Oxymyrrhine Schauer

ALA (https://bie.ala.org.au/species/https://id.biodiversity.org.au/node/apni/2895626) NSL [legitimate] (https://biodiversity.org.au/nsl/services/apni-format/display/109742)

Options

— Schauer, J.C. (1843), Genera Myrtacearum nova vel denuo recognita. *Linnaea: ein Journal für die Botanik in ihrem ganzen Umfange, oder Beiträge zur Pflanzenkunde* 17: 240

Nomenclature

Schauer, J.C. (1843), Genera Myrtacearum nova vel denuo recognita. *Linnaea: ein Journal für die Botanik in ihrem ganzen Umfange, oder Beiträge zur Pflanzenkunde* 17: 240 ()

Etymology

From the Greek *oxy-* (sharp-) and *myrrhinos* (of myrtle), presumably referring to the sepals, which were originally described as acuminate.

Description

Small, open or spindly shrubs, glabrous, single-stemmed or multi-branched at base. Peduncles moderately long, nearly always 1-flowered. Bracteoles often subopposite or alternate, persistent at anthesis and often in fruit. Hypanthium obconic in early bud, ± hemispheric in flower, 1.5–2.5 mm long, broader than long, sometimes somewhat 5-ribbed, the adnate part dotted with oil glands. Sepals 5, shorter than the petals, narrowed distally into a ± acute apex or horned, persistent and stiffly projecting from the summit of the fruit. Petals 5, widely spreading in flower, very broadly obovate to circular, shed before fruits mature; antipetalous colleters minute. Staminodes rare or absent. Stamens inflexed in bud, 22–35, in a circle, ± equidistant, free, much shorter than the petals, not geniculate. Filaments narrow, thick. Anthers small, wider than long, with the thecae and connective gland fused into a 3-lobed or transversely sub-reniform structure, opening by two slits that diverge basally. Ovary inferior, 3-locular; placentas distinctly stalked; ovules 8–15 per loculus, radially arranged. Style base inset into a funnelled central depression in the ovary summit; stigma capitate.

Top

Fruits fully inferior, with a concave (and funnelled) summit, 3-valvate, multi-seeded, capped by erect sepals. Seeds strongly facetted, wedge-shaped, 0.6–0.8 mm long; testa crustaceous, colliculate or smooth, brown.

Diagnostic Features

Apparently unique in having a funnelled depression in the ovary (and fruit) summit. Other important characters: stamens 22–35, in a circle, not geniculate, with a short, thick filament; anthers wider than long; connective gland fused; fruits fully inferior, 3-valvate; seeds small, wedge-shaped.

Chromosome Numbers

Unknown.

Biostatus

Native.

Distribution

A genus of 4 species endemic to southwestern Western Australia, extending from the Chittering area in the Darling Range southeast to Cape Arid National Park.

Ecology

Oxymyrrhine has small, insect-pollinated flowers with readily accessible nectar. The short stamens form a complete circle surrounding the stigma but well separated from it. Some stamens may dehisce earlier than others in the same flower. The funnelled central depression in the ovary summit is retained in the fruit, which has stiff sepals projecting from the top and releases very small, crustaceous seeds. The adaptive significance of these features needs further study.

Top

Nomenclature and Typification

Oxymyrrhine Schauer, *Linnaea: ein Journal für die Botanik in ihrem ganzen Umfange, oder Beiträge zur Pflanzenkunde* 17: 240 (1843); *Baeckea* sect. *Oxymyrrhine* (Schauer) Benth. & Hook.f., *Genera Plantarum* 1: 701 (1865). Type: *Oxymyrrhine gracilis* Schauer.

Taxonomic Notes

Oxymyrrhine is a very distinctive genus that belongs to the large subtribe Hysterobaeckeinae, but its closest affinities within the subtribe are not yet clear (Rye *et al.* 2020). Its four species are all geographically separated. Most species have sepals with a horn or a narrow projection that resembles a horn.

Illustrations

B.L. Rye, *Nuytsia* 19(1): 158, fig. 1 (2009), https://www.biodiversitylibrary.org/page/62005838. (https://www.biodiversitylibrary.org/page/62005838..)

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Top

Source

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Taxonomy

- Kingdom: Plantae ()
- Phylum: Charophyta
- Class: Equisetopsida
- Subclass: Magnoliidae
- Superorder: Rosanae ()
- Order: Myrtales ()
- Family: Myrtaceae (/opus/foa/profile/Myrtaceae) ()
- Genus: Oxymyrrhine (/opus/foa/profile/Oxymyrrhine) ()

()

Oxymyrrhine coronata by Thiele, K.R., 10/12/2011 (© Thiele, K.R.)

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Top

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Top