## **FLORA**OF AUSTRALIA

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★ (/opus/foa) / ROSANAE \( () \) / MYRTALES \( () \) / MYRTACEAE (/OPUS/FOA/PROFILE/MYRTACEAE) \( () \) \( () \) ALUTA (/OPUS/FOA/PROFILE/ALUTA) \( () \) \( () \)
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### Aluta Rye & Trudgen

Q ALA (https://bie.ala.org.au/species/https://id.biodiversity.org.au/node/apni/2902952) Q NSL [legitimate] (https://biodiversity.org.au/nsl/services/apni-format/display/173543)

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Rye, B.L. & Trudgen, M.E. (1 August 2000), Aluta, a new Australian genus of Myrtaceae. *Nuytsia* 13(2): 347-348

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#### Nomenclature



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#### Etymology

From the Latin *aluta* (pouch of soft leather), referring to the large, pouch-like connective gland on the anthers.

#### Description

Small to tall shrubs, up to 3 m high, single-stemmed or multi-branched at base. Leaves opposite, decussate, shortly petiolate; blade concolorous, small. Peduncles solitary in the axils, 1-flowered, usually borne at several close nodes resulting in clusters of flowers towards the ends of flowering stems, rarely more widely spaced. Bracteoles usually overlapping at base, partially membranous, persistent in fruit. Pedicels ± absent. Flowers actinomorphic. Hypanthium ± obconic or cup-shaped, adnate to ovary for ± its full length, minutely rugose-pitted, in one subspecies also densely hairy. Sepals 5, much shorter than the petals, scarious or somewhat herbaceous, persistent in fruit. Petals 5, widely spreading in flower, shed in fruit, ± circular or broadly obovate, 1.7–5.5 mm long, white to medium pink; antipetalous colleters often present, minute. Staminodes absent. Stamens inflexed in bud, 5–22, when five then one opposite each sepal, when c. 10 then with 1–3 opposite each sepal and if more numerous then opposite petals as well as sepals, mostly well separated at base, much shorter than the petals. Filaments free, fairly narrow. Anthers dorsifixed, versatile, opening by 2 pores, with small, fused thecae, that are maroon at first; connective gland free, dorsal-subterminal,

projecting towards outside of flower, obovoid, large, pale-coloured. Ovary inferior, 1-locular; summit markedly pitted, green to yellow at first, becoming deep pink or red; placenta near-basal to ± lateral; ovules 4–6, in 2 rows. Style terminal (base not inset); stigma small, capitate. Fertile fruits indehiscent, inferior (but with a convex summit), hard, usually very broadly obovoid, 1-seeded. Seeds usually transversely reniform, 1.3–2.2 mm across, c. as thick as high; testa membranous.

#### **Diagnostic Features**

Unique in anther morphology, having small, fused thecae, dehiscence by 2 pores and a large, free, obovoid connective gland projecting towards outside of flower. Other important characters: hypanthium minutely rugose-pitted, rarely also densely hairy, ± fully adnate to ovary; ovary 1-locular, with summit markedly pitted; fruits hard, indehiscent, with a solitary, transversely reniform seed.

#### **Chromosome Numbers**

Presumed to be constant on n = 11 but only one species has been sampled (Rye 1979, as *Thryptomene maisonneuvei*).

#### **Biostatus**

Native.

#### **Distribution**

A genus of 8 named taxa, 5 species and 3 subspecies, occurring in central and southern Western Lustralia, with 1 species extending into southwestern Northern Territory and western South Australia. Aluta extends from near Hamelin Pool in Western Australia east to near Lake Acraman in the Ooldea Lake Acraman in the Ooldea



Flowers have exposed nectar and attract varied insect pollinators. The diaspore is an indehiscent fruit; in most species it has widely spreading, scarious sepals that would enhance dispersal by wind. Fertile fruits are often greatly outnumbered by sterile ones.

#### Nomenclature and Typification

Aluta Rye & Trudgen, Nuytsia 13(2): 345–333 (2000). Type: Aluta aspera (E.Pritz.) Rye & Trudgen.

#### **Taxonomic Notes**

*Aluta* was previously included within *Thryptomene* Endl. but molecular data indicate that it is closer to *Micromyrtus* Benth. (Rye *et al.* 2020). It is readily distinguished from both genera by its ± fully adnate hypanthium, markedly reticulate-pitted ovary summit and unique anther morphology. *Aluta* is now placed alone in subtribe Alutinae.

When *Aluta* was first described (Rye & Trudgen 2000), seed morphology was scarcely known as almost all the fruits examined were sterile. Mature seeds are now known to be reniform and usually horizontal (i.e. transversely reniform) but may sometimes be semi-erect.

#### Illustrations

F.L.E. Diels & E.G. Pritzel, *Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie* 35: 414, fig. 49F–M (1904), as *Thryptomene aspera*, https://www.biodiversitylibrary.org/page/126885; (https://www.biodiversitylibrary.org/page/126885-) J.W. Green, *Nuytsia* 3(2): 186, figs 1–11 (1980), as *Thryptomene maisonneuvei*, https://www.biodiversitylibrary.org/page/53144077; (https://www.biodiversitylibrary.org/page/53144077) J.P. Jessop & H.R. Toelken (eds), *Flora of South Australia* 4th edn, 2: 951, fig. 485D (1986), as *Thryptomene maisonneuvei*, B.L. Rye & M.E. Trudgen, *Nuytsia* 13(2): 356, fig. 3 (2000), https://www.biodiversitylibrary.org/page/53393522

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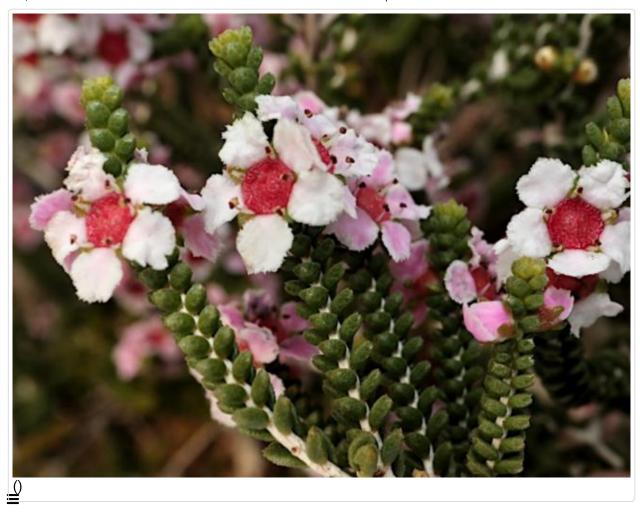
#### **Taxonomy**

- Phylum: Charophyta
- Class: Equisetopsida
- Subclass: Magnoliidae
- **■** Superorder: Rosanae **■**()
  - Order: Myrtales **\equiv**()
- ♣ Family: Myrtaceae (/opus/foa/profile/Myrtaceae) \( \opin \)
  - Genus: Aluta (/opus/foa/profile/Aluta) \\ \equiv ()

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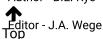
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