

List of Orchid Species Common to Australia and New Zealand.

By EDWIN D. HATCH, Laingholm, Auckland.

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THE close relationship between the orchid floras of Australia and New Zealand has become more and more evident with the passing of the years. When Hooker published the *Flora Novae Zelandiae* in 1853, he recognised only three species of orchids occurring both in New Zealand and in Australia. The present account recognises 34 such species, rather less than half the total orchid population of these islands, and an advance of 18 upon Cheeseman's figure in the 1925 *Manual*.

To the Rev. H. M. R. Rupp, of Sydney, must go the credit for most of the research connected with proving the identity of the species under consideration. All the writer has done, has been to check and confirm the evidence and conclusions presented by Mr. Rupp. Sound reasons for the several changes of name are given in the *Proc. Linn. Soc. N.S.W.* 70, 1945. (Rupp & Hatch.) In the same paper the anomalous *Caladenia bifolia* Hook.f. becomes *Aporostylis bifolia* (Hook.f.) R. & H.

Only the current local synonymy has been quoted in the lists that follow.

An asterisk following a name indicates that the species has been recorded from New Zealand since the appearance of the 1925 *Manual*. In these cases a note of the general distribution of the form and its relationships with other New Zealand species, is added. The list has been divided for convenience into two sections—

A. Those species in which the New Zealand plant is exactly similar (except for normal epharmony) to the Australian.

B. Those species in which the New Zealand plant shows sufficient constant variation from the Australian to warrant varietal rank.

It is worth recording here that *Thelymitra uniflora* Hook.f., which Cheeseman (*Manual*, 1906, 672) thought might be identical with the Tasmanian *Th. cyanea* Ldl., is in fact quite distinct. Both belong to the evolutionary group of *Th. venosa* R. Br., but in *Th. uniflora* the lateral lobes of the column-wing are spirally involute and entire; whereas in *Th. cyanea* the lobes are not involute and are irregularly bifid.

A.

1. **Thelymitra ixioides** Sw. *Vet. Akad. Handl. Stockh.*, 21. 1800. 228. t. 3. L.
2. **Thelymitra longifolia** J. R. & G. Forst. *Char. Gen. Plant.*, 1776. 98. t. 49.

3. *Thelymitra aristata** Ldl. *Gen. et. Spec. Orch.*, 1840. 521.
Proc. Linn. Soc. N.S.W., 70. 1945. Rupp & Hatch.
Australia, N.Z.—N. Auck. Dist. Kaitaia, 4. 1928. H. B. Matthews:
4. *Thelymitra pauciflora* R.Br. *Prodr.*, 1810. 314.
5. *Thelymitra venosa* R.Br. *Prodr.*, 1810. 314.
6. *Thelymitra matthewsii* Cheesmn. *Trans. N.Z. Inst.*, 43. 1910. 177.
Th. D'Altonii Rog.
7. *Orthoceras strictum* R.Br. *Prodr.*, 1810. 317.
8. *Microtis unifolia* (Forst. f.) Reichb. f. *Beitr. Syst.*, Pfl. 62. 1871.
9. *Microtis parviflora** R.Br. *Prodr.*, 1810. 321.
Australia, Islands of the Western Pacific, South China, N.Z.—
N. Auck. Dist. Kaitaia, 11. 1924. H. B. Matthews.

KEY TO N.Z. SPECIES OF *Microtis*.

