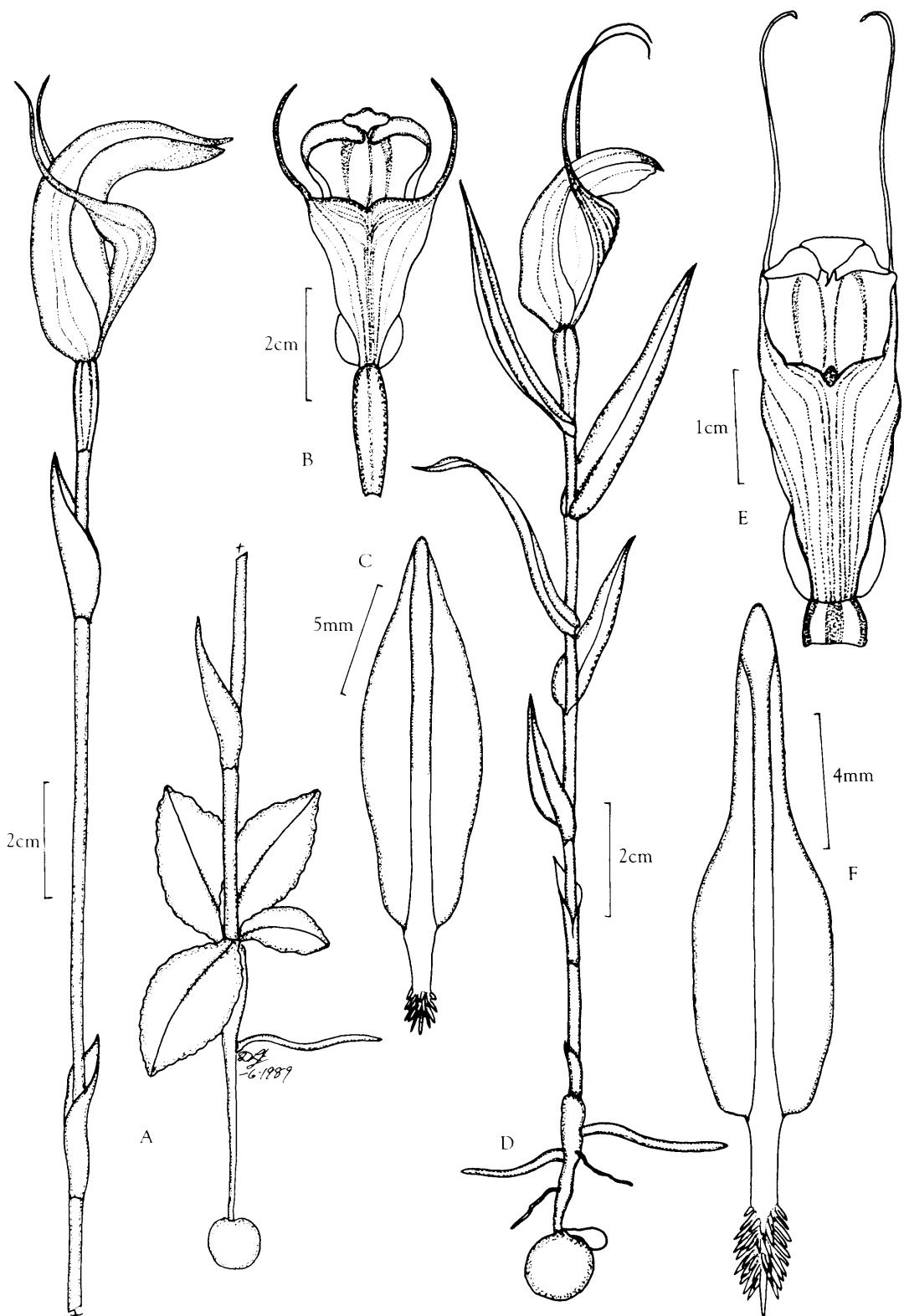


Fig. 3. A-C *Pterostylis procera* D. Jones et M. Clements, A. plant, B. flower from front, C. labellum from above; D-F *Pterostylis aspera* D. Jones et M. Clements, D. plant, E. flower from front, F. labellum from above.



