FLORAOF AUSTRALIA

```
★ (/opus/foa) / ROSANAE \( () \) / MYRTALES \( () \) / MYRTACEAE (/OPUS/FOA/PROFILE/MYRTACEAE) \( () \) / CHEYNIANA (/OPUS/FOA/PROFILE/CHEYNIANA) \( () \) ()
```

Cheyniana Rye

Q ALA (https://bie.ala.org.au/species/https://id.biodiversity.org.au/node/apni/2900527) Q NSL [legitimate] (https://biodiversity.org.au/nsl/services/apni-format/display/222301)

⇔ Options ≽

— Rye, B.L. (2 June 2009), A reduced circumscription of Balaustion and description of the new genus Cheyniana (Myrtaceae: Chamelaucieae). *Nuytsia* 19(1): 141-143

PROFILE ()

DISTRIBUTION ()

GALLERY ()

LITERATURE & LINKS ()

KEY ()



Nomenclature



ሑ



Etymology

Named in honour of George McCartney Cheyne (1790–1869) and his wife Grizzel Melville Cheyne (1797–1871), pioneer settlers at Cape Riche, who assisted early collectors such as James Drummond

Description

Shrubs usually low and spreading, glabrous. Leaves opposite, decussate, small, shortly petiolate. Peduncles moderately long, 1-flowered. Bracteoles opposite, persistent at anthesis. Pedicels absent or shorter than the peduncles. Flowers actinomorphic. Hypanthium \pm urceolate, partially adnate to the ovary, with the free part flared. Sepals 5, much shorter than the petals, persistent in fruit. Petals 5, widely spreading in flower, broadly obovate, 4.5-7 mm long, brightly coloured, shed in fruit; antipetalous colleters minute or absent. Staminodes absent. Stamens inflexed in bud, 30-60, in 1 or 2 series, not geniculate, much shorter than to about as long as the petals, the outer ones or those opposite petals the longest. Filaments free, filiform, \pm terete, with prominent glands. Anthers appearing basifixed, small, \pm globular to broadly reniform, dehiscent by two basally divergent to \pm transverse short slits or pores; connective gland inconspicuous or possibly absent. Ovary inferior but summit with a central dome, 2- or 3-locular; placentas sessile, shortly cylindrical to conic; ovules 10-

23 per loculus, arranged radially. Style base deeply inset. Fruits largely inferior, indehiscent, very thickwalled, hard, \pm globular, few-seeded. Seeds (where known) somewhat facetted, 1.4–1.7 mm long, with a small hilum; testa crustaceous.

Diagnostic Features

Fruits indehiscent, 2- or 3-locular, very thick-walled, hard, ± globular. Stamens 30–60, with a narrow, glandular-tuberculate filament. Petals 4.5–7 mm long, brightly coloured.

Chromosome Numbers

Unknown.

Biostatus

Native.

Distribution

A genus of 2 species from the southwest of Western Australia.

Ecology

The large, brightly coloured flowers are either bird-pollinated or likely to attract large insects.

Dispersal of the seeds might be primarily by ingestion as the very thick-walled, hard, globular, indehiscent fruits would not be readily dispersed by other means, although the bristly fruits of one of the two species might occasionally be dispersed in fur or feathers.

Nomenclature and Typification

Cheyniana Rye, Nuytsia 19(1): 141-143 (2009). Type: Cheyniana microphylla (C.A.Gardner) Rye.

Taxonomic Notes

The only other genus of tribe Chamelaucieae known to have hard, thick-walled, indehiscent, multi-locular fruits is *Enekbatus*, a case of convergent evolution as that genus belongs to a different subtribe (Rye *et al.* 2020). In *Cheyniana*, the connective gland does not extend beyond the thecae and is not evident from the external structure of the reduced anther.

