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### Flora Australiensis

George Bentham (1800–84) was one of Britain's most influential botanists, whose own collection of plant specimens numbered more than 100,000. Although he donated his herbarium to the Royal Botanic Gardens, Kew in 1854, he continued to make significant contributions to the field, including this exhaustive, seven-volume work detailing the plant life of Australia, which was published from 1863 to 1878. It was part of a series of works commissioned by the British government to document the flora in its colonies. Using the extensive numbers of specimens at Kew – and with the help of Ferdinand Mueller (1825–96), a German botanist in Australia – Bentham was able to compile descriptions of more than 8,000 species of Australian plants, making these volumes the first completed compendium of the flora of any large continental area. Volume 5, published in 1870, gives the details of 14 orders of monopetalae and monochlamydeae dicotyledon flora.

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# Flora Australiensis

## A Description of the Plants of the Australian Territory

VOLUME 5: MYOPORINEAE TO PROTEACEAE

George Bentham Ferdinand von Mueller



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GEORGE BENTHAM, F.R.S., P.L.S.,

ASSISTED BY

FERDINAND MUELLER, M.D., C.M.G., F.R.S. & L.S., Government Botanist, Melbouene, Victobia.

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### CONSPECTUS OF THE ORDERS CONTAINED IN THE FIFTH VOLUME.

#### CLASS. I. DICOTYLEDONS.

#### SUBCLASS II. MONOPETALÆ.

(Continued from Vol. IV.)

(Ovary in the following Orders superior, usually 2-celled or the cells divided so as to be opparently 4 celled, with 1 pair of ovules or rarely 1 ovule or 2 superposed pairs of ovules to each true cell.)

XC. MYOPORINEE. Shrubs. Leaves alternate. Stamens usually 4, in pairs anthers when open reniform and 1-celled by confluence. Ovary not lobed, the style Shrubs. terminal. Micropyle and radicle superior.

 XCI. SELAGINEÆ. Herbs or small undershrubs. Leaves alternate or the lower ones opposite. Stamens usually 4, in pairs; anthers straight, 1-celled. Ovary not lobed, the style terminal. Micropyle and radicle superior.
XCII. VERBENACEÆ. Herbs shrubs or trees. Leaves opposite or rarely alternate. Stamens 2 or 4, in pairs, or rarely equal and isomerous with the corolla-lobes; anthers 2-celled. Ovary not at all or scarcely lobed, the style terminal. Micropyle and radicle infosion inferior

XCIII. LABLATZ. Herbs or shrubs. Leaves opposite. Stamens 2 or 4, in pairs; anthers 2-celled or 1-celled by abortion or by confluence. Ovary deeply lobed, the style

nearly basal between the lobes. Micropyle and radicle inferior. XCIV.  $P_{LANTAGINE \mathcal{X}}$ . Herbs. Leaves radical or tufted, rarely scattered. Flowers regular, the corolla with 4 spreading scarious lobes. Stamens 4 or fewer, equal; anthers 2-celled. Ovary not lobed, with a terminal style. Seeds peltate.

#### SUBCLASS III. MONOCHLAMYDEÆ.

Perianth really or apparently simple, the lobes or segments all calycine or herbaceous, or all petal-like or scarious, or entirely wanting (rarely petals or petal-like staminodia in a few *Euphorbiaceœ* or *Phytolaccaceœ*).

\* Ovary (except in Nyctagines?) formed of several carpels, but 1-celled and usually 1-orulate (except in a very few Phytolaccaces and Amarantaces). Embryo excentrical or curved; albumen mealy, rarely wanting (Curvembryse).

XCV. PHYTOLACCACE ... Herbs undershrubs or rarely shrubs. Leaves alternate, without stipules. Ovules 1 to each carpel.

XCVI. CHENOPODIACE  $\mathcal{E}$ . Herbs or undershrubs, often succulent or scaly tomentose. Leaves alternate or rarely opposite, without stipules. Perianth usually herbaceous. Ovary (of 2 or 3 carpels) 1-celled, with 2 or 3 styles or style-branches and only 1 ovule

XCVII. AMARANTACEE. Herbs or undershrubs, rarely shrubs. Leaves alternate or

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#### CONSPECTUS OF THE ORDERS.

opposite, without stipules. Perianth usually more or less scarious or coloured. Ovary (of 2 or 3 carpels) 1-celled, with 2 or 3 styles or style-branches and only 1 ovule or rarely a cluster of ovules, bearing no relation in number to that of the carpels. XCVIII. PAROXYCHIAGEE. Herbs with the character of *Amarantacea*, except that

ACVIII. FARONYCHACEZ. Herbs with the character of *Amburatulatede*, except that the leaves (usually opposite) are accompanied by small scazious stipules or connected by a raised line or narrow membrane.
XCIX. POLYGONACEZ. Herbs or shrubs. Leaves alternate; stipules usually thin or scarious, forming a sheath or ring round the stem. Ovary (of 2 or 3 carpels) 1-celled, with 2 or 3 styles or style-branches and only 1 ovule.
C. NYCTAGINEZ. Herbs shrubs or trees. Leaves usually opposite, without stipules.

Lower portion of the perianth persistent and enclosing the ovary and fruit, the upper portion deciduous or withering. Ovary 1-celled with 1 ovule and an undivided style.

**\*\*** Ovary apocarpous or more frequently reduced to a single more or less oblique carpel, 1-celled with a single one or a pair of ovules and a single excentrical or oblique style or stigma. Embryo small or amygdaloid; albumen fleshy or none.

CI. MYRISTICEE. Trees. Leaves alternate. Flowers diocious. Perianth-lobes 1-seriate valvate. Stamens united in a central column. Carpel 1. Embryo very small at the base of a ruminate albumen.

CII. MONIMIACEÆ. Trees or shrubs. Leaves opposite. Perianth-lobes in 2 or CIII. MONIMACE. Trees or surus. Leaves opposite. Feriantn-looes in 2 or more rows. Stamens opposite the perianth-lobes or indefinite. Carpels usually several. Embryo very small in a fleshy albumen. CIII. LAURINE. Trees or shrubs with alternate or rarely opposite leaves or (in *Cassylia*) leafless parasitical twiners. Perianth-segments usually in 2 rows. Stamens provide the perionth segments: *carpet a carbon constant and an and a constant setting* and the second of the seco

Cassy that leaness parasitical twhere. Ferranti-segments usually in 2 lows. Scattere opposite the perianth-segments; anther-cells opening in deciduous values. Carpel 1. Fruit succulent. Albumen none. Radicle superior. CIV. PROTEACEE. Trees or shrubs, rarely undershrubs. Leaves alternate or rarely opposite. Perianth-segments 4, valuate. Stamens opposite the perianth-segments and inserted on them. Carpel 1. Albumen none. Radicle inferior.