

adult stage, it does not bear leaves, their functions being carried out by green and flattened branches. Mr. Cheeseman, in the Manual (1925) stressed the need for its revision. Mr. Simpson's work based on a long and careful study of all the important material provides what is wanted. He divides the group into 8 subgenera, and expands Mr. Cheeseman's 21 species into 44. In the sub-genera the pod characteristics are extremely important, "Pod characteristics mark definite stages in a procession linking the freely dehiscent with the indehiscent" (p.238) As regards the species, he remarks, "Compound species abound, and for the present it would be unwise to suppose the existence of any one simple species". On the subject of distribution he makes the interesting comment, "Notwithstanding previous recordings, the author is firmly of the opinion that no species crosses Cook Strait in either direction." It is hoped that this very able revision will receive the attention of members interested in the genus.

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For the convenience of members we publish Mrs. Lucy Cranwell Smith's present address. It is; C/- Mrs. Russell Wilson,
2726 Johnstone Place,
Cincinnati, OHIO.

Miss Betty Molesworth, Museum Botanist has kindly forwarded a further botanical revision, and also a very useful key to that interesting New Zealand Heath family, Gaultheria.

THE GENUS GAULTHERIA.

In 1935 Sir Arthur Hill, then Director of Kew, with Mr. Burt, published an account of the genera GAULTHERIA and PERNETTIA in Australia and New Zealand. This is in the Linnean Society Journal. Species of the two genera hybridise, as well as there being many hybrids between different species of GAULTHERIA, which makes identification difficult.

G. fagifolia (Manual, P.691) is a hybrid, and has been rejected. Gaultheria perplexa is now Pernettya macrostigma. It is hoped that the key below, which has been copied from this paper, will assist in identification.

GAULTHERIA.

Key to the New Zealand species of Gaultheria.

Flowers racemose.

Calyx dry and unaltered in fruit.

New Zealand.

Leaves opposite or subopposite, ovate, cordate at the base, usually about 3.5cm. long and 2 c.m. broad; flowers paniculate; pedicels bibracteolate at the base, glabrous or minutely pubescent, about 5 mm. long; corolla glabrous;* anther-cells conspicuously biaristate.

1. *oppositifolia*.

Leaves alternate, narrowed, or at the most rounded at the base. Leaves oblong or elliptic-oblong, 3-5 cm. long and 1-2 cm. broad; branchlets setose; flowers paniculate; pedicels 4 mm. long, pubescent, and with some thicker hairs, bibracteolate at the base, corolla glabrous; anther-cells biaristate

2. *paniculata*.

Leaves lanceolate, up to 3 cm. long and 1 cm. broad, or small, thick, c. 1.5 cm. long, elliptic to suborbicular. Branchlets setose and usually pubescent; flowers racemose, often forming a panicle, calyx segments with marginal outgrowths, anther-cells biaristate

3. *rupestris*.

Branchlets pubescent only; leaves small, 1 cm. long and 0.5-0.8 cm. broad, oblong or suborbicular, veins impressed; racemes terminal, pedicels bibracteolate at the base; corolla pubescent within

4. *Colensoi*.

Flowers solitary, or occasionally subracemose towards the ends of the branches.

Dwarf plant up to about 15 cm. high; branchlets setose; leaves elliptic to suborbicular, about 1cm. long and 0.5 cm. broad, crenate, often setose on the margins, veins impressed; "Fruits" large and fleshy, red or white

7. *depressa*.

Erect plant up to about 2 m. high; branchlets setose and sometimes also densely pubescent; leaves variable in shape, thinner, and with sharper serrations than in *G. depressa*; veins slightly prominent; fruiting calyx fleshy, red or white, but much smaller than in *G. depressa***, or sometimes dry

8. *antipoda*.

* Very occasionally pubescent within.

** Unfortunately only dried material is available for measuring, but in *G. antipoda* the fleshy fruits seem to average about 0.4-0.5 cm. in diameter, in *G. depressa* about 0.7-1 cm.

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