

A check list of the Orchidaceae of Western Australia

By A. S. George

Abstract

The List includes all names which have been applied to Western Australian Orchidaceae and gives original citations, type collections and their location. Of a total of 297 names (including combinations) of specific or infra-specific rank, 148 are here accepted as correct including 20 of infra-specific rank, while 15 are considered to have been incorrectly recorded for this State.

One new generic name is proposed—*Leporella* gen. nov. to replace *Leptoceras* R. Fitzg. non (R. Br.) Lindl.

Ten new combinations are made, and 25 names which have been in recent use are reduced to synonymy.

Introduction

This List is intended to provide the correct nomenclature and synonymy for the Orchidaceae of Western Australia as far as is possible at present. Essentially, it gives the results of checking the Type collections of all except seven of the names which have been applied to orchids occurring in the State. In the past, the family has been studied quite extensively here as elsewhere, but a major handicap has been the location of most early type specimens in European herbaria. Most Australian workers since 1880 have used only the available literature in their interpretations, and their conclusions in some groups such as *Diuris* and *Pterostylis* have varied considerably. Bentham, in the "Flora Australiensis", submerged many species, and this has been accepted largely without question, even though he worked only on herbarium material which was often in poor condition. It was therefore probable that on close examination by workers familiar with the orchids in Australia, a proportion of the species synonymised by Bentham would prove to be valid, and that many would prove to be conspecific with more recently-described species.

In 1968, as Botanical Liaison Officer at the Royal Botanic Gardens, Kew, I was able to examine the types of Western Australian (and some eastern States) orchids which are housed at Kew, at the British Museum (Natural History) or at various European herbaria. Other types housed in Australian herbaria have been borrowed for study or examined during visits to the various institutions. The types of almost all the names applied to Western Australian orchids have now been seen, and the relevant literature has been studied. As a result, 25 names which have been in recent use have been found to be synonymous with earlier names. Ten new combinations are made for taxa which are considered to require a change of status. One new generic name is proposed—*Leporella*, to replace *Leptoceras* R. Fitzg. non (R. Br.) Lindl.

The List includes every name which has been applied to Western Australian orchids in the literature, including mis-identifications. The date and place of original publication are given, followed by the type collections and where the latter are housed. These have been seen unless otherwise indicated. In a number of cases lectotypes have been chosen, and here consideration has been given to the original descriptions, annotations by authors, and current usage where the type material contains more than one taxon.

Synonyms are listed in the alphabetical sequence and again in chronological order under the relevant accepted names for the taxa, but details of type collections only in the latter situation. Where recently-accepted names are reduced to synonymy the conclusions have been based on a study of the type

collections, original descriptions and the range of material available. An explanation is given if the conclusion is not straightforward.

The number of epithets applied to Western Australian orchids is 233 of which 204 are of specific and 29 of infra-specific rank. There are another 49 combinations involving some of these epithets, including 10 made in this paper, so that the total number of names is 282. Of these 148 are here accepted, including 20 infra-specific taxa.

Some taxa are left without names as a result of this work, but their status is considered doubtful and further work on them is required. Examples are the orchids described in Pelloe (1930) and Erickson (1951, 1965) as *Drakaea elastica* and *Thelymitra aristata*.

The list also cites 15 taxa which have been recorded for Western Australia at various times but are now considered not to occur here. In some cases the records were based on wrong determinations, in others apparently only on assumptions. The reference to the original record is given, and the correct name for mis-identified specimens. Many of these records have been carried on in various works on orchids, e.g. Blackall (1954), Erickson (1951, 1965), Firth (1965), Gardner (1930), Nicholls (1969), Pelloe (1930), Rogers in Black (1943), Rupp (1943) and Willis (1962).

Lindley's Types

These are housed in a special collection at the Herbarium of the Royal Botanic Gardens, Kew. In "A Sketch of the vegetation of the Swan River Colony", where Lindley described most of his Western Australian species, very few types were cited. In the introduction he stated (p. 2) only that he had "an herbarium of about 1,000 species, formed by the communications of Mr. James Drummond, now resident in the Colony, Captain James Mangles, R.N., R. Mangles, Esq., Mr. Toward, Gardener to Her Royal Highness the Duchess of Gloucester, and N. B. Ward, Esq., of Wellclose Square". Several collectors such as Mrs. Molloy of Augusta sent specimens to these people and sometimes they have been recorded in the Lindley collection under the recipient's name. The sheets have manuscript names in Lindley's hand; where there is a single collection it is taken as the holotype, but where there are two or more collections a lectotype has been chosen. The collections cited in Lindley's *Genera and Species of Orchidaceous Plants* have been considered and in most cases are those represented in his herbarium. There are often duplicates, especially of the Drummond collections, at other herbaria.

R. Fitzgerald's Types

It has long been thought that Fitzgerald destroyed all his specimens after drawing them. At the British Museum (Natural History) are a number of his specimens. They have small labels with his name printed on them, and the identifications and localities written in his own hand. The specimens are not always complete, and often are not those illustrated in "Australian Orchids", but they are apparently from the type collections. Fitzgerald cited no localities with the descriptions in the *Gardener's Chronicle* but usually gave them in "Australian Orchids". In most cases the British Museum specimens are from the same localities and are here selected as lectotypes. There are also a few Fitzgerald specimens in the National Herbarium of New South Wales but they do not have his writing. They are from the Deane Collection and are marked "R. D. Fitzgerald, W.A.". These are probably syntypes.

Guide to the List

Accepted names are printed in heavy type and synonyms in italics, except in the discussions where all names are in italics.

Apart from literature references, the following abbreviations are used:—

The = sign denotes synonymy.

Type categories: holo.—holotype.

iso.—isotype, isolectotype.

lecto.—lectotype.

syn.—syntype.

Herbaria: these are the standard abbreviations as listed in the Index Herbariorum (1964). K-L is the Lindley Collection at the Herbarium of the Royal Botanic Gardens, Kew.

Acknowledgements

Valuable co-operation in providing facilities for study, assistance to locate type collections and the loan of specimens has been received from a number of institutions. I wish to express my thanks to the Directors and staff of the following institutions:—

State Herbarium of South Australia, Adelaide (AD); Botany School, University of Cambridge, England (CGE); Botany Division, D.S.I.R., Christchurch, New Zealand; Royal Botanic Garden, Edinburgh, Scotland (E); Herbarium Universitatis Florentinae, Instituto Botanico, Firenze, Italy (FI); Conservatoire et Jardin botaniques, Genève, Switzerland (G); Systematisch-Geobotanisches Institut, Universität Göttingen, W. Germany (GOET); Herbarium, Royal Botanic Gardens, Kew, England (K); Rijksherbarium, Leiden, Netherlands (L); British Museum (Natural History), London, England (BM); Botanical Museum, Lund, Sweden (LD); National Herbarium of Victoria, Royal Botanic Garden, Melbourne, Victoria (MEL); Muséum d'Histoire Naturelle, Laboratoire de Phanérogamie, Paris, France (P); National Herbarium of New South Wales, Sydney (NSW); Naturhistorisches Museum, Wien, Austria (W).

ACIANTHUS

Acianthus R. Br., Prod. 321 (1810). *Cyrtostylis* R. Br., Prod. 322 (1810).

A. exsertus R. Br., Prod. 321 (1810). Recorded for Western Australia by Rogers in Black, Fl. S. Austral. 132 (1922). There is no authentic record from W.A. Possibly a collection from Bayswater, Victoria caused the error, as there is also a Bayswater in W.A.

A. huegelii (Endl.) Nicholls et Goadby, Vict. Nat. 50:106 (1906)

= *Acianthus reniformis* (R. Br.) Schlechter var. **huegelii** (Endl.) A. S. George.

A. reniformis (R. Br.) Schlechter, Bot. Jahrb. 39:39 (1906).

var. **reniformis**

Cyrtostylis reniformis R. Br., Prod. 322 (1810)—*Caladenia reniformis* (R. Br.) Reichb. f., Beitr. Syst. Pfl. 67 (1871)—

Type: Port Jackson, R. Brown, May-June 1802—holo.: BM, iso.: G, FI.

var. **huegelii** (Endl.) comb. nov.

Basionym: *Cyrtostylis huegelii* Endl. in Lehm., Pl. Preiss, 2:6 (1846)—

Caladenia reniformis (R. Br.) Reichb. f. var. *huegelii* (Endl.) Reichb. f.,

Beitr. Syst. Pfl. 67 (1871)—*Cyrtostylis reniformis* R. Br. var. *huegelii*

(Endl.) Benth., Fl. Austral. 6:376 (1873)—*Acianthus huegelii* (Endl.)

Nicholls et Goadby, Vict. Nat. 50:106 (1933)—

Type: Rottneest Island, Preiss 2204, Aug. 22, 1839—holo.:W, iso.:W, G, P.

This differs from the var. *reniformis* in having a narrower labellum—less than 3 mm as against 3–5 mm—which is also usually more acute. It is often greenish-brown, whereas the typical variety is more reddish-brown. Nicholls and Goadby erred in reducing their *A. tenuissimus* to a synonym

of this taxon, as it has much smaller flowers, the labellum is triangular and the flowering period is some two months later.

A. tenuissimus Nicholls et Goadby, *Vict. Nat.*, 50:22 (1933)—

Type: Bayswater, near Perth, *Goadby*, Sept.-Oct. 1932—holo.:PERTH, iso.:PERTH.

CALADENIA

Caladenia R. Br., *Prod.* 323 (1810).

C. aphylla Benth., *Fl. Austral.* 6:387 (1873)—

Type: King George Sound, *Harvey*—lecto.:K; Forest Hill, *Muir*—iso.:K; Hay and Kalgan Rivers, *F. Mueller*—not seen; Three-miles Plain, *Maxwell*—not seen.

C. barbarossa Reichb. f., *Beitr. Syst. Pfl.* 64 (1871)—

Type: Swan River, *Drummond* 861—holo.:W, iso.:W, G, P. The original and correct spelling of the epithet is *barbarossa*, not *barbarossae* as used by subsequent workers.

C. bicolor R. S. Rogers, *Trans. Roy. Soc. S. Austral.* 54:46 (1930)

= **C. radialis** R. S. Rogers.

C. brunonis (Endl.) Reichb. f., *Beitr. Syst. Pfl.* 67 (1871)

= **Elythranthera brunonis** (Endl.) A. S. George.

C. bryceana R. S. Rogers, *Trans. Roy. Soc. S. Austral.* 38:359 (1914)—

Type: Gnowangerup, *Miss Bryce MacIntyre*, Sept. 3, 1914—holo.:AD.

C. caerulea R. Br., *Prod.* 324 (1810)—

Type: Port Jackson, *R. Brown* May, 1802; June, 1803; Sept. 1804—BM.

C. cairnsiana F. Muell., *Fragm.* 7:31 (1869)—

Type: North of Stirling Range, *Mueller*—holo.:MEL, iso.:K.

C. carnea R. Br., *Prod.* 324 (1810). Recorded for Western Australia by Rogers in Black, *Fl. S. Austral.* 140 (1922), possibly on the basis of Sargent's record (*Journ. W. Austral. Nat. Hist. Soc.* no. 3:12 (1906) of the var. *alba* (R. Br.) Benth. This was a misidentification of *Caladenia saccharata* Reichb. f.

C. clavigera A. Cunn. ex Lindl., *Gen. et Sp. Orch. Pl.* 422 (1840). Recorded for Western Australia by Rogers, *Trans. Roy. Soc. S. Austral.* 44:353 (1920), but later described as a new species, *C. radialis* Rogers (1927).

C. congesta R. Br., *Prod.* 324 (1810). Doubtfully recorded for Western Australia by Bentham (*Fl. Austral.* 6:387) but the collection, by Mangles, is probably *C. marginata* Lindl.

C. corynephora A. S. George, *Nuytsia* 1, 2:158 (1971)—

Type: Banks of Donnelly River, 15 miles W. of Pemberton, W.A., *A. S. George* s.n., Dec. 7, 1957—holo.:PERTH, iso.:K.

C. crebra A. S. George, *Nuytsia* 1, 2:160 (1971)—

Type: 24 miles S. of Dongara, W.A., in sandy soil with *Eucalyptus erythrocorys* and scrub, *A. S. George* 9621, Aug. 29, 1969—holo.:PERTH, iso.:K, MEL, NSW.

C. cristata R. S. Rogers, *Trans. Roy. Soc. S. Austral.* 47:337 (1923)—

Type: Milng, Murchison district, *E. Simpson*, Sept. 1923—holo.:AD, iso.:PERTH.

C. deformis R. Br., *Prod.* 324 (1810)—

Type: Port Dalrymple, Tas., *Paterson*—holo.:BM.