Fig. 4. A-D *Pterostylis sanguinea* D. Jones et M. Clements, A. plant, B. flower from side, C. flower from front, D. labellum from above; E-H *Pterostylis concava* D. Jones et M. Clements, E. plant, F. flower from side, G. flower from front, H. labellum from above.

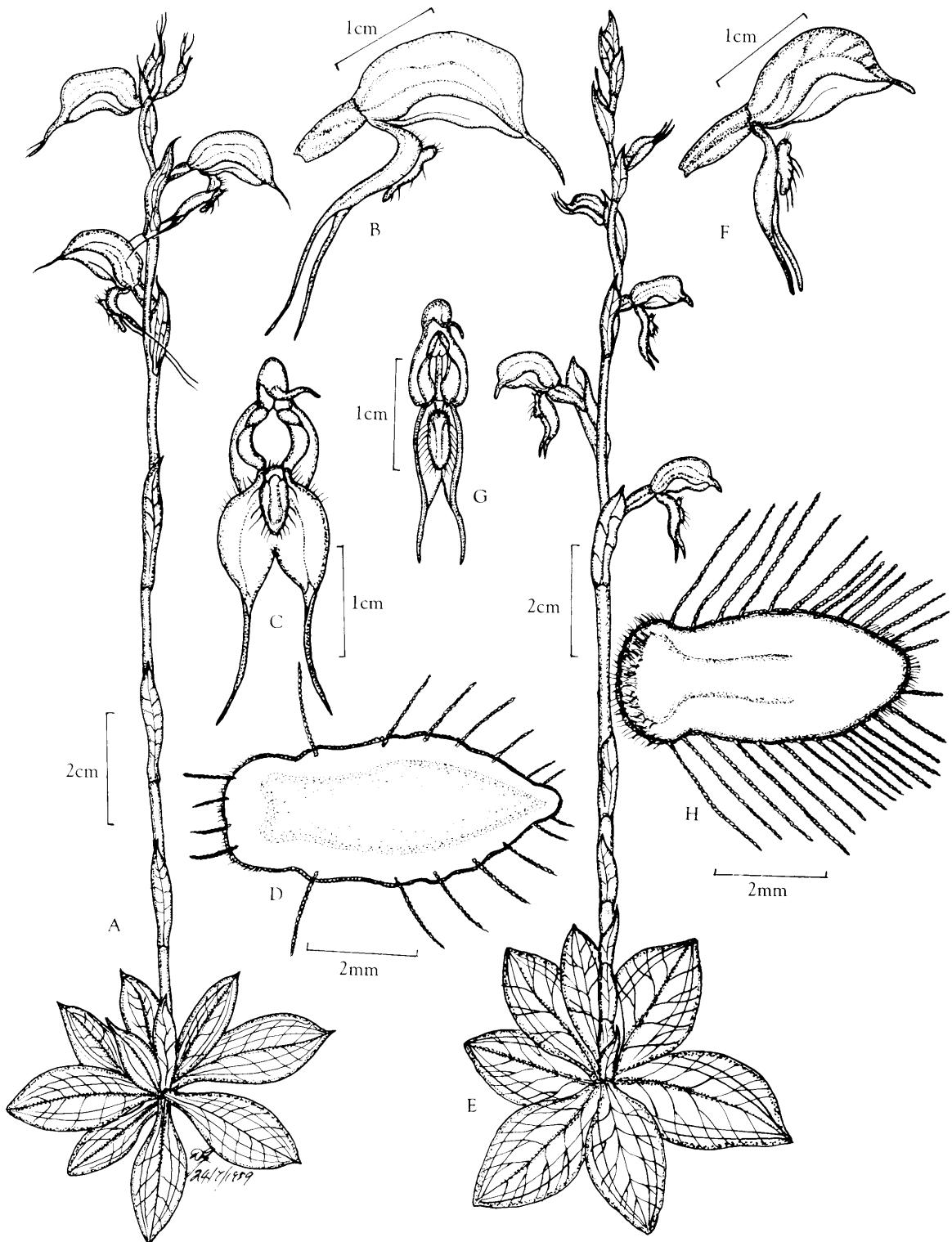


Fig. 5. A-D *Pterostylis lingua* M. Clements et D. Jones, A. plant, B. flower from side, C. flower from front, D. labellum from above; E-H *Pterostylis praetermissa* M. Clements et D. Jones, E. plant, F. flower from side, G. flower from front, H. labellum from above.