1. Labellum emarginate, with three callosities, two at the base and one at the apex *M. unifolia*.
2. Labellum entire, with the two basal callosities only *M. parviflora*.
Orch. N.S.W., 1943. 21. Rupp.
10. *Prasophyllum patens* R.Br. *Prodr.*, 1810. 318.†
11. *Prasophyllum rogersii** Rupp. *Proc. Linn. Soc. N.S.W.*, 53. 1928. 340.
Orch. N.S.W. 1943. 28. Rupp. *Proc. Linn. Soc. N.S.W.*, 70. 1945. Rupp & Hatch.
N.S.W., Victoria, Tasmania, N.Z.—N. Auck. Dist. Kaitaia, 12. 1924. H. B. Matthews. Section *Euprasophyllum*.
12. *Caleana minor* R.Br. *Prodr.*, 1810. 329.
13. *Chiloglottis cornuta* Hook. f. *Flor. Ant.*, 1. 1844. 69.
Ch. Muelleri R. D. Fitzg.
14. *Chiloglottis formicifera* R. D. Fitzg. *Austr. Orch.*, 2. 1885. 2.
15. *Calochilus campestris** R.Br. *Prodr.*, 1810. 320. *Proc. Linn. Soc. N.S.W.*, 70. 1945. Rupp & Hatch.
Australia (except W.A.), N.Z.—N. Auck. Dist. Kaimaumuau,
11. 1924. H. B. Matthews. The *C. campestris* of Cheeseman was in fact *C. robertsonii* Benth. Details are given in the paper referred to above.
16. *Calochilus robertsonii* Benth. *Fl. Austr.* 6. 1873. 315.
C. campestris Cheesmn. (not of R.Br.).
17. *Calochilus paludosus* R.Br. *Prodr.*, 1810. 320.

† Subsequent investigation suggests that *Pr. patens* will probably have to be deleted from the list and *Pr. suttonii* Rog. and Rees. substituted.

18. **Caladenia carnea** R.Br. *var. minor* (Hook. f.) Hatch *Trans. R.S.N.Z.* 75. 1945.
C. minor Hook. f.
- Caladenia carnea** R.Br. *var. exigua* (Cheesmn.) Rupp. *Proc. Linn. Soc. N.S.W.*, 69. 1944. 75.
C. exigua Cheesmn.
19. **Caladenia lyallii** Hook. f. *Flor. Nov. Zel.*, 1. 1853. 247.
C. alpina Rog.
20. **Townsonia viridis** (Hook. f.) Schltr. *Fedde. Repert.*, 9. 1911. 249. *T. deflexa* Cheesmn. *Acianthus viridis* Hook. f.
21. **Corybas aconitiflorus** Salisb. *Parad. Lond.*, 1805. t. 83.
Corysanthes cheesemani Hook. f. ex T. Kirk.
22. **Corybas unguiculatus** (R.Br.) Reichb. f. *Beitr. Syst. Pfl.*, 43.
Corysanthes Matthewsii Cheesmn.
23. **Pterostylis furcata** Ldl. *Gen. et Spec. Orch.*, 1840. 390.
Pt. micromega Hook. f.
24. **Pterostylis nutans** R.Br. *Prodr.*, 1810. 327.
Pt. matthewsii Cheesmn.
25. **Pterostylis foliata** Hook. f. *Fl. Nov. Zel.*, 1. 1853. 249.
Pt. gracilis Nich.
26. **Pterostylis nana** R.Br. *Prodr.*, 1810. 327.
Pt. puberula Hook. f.
27. **Pterostylis mutica** R.Br. *Prodr.*, 1810. 328.
28. **Pterostylis barbata** Ldl. *Swan. River. App.*, 1839. 53.
29. **Gastrodia sesamoides** R.Br. *Prodr.*, 1810. 330.
30. **Spiranthes sinensis** (Pers.) Ames. *Orch.*, 2. 1908. 53.
Sp. australis (R.Br.) Ldl.
31. **Bulbophyllum tuberculatum** Col. *Trans. N.Z. Inst.*, 16. 1884. 336.
- (Extends only to Lord Howe Island, so perhaps only politically Australian.)

B

32. **Thelymitra carnea** R.Br. *var. imberbis* (Hook. f.) R. & H. *Proc. Linn. Soc. N.S.W.*, 70. 1945.
Th. imberbis Hook. f.
33. **Acianthus fornicatus** R.Br. *var. sinclairii* (Hook. f.) Hatch. *Trans. R.S.N.Z.* 75., 1945.
A. sinclairii Hook. f.
34. **Acianthus reniformis** (R.Br.) Schltr. *var. oblongus* (Hook. f.) R. & H. *Proc. Linn. Soc. N.S.W.*, 70. 1945.
Cyrtostylis oblonga Hook. f. *C. rotundifolia* Hook. f.