- C. unguiculata* Lindl., Sketch Veg. Swan Riv. Col. 51 (1840)—
Type: Swan River, *Drummond*.
- C. denticulata* Lindl., Sketch Veg. Swan Riv. Col. 52 (1840)
= *C. filamentosa* R. Br. var. *denticulata* (Lindl.) Reichb. f.
- C. dilatata* R. Br., Prod. 325 (1810).
var. *dilatata*—*Caladenia patersonii* R. Br. var. *dilatata* (R. Br.) Benth.,
Fl. Austral. 6:382 (1873)—
Type: Port Dalrymple, Tas., *Paterson*—holo.:BM.
var. *falcata* W. H. Nicholls, Vict. Nat. 65:268 (1949)—
Type: Kojonup, *Nicholls*, Sept. 26, 1948—holo.:MEL.
- C. dilatata* R. Br. var. *rhomboidiformis* E. Coleman, Vict. Nat. 46:197 (1930)
= *C. longiclavata* E. Coleman var. *rhomboidiformis* (E. Coleman) A. S.
George.
- C. discoidea* Lindl., Sketch Veg. Swan Riv. Col. 52 (1810)—
Type: Swan River, *Drummond*—holo.:K-L, iso.:K, G.
- C. dorrienii* Domin, Journ. Linn. Soc. (Bot.) 41:251 (1912)
= *C. filamentosa* R. Br. var. *dorrienii* (Domin.) A. S. George.
- C. douthae* O. H. Sargent, Journ. Bot. 59:175 (1921)—
Type: Datatine, near Katanning, *Miss L. Douth*—holo.:PERTH.
- C. drummondii* Benth., Fl. Austral. 6:385 (1873)—
Type: Swan River, *Drummond*—holo.:K.
Caladenia glossodiphylla Rupp and Erickson, W. Austral. Nat. 4:65
(1953)—
Type: Wongan Hills, *Mrs. R. Erickson*, June 10, 1953—holo.:PERTH.
- C. elongata* Lindl., Sketch Veg. Swan Riv. Col. 52 (1840)
= *C. latifolia* R. Br.
- C. emarginata* (Lindl.) Reichb. f., Beitr. Syst. Pfl. 67 (1871)
= *Elythranthera emarginata* (Lindl.) A. S. George.
- C. ensata* W. H. Nicholls, Vict. Nat. 64:138 (1947)
= *C. longiclavata* E. Coleman var. *longiclavata*.
- C. ericksonae* W. H. Nicholls, Vict. Nat. 66:214 (1950)—
Type: Bolgart, *Mrs. R. Erickson*, Sept. 27, 1949—holo.:MEL.
- C. ferruginea* W. H. Nicholls, Vict. Nat. 64:136 (1947)
= *C. huegelii* Reichb. f.
- C. filamentosa* R. Br., Prod. 324 (1810).
var. *filamentosa*
Type: Port Dalrymple, Tas., *Paterson*—holo.:BM. No material from
Western Australia quite matches the typical form from eastern Australia.
var. *caesarea* Domin, Journ. Linn. Soc. (Bot.) 41:251 (1912)—
Type: Bridgetown to Kojonup and Slab Hut Gully, *Dorrien-Smith*, 1909—
holo.:K, iso.:L.
var. *denticulata* (Lindl.) Reichb. f., Beitr. Syst. Pfl. 66 (1871)—*Caladenia
denticulata* Lindl., Sketch Veg. Swan Riv. Col. 52 (1840)—
Type: Swan River, *Drummond*—holo.:K-L, iso.:K, G.—
C. filamentosa R. Br. var. *pallens* Benth., Fl. Austral. 6:381 (1873)—
Types: Swan River, *Drummond* 442—lecto.:K, iso.:G; Swan River,
Mylne—Syn.:K.
var. *dorrienii* (Domin) comb. et stat. nov.—*Caladenia dorrienii* Domin,
Journ. Linn. Soc. (Bot.) 41:25 (1912)—

Type: Bridgetown to Kojonup and Slab Hut Gully, *Dorrien-Smith*, 1909—holo.:K.

This variety has the basic morphology of the *filamentosa* complex. It is really a reduction in size from the var. *denticulata*.

var. **filifera** (Lindl.) Reichb. f., *Beitr. Syst. Pfl.* 66 (1871)—*C. filifera* Lindl., *Sketch Veg. Swan Riv. Col.* 52 (1840)—

Type: Swan River *Drummond*—holo.:K-L, iso.:K, G.

var. *pallens* Benth., *Fl. Austral.* 6:381 (1873)

= **C. filamentosa** R. Br. var. **denticulata** (Lindl.) Reichb. f.

var. **tentaculata** Rogers in Black, *Fl. S. Austral.* 1:138 (1922)—

Type: Caroon Hill, 45 miles W of Port Augusta, *W. L. Cleland*, Aug. 1889—holo.:AD. The taxon is based on *Caladenia tentaculata* Tate, nom. illeg. and is therefore regarded as a new epithet.

C. filifera Lindl., *Sketch Veg. Swan Riv. Col.* 52 (1840)

= **C. filamentosa** R. Br. var. **filifera** (Lindl.) Reichb. f.

C. fimbriata (Lindl.) Reichb. f., *Beitr. Syst. Pfl.* 65 (1871)

= **Leporella fimbriata** (Lindl.) A. S. George.

C. fimbriata (Lindl.) Reichb. f. var. *pectinata* (Lindl.) Reichb. f., *Beitr. Syst. Pfl.* 65 (1871)

= **Leporella fimbriata** (Lindl.) A. S. George.

C. flava R. Br., *Prod.* 324 (1810)—

Type: King George Sound, *Menzies*, 1791—holo.:BM, iso.:E.

C. gemmata Lindl., *Sketch Veg. Swan Riv. Col.* 52 (1840).

forma **gemma**—

Type: Swan River, *Drummond*—lecto.:K-L, iso.:K, G; *Vasse, Mrs. Molloy*—syn.:K-L, Swan River, *Mangles*—syn.:K-L.—

C. pellita Endl. in *Lehm.*, *Pl. Preiss* 2:8 (1846)—

Type: Near Perth, *Preiss* 2192, Sept. 23, 1839—lecto.:W, iso.:W, G.—

C. gertrudae Ostenf., *Dansk. Vidensk. Selsk. Biol. Medd.* 3, 2:43 (1921)—

Type: Yallingup Cave, *Ostenfeld*, Sept. 26, 1914—iso.:K.

forma **lutea** S. C. Clemesha, *Orchad.* 2, 9:118 (1967)—

based on *Caladenia ixioides* Lindl., *Sketch Veg. Swan Riv. Col.* 52 (1840)—

C. gemmata Lindl. var. *ixioides* (Lindl.) Ewart et White, *Proc. Roy. Soc. Vict.* 22 (n.s.):317 (1910)—

Type: Swan River, *Drummond*—holo.:K-L, iso.:K, G.

C. gemmata Lindl. var. *ixioides* (Lindl.) Ewart et White, *Proc. Roy. Soc. Vict.* 22 (n.s.):317 (1910)

= **C. gemmata** Lindl. forma **lutea** Clemesha.

C. gertrudae Ostenf., *Dansk. Vidensk. Selsk. Biol. Medd.* 3, 2:43 (1921)

= **C. gemmata** Lindl. forma **gemma**.

C. glossodiphylla Rupp and Erickson, *W. Austral. Nat.* 4:65 (1953)

= **C. drummondii** Benth.

C. graminifolia A. S. George, *Nuytsia* 1,2:162 (1971)—

Type: Culham Inlet, W. of Hopetoun, W.A., in sandy soil under *Eucalyptus platypus* var. *heterophylla*, *A. S. George* 9468, Aug. 1, 1969—holo.:PERTH, iso.:K, MEL, NSW.

C. hirta Lindl., *Sketch Veg. Swan Riv. Col.* 52 (1840)—

Types: *Vasse River, Mrs. Molloy*—lecto.:K-L; *Swan River, Drummond*—syn.:K-L, FI.—

Caladenia tenuis R. Fitzg., Gard. Chron. 17, 1 (n.s.):461 (1882)—

Type: Fitzgerald designated no Type; a collection at BM with this name is labelled "St. Werberg, W.A. Sept." in Fitzgerald's hand, and is here selected as Lectotype. An unpublished plate by Fitzgerald in the Mitchell Library, Sydney, has the locality "Champion Bay 4 Aug".

C. huegelii Reichb. f., Beitr. Syst. Pfl. 66 (1871)—

Types: Swan River, Huegel—lecto.:W, iso.:W; Swan River, Drummond 439—syn.:FI, G, K; Drummond 832—syn.:not seen.—

Caladenia pectinata R. S. Rogers, Trans. Roy. Soc. S. Austral. 47:341 (1920)—

Types: Albany, Rogers, Sept., 1919—lecto.:AD; York, O. H. Sargent—syn.:not seen; Cork Swamp near Perth, Tapp, Sept. 3, 1907—syn.:AD; Swan View, Cooke, Sept. 13, 1906—syn.:AD.—

C. ferruginea W. H. Nicholls, Vict. Nat. 64:136 (1947)—

Types: Armadale, Nicholls, Sept., 1946—lecto.:MEL, iso.:PERTH; Waterloo, Nicholls, Oct., 1946—syn.:MEL; between Yarloop and Cookernup, Nicholls, Oct., 1946—syn.: not seen.

C. huegelii was described in the middle of a paragraph and was not listed in Index Kewensis, so the name has been overlooked by later workers. The specimen chosen as Lectotype is that which best agrees with Reichenbach's description; there are two others on the Huegel sheet, one of which is *C. longiclavata* E. Coleman var. *longiclavata*.

The collections chosen as Lectotypes of *C. pectinata* and *C. ferruginea* were both marked "Type" by the respective authors. Although *C. huegelii* is a variable species, the types of *C. pectinata* and *C. ferruginea* agree quite well with the Huegel collection.

C. integra E. Coleman, Vict. Nat. 49:246 (1933)—

Types: Tunney, Miss R. Sandilands, Sept., 1930, 1931; Kendenup, Rowe, Sept., 1931, 1932—MEL. There is one sheet with all these details on the label, containing one flowering stem, a leaf and two dissected specimens, one having only the column and labellum. Mrs. R. Erickson (nee Sandilands) examined the sheet in 1969 and stated that the mounted flowering stem (without the leaf) was her original collection of 1930.

This specimen is selected as Lectotype.

C. ixiooides Lindl., Sketch Veg. Swan Riv. Col. 52 (1840)—

= **C. gemmata** Lindl. forma **lutea** S. C. Clemesha.

C. latifolia R. Br., Prod. 324 (1810)—

Type: Port Dalrymple, Tas., Paterson—holo.:BM, iso.:E.—

C. elongata Lindl., Sketch Veg. Swan Riv. Col. 52 (1840)—

Type: Swan River, Drummond—holo.:K-L, iso.:K—

C. mollis Lindl., Sketch Veg. Swan Riv. Col. 51 (1840)—

Type: Swan River, Drummond—holo.:K-L, iso.:K.

C. latifolia R. Br. var. **angustifolia** Benth., Fl. Austral. 6:385 (1873)

= **C. marginata** Lindl.

C. latifolia R. Br. var. **glandula** Ewart et Wood, Proc. Roy. Soc. Vict. 23 (n.s.): 290 (1911)

= **C. marginata** Lindl.

C. lavandulacea R. S. Rogers, Trans. Roy. Soc. S. Austral. 51:11 (1927)

Type: Between York and Narrogin, Miss W. Dedman, late Sept., 1926—holo.:AD.

C. lobata R. Fitzg., Gard. Chron. 17 (n.s.):461 (1882)—

Type: Western Australia, *Fitzgerald*. In *Australian Orchids* 3, 1 (1882), Fitzgerald gives the locality "St. Werberg's, on the Upper Hay River". There is one sheet at BM labelled "St. Werberg, Sept." in Fitzgerald's hand, and this can be taken as the type. At NSW there is a sheet from the Deane Collection labelled "R. D. Fitzgerald, W.A.", which is probably an isotype.

C. longicauda Lindl., Sketch Veg. Swan Riv. Col. 52 (1840)
= **C. patersonii** R. Br. var. **longicauda** (Lindl.) R. S. Rogers.

C. longicauda Lindl. var. *eminens* Domin, Journ. Linn. Soc. (Bot.)41:253 (1912)
= **C. patersonii** R. Br. var. **longicauda** (Lindl.) Rogers.

C. longicauda Lindl. forma *elatior* Endl. in Lehm., Pl. Preiss 2:9 (1846)—
nomen nudum.

C. longicauda Lindl. forma *humilior* Endl. in Lehm., Pl. Preiss. 2:9 (1846)—
nomen nudum.

C. longiclavata E. Coleman, Vict. Nat. 46:196 (1930).

var. **longiclavata**

Type: In the protologue, Coleman cites Busselton, Capel, Donnybrook, Augusta, Forest Grove and Boyup Brook, Sept., Oct., 1928, 1929, and states that "The type is in the Melbourne Herbarium". There is one sheet with four specimens at MEL—1002450, ex. Herb. Coleman—"South-west, Miss Corker, Mr. Hill, Mr. Mitchell, Rev. E. Bryant. Sept., Oct., 1928, 1929." There is some variation in the specimens; in fact, one complete specimen which may be that illustrated by Coleman, agrees well with *Caladenia magniclavata* Nicholls. As all agree with Coleman's description, the other complete specimen is selected as Lectotype in order to maintain current usage. A sheet at PERTH, Boyup Brook, Miss E. Corker, Sept., 1928, which agrees with the Lectotype, is taken to be a syntype.—

C. ensata W. H. Nicholls, Vict. Nat. 64:138 (1947)—

Type: King River, near Ballymena Guest House, and on granite slope 1½ miles west, *Nicholls*, Oct., 1946—holo.:MEL, iso.:PERTH.

var. **magniclavata** (W. H. Nicholls) comb. et stat. nov.

Basionym: *Caladenia magniclavata* W. H. Nicholls, Vict. Nat. 64:135 (1947)—

Type: Lesmurdie, Darling Range, *Nicholls*, Sept. 14, 1946.—holo.:MEL. This form is not sufficiently distinct from typical *C. longiclavata* to warrant specific rank. It is a more robust plant, with slightly different calli (more slender, apices more recurved,) and a smooth (not scabrous) labellum fringe.

var. **rhomboidiformis** (E. Coleman) comb. nov.