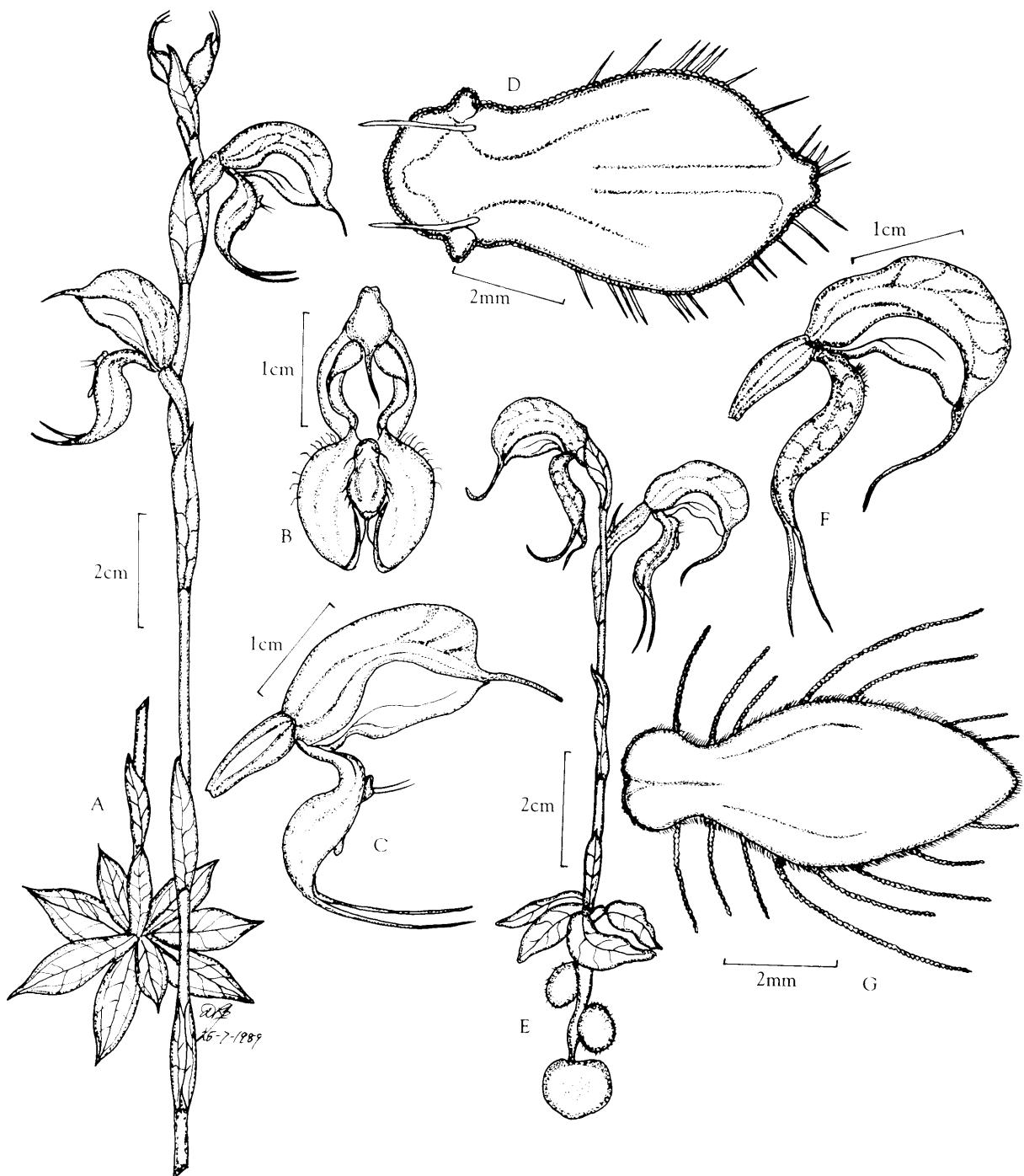


Fig. 6. A-D *Pterostylis maxima* M. Clements et D. Jones, A. plant, B. flower from front, C. flower from side, D. labellum from above; E-G *Pterostylis macrocalymma* M. Clements et D. Jones, E. plant, F. flower from side, G. labellum from above.



