

## DIRINARIA

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*Dirinaria* (Tuck.) Clem., *Gen. Fungi* 84 (1909); from the crustose genus *Dirina* Fr. (Roccellaceae) and the Latin suffix *-arius* (indicating connection), in reference to the superficial resemblance of these genera.

Type: *D. picta* (Sw.) Schaer. ex Clem.

Thallus foliose, continuous, lobate, adnate to tightly adnate, 2–12 (–20) cm wide. Lobes irregular to radiating, discrete or confluent, 0.2–3.0 (–5.0) mm wide, eciliate; apices rounded to truncate or flabellate. Upper surface white, grey-white to bluish grey or ochre-yellow, plane to convex or concave towards the periphery, dull or glossy, pruinose or not; soredia, isidia and dactyls present or absent; pseudocyphellae absent; upper cortex paraplechtenchymatous, formed by vertically oriented hyphae. Medulla white or pale yellow to scarlet. Lower surface pale brown to brown-black or black, erhizinate, attached by hapters; lower cortex prosoplectenchymatous, formed by longitudinally arranged hyphae. Ascomata apothecial, laminal, orbicular, sessile to subpedicellate; disc black but often whitish to pale grey- or purple-pruinose; thalline exciple prominent or reflexed, well defined and persistent. Epihymenium pale brown to brown or red, K– or decolourising in K. Hymenium colourless to pale yellow, I+ blue. Hypothecium pale brown to brown or brown-black. Paraphyses septate, simple or with short branches near the apices; apices generally capitate, brown, K–. Asci of *Lecanora*-type, clavate, unitunicate, 8-spored; apex wall layers thickened, the apex amyloid, with a distinct axial mass. Ascospores brown, 1-septate, thick-walled, mischoblastiomorphic (*Dirinaria*-type), ellipsoidal, 10–24 × (4–) 5–9 (–10) μm. Conidiomata pycnidial, laminal, immersed in elevated warts; conidiophores of type VI (*sensu* Vobis, 1980), pleurogenous. Conidia bacilliform to fusiform.

*Dirinaria* is mainly a pantropical and subtropical genus with several species extending to temperate or oceanic regions; currently considered to contain c. 36 species world-wide, 13 are known from Australia. These lichens grow on bark, wood, mosses or rocks.

D.D.Awasthi, A monograph of the lichen genus *Dirinaria*, *Biblioth. Lichenol.* 2: 1–108 (1975); T.D.V.Swincow & H.Krog, The genus *Dirinaria* in East Africa, *Norweg. J. Bot.* 25: 157–168 (1978); G.Vobis, Bau und Entwicklung der Flechten-Pycnidien und ihrer Conidien, *Biblioth. Lichenol.* 14: 1–141 (1980); D.Allen, H.T.Lumbsch, S.Madden & H.Sipman, New Australian and Australian State lichen records and lichenicolous lichen reports, *J. Hattori Bot. Lab.* 90: 269–291 (2001); K.Kalb, New or otherwise interesting lichens I, *Biblioth. Lichenol.* 78: 141–167 (2001); K.Kalb, *Dirinaria*, *Lichen Fl. Greater Sonoran Desert Region* 2: 98–103 (2004); J.A.Elix, Four new lichens (lichenized Ascomycota) from tropical and subtropical Australia, *Australas. Lichenol.* 62: 35–40 (2008).

1	Thallus lacking vegetative propagules .....	2
1:	Thallus with soredia or dactyls .....	9
2:	Lower surface black (1) .....	3
2:	Lower surface white to pale brown .....	7
3	Thallus containing sekikaic acid (2) .....	9. <b>D. minuta</b>
3:	Thallus containing divaricatic acid .....	4
4	Apothecial disc purple-pruinose (3:) .....	11. <b>D. purpurascens</b>
4:	Apothecial disc epruinose or whitish-pruinose .....	5
5	Hypothecium pale brown to yellow-brown (4:) .....	3. <b>D. batavica</b>
5:	Hypothecium brown to dark brown .....	6
6	Hymenium less than 80 μm thick; ascospores 13–18 × 5–8 μm (5:) .....	13. <b>D. subconfluens</b>
6:	Hymenium more than 80 μm thick; ascospores 16–24 × 7–10 μm .....	5. <b>D. confluens</b>
7	Thallus loosely adnate; lobes 1–5 mm wide (2:) .....	4. <b>D. complicata</b>
7:	Thallus tightly adnate; lobes 0.2–1.5 mm wide .....	8

8	Thallus containing divaricatic acid (7:)	3. <b>D. batavica</b>
8:	Thallus containing sekikaic acid	9. <b>D. minuta</b>
9	Thallus containing sekikaic acid (1:)	10
9:	Thallus containing divaricatic acid	11
10	Dactyls present; orbicular soralia absent (9)	6. <b>D. consimilis</b>
10:	Dactyls absent; orbicular soralia present	12. <b>D. sekikaica</b>
11	Dactyls present; orbicular soralia absent (9:)	1. <b>D. aegialita</b>
11:	Dactyls absent; orbicular soralia present	12
12	Thallus ochre-yellow; C+ orange; xanthonenes present (11:)	7. <b>D. flava</b>
12:	Thallus whitish to pale grey; C-; xanthonenes absent	13
13	Apothecial disc purple-pruinose (12:)	8. <b>D. melanoclina</b>
13:	Apothecial disc epruinose or whitish-pruinose	14
14	Lobes contiguous; apices flabellate; thallus longitudinally plicate and rugose (13:)	2. <b>D. applanata</b>
14:	Lobes slightly disjunct or adjacent; apices not flabellate; thallus not longitudinally plicate or rugose	10. <b>D. picta</b>