Basionym: *Caladenia dilatata* R. Br. var. *rhomboidiformis* E. Coleman, Vict. Nat. 46:197 (1930)—

Type: Coleman cites "Busselton, Capel, Forest Grove, Augusta, Boyup Brook, Mundaring, Waterloo, Sept., Oct., 1928, 1929. For specimens, Sept. and Oct., 1928, I am indebted to Miss Edna Corker, Mr. C. Hill, Mr. S. Mitchell and Rev. E. Bryant . . . Specimens . . . are in the Melbourne Herbarium". A sheet at MEL—1002422—bears three mounted and two dissected specimens, with the details more or less as above. It is now impossible to assign the specimens to individual collections. As there is some slight variation in morphology, one of the mounted specimens is selected as Lectotype. The taxon is very similar to *C. longiclavata* var. *longiclavata* differing essentially in the acuminate, not clubbed, petals.

- C. macrophylla* R. Br. Prod. 325 (1810)
= *C. menziesii* R. Br.
- C. macrostylis** R. Fitzg., Gard. Chron. 17:462 (1882)—
Type: Western Australia, *Fitzgerald*. In Australian Orchids 2, 1 (1882), *Fitzgerald* cites "St. Werberg, Upper Hay River". There is a sheet at BM labelled "St. Werberg, Sept." in *Fitzgerald*'s hand, which may be taken as the type.
- C. magniclavata* W. H. Nicholls, Vict. Nat. 44:135 (1947)—
= *C. longiclavata* Coleman var. *magniclavata* (Nicholls) A. S. George.
- C. marginata** Lindl., Sketch Veg. Swan Riv. Col. 51 (1840)—
Type: King George Sound, *A. Collie*—holo.:K-L, iso.:K.—
C. ochreatea Lindl., Sketch Veg. Swan Riv. Col. 51 (1840)—
C. marginata Lindl. var. *ochreatea* (Lindl.) Reichb. f., Beitr. Syst. Pfl. 64 (1871)—
Type: Swan River, *Drummond*—holo.:K-L, iso.:K, G.—
C. latifolia R. Br. var. *angustifolia* Benth., Fl. Austral. 6:385 (1873)—
Types: Lake Muir, *Muir*—lecto.:K; Upper Hay River, *Miss Warburton*—not seen. The Muir sheet bears two specimens of *C. marginata* and four of *C. reptans* Lindl. As the former has much longer, narrower leaves, it is probably the form described by Bentham.—
C. paniculata R. Fitzg., Gard. Chron. 17:461 (1882)—
Type: Western Australia, *Fitzgerald*. In Australian Orchids 2, 1 (1882), *Fitzgerald* cites "St. Werberg, Upper Hay River . . . September". There is a sheet at BM, labelled "St. Werberg, Sept." in *Fitzgerald*'s hand, which may be taken as the type.—
C. purdieana C. Andrews, Journ. Muell. Bot. Soc. W. Austral. no. 10:39 (1902)—
Type: Kelmescott, *Andrews*, Oct. 1902—holo.:PERTH, iso.:K.—
C. latifolia R. Br. var. *glandula* Ewart et Wood, Proc. Roy. Soc. Vict. 23 (n.s.):290 (1911)—
Type: Lowden, Preston River, *Koch* 1944, Nov.-Dec. 1909— iso.:K, E, P.
- Examination of the descriptions and types of all these names has shown them to be conspecific. Different interpretations of the calli has caused some of the confusion (George, W. Austral. Nat. 8, 2:40 (1961). *C. marginata* and *C. ochreatea* are of the same date but as Reichenbach f. reduced *ochreatea* to a variety of *marginata* the latter name is maintained.
- C. marginata* Lindl. var. *ochreatea* (Lindl.) Reichb. f., Beitr. Syst. Pfl. 64 (1871)
= *C. marginata* Lindl.
- C. menziesii** R. Br., Prod. 325 (1810)—*Leptoceras menziesii* (R. Br.) Lindl., Gen. et Sp. Orch. Pl. 416 (1840)—
Type: King George Sound, *Menzies*, 1791—holo.:BM.—
Caladenia macrophylla R. Br., Prod. 325 (1810)—*Leptoceras macrophylla* (R. Br.) Lindl., Gen. et Sp. Orch. Pl. 416 (1840)—
Type: King George Sound, *Menzies*, 1791—holo.:BM.—
Leptoceras oblonga Lindl., Sketch Veg. Swan Riv. Col. 53 (1840)—
Type: Swan River, *J. Mangles*—holo.:K-L.
- C. mollis* Lindl., Sketch Veg. Swan Riv. Col. 51 (1840)
= *C. latifolia* R. Br.

- C. multiclavia** Reichb. f., Beitr. Syst. Pfl. 64 (1871)—
Types: Swan River, *Drummond* 5. 441—lecto.:W, iso.:CGE, FI, G, K, K-L; *Drummond* 440—no specimen of this collection seen. A sheet at FI labelled *Drummond* 440 is *Caladenia lobata* R. Fitzg.
- C. multiclavia** Reichb. f. var. *brevicuspis* Benth., Fl. Austral. 6:380 (1873)—
Type: Western Australia, *Drummond*. No specimen of this has been found, and the application of the name remains doubtful.
- C. nana** Endl. in Lehm., Pl. Preiss. 2:7 (1846)—
Type: Mt. Clarence, *Preiss* 2205, Oct. 5, 1840—holo.:W, iso.:W, G.—
C. unita R. Fitzg., Gard. Chron. 17:461 (1882)—
Type: Western Australia, *Fitzgerald*. No locality was cited in Austral. Orch. 2, 5, but there is a sheet at BM, labelled "Wilson's Inlet" in *Fitzgerald's* hand, here selected as lectotype.
- This species varies in size from 3-4 cm. tall to about 25 cm. *Preiss's* specimens are small, while *Fitzgerald* figured tall plants, but the morphology is similar.
- C. nigricans** (R. Br.) Reichb. f., Beitr. Syst. Pfl. 67 (1871)
 = **Lyperanthus nigricans** R. Br.
- C. ochreatea** Lindl., Sketch Veg. Swan Riv. Col. 51 (1840)
 = **C. marginata** Lindl.
- C. paniculata** R. Fitzg., Gard. Chron. 17 (n.s.):461 (1882)
 = **C. marginata** Lindl.
- C. patersonii** R. Br., Prod. 324 (1810).
 var. **patersonii**
Type: Port Dalrymple, Tas., *Paterson*, Nov., 1804—holo.:BM. The typical variety has not been recorded for Western Australia.
 var. *dilatata* (R. Br.) Benth., Fl. Austral. 6:382 (1873)
 = **C. dilatata** R. Br.
- var. **longicauda** (Lindl.) R. S. Rogers, Trans. Roy. Soc. S. Austral. 44:351 (1920)—*Caladenia longicauda* Lindl., Sketch Veg. Swan Riv. Col. 52 (1840)—
Types: Swan River, *Drummond*—lecto.:K-L, iso.:K-L, W, G, FI. One of the two specimens on the lectotype sheet matches *Lindley's* illustrations in Sketch Veg. Swan Riv. Col. t.8. The sheet also has two specimens of *C. longiclavata* E. Coleman var. *longiclavata*.—
C. longicauda Lindl. var. *eminens* Domin, Journ. Linn. Soc. (Bot.) 41:253 (1912)—
Type: Mallet, *Dorrien-Smith*—holo.:K.
- C. pectinata** R. S. Rogers, Trans. Roy. Soc. S. Austral. 47:341 (1920)
 = **C. huegelii** Reichb. f.
- C. pellita** Endl. in Lehm., Pl. Preiss 2:8 (1846)
 = **C. gemmata** Lindl. forma **gemma**.
- C. plicata** R. Fitzg., Gard. Chron. 17:461 (1882)—
Type: Western Australia, *Fitzgerald*. In Australian Orchids 2, 1 (1882) *Fitzgerald* cites "near Albany, King George's Sound and at St. Werberg's, Upper Hay River." There is a sheet at BM, labelled "St. Werberg Sept." in *Fitzgerald's* hand, which is here designated as lectotype. At NSW there is a specimen from the Deane Collection, labelled "R. D. Fitzgerald, W.A." which is probably a syntype.

- C. preissii* Endl. in Lehm., Pl. Preiss. 2:7 (1846)
= *C. reptans* Lindl.
- C. purdieana* C. Andrews, Journ. Muell. Bot. Soc. W. Austral. no. 10:39 (1902)
= *C. marginata* Lindl.
- C. radialis* R. S. Rogers, Trans. Roy. Soc. S. Austral. 51:296 (1927)—
Types: Dowerin, *E. H. Ising*, Sept. 1, 1926—lecto.:AD; Beverley, *F. Stoward*, Sept. 13, 1913—not seen.—
C. bicolor R. S. Rogers, Trans. Roy. Soc. S. Austral. 54:46 (1930)—
Type: Swan View, *Mrs. W. Cooke*, Sept. 13, 1907—holo.:AD. The locality is probably an error, as this is a plant of drier districts and is otherwise unknown within 50 miles of Swan View.
- The only notable difference between the original descriptions of *C. radialis* and *C. bicolor* is the absence of glands at the base of the column in *radialis* and their presence in *bicolor*. This is a variable character, insufficient to maintain the two species separately. The type of *radialis* does in fact have two small glands on the column. The margins of the labellum may be shortly dentate or entire, and the calli vary in number and robustness.
- C. radiata* W. H. Nicholls, Vict. Nat. 65:267 (1949)—
Type: Yarloop, *Nicholls*, Oct. 9, 1948—holo.:PERTH.
- C. reniformis* (R. Br.) Reichb. f., Beitr. Syst. Pfl. 67 (1871)—
Cyrtostylis reniformis R. Br.
= *Acianthus reniformis* (R. Br.) Schlechter var. *reniformis*.
- C. reniformis* (R. Br.) Reichb. f. var. *huegelii* (Endl.) Reichb. f., Beitr. Syst. Pfl. 67 (1871)—
Cyrtostylis huegelii Endl.
= *Acianthus reniformis* (R. Br.) Schlechter var. *huegelii* (Endl.) A. S. George.
- C. reptans* Lindl., Sketch Veg. Swan Riv. Col. 52 (1840)—
Type: Swan River, *Drummond*—holo.:K-L, iso.:K, G, FI.—
C. preissii Endl. in Lehm., Pl. Preiss. 2:7 (1846)—
Type: Preston Creek, Perth, *Preiss* 2208, July 25, 1839—iso.:W.
- C. reticulata* R. Fitzg., Gard. Chron. 17:462 (1882). Recorded for Western Australia by Sargent, Journ. W. Austral. Nat. Hist. Soc. no. 6:65 (1909), but this specimen should probably be referred to *C. longiclavata* E. Coleman.
- C. roei* Benth., Fl. Austral. 6:383 (1873)—
Type: Western Australia, *Roe*—holo.:K.
- C. saccharata* Reichb. f., Beitr. Syst. Pfl. 63 (1871)—
Type: Swan River, *Drummond* 324—holo.:W, iso.:CGE, P.
- C. sericea* Lindl., Sketch Veg. Swan Riv. Col. 52 (1840)—
Type: Swan River, *Drummond*—holo.:K-L.
- C. serrata* (Lindl.) Reichb. f., Beitr. Syst. Pfl. 67 (1871)—
= *Lyperanthus serratus* Lindl.
- C. sigmoidea* R. S. Rogers, Trans. Roy. Soc. S. Austral. 62:12 (1938)—
Type: Kumarl, *Horbury*, Aug. 25, 1937—holo.:AD, iso.:PERTH.
- C. tentaculata* Tate, Trans. Roy. Soc. S. Austral. 12:130 (1889)
= *C. filamentosa* R. Br. var. *tentaculata* Rogers.
- C. tenuis* R. Fitzg., Gard. Chron. 17:461 (1882)
= *C. hirta* Lindl.

- C. triangularis** R. S. Rogers, Trans. Roy. Soc. S. Austral. 51:10 (1927)—
Type: Highbury, *Goadby*, Sept., 1924—holo.:AD.
C. unguiculata Lindl., Sketch Veg. Swan Riv. Col. 51 (1840)
 = **C. deformis** R. Br.
C. unita R. Fitzg., Gard. Chron. 17:461 (1882)
 = **C. nana** Endl.

CALEANA

- Caleana** R. Br., Prod. 329 (1810).
C. nigrita Lindl., Sketch Veg. Swan Riv. Col. 54 (1840)—
Type: Swan River, *Drummond*—holo.:K-L, iso.:K.

CALOCHILUS

- Calochilus** R. Br., Prod. 320 (1810).
C. robertsonii Benth., Fl. Austral. 6:315 (1873)—
Types: Heaths near the Glenelg R., Vic., *Robertson*—lecto.: K; Bendigo, *Oldfield*—syn.:K; Mt. McIvor, *Mueller*—not seen.