Bibliography

Blackall, W.E. & Grieve, B.J. (1980). *How to know Western Australian wildflowers Part 3A*. Restructured and revised second edition by B.J. Grieve. (University of Western Australia Press: Nedlands, Western Australia). https://www.biodiversitylibrary.org/page/60448011 (https://www.biodiversitylibrary.org/page/60448011)

Dell. J. & McGauran, D.J. (1981). Biological survey of the Western Australian wheatbelt. Part 14. Birds of East Yuna and Bindoo Hill Nature Reserves and adjacent areas, in *Records of the Western Australian Museum* Suppl. 13, pp. 67–93. (Western Australian Museum: Perth).

Gardner, C.A. (1928). Contributiones florae Australiae occidentalis VI. *Journal of the Royal Society of Western Australia* 13: 61–68, plates 24–27. https://www.biodiversitylibrary.org/page/43760940 (https://www.biodiversitylibrary.org/page/43760940)

Keighery, G.J. (1982). Bird-pollinated Plants in Western Australia, in Armstrong, J.A., Powell, J.M. & Richards, A.J. (eds), *Pollination and Evolution*, pp. 77–89. (Royal Botanic Gardens: Sydney).

Keighery, G.J. (2004). Balaustion (native pomegranates). Australian Plants 22: 273.

Patel, V.C., Skvarla, J.J. & Raven, P.H. (1984). Pollen characters in relation to the delimitation of Myrtales. *Annals of the Missouri Botanical Garden* 71: 858–969.

https://www.biodiversitylibrary.org/page/16167167 (https://www.biodiversitylibrary.org/page/16167167)

Rye, B.L. (2009). A reduced circumscription of *Balaustion* and description of the new genus *Cheyniana* (Myrtaceae: Chamelaucieae). *Nuytsia* 19(1): 129–148.

https://www.biodiversitylibrary.org/page/62005809

(https://www.biodiversitylibrary.org/page/62005809)

Rye, B.L. (2009). An interim key to the Western Australian tribes and genera of Myrtaceae. *Nuytsia* 19(2): 313–323. https://www.biodiversitylibrary.org/page/62002065 (https://www.biodiversitylibrary.org/page/62002065)

Rye, B.L., Wilson, P.G., Heslewood, M.M., Perkins, A.J. & Thiele, K.R. (2020). A new subtribal classification of Myrtaceae tribe Chamelaucieae. *Australian Systematic Botany* 33: 191–206. https://doi.org/10.1071/SB19009 (https://doi.org/10.1071/SB19009)

Wilson, P.G., Heslewood, M., Lam, N. & Quinn, C. (2004). Progress towards a phylogeny of the *Chamelaucium* alliance (Myrtaceae). *Australian Biologist* 17: 28–33.

&ource

Top Published 4 January 2023.

Taxonomy

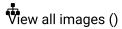
- Phylum: Charophyta
- · Class: Equisetopsida
- · Subclass: Magnoliidae
- Superorder: Rosanae \\ \exi()
- Order: Myrtales **\equiv**()
- Family: Myrtaceae (/opus/foa/profile/Myrtaceae)

 ≡ ()
- Genus: Cheyniana (/opus/foa/profile/Cheyniana)

 ≡ ()



Australian Plant Image Index Cheyniana microphylla by Fagg, M., 1983-09 (© Fagg, M.)



Copyright Commonwealth of Australia, 2023 (/opus/foa/about##copyright)

Last updated: Charlotte Ely; Mar 29, 2022 10:18 Status: Partial

♠thor - B.L. Rye

Tentor - J.A. Wege

Contributor - C.J. Ely provided technical support. P.G. Kodela provided editorial assistance.

Cite this profile as: B.L. Rye. Cheyniana, in J.A. Wege (ed.), Flora of Australia. Australian Biological Resources Study, Department of Climate Change, the Environment and Water: Canberra.

https://profiles.ala.org.au/opus/foa/profile/Cheyniana [Date Accessed: 27 February 2023]

(http://www.environment.gov.au) (http://www.environment.gov.au/science/abrs) (https://www.ala.org.au)



CHAH

Council of Heads of Australasian Herbaria



Flora of Australia

■ abrs@awe.gov.au (mailto:abrs@awe.gov.au) ISSN 2207-7820

All material CC-BY unless otherwise stated.

Other collections (/)









Тор