

COCCOCARPIACEAE

L. Arvidsson

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Thallus to 10 cm wide, foliose, heteromerous, leaden grey, whitish, bluish green or almost black. Lobes flat or convex, rarely canaliculate, imbricate, adjoined or disjunct, broadly flabellate or cuneate or linear, weakly or richly branched; pruinose or epruinose, with or without isidia. Soredia absent. Rhizines white to black. Hyphae of upper cortex, medulla and lower cortex periclinal, parallel to long axis of lobes. Cyanobiont *Scytonema*. Ascomata apothecial, biatorine, adnate, pale yellow to black. Ascospores simple, ellipsoidal to fusiform, 8 per ascus, hyaline. Conidiomata pycnidial, laminal or marginal, immersed. Conidia rod-shaped, $2-4 \times 1 \mu\text{m}$.

Chemistry: thallus K-, C-, KC-, P- and UV-. No substances detected by TLC in Australian material.

A family of 1 genus and 21 species, widely distributed in tropical and temperate regions, having two main centres of speciation, one in the northern part of South America and one in SE Asia. In Australia, 8 non-endemic species distributed mainly in the humid, tropical and subtropical forests in the eastern and north-eastern parts of the continent.

The Coccocarpiaceae is characterised by the ontogeny of the ascomata, with many upright ascogones in a paraplectenchymatous primordium of isodiametric cells.

L. Arvidsson, A monograph of the genus *Coccocarpia*, *Opera Bot.* 67: 1-96 (1983); A. Henssen, Eine Revision der Flechtenfamilien Lichinaceae und Ephebeaceae, *Symb. Bot. Upsal.* 18(1): 86 (1963).

COCCOCARPIA

Coccocarpia Pers. in C. Gaudichaud-Beaupré, *Voy. Uranie* 206 (1827); from the Greek *coccus* (lice) and *carpon* (fruit), in reference to the apothecia resembling lice of the genus *Coccus* L.

Type: *C. erythroxyli* (Sprengel) Swinscow & Krog

Circinaria Fée, *p.p.*, *Essai Crypt. Ecorc.* LXIII (1824), *nom. illeg.* T: *C. epiphylla* Fée

Vischia C.W. Dodge, *Nova Hedwigia* 19: 466 (1970). T: *V. coccocarpoides* C.W. Dodge

Characters as for family.

1 Lobes pruinose

2 Lobes with flattened, upright isidia

2: Lobes without isidia

1: Lobes glossy or matt, not pruinose

7. *C. pruinosa*

8. *C. smaragdina*

- 3 Lobes isidiate
 - 4 Isidia distinctly flattened, microphylline
 - 5 Lobes canaliculate; margins upcurled; isidia marginal, occasionally also laminal **4. C. glaucina**
 - 5: Lobes flat; margins deflexed; isidia laminal, occasionally marginal **6. C. pellita**
 - 4: Isidia terete, often coralloid-branched
 - 6 Lobes flabelliform, not or only weakly branched, contiguous or imbricate, 1–7 mm wide; apices round, usually loosely attached
 - 7 Lobes flat or slightly convex; margins deflexed; isidia mainly laminal **5. C. palmicola**
 - 7: Lobes canaliculate; margins upcurled; isidia marginal, occasionally also laminal **4. C. glaucina**
 - 6: Lobes linear or narrowly cuneate, richly branched, adjoined or discrete, less than 1 mm wide; apices truncate, adnate **2. C. dissecta**
 - 3: Lobes not isidiate; round accessory lobules sometimes present
 - 8 Lobes linear or narrowly cuneate, less than 1 mm wide, richly branched, adjoined or discrete; apices truncate, adnate **1. C. adnata**
 - 8: Lobes flabelliform, more than 1 mm wide, not or weakly branched, contiguous or imbricate; apices round, usually loosely attached **3. C. erythroxyli**