CORYBAS

- Corybas** Salisb., Parad. Lond. t.83 (1805)—*Corysanthes* R. Br. Prod. 328 (1810).
C. dilatatus (Rupp et Nicholls) Rupp et Nicholls ex Rupp, Vict. Nat. 59:61 (1942)—*Corysanthes dilatata* Rupp et Nicholls, Proc. Linn. Soc. N.S.W. 53:87 (1928)—
Types: 14 localities were cited but no type designated. Study of all these collections is needed before a lectotype can be chosen.
C. fimbriatus (R. Br.) Reichb. f., Beitr. Syst. Pfl. 42 (1871). Recorded for Western Australia by Bentham (Fl. Austral. 6:351) as *Corysanthes*. Western Australian specimens are now placed under *Corybas dilatatus*.
C. pruinus (R. Br.) Reichb. f., Beitr. Syst. Pfl. 42 (1871). Recorded for Western Australia by Pescott (Orch. of Vict. 46 (1928)), as *Corysanthes*. Western Australian specimens are now placed under *Corybas dilatatus*.
C. unguiculatus (R. Br.) Reichb. f. Beitr. Syst. Pfl. 43 (1871)—
Corysanthes unguiculata R. Br. Prod. 328 (1810)—
Type: Port Jackson, NSW, *Bauer*—not seen.

CORYSANTHES

- Corysanthes* R. Br., Prod. 328 (1810)
 = **Corybas** Salisb.
C. dilatata Rupp et Nicholls, Proc. Linn. Soc. N.S.W. 53:87 (1928)
 = **Corybas dilatatus** (Rupp et Nicholls) Rupp et Nicholls ex Rupp.
C. unguiculata R. Br., Prod. 328 (1810)
 = **Corybas unguiculatus** (R. Br.) Reichb. f.

CRYPTOSTYLIS

- Cryptostylis** R. Br., Prod. 317 (1810).
C. ovata R. Br. Prod. 317 (1810)—
Type: King George Sound, *R. Brown*, Dec., 1801—lecto.:BM; iso.:BM, E.

CYMBIDIUM

Cymbidium Swartz, Nov. Act. Soc. Sc. Upsal. 6:70 (1799).

C. canaliculatum R. Br., Prod. 331 (1810)—

Type: Broad Sound, Qld., *R. Brown*, Sept. 25, 1802—holo.:BM.

CYRTOSTYLIS

Cyrtostylis R. Br., Prod. 322 (1810)

= *Acianthus* R. Br.

C. huegelii Endl. in Lehm., Pl. Preiss. 2:6 (1846)

= *Acianthus reniformis* (R. Br.) Schlechter var. *huegelii* (Endl.) A. S. George.

C. reniformis R. Br., Prod. 322 (1810)

= *Acianthus reniformis* (R. Br.) Schlechter var. *reniformis*.

C. reniformis R. Br., var. *huegelii* (Endl.) Benth. Fl. Austral. 6:376 (1873)

= *Acianthus reniformis* (R. Br.) Schlechter var. *huegelii* (Endl.) A. S. George.

DENDROBIUM

Dendrobium Swartz, Nov. Act. Soc. Sc. Upsal. 6:82 (1799).

D. dicuphum F. Muell., Fragm. 8:28 (1873)—

Type: Liverpool River, N.T., *B. Gulliver*—iso.:K.

DIPODIUM

Dipodium R. Br., Prod. 330 (1810).

Dipodium venosum F. Muell., Fragm. 1:61 (1858)

= *Eulophia venosa* (F. Muell.) Reichb. f. ex Benth.

DIURIS

Diuris J. E. Smith, Trans. Linn. Soc. 4:222 (1798).

D. carinata Lindl., Gen. et Sp. Orch. Pl. 510 (Sept., 1840)

= *D. laxiflora* Lindl.

D. corymbosa Lindl., Sketch Veg. Swan Riv. Col. 51 (1840)

= *D. longifolia* R. Br.

D. drummondii Lindl., Sketch Veg. Swan Riv. Col. 51 (1840)

= *D. emarginata* R. Br. var. *emarginata*.

D. emarginata R. Br. Prod. 316 (1810).

var. *emarginata*

D. setacea R. Br. var. *emarginata* (R. Br.) Domin, Journ. Linn. Soc. (Bot.) 41:248 (1912)—

Type: King George Sound, *R. Brown*, Dec., 1801—holo.:BM, iso.:BM.

D. drummondii Lindl., Sketch Veg. Swan Riv. Col. 51 (1840)—

Types: Swan River, *Drummond*—lecto.:K-L, syn.:K, G; Swan River, *Mangles*—syn.:K-L.

var. *pauciflora* (R. Br.) comb. et stat nov.

Basionym: *Diuris pauciflora* R. Br., Prod. 316 (1810)—

Type: King George Sound, *R. Brown*, Dec., 1801—holo.:BM iso.:E, K.

This is a small-flowered form of *D. emarginata* which varies greatly in size.

D. filifolia Lindl., Sketch Veg. Swan Riv. Col. 51 (1840)

= *D. setacea* R. Br.

D. laevis R. Fitzg., Gard. Chron. 17:495 (1882)—

Type: Western Australia. In Australian Orchids, 2 3, Fitzgerald cites Albany. There is one sheet at BM, labelled "Wilson's Inlet, Sept." in Fitzgerald's hand, which may be taken as the lectotype. The original spelling was *laertis* which was altered without explanation to *laevis* in Australian Orchids. As the former has no apparent meaning it seems best to regard it as a typographical error and maintain *laevis*, which has been used by all subsequent workers.

D. laxiflora Lindl., Sketch Veg. Swan Riv. Col. 51 (Jan. 1840)—

Type: Swan River, *Drummond*—holo.:K-L.—

D. carinata Lindl., Gen. et Sp. Orch. Pl. 510 (Sept. 1840)—

Types: Swan River, *Drummond*—lecto.:K-L; Swan River, *Mangles*—syn.:K-L; Molloy Plains, Vasse, *Mrs. Molloy*—syn.:K-L.

It is unfortunate that the name *laxiflora* antedates *carinata*, as the latter has been in general use, while *laxiflora* was incorrectly placed under *D. emarginata* R. Br. by Bentham and has been overlooked until now. The holotype of *laxiflora* has no leaves and the flowers are on extremely long pedicels, but they agree morphologically with *carinata*.

D. longifolia R. Br., Prod. 316 (1810)—

Type: West Coast of New Holland, *Menzies*, 1791—lecto.:BM, iso.:BM.—

D. corymbosa Lindl., Sketch Veg. Swan Riv. Col. 51 (1840)—

D. longifolia R. Br. var. *corymbosa* (Lindl.) Domin. Journ. Linn. Soc. (Bot.) 41:249 (1912)—

Types: Swan River, *Drummond*—lecto.:K-L, syn.:K; King George Sound, *Collie*—syn.:K-L; Swan River, *Mangles*—syn.:K-L; Vasse River, *Mrs. Molloy*—syn.:K-L.—

D. porrifolia Lindl., Sketch Veg. Swan Riv. Col. 51 (1840)—

Type: Swan River, *Drummond*—holo.:K-L.—

D. longifolia R. Br. var. *parviflora* W. H. Nicholls, Vict. Nat. 64:115 (1947)—

Type: Lesmurdie, *Nicholls*, Sept., 1946—iso.:PERTH.

These names all refer to the small-flowered form of *Diuris longifolia*, although Domin incorrectly applied Lindley's epithet *corymbosa* to the large-flowered form. The Molloy collection on the Lindley sheet of *corymbosa* is in fact the large form, but the two specimens have four and five flowers, whereas Lindley's description states "scapo trifloro", which fits the lectotype. The Molloy specimens also lack leaves, which are present in the lectotype and were described by Lindley. Further work is required on the range of variation within *D. longifolia* before infraspecific names can be applied.

D. longifolia R. Br. *corymbosa* (Lindl.) Domin. Journ. Linn. Soc. (Bot.) 41:249 (1912)

= *D. longifolia* R. Br.

D. longifolia R. Br. var. *parviflora* W. H. Nicholls, Vict. Nat. 64:115 (1947)

= *D. longifolia* R. Br.

D. pauciflora R. Br., Prod. 316 (1810)

= *D. emarginata* R. Br. var. *pauciflora* (R. Br.) A. S. George.

D. pedunculata R. Br., Prod. 316 (1810). Recorded by A. Purdie, Journ. & Proc. Muell. Bot. Soc. W. Austral. 1, 7:17 (1900). This plant was later described by Diels as a new species, *D. purdiei*.

D. porrifolia Lindl., Sketch Veg. Swan Riv. Col. 51 (1840)

= *D. longifolia* R. Br.

D. purdiei Diels, Journ. Muell. Bot. Soc. W. Austral. no.11:79 (1903)—

Type: Cannington, *A. Purdie*, Oct. 7—iso.:BM, PERTH.

D. setacea R. Br. Prod. 316 (1810)—

Type: King George Sound, *R. Brown*, Dec., 1801—lecto.:BM, iso.:BM.

D. filifolia Lindl., Sketch Veg. Swan Riv. Col. 51 (1840)—

Types: Swan River, *Drummond*—lecto.:K-L, iso.:K; Swan River, *Mangles*—syn.:K-L.

The correct identity of this species has been confused by the different interpretations of workers over the past 60 years. Examination of the types shows that *D. filifolia* is synonymous with *D. setacea*. As in the case of *Prasophyllum gibbosum*, Brown must have collected late-flowering specimens, as the species generally flowers in October.

D. setacea R. Br. var. *emarginata* (R. Br.) Domin. Journ. Linn. Soc. Bot. 41:248 (1912)

= **D. emarginata** R. Br. var. *emarginata*.

DRAKAEA

Drakaea Lindl., Sketch Veg. Swan Riv. Col. 55 (1840).

D. ciliata (Lindl.) Reichb. f., Beitr. Syst. Pfl. 68 (1871)

= **Spiculaea ciliata** Lindl.

D. elastica Lindl., Sketch Veg. Swan Riv. Col. 56 (1840)—

Type: Swan River, *Drummond*—holo.:K-L, iso.:K, FI.—

D. fitzgeraldii, Schlechter, Fedde Rep. Sp. Nov. 17:81 (1921)—

Type: This was based on Fitzgerald's illustration of *Drakaea elastica* in Australian Orchids 2, 1. The plate is here designated as the type, as no specimen of Fitzgerald's has been found. Schlechter was in error in thinking that the type of *D. elastica* had no spots on the labellum. Fitzgerald's plate is correctly named, and is a good representation of the species.

D. fitzgeraldii Schltr., Fedde. Rep. Sp. Nov. 17:81 (1921)

= **D. elastica** Lindl.

D. glyptodon R. Fitzg., Gard. Chron. 1:494 (1882)—

Type: s Wetern Australia. In Australian Orchids 2, 1, Fitzgerald cites Dardanup and Albany. At BM there is a sheet labelled "Bunbury, Sept.", in Fitzgerald's hand. This locality is close to Dardanup and is probably one of the original specimens. It is here selected as lectotype. There is one sheet at NSW with the locality of "W.A. RDF" which is probably a syntype.

D. jeanensis R. S. Rogers, Trans. Roy. Soc. S. Austral. 44:322 (1920)—

Type: Ravenswood, near Pinjarra, *J. S. Rogers*, Sept. 1, 1919—holo.:AD.

ELYTHRANTHERA

Elythranthera (Endl.) A. S. George, W. Austral. Nat. 9:6 (1963).

Glossodia R. Br. Sect. *Elythranthera* Endl., Nov. Stirp. Dec. 2:16 (1839).

There seems no reason to take up the spelling *Elytranthera*, used without explanation by Endlicher in his Gen. Pl. Suppl. 1:1367 (1841).

E. brunonis (Endl.) A. S. George, W. Austral. Nat. 9:7 (1963)

Glossodia brunonis Endl., Nov. Stirp. Dec. 2:16 (1839)—*Caladenia brunonis* (Endl.) Reichb. f., Beitr. Syst. Pfl. 67 (1871)—

Type: Swan River Colony, South-west New Holland, *Huegel*. At W, there is one sheet from King George Sound and two from Swan River, all collected by Huegel.

E. emarginata (Lindl.) A. S. George, W. Austral. Nat. 9:7 (1963)—

Glossodia emarginata Lindl., gen. et Sp. Orch. Pl. 424 (1840)—

Caladenia emarginata (Lindl.) Reichb. f., Beitr. Syst. Pfl. 67 (1871)—

Type: Swan River, *Drummond*—holo.:K-L.—

Glossodia intermedia R. Fitzg., Gard. Chron. 17:462 (1882)—

Type: Western Australia. No specimen has been found, so Fitzgerald's plate in Australian Orchids 2, 5 is regarded as the type.

EPIBLEMA

Epiblema R. Br., Prod. 315 (1810).

E. grandiflorum R. Br. Prod. 315 (1810)—

Type: King George Sound, *Brown*, Dec., 1801—holo.:BM, iso.:K, K-L, E, G, P.

EPIPACTIS

Epipactis porrifolia Swartz, Act. Holm. 1800:233—superfluous name.

= **Microtis unifolia** (Forst. f.) Reichb. f.

ERIOCHILUS

Eriochilus R. Br., Prod. 323 (1810).

E. dilatatus Lindl., Sketch Veg. Swan Riv. Col. 53 (1840)—

Type: Swan River, *Mangles*—holo.:K-L.—

E. latifolius Lindl., Sketch Veg. Swan Riv. Col. 53 (1840)—

E. dilatatus Lindl. var. *latifolius* (Lindl.) Benth., Fl. Austral. 6:373 (1873)—

Type: Swan River, *Drummond*—holo.:K-L.—

E. multiflorus Lindl., Sketch Veg. Swan Riv. Col. 53 (1840)—

Type: Swan River, *Drummond*—holo.:K-L, iso.:K.—

E. dilatatus Lindl. var. *brevifolius* Benth., Fl. Austral. 6:373 (1873)—

Types: Murchison River, *Oldfield*—lecto.:K; Swan River, *Drummond* syn.:K.

These names were applied to plants of similar morphology. *E. latifolius* has the leaf well-developed, while the var. *brevifolius* has the leaf at an early stage of development. *E. multiflorus* has a many-flowered inflorescence.

E. dilatatus Lindl. var. *brevifolius* Benth., Fl. Austral. 6:373 (1873)

= **E. dilatatus** Lindl.

E. dilatatus Lindl. var. *latifolius* (Lindl.) Benth., Fl. Austral. 6:373 (1873)

= **E. dilatatus** Lindl.

E. fimbriatus (Lindl.) F. Muell., Wing's South Sci. Rec. 2:152 (1882)

= **Leporella fimbriata** (Lindl.) A. S. George.

E. latifolius Lindl., Sketch Veg. Swan Riv. Col. 53 (1840)

= **E. dilatatus** Lindl.

- E. lindleyi* Endl. in Lehm., Pl. Preiss. 2:10 (1846)
= *E. scaber* Lindl.
- E. multiflorus* Lindl., Sketch Veg. Swan Riv. Col. 53 (1840)
= *E. dilatatus* Lindl.
- E. scaber* Lindl., Sketch Veg. Swan Riv. Col. 53 (1840)—
Type: Swan River, *Drummond*—holo.:K-L, iso.:K.—
E. tenuis Lindl., Sketch Veg. Swan Riv. Col. 53 (1840)—
Type: Swan River, *Drummond*—holo.:K-L.—
E. lindleyi Endl. in Lehm., Pl. Preiss. 2:10 (1846)— *E. scaber* Lindl.
var. *lindleyi* (Endl.) Reichb. f., Beitr. Syst. Pfl. 62 (1871)—
Type: Near Canning River, *Preiss* 2206, July 22, 1839—lecto.:W,
iso.:G, P, W—
E. tenuis Lindl. var. *robustior* Reichb. f., Beitr. Syst. Pfl. 62 (1871)—
Type: King George Sound, *Maxwell*—holo.:W.
E. tenuis is a tall, slender form of *E. scaber*.
- E. scaber* Lindl. var. *lindleyi* (Endl.) Reichb. f., Beitr. Syst. Pfl. 62 (1871)
= *E. scaber* Lindl.
- E. tenuis* Lindl., Sketch Veg. Swan Riv. Col. 53 (1840)
= *E. scaber* Lindl.
- E. tenuis* Lindl. var. *robustior* Reichb. f., Beitr. Syst. Pfl. 62 (1871)
= *E. scaber* Lindl.

EULOPHIA

- Eulophia* R. Br. ex Lindl., Bot. Reg. t.573 (1821).
- E. venosa* (F. Muell.) Reichb. f. ex Benth., Fl. Austral. 6:300 (1873)—*Dipodium*
venosum F. Muell., Fragm. 1:61 (1858)—
Type: near Providence Hill and Macadam Range, N.T., *Mueller*—iso.:K.

GASTRODIA

- Gastrodia* R. Br., Prod. 330 (1810).
- G. sesamoides* R. Br., Prod. 330 (1810)—
Type: Port Jackson, N.S.W., *Brown*—holo.:BM.

GLOSSODIA

- Glossodia* R. Br., Prod. 325 (1810).
- G. brunonis* Endl., Nov. Stirp. Dec. 2:16 (1839)
= *Elythranthera brunonis* (Endl.) A. S. George.
- G. emarginata* Lindl., Gen. et Sp. Orch. Pl. 424 (1840)
= *Elythranthera emarginata* (Lindl.) A. S. George.
- G. intermedia* R. Fitzg., Gard. Chron. 17:462 (1882)
= *Elythranthera emarginata* (Lindl.) A. S. George.

GOADBYELLA

- Goadbyella* R. S. Rogers, Trans. Roy. Soc. S. Austral. 51:294 (1927).
- G. gracilis* R. S. Rogers, l.c.—
Type: Pindalup, *P. J. Barwise*, Nov. 1926—holo.:AD, iso.:PERTH.
This is now considered to be an aberrant form of *Microtis alba* R. Br.
See George, W. Austral. Nat. 8, 2:40-41 (1961).

LEPORELLA

Leporella A. S. George, gen. nov. Ab *Caladenia* R. Br. Sect. *Leptoceras* R. Br. planta glabra, tubere 1, foliis 1-2, labello transverse-ovato margine postice recurvo antice fimbriato sine callis, columna post antheram glandibus crassis sessilibus ornata, differt.

Leptoceras R. Fitzg., Austral. Orch. 2, 4 (1889), nom. illeg., non (R. Br.) Lindl., Sketch Veg. Swan Riv. Col. 53 (1840).

Type species: **Leporella fimbriata** (Lindl.) A. S. George, comb. nov.

Basionym: *Leptoceras fimbriata* Lindl., Sketch Veg. Swan Riv. Col. 53 (1840)—*Caladenia fimbriata* (Lindl.) Reichb. f., Beitr. Syst. Pfl. 65 (1871)—*Eriochilus fimbriatus* (Lindl.) F. Muell., Wing's South. Sci. Rec. 2:152 (1882)—

Type: Swan River, *Drummond*—holo.:K-L.

Taxonomic synonym: *Leptoceras pectinata* Lindl., Sketch Veg. Swan Riv. Col. 53 (1840)—

Type: Swan River, *Drummond*—holo.:K-L.

Leptoceras (R. Br.) Lindl. was based on *Caladenia* Sect. *Leptoceras* R. Br. which included two species, *C. menziesii* R. Br. and *C. macrophylla* R. Br. The latter is now regarded as synonymous with *C. menziesii* which is thus the type species for the Section. Lindley retained both species and added *L. fimbriata*, *L. oblonga* and *L. pectinata*. Bentham placed all five in *Caladenia* Sect. *Leptoceras*. Robert Fitzgerald was the first to regard *Leptoceras fimbriata* Lindl. as constituting a monotypic genus, but unfortunately he retained this generic name. He thus excluded the type species of the name *Leptoceras* (R. Br.) Lindl., and his name must be regarded as a later homonym. As *Leptoceras* is correctly used for a section of *Caladenia* there is no case for having it conserved. The name *Leporella* is derived from the Latin *lepus*, *leporis*, a hare, in reference to the vernacular name for this orchid.

LEPTOCERAS (R. BR.) LINDL.

Leptoceras (R. Br.) Lindl. Sketch Veg. Swan Riv. Col. 53 (1840)—

Caladenia R. Br. Sect. **Leptoceras** R. Br., Prod. 325 (1810).

L. fimbriata Lindl., Sketch Veg. Swan Riv. Col. 53 (1840)

= **Leporella fimbriata** (Lindl.) A. S. George.

L. macrophylla (R. Br.) Lindl., Gen. et Sp. Orch. Pl. 416 (1840)

= **Caladenia menziesii** R. Br.

L. menziesii (R. Br.) Lindl., Gen. et Sp. Orch. Pl. 416 (1840)

= **Caladenia menziesii** R. Br.

L. oblonga Lindl., Sketch Veg. Swan Riv. Col. 53 (1840)

= **Caladenia menziesii** R. Br.

L. pectinata Lindl., Sketch Veg. Swan Riv. Col. 53 (1840)

= **Leporella fimbriata** (Lindl.) A. S. George.

L. pectinata Endl. in Lehm., Pl. Preiss. 2:6 (1846).

This is cited by Bentham, Fl. Austral. 6:374, and in Index Kewensis. However, Endlicher, l.c., refers to *Leptoceras pectinata* Lindl., though his description is of *Lyperanthus nigricans* R. Br.

LEPTOCERAS R. FITZG.

Leptoceras R. Fitzg. Austral. Orch. 2, 4 (1889), nom. illeg., non (R. Br.) Lindl.
= **Leporella** A. S. George.

LYPERANTHUS

Lyperanthus R. Br., Prod. 325 (1810).

L. forrestii F. Muell., Wing. South. Sci. Rec. 2:55 (1882)—

Type: Near the Stirling Range, *J. Forrest*—iso.:K.

L. nigricans R. Br., Prod. 325 (1810)—

Caladenia nigricans (R. Br.) Reichb. f., Beitr. Syst. Pfl. 67 (1871)—

Type: Port Jackson, *R. Brown*, Oct. 1803—holo.:BM, iso.:K.—

Lyperanthus nigricans R. Br. forma *pumila* Domin, Journ. Linn. Soc. (Bot.) 41:251 (1912)—

Type: Mt. Toolbrunup, *Dorrien-Smith*, 1909—holo.:K. This is simply a short specimen.

L. nigricans R. Br. forma *pumila* Domin, Journ. Linn. Soc. (Bot.) 41:251 (1912)

= *L. nigricans* R. Br.

L. serratus Lindl., Gen. et Sp. Orch. Pl. 393 (1840)—

Caladenia serrata (Lindl.) Reichb. f., Beitr. Syst. Pfl. 67 (1871)—

Type: Swan River, *Drummond*—holo.:K-L.

MACDONALDIA

Macdonaldia Gunn ex Lindl., Sketch Veg. Swan Riv. Col. 50 (1840)

= *Thelymitra* J. R. et G. Forster.

M. antennifera Lindl., Sketch Veg. Swan Riv. Col. 50 (1840)

= *Thelymitra antennifera* (Lindl.) Hook. f.

M. concolor Lindl., Sketch Veg. Swan Riv. Col. 50 (1840)

= *Thelymitra flexuosa* Endl.

M. spiralis Lindl., Sketch Veg. Swan Riv. Col. 50 (1840)

= *Thelymitra spiralis* (Endl.) F. Muell.

M. variegata Lindl., Sketch Veg. Swan Riv. Col. 50 (1840)

= *Thelymitra variegata* (Lindl.) F. Muell.

MICROTIS

Microtis R. Br., Prod. 320 (1810).

M. alba R. Br., Prod. 321 (1810)—

Type: King George Sound, *R. Brown*, Dec. 1801—holo.:BM, iso.:K.

M. atrata Lindl., Sketch Veg. Swan Riv. Col. 54 (1840)—

Type: Swan River, *Drummond*—holo.:K-L, iso.:K—

M. atrata Lindl. var. *viridula* Reichb. f., Beitr. Syst. Pfl. 62 (1871)—

Types: Swan River, *Preiss*. 2403—lecto.:W; Australia felix *F. Mueller* syn.:W. The granular surface of the labellum by which the variety was distinguished, is typical of the species.

M. atrata Lindl. var. *viridula* Reichb. f., Beitr. Syst. Pfl. 62 (1871)

= *M. atrata* Lindl.

M. brownii Reichb. f., Beitr. Syst. Pfl. 24 (1871)—

Type: In paludibus ad portum Regis Georgii III, *R. Brown*, Dec. 1801—lecto.:K.—

M. truncata R. S. Rogers, Trans. Roy. Soc. S. Austral. 44:326 (1920)—

Types: Diamond Tree School, near Jarnadup, *Miss I. Knox-Peden*, Dec. 1918—lecto.:AD; Greenbushes, *R. Pulleine*, Dec. 8, 1917—syn.:not seen; Albany, *A. Syme Johnson*, Dec. 4, 1919—syn.:not seen.

- The specimen selected as Lectotype of *M. brownii* is one of two on a sheet at K, collected at King George Sound by Brown. This specimen matches a sketch by Reichenbach f. on a sheet at W, and agrees with his description better than the other specimen on the K sheet. There are two sheets at W named *M. brownii* by Reichenbach, but neither is apparently a Brown collection nor do the specimens fit the description of *brownii*—"labellum late ligulatum . . . callus ligulatus ante apicem in disco." Another specimen of Brown's from King George Sound was found at E, on a sheet with *Cryptostylis ovata* R. Br. It agrees with the lectotype and is probably an isotype.
- M. gymnadenioides* Diels, Journ. Muell. Bot. Soc. W. Austral. no. 11:79 (1903) = **M. pulchella** R. Br. This is the correct spelling of the epithet, not *gymnadenioides*.
- M. media** R. Br., Prod. 321 (1810)
Type: King George Sound, *Brown*, Dec. 1801—holo.:BM, iso.:BM. One of the **M. unifolia** complex.
- M. orbicularis** R. S. Rogers, Trans. Roy. Soc. S. Austral. 31:63 (1907)—
Type: Myponga, S.A. *Rogers*, Nov. 2, 1906—holo.:AD, iso.:BM, PERTH NSW.
- M. parviflora** R. Br., Prod. 321 (1810). Recorded for Western Australia by Rogers in Black, Fl. S. Austral. 123 (1922) but the typical form does not occur in this State.
- M. parviflora* R. Br. var. *densiflora* Benth., Fl. Austral. 6:348 (1873)—
Type: W. Australia, *Drummond* 117, 1849—holo.:K. One of the **M. unifolia** complex.
- M. porrifolia* (Swartz) Spreng., Syst. Veget. 3:713 (1826)—
 Based on *Epipactis porrifolia* Swartz, Act. Holm. 1800: 233, a superfluous name for *Ophrys unifolia* Forst. f.
- M. pulchella** R. Br. Prod. 321 (1810)—
Type: King George Sound, *R. Brown*, Dec. 1801—holo.:BM, iso.:K—
M. gymnadenioides Diels, Journ. Muell. Bot. Soc. W. Austral. no. 11:79 (1903)—
Type: Near Albany, *Diels*, Nov. 1901—not seen. Diels did not see Brown's specimens, and his characters for distinguishing *M. gymnadenioides* in fact fall down when a range of specimens is examined.
- M. truncata* R. S. Rogers, Trans. Roy. Soc. S. Austral. 44:326 (1920)—
 = **M. brownii** Reichb. f.
- M. unifolia** (Forst. f.) Reichb. f., Beitr. Syst. Pfl. 62 (1871)—*Ophrys unifolia* Forst. f., Flor. Ins. Aust. Prod. 59 (1786)—
Type: New Zealand, *Forster*—holo.:GOET, iso.:P. At present this name is used for a multitude of forms in Australia. No western specimens quite match the Type, though some are very close. *M. media* and *M. parviflora* var. *densiflora* belong to this complex and several eastern forms have also received names.
M. porrifolia (Swartz) Spreng., Syst. Veget. 3:713, based on *Epipactis porrifolia* Swartz, Act. Holm. 1800:233, is a superfluous name for *Ophrys unifolia* Forst. f.

MONADENIA

- Monadenia** Lindl., Gen. et Sp. Orch. Pl. 356 (1838).
M. australiensis Rupp, Austral. Orch. Rev. 11, 3:70 (1946)—
 = **M. micrantha** Lindl.

M. micrantha Lindl., Gen. et Sp. Orch. Pl. 357 (1838)—

Types: Cape of Good Hope, *Thom*—syn.:K-L; Cape of Good Hope, *Burchell* 6139; Nieuwekloof and Ruigtevalei, *Drège*—syn.:K-L.—

M. australiensis Rupp, Austral. Orch. Rev. 11, 3:70 (1946)—

Type: Youngs Siding, *Miss D. Southerland*, Nov. 1944—holo.:PERTH.
Introduced into South-western Australia from South Africa.

NERVILIA

Nervilia Commerson ex Gaud., in Freycinet, Voy. Uran. et Phys. (Bot.) 421 (1829), t.53 (1827).

N. holochila (F. Muell.) Schlechter, Engl. Bot. Jahrb. 39:48 (1906)—*Pogonia holochila* F. Muell., Fragm. 5:200 (1866)—

Type: Rockingham Bay, Qld., *Dallachy*—iso.:K.

OPHRYS

Ophrys unifolia Forst. f., Flor. Ins. Aust. Prod. 59 (1786)—

= **Microtis unifolia** (Forst. f.) Reichb. f.

POGONIA

Pogonia holochila F. Muell., Fragm. 5:200 (1866).

= **Nervilia holochila** (F. Muell.) Schlechter.

PRASOPHYLLUM

Prasophyllum R. Br., Prod. 317 (1810).

P. attenuatum R. Fitzg., Gard. Chron. 17:495 (1882)

= **P. ovale** Lindl. var. **ovale**.

Note: *P. attenuatum* R. Fitzg., Journ. Bot. 23:136 (1885) which was applied to an eastern Australian plant, is a later homonym.

P. australe R. Br., Prod. 318 (1810). Recorded for Western Australia by Rogers in Black, Fl. S. Austral. 1:125 (1922) but the typical form does not occur in this State, while the var. *sargentii* is considered to warrant specific rank.

P. australe R. Br. var. *sargentii* W. H. Nicholls, Vict. Nat. 65:268 (1949)

= **P. sargentii** (W. H. Nicholls) A. S. George.

P. brownii Reichb. f., Beitr. Syst. Pfl. 16 (1871)—

Type: ad portum Regis Georgii III in palud., *R. Brown*, Dec. 1810—
There is no specimen in the Reichenbach collection at W, but one at BM has the above locality in Brown's hand and agrees with the description. It is here chosen as lectotype. Reichenbach's published illustration in *Xenia Orchidacea*, t.198, is not very accurate; his original sketch (at W) is better.

P. ellipticum R. S. Rogers, Trans. Rcy. Soc. S. Austral. 44:325 (1920)—

Type: Near Jarnadup, *Miss I. Knox-Peden*, Dec. 21, 1918—holo.:AD.
Roger's type agrees very well with that of *P. brownii*.

P. cucullatum Reichb. f., Beitr. Syst. Pfl. 59 (1871)

= **P. gibbosum** R. Br.

P. cyphochilum Benth., Fl. Austral. 6:340 (1873)—

Types: Upper Kalgan, *Oldfield* 593—lecto.:K, iso.:MEL; Porongurup, *F. Mueller*, Oct. 1867—syn.:MEL.

The other collections cited by Bentham—Darling Range, *Collie*; Swan River, *Oldfield*; and King George Sound, *Muir*—represent *Prasophyllum hians* Reichb. f. Bentham's description applies better to the collections from Upper Kalgan and Porongurup.

P. drummondii Reichb. f., Beitr. Syst. Pfl. 69 (1871)—

Type: Swan River, *Drummond* 181—holo.:W, iso.:W. The holotype sheet has Reichenbach's sketches.—

P. muelleri C. Andrews, Journ. Muell. Bot. Soc. W. Austral. no. 9:19 (1902)—*P. elatum* R. Br. var. *muelleri* (C. Andrews) W. H. Nicholls, Vict. Nat. 65:270 (1949)—

Type: Guildford, *Andrews*, Nov.—holo.:PERTH, iso.:K, PERTH.—

P. paludosum W. H. Nicholls, Vict. Nat. 64:172 (1948)—

Type: Bayswater, *W. H. Nicholls*, 1946—holo.:MEL, iso.:PERTH.

P. elatum R. Br. Prod. 318 (1810)—

Type: Port Jackson, N.S.W., *Brown*, Sept-Oct. 1803—holo.:BM, iso.:E, K.—

P. macrotys Lindl., Sketch Veg. Swan Riv. Col. 54 (1840)—

Type: Swan River, *Drummond*—holo.:K-L, iso.:K.

P. elatum R. Br. var. *muelleri* (C. Andrews) W. H. Nicholls, Vict. Nat. 65:270 (1949)

= **P. drummondii** Reichb. f.

P. ellipticum R. S. Rogers, Trans. Roy. Soc. S. Austral. 44:325 (1920)

= **P. brownii** Reichb. f.

P. fimbria Reichb. f., Beitr. Syst. Pfl. 60 (1871)—

Types: Swan River, *Drummond* 848—lecto.:W, iso.:W; Swan River, *Preiss* 2215, July 26, 1839—syn.:W; Vasse River, *Oldfield*—not seen.—

P. gracillimum W. H. Nicholls, Vict. Nat. 64:175 (1948)—

Type: Yarloop, *Mrs. E. Scouler*, Oct. 1944—holo.:MEL, iso.:PERTH. Nicholls' specimens are rather slender, with the inner plate of the labellum less developed than in the typical form, but otherwise they agree very well. The inner plate is more prominent than it appears in his illustration.

P. fuscoviride Reader, Vict. Nat. 14:163 (1898)

= **P. nigricans** R. Br.

P. gibbosum R. Br., Prod. 318 (1810)—

Type: King George Sound, *R. Brown*. Dec. 1801—holo.:BM; iso.:K, P, PERTH.—

P. cucullatum Reichb. f., Beitr. Syst. Pfl. 59 (1871)—

Types: Stirling Terrace (Albany), *Preiss* 2211, Sept. 22, 1840—lecto.:W, syn.:FI, G, L, P, W; Swan River, *Drummond* 5.443—syn.:G, P, W, K-L. *P. cucullatum* is within the range of variation of *P. gibbosum*.

P. giganteum Lindl., Sketch Veg. Swan Riv. Col. 54 (1840)—

Type: Swan River, *Drummond*—holo.:K-L, iso.:K.

P. giganteum Endl., cited in Index Kewensis, is an error, as Endlicher cites *P. giganteum* Lindl.

P. gracile Lindl., Sketch Veg. Swan Riv. Col. 54 (1840)

= **P. macrostachyum** R. Br. var. **macrostachyum**.

P. gracile Lindl. var. *ringens* Reichb. f., Beitr. Syst. Pfl. 60 (1871)

= **P. macrostachyum** R. Br. var. **ringens** (Reichb. f.) A. S. George.

- P. gracillimum* W. H. Nicholls, Vict. Nat. 64:175 (1948)
= *P. fimbria* Reichb. f.
- P. grimwadeanum** W. H. Nicholls, Vict. Nat. 64:175 (1948)—
Type: Middleton Beach, Albany, Nicholls, Oct. 1946—holo.:MEL.
This belongs to a complex including *P. brownii*, *P. giganteum*, *P. lanceolatum*, *P. regium* and *P. triangulare*, all of which require extensive study.
- P. hians** Reichb. f., Beitr. Syst. Pfl. 61 (1871)—
Types: Swan River, Drummond 851—lecto.:W, iso.:BM, W; Drummond 175—syn.:W; Drummond 180—syn.:W; Swan River, Preiss s.n.—syn.:W; King George Sound, Huegel—syn.:W.
- P. horburyanum* Rupp, Vict. Nat. 59:122 (1942)
= *P. nigricans* R. Br.
- P. lanceolatum** R. S. Rogers, Trans. Roy. Soc. S. Austral. 44:325 (1920)—
Types: Albany, A. Syme Johnson, Sept. 25, 1919—lecto.:AD; Muresk, Mrs. W. E. Cooke, Sept. 4, 1907—syn.:AD.
- P. macrostachyum** R. Br. Prod. 318 (1810).
var. **macrostachyum**—
Type: King George Sound, Brown, Dec. 1801—holo.:BM, iso.:K.—
P. gracile Lindl., Sketch Veg. Swan Riv. Col. 54 (1840)—
Type: Swan River, Drummond—holo.:K-L. The Drummond specimens are much shorter than Brown's, but similar morphologically.
- var. **ringens** (Reichb. f.) comb. nov.
Basionym: *Prasophyllum gracile* Lindl., var. *ringens* Reichb. f., Beitr. Syst. Pfl. 60 (1871)—
Type: York, Preiss 2198—lecto.:W. Reichbenbach cited no collection but referred to Endlicher's description of *P. gracile* Lindl., in Lehm. Pl. Preiss. 2:13, where the above Preiss collection is cited.
- P. macrotys* Lindl., Sketch Veg. Swan Riv. Col. 54 (1840)
= *P. elatum* R. Br.
- P. muelleri* C. Andrews, Journ. Muell. Bot. Soc. W. Austral. no. 9:19 (1902)
= *P. drummondii* Reichb. f.
- P. nigricans** R. Br., Prod. 319 (1810)—
Type: Bay X, R. Brown, March 3, 1802—holo.:BM. Bay X is Port Lincoln, S.A.—
P. fuscoviride Reader, Vict. Nat. 14:163 (1898)—
Type: Lowan, Dimboola Shire, Miss F. Reader, 1892—holo.:MEL.—
P. horburyanum Rupp, Vict. Nat. 59:122 (1942)—
Type: Kumarl, W.A., L. Horbury, May, 1938—holo.:NSW (87484), iso.:PERTH.
- Much confusion has surrounded the correct identity of *P. nigricans*. Examination of the Type showed that it is the same as *P. fuscoviride*, of which *P. horburyanum* has already been reduced to a synonym (George, W. Austral. Nat. 8, 2:39 (1961)). This is the only species of the Section *Micranthum* known to occur in Western Australia, and on Eyre Peninsula where the Type was collected.
- P. ovale** Lindl., Sketch Veg. Swan Riv. Col. 54 (1840).
var. **ovale**
Type: Swan River, Drummond—lecto.:K-L. The sheet contains one specimen of *P. ovale* and three of *P. hians* Reichb. f. The *ovale* specimen

agrees with Lindley's description in the obtuse, free lateral sepals and in the form of the labellum. There is also a sketch of the labellum of this specimen on the sheet.—

P. attenuatum R. Fitzg., Gard. Chron. 17:495 (1882)—

Type: Western Australia, *Fitzgerald*. There is a sheet at BM with the locality "Green Mount, Sept.", in Fitzgerald's hand. It agrees with the description and is therefore selected as lectotype. An unpublished plate by Fitzgerald in the Mitchell Library, Sydney, has the locality "Bunbury 15th Sep".

var. **triglochin** Reichb. f., Beitr. Syst. Pfl. 60 (1871)—

Type: Swan River, *Drummond* 854—holo.:W, iso.:K, W.—

P. plumaeforme R. Fitzg., Gard. Chron. 1:495 (1882)—

Type: Western Australia, *Fitzgerald*. Fitzgerald cited no collection but there is a sheet at BM labelled "King River, Western Australia, Sept." in his hand. This agrees with his description and is selected as lectotype. An unpublished plate by Fitzgerald in the Mitchell Library, Sydney, has the localities "Greenhill, Perth, Albany 17 Aug".

P. paludosum W. H. Nicholls, Vict. Nat. 64:172 (1948)

= *P. drummondii* Reichb. f.

P. parvifolium Lindl., Sketch Veg. Swan Riv. Col. 54 (1840)—

Types: Swan River, *Drummond*—lecto.:K-L, iso.:K; Cape Leeuwin, *Collie*—syn.:K-L.

P. plumaeforme R. Fitzg., Gard. Chron. 1:495 (1882)

= *P. ovale* Lindl. var. **triglochin** Reichb. f.

P. regium R. S. Rogers, Trans. Roy. Soc. S. Austral. 42:27 (1918)—

Type: Near Diamond Tree, Manjimup, *R. Pulleine*, Dec. 1917—holo.:AD.

P. sargentii (W. H. Nicholls) A. S. George, stat. nov.

Basionym: *Prasophyllum australe* R. Br. var. *sargentii* W. H. Nicholls, Vict. Nat. 65:268 (1949)—

Type: Near Beverley, *Nicholls*, Sept. 1948—holo.:MEL. The differences from the typical *P. australe* are sufficient to raise this taxon to specific rank. It is usually a robust plant, with a distinctive short leaf. The differences include larger floral bracts (7-12 mm long, compared with 4-7 mm in *australe*); white lateral sepals (green and brown in *australe*); the inner plate of the labellum ending in two obtuse projections, much larger than in *australe*; and a differently shaped column. These features are well shown in Nicholls' "Orchids of Australia" (1969) pl. 113. Although colour is often an unreliable character it appears to be constant in this species. *P. sargentii* is endemic in Western Australia, while *P. australe* has not been recorded here.

P. triangulare R. Fitzg., Gard. Chron. 1:495 (1882)—

Type: Western Australia, *Fitzgerald*. At BM there is a sheet labelled "Prasophyllum triangulare, Albany, Western Australia Oct." in Fitzgerald's hand. This is selected as lectotype.

PTEROSTYLIS

Pterostylis R. Br. Prod. 326 (1810).

P. allantoidea R. S. Rogers, Trans. Roy. Soc. S. Austral. 64:139 (1940)—

Type: Kumarl, *L. Horbury*, Sept. 1938—holo.:AD, iso.:PERTH, NSW.

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, *A. S. George* 9480, Aug. 2, 1969—holo.:PERTH, iso.:MEL, NSW, K.

- P. barbata** Lindl., Sketch Veg. Swan Riv. Col. 53 (1840)—
Types: Swan River, *Drummond*—lecto.:K-L, iso.:K; King George Sound, *A. Collie*—syn.:K-L.—
P. turfosa Endl. in Lehm., Pl. Preiss 2:5 (1846)—
Type: Stirling Terrace (Albany), *Preiss* 2632, Sept. 20, 1840—holo.:LD.
 The single specimen is very small and slender, but represents the same taxon as *P. barbata*.
- Pterostylis barbata* Endl. in Lehm., Pl. Preiss. 2:5 (1846) is cited in Bentham, Fl. Austral. 6:357, but this is an error, as Endlicher refers to *P. barbata* Lindl.
- P. constricta* O. H. Sargent, Journ. W. Austral. Nat. Hist. Soc. 2,4:24 (1907)
 = **P. scabra** Lindl. var. **scabra**.
- P. hamiltonii* W. H. Nicholls, Vict. Nat. 50:89 (1933)
 = **P. scabra** Lindl. var. **robusta** (R. S. Rogers) A. S. George.
- P. mitchellii** Lindl. in Mitch., Journ. Trop. Austral. 365 (1848)—
P. rufa R. Br. var. *mitchellii* (Lindl.) R. Fitzg. in Moore and Betche, Handb. Fl. N.S.W. 401 (1893)—
Type: Mt. Kennedy, Qld., *Mitchell*—holo.:K-L, with the locality "Range SE of Camp 29, Sept. 27." See note under *Pterostylis rufa*.
- P. mutica** R. Br., Prod. 328 (1810)—
Type: Port Jackson, *Brown*—holo.:BM, iso.:K.
- P. nana** R. Br., Prod. 327 (1810)—
Type: Port Dalrymple, *Paterson*—holo.:BM.—
P. pyramidalis Lindl., Sketch Veg. Swan Riv. Col. 53 (1840)—*P. nana* R. Br. var. *pyramidalis* (Lindl.) Ewart, Proc. Roy. Soc. Vict. 24:72 (1911)—
Type: Swan River, *Drummond*—holo.:K-L.
- P. plumosa** L. I. Cady, Austral. Pl. 5, 39:138 (1969)—
Type: Road to Abercrombie Caves, *W. Brinsley*, Oct. 1961—holo.:NSW, iso.:Herb. L. I. Cady 1614 (not seen). Forms very similar to this taxon occur in Western Australia, e.g. Youngs Siding, near Albany, *Miss R. Sandilands*, Sept. 16, 1932; 15 miles west of Pemberton, *M. C. George*, Oct. 25, 1959.
- P. pusilla** R. S. Rogers, Trans. Roy. Soc. S. Austral. 42:26 (1918)—
Types: Geranium, S.A., *Nora E. Jacob*, Oct. 1917—lecto.:AD, iso.:K (1 flower); Wirrega, S.A., *T. G. Osborn*—not seen; Grampians, Vic., *C. Walter*—not seen; Greensborough, Vic., *E. Pescott*—not seen; Blackburn, Vic., *D. Coleman*—not seen. See note under *P. rufa* R. Br.
- P. pyramidalis* Lindl., Sketch Veg. Swan Riv. Col. 53 (1840)
 = **P. nana** R. Br.
- P. pyramidalis* Endl. in Lehm. Pl. Preiss. 2:5 (1846). This is cited by Bentham, Fl. Austral. 6:359, but Endlicher cites *P. pyramidalis* Lindl., though his description is of *P. scabra* Lindl. var. *robusta*.
- P. recurva** Benth., Fl. Austral. 6:360 (1873)—
Type: Swan River, *Drummond*—lecto.:K; Upper Hay River, *Miss Warburton*—syn.:K.
- P. reflexa* R. Br. var. *constricta* (O. H. Sargent) Ewart, White et Tovey, Journ. Roy. Soc. N.S. Wales 42:193 (1908)—*P. constricta* O. H. Sargent.
 = **P. scabra** Lindl. var. **scabra**.

- P. robusta* R. S. Rogers, Trans. Roy. Soc. S. Austral. 51:296 (1927)
= *P. scabra* Lindl. var. *robusta* (Rogers) A. S. George.
- P. rogersii** E. Coleman, Vict. Nat. 44:100 (1929)—
Types: Bunbury and Collie, *Miss I. Banks*, July, 1929; Busselton, *E. Bryant*, June 1928 and July 1929; *B. T. Goadby* July 1929. The citation of Goadby as a collector is probably an error, as the specimens were only forwarded by him. There is one sheet at MEL—1002452—with all the above details except the locality Collie. It is now impossible to assign the specimens to the collectors and the whole sheet is therefore selected as Lectotype. Another sheet at MEL—1002453—has two syntype specimens, and one collected by Miss Banks in June, 1928.
- P. rufa** R. Br. Prod. 327 (1810)—
Type: Port Jackson, *Brown*—holo.:BM, iso.:FI, G, K, L, P.—
P. squamata R. Br. Prod. 327 (1810)—*P. rufa* R. Br. var. *squamata* (R. Br.) R. Fitz. in Moore and Betche, Handb. Fl. N.S.W., 401 (1893)—
Type: Table Mountain, Tas., *Brown*—holo.:BM.
- A revision of the "rufa" group by Blackmore and Clemesha in the Orchadian 2, 12; 148-166 (1968) goes a long way towards resolving this difficult group, though some of the conclusions are doubtful. However, the treatment scarcely touches on the Western Australian forms, all of which show differences in varying degree from the eastern ones. Much work is still required here.
- P. rufa* R. Br. var. *mitchellii* (Lindl.) R. Fitzg. in Moore et Betche Handb. Fl. N.S.W. 401 (1893)
= *P. mitchellii* Lindl.
- P. rufa* R. Br. var. *squamata* (R. Br.) R. Fitzg. in Moore et Betche Handb. Fl. N.S.W. 401 (1893)
= *P. rufa* R. Br.
- P. rupestris* Drummond, Journ. Bot. (Hook) 2:367 (1840)—Nomen nudum.
- P. sargentii** C. Andrews, Journ. W. Austral. Nat Hist. Soc. 2,2:57 (1905)—
Type: York *O. H. Sargent*, July and Aug. 1904. The collections from York in July-August 1904 have been found, and these are designated as follows: lecto.:York, *O. H. Sargent*, Aug. 1904.—PERTH, ex W. E. Blackall Collection, named by C. Andrews; syn.:Cut Hill near York, *O. H. Sargent*, Aug. 7, 1904—PERTH, NSW.; syn.:York, *O. H. Sargent*, July 1904—NSW, ex C. Andrews Collection.
- P. scabra** Lindl., Sketch Veg. Swan Riv. Col. 53 (1840).
var. *scabra*—
Type: Swan River, *Drummond*—holo.:K-L—
P. constricta O. H. Sargent, Journ. W. Austral. Nat. Hist. Soc. 2,4:24 (1907)—*P. reflexa* R. Br. var. *constricta* (Sargent) Ewart, White et Tovey, Journ. & Proc. Roy. Soc. N.S. Wales 42:193 (1908)—
Type: Kindelans Road, near York, *O. H. Sargent*, July 21, 1907—lecto.:PERTH. Sargent cited no definite collection, but this sheet has one of his labels and agrees with his description.
- var. *robusta* (Rogers) comb. et stat. nov.—
Basionym: *P. robusta* R. S. Rogers, Trans. Roy. Soc. S. Austral. 51:296 (1927)—
Type: National Park, Belair, S.A., *R. S. Rogers*, May 28, 1905—lecto:AD.

This collection is marked type, in Rogers' hand. He also cited two W.A. localities—between Perth and Fremantle, *Goadby*, July 1927, and Swanbourne, *Goadby*, July 7, 1927—

P. hamiltonii W. H. Nicholls, *Vict. Nat.* 50:89 (1933)—

Type: Boyup Brook, *Miss E. Corker*, June-July 1927-30—syn.:PERTH (Coll. June 1928).

P. scabra at present includes a number of forms, some of which connect the typical one with the var. *robusta*.

P. hamiltonii differs from the typical var. *robusta* only in having a longer labellum, but this feature is extremely variable.

P. squamata R. Br., *Prod.* 327 (1810)

= *P. rufa* R. Br.

P. turfosa Endl. in *Lehm.*, *Pl. Preiss* 2:5 (1846)

= *P. barbata* Lindl.

P. vittata Lindl., *Sketch Veg. Swan Riv. Col.* 53 (1840).

var. ***vittata***

Types: Interior of King George Sound, *A. Collie*—lecto.:K-L, iso.:K; W. Australia, *Henslow*—syn.:K-L—

P. vittata Lindl. var. *viridiflora* W. H. Nicholls, *Vict. Nat.* 49:254 (1933)—

Type: Boyup Brook, *Miss E. Corker*, July-Aug.—holo.:not seen.

The Collie specimen selected as lectotype of var. *vittata* is the best of those in the Lindley collection. It has green flowers, though some of the others are brown (but are not the large-flowered form, var. *subdifformis*).

var. *major* Endl. in *Lehm.*, *Pl. Preiss* 2:5 (1846)—nomen nudum.

var. *minor* Endl. in *Lehm.*, *Pl. Preiss* 2:5 (1846)—nomen nudum.

var. ***subdifformis*** W. H. Nicholls, *Vict. Nat.* 49:253 (1933)—

Type: Boyup Brook, *Miss E. Corker*, July-Aug.—iso.:PERTH.

var. *viridiflora* W. H. Nicholls, *Vict. Nat.* 49:254 (1933)

= ***P. vittata*** Lindl. var. ***vittata***.

RHIZANTHELLA

Rhizanthella R. S. Rogers, *Journ. Roy. Soc. W. Austral.* 15:1 (1928).

R. gardneri R. S. Rogers, l.c.—

Types: Corrigin, *J. Trott*, May 23, 1928—syn.:PERTH; Shackleton, *J. H. Plant*, June 1928—not seen; Goomalling June, 1928—syn.:PERTH.

SPICULAEA

Spiculaea Lindl., *Sketch Veg. Swan Riv. Col.* 56 (1840).

S. ciliata Lindl., l.c. 56 (1840)—*Drakaea ciliata* (Lindl.) Reichb. f., *Beitr. Syst. Pfl.* 68 (1871)—

Type: Swan River, *Drummond*—holo.:K-L, iso.:FI, G, K.

THELYMITRA

Thelymitra J. R. et G. Forster, *Char. Gen.* 97 t.49 (1776).—

Macdonaldia Gunn ex Lindl.

- T. antennifera** (Lindl.) Hook. f., Fl. Tasm. 2:4 (1858)—
Macdonaldia antennifera Lindl., Sketch Veg. Swan Riv. Col. 50 (1840)—
Types: Swan River, *Drummond*—lecto.:K-L; Augusta, *Mrs. Molloy*—
syn.:K-L.
The authorship is sometimes given as Gunn ex Lindl., but there are no
Tasmanian specimens in the Lindley collection and he cites only the two
above collections in Gen. et Sp. Orch. Pl. 385 (1840). The epithet is almost
certainly Lindley's own.
- T. aristata** Lindl., Gen. et Sp. Orch. Pl. 521 (1840). Recorded for Western
Australia by Bentham (Fl. Austral. 6:319), and later workers, but the name
has been misapplied to forms of the *Thelymitra nuda* complex, and the
species does not occur here. *T. aristata* Lindl. is the correct name for the
species previously known (e.g. Nicholls 1951, 1969) as *T. grandiflora* R.
Fitzg., Gard. Chron. 1:495 (1882), which must be reduced to synonymy.
- T. azurea** R. S. Rogers, Trans. Roy. Soc. S. Austral. 41:342 (1917)
= **T. canaliculata** R. Br.
- T. benthamiana** Reichb. f., Beitr. Syst. Pfl. 55 (1871)
= **T. fuscolutea** R. Br. var. **fuscolutea**
- T. campanulata** Lindl., Sketch Veg. Swan Riv. Col. 59 (1840)—
Type: Swan River, *Mangles*—lecto.:K-L. This is the only specimen in the
Lindley collection which agrees with his description. It is annotated by
him but is not cited in the Gen. et Sp. Orch. Pl. 521 (1840), where Swan
River, *Drummond* is given.
- T. canaliculata** R. Br., Prod. 314 (1810)—
Type: King George Sound, *R. Brown*, Dec. 1801—holo.:BM.—
T. azurea R. S. Rogers, Trans. Roy. Soc. S. Austral. 41:342 (1917)—
Type: Between Mt. Compass and Victor Harbour, *Rogers*, Nov. 19,
1916—holo.:AD, iso.:NSW. Rogers' specimens are shorter and
more robust than Brown's but the floral morphology is the same.
Both forms occur in Western Australia.
- T. carnea** R. Br., Prod. 314 (1810)—
Type: Towards George's River and near Parramatta, *R. Brown*, Oct.-Nov.
1803—holo.:BM. The western specimens do not quite match these but
are left under this name for the present.
- T. cornicina** Reichb. f., Beitr. Syst. Pfl. 54 (1871)—
Type: King George Sound, *Maxwell*—holo.:W.—
T. fasciculata R. Fitzg., Austral. Orch. 3, 2 (1888)—
Type: Fitzgerald cited no collection and none has been found. His
plate is therefore regarded as the type.
Reichenbach's type is a single specimen (that illustrated in Xen. Orch. 2,
t.196) but it is in good condition. It is smaller than that figured by Fitz-
gerald, but the two agree otherwise morphologically.
- T. crinita** Lindl., Sketch Veg. Swan Riv. Col. 49 (1840)—
Type: Swan River, *Drummond*—holo.:K-L.
- T. cucullata** H. M. R. Rupp, Austral. Orch. Rev. 11:71 (1946)—
Type: Youngs Siding, *Miss D. Southerland*, Aug. 1945—holo.:NSW.
(87492), iso.:PERTH.
- T. dedmanae** R. S. Rogers, Trans. Roy. Soc. S. Austral. 62:13 (1938)
= **T. fuscolutea** R. Br. var. **stellata** (Lindl.) A. S. George.

- T. fasciculata* R. Fitzg., Austral. Orch. 2, 3 (1888)
= *T. cornicina* Reichb. f.
- T. flexuosa** Endl., Nov. Stirp. Dec. 23 (1839)—
Type: King George Sound, *Huegel*—holo.:W.—
Macdonaldia concolor Lindl., Sketch Veg. Swan Riv. Col. 50 (1840)—
Type: King George Sound, *A. Collie*—holo.:K-L, iso.:K.—
Macdonaldia smithiana Gunn ex Lindl., Sketch Veg. Swan Riv. Col. 50 (1840)—
Type: Circular Head, Tas., *Gunn* 945—holo.:K-L, iso.:K, L, P, W.
- T. fuscolutea** R. Br., Prod. 315 (1810)—
var. **fuscolutea**—
Type: King George Sound, *R. Brown*, Dec. 1801—holo.:BM.—
T. benthamiana Reichb. f., Beitr. Syst. Pfl. 55 (1871)—
Types: Swan River, *Drummond* 825—lecto.:W, iso.:G, W; *Drummond* 145—syn.:W. The specimen selected as lectotype is that which Reich-
enbach figured in *Xen. Orch.* 2, t.199.
var. **stellata** (Lindl.) comb. et stat. nov.
Basionym: *Thelymitra stellata* Lindl., Sketch Veg. Swan Riv. Col. 49 (1840)—
Type: Swan River, *Drummond*—holo.:K-L, iso.:K, FI.—
T. dedmanae R. S. Rogers, Trans. Roy. Soc. S. Austral. 62:13 (1938)—
Type: Toodyay, *Mrs. and Miss Dedman*, Nov. 11, 1934—holo.:AD.
This only differs from the var. *fuscolutea* in having the perianth more uniformly golden-brown and the column fringe a bright orange. Rogers' type agrees very well with Lindley's.
- T. graminea* Lindl., Sketch Veg. Swan Riv. Col. 49 (1840)—
Type: Swan River, *Drummond*—holo.:K-L. See note under **T. nuda** R. Br.
- T. ixioides** Sw., K. Vetensk. Acad. Handl. 21:228 (1800). Recorded for Western Australia by Bentham (*Fl. Austral.* 6:318), who reduced *T. campanulata* Lindl. to synonymy. The latter species is now regarded as distinct, and all the western specimens formerly placed under *T. ixioides* belong to it.
- T. longifolia** Forst. f., Char. Gen. 98, t.49 (1776). Recorded for Western Australia by Bentham (*Fl. Austral.* 6:320), but at present not thought to occur here. See note under *T. nuda* R. Br.
- T. mackibbinii** F. Muell., Chem. & Drugg. Lond. Austral. Suppl. 42:44 (1881). Listed by Mueller (*Syst. Cens. Austral. Pl.* 112) but probably in error for one of the forms of *T. spiralis* (Lindl.) F. Muell.
- T. macmillanii** F. Muell., Fragm. 5:93 (1865)—
Type: In locis graminosis sinui Port Phillip vicinis e.g. prope montes Eliza et Martha, *McMillan*—holo.:MEL.
- T. macrophylla* Lindl., Sketch Veg. Swan Riv. Col. 49 (1840)—
Type: Swan River, *Drummond*—holo.:K-L. See note under **T. nuda** R. Br.
- T. matthewsii** Cheeseman, Trans. N.Z. Inst. 43:177 (1911)—
Type: Between Lake Tongongee and the coast, Mongonui County, N.Z., *R. H. and H. B. Matthews*, 1909.
Although the type has not been examined, a collection from New Zealand—Kaitaia, H. B. Matthews, Sept. 13, 1914—agrees very well with one from Western Australia—42-43 mile pegs, Brookton Highway, George 1514,

Sept. 10, 1960. The specimens figured by Nicholls, *Orchids of Australia* 1952 t.45, 1969 t.46, are much more deeply coloured and have smaller column lobes than the western and New Zealand specimens. This taxon belongs to the *Thelymitra spiralis* complex and requires further study.

T. mucida R. Fitzg., *Gard. Chron.* 1:495 (1882)—

Type: Western Australia, *Fitzgerald*. In *Austral. Orch.* 2, 2, Fitzgerald cites "Wilson Inlet". At BM there is a sheet labelled "Wilson's Inlet, Sept.", in Fitzgerald's hand, which may be taken as the lectotype. There is an isotype at NSW.

T. nuda R. Br., *Prod.* 314 (1810)—

Type: Port Dalrymple, Tas., *Brown*—holo.:BM, iso.:E, K. There is a complex of forms requiring further study which include *T. nuda*, *T. pauciflora*, *T. graminea* and *T. macrophylla* as well as a number of names applied to eastern Australian forms. *T. longifolia* Forst. f. (1776) is the oldest name available, but the type is from New Zealand and further work is required to ascertain whether this form occurs in Australia.

T. pardalina F. Muell., *Fragm.* 5:94 (1865)

= *T. villosa* Lindl.

T. pauciflora R. Br., *Prod.* 314 (1810)—

Type: Port Jackson, *Brown*, 1803—holo.:BM, iso.:E. See note under *T. nuda* R. Br.

T. porphyrosticta F. Muell., *Fragm.* 5:97 (1865)

= *T. variegata* (Lindl.) F. Muell.

T. psammophila C. Andrews, *Journ. W. Austral. Nat. Hist. Soc.* 2, 2:57 (1905)—

Type: Near Upper Kalgan River and Stirling Range, *Andrews*, Oct. 1903—holo.:PERTH, iso.:PERTH, NSW.

T. rubra R. Fitzg., *Gard. Chron.* 1:495 (1882). Listed for Western Australia by Rogers in *Black, Fl. S. Austral.* (2nd Ed.) 216 (1943), but western specimens are now referred to *T. carnea* R. Br.

T. sargentii R. S. Rogers, *Trans. Roy. Soc. S. Austral.* 54:41 (1930)—

Types: Bruce Rock, *O. H. Sargent*, Oct. 1929—lecto.:AD; Bencubbin, *R. E. Edmondson*, Oct. 1929—not seen; Dalwallinu, *B. T. Goadby*, Oct. 1929—not seen.

T. spiralis (Lindl.) F. Muell., *Fragm.* 5:98 (1865)—

Macdonaldia spiralis Lindl., *Sketch Veg. Swan Riv. Col.* 50 (1840).

var. *spiralis*—

Type: Swan River, *Drummond*—holo.:K-L.—

T. spiralis (Lindl.) F. Muell. var. *pulchella* W. H. Nicholls *Vict. Nat.* 66:56 (1949)—

Type: Near Bolgart, *Mrs. R. Erickson*—holo.:not seen. Nicholls apparently did not see Lindley's type and was mistaken in assuming another form to be the typical one.

Rogers, in *Trans. Roy. Soc. S. Austral.* 54:43 (1930), also published the combination *T. spiralis*, apparently unaware that Mueller had already done so.

var. *pallida* W. H. Nicholls, *Vict. Nat.* 66:55 (1949)—

Type: Yarloop, *Mrs. E. Scouler*—holo.:MEL.

var. *pulchella* W. H. Nicholls, *Vict. Nat.* 66:56 (1949)

= *T. spiralis* var. *spiralis*.

- var. **punctata** W. H. Nicholls, Vict. Nat. 66:55 (1949)—
Type: Yarloop, Mrs. E. Scouler—not seen.
- var. **scoulerae** W. H. Nicholls, Vict. Nat. 66:55 (1949)—
Type: Yarloop, Mrs. E. Scouler, Sept.-Oct. 1946—holo.:MEL.
- T. stellata* Lindl., Sketch Veg. Swan Riv. Col. 49 (1840)
 = *T. fuscolutea* R. Br. var. **stellata** (Lindl.) A. S. George.
- T. tigrina** R. Br., Prod. 315 (1810)—
Type: King George Sound, R. Brown, Dec. 1801—holo.:BM.
- T. variegata** (Lindl.) F. Muell., Fragm. 5:98 (1865)—
Macdonaldia variegata Lindl., Sketch Veg. Swan Riv. Col. 50 (1840)—
Type: Swan River, Drummond—holo.:K-L, iso.:K.
 Bentham published the same combination in Fl. Austral. 6:323 (1873),
 apparently unaware that Mueller had already done so.
Thelymitra porphyrosticta F. Muell., Fragm. 5:97 (1865)—
Type: Kalgan River, Maxwell—iso.:K.
- T. villosa** Lindl., Sketch Veg. Swan Riv. Col. 59 (1840)—mis-spelt *villosa* by
 typographical error.—
Type: Swan River, Drummond—holo.:K-L, iso.:K.—
T. pardalina F. Muell., Fragm. 5:94 (1865)—
Types: Sandy soil, Esperance Bay and Cape le Grand, Maxwell—
 lecto.:MEL; Fitzgerald Ranges, Maxwell—syn.:MEL.

References

The works listed here are floras and comprehensive orchid treatments. All other references used are cited in the text.

- BENTHAM, G. (1873)—Flora Australiensis, Vol. 6.—Reeve, London.
- BLACKALL, W. E., ed. B. J. GRIEVE (1954)—How to know Western Australian Wildflowers, Part 1.—University of Western Australia, Nedlands, W.A.
- ERICKSON, RICA (1951)—Orchids of the West.—Paterson Brokensha, Perth, W.A.
- ERICKSON, RICA (1965)—Orchids of the West, 2nd Ed.—Paterson Brokensha, Perth, W.A.
- FIRTH, M. J. (1965)—Native Orchids of Tasmania.—Richmond and Sons, Devenport, Tas.
- FITZGERALD, R. D. (1875-94)—Australian Orchids.—Government Printer, Sydney, N.S.W.
- GARDNER, C. A. (1930)—Enumeratio Plantarum Australiae Occidentalis.—Government Printer, Perth, W.A.
- LINDLEY, J. (1839-40)—A Sketch of the vegetation of the Swan River Colony. Appendix to the first 23 volumes of the Botanical Register. Cited in the List as "Sketch Veg. Swan Riv. Col."
- MUELLER, F. (1882)—Systematic Census of Australian Plants, Part 1, Vasculares.—Government of Victoria.
- NICHOLLS, W. H. (1951-1958)—Orchids of Australia, Parts 1-4.—Georgian House, Melbourne, Vic.
- NICHOLLS, W. H., ed. D. L. JONES and T. B. MUIR (1969)—Orchids of Australia.—Nelson, Melbourne, Vic.
- PELLOE, EMILY (1930)—West Australian Orchids.—Published by the author.
- PESCOTT, E. E. (1928)—The Orchids of Victoria.—Horticultural Press, Melbourne, Vic.
- ROGERS, R. S. in BLACK, J. M. (1922)—Flora of South Australia, Part 1.—Government Printer, Adelaide, S.A.
- ROGERS, R. S. in BLACK, J. M. (1943)—Flora of South Australia, Part 1, 2nd Ed.
- RUPP, H. M. R. (1943)—The Orchids of New South Wales.—Government Printer, Sydney N.S.W.
- RUPP, H. M. R. (1969)—The Orchids of New South Wales—facsimile reprint with a supplement by D. J. McGillivray.—Government Printer, Sydney.
- WILLIS, J. H. (1962)—A Handbook to Plants in Victoria, Vol. 1.—Melbourne University Press, Victoria.