

FLAVOPARMELIA

John A.Elix

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Flavoparmelia Hale, *Mycotaxon* 25: 604 (1986); from the Latin *flavus* (yellow), referring to the colour of the upper surface of this segregate of *Parmelia*.

Type: *F. caperata* (L.) Hale

Thallus foliose, loosely adnate to adnate, or rarely tightly adnate, dorsiventral, orbicular, to 3–20 cm wide. Lobes irregular, 1–8 mm wide; margins without cilia; apices rotund or subrotund, never incised. Upper surface yellow-green to green, rarely yellow (usnic acid and \pm traces of atranorin), smooth, rugulose or rugose, without pseudocyphellae, with or without maculae, soralia, dactyls, pustules and isidia; upper cortex of palisade plectenchyma with a thin, pored epicortex. Cell walls containing isolichenan. Medulla white, or partly yellow or orange. Lower surface black, with a narrow, brown, naked marginal zone; rhizines sparse to moderately abundant, simple, tufted or rarely dichotomously branched, usually concolorous, often pale at lobe apices. Ascomata apothecial, laminal, sessile to subpedicellate, 1–10 mm wide; disc imperforate, shiny or matt, red-brown to cinnamon-brown or dark brown. Ascospores ellipsoidal, 8 per ascus, 12–21 \times 5–11 μ m. Conidiomata pycnidial, laminal, subglobose to globose, immersed; ostiole black. Conidia bifusiform, rarely fusiform or bacilliform, 4–12 \times 1 μ m.

Flavoparmelia is a segregate of *Parmelia s. lat.* containing c. 22 species, of which 13 species occur in Australia. It is a common and widespread genus in Australia, occurring on rock, bark, dead wood and old fence posts. Several species are particularly common on the trunks and branches of *Callitris*, *Casuarina* and *Allocasuarina* in drier hinterland areas.

M.E.Hale, A monograph of the lichen genus *Pseudoparmelia* Lynge (Parmeliaceae), *Smithsonian Contr. Bot.* 31: 1–62 (1976); J.A.Elix & G.N.Stevens, New species of *Parmelia* (lichens) from Australia, *Austral. J. Bot.* 27: 873–883 (1979); R.B.Filson, A contribution to the genus *Parmelia* (Lichens) in Southern Australia, *Austral. J. Bot.* 30: 511–582 (1982); M.E.Hale, *Flavoparmelia*, a new genus in the lichen family Parmeliaceae (Ascomycotina), *Mycotaxon* 25: 603–605 (1986); J.A.Elix & J.Johnston, New species and new reports of *Flavoparmelia* (lichenized Ascomycotina) from the Southern Hemisphere, *Mycotaxon* 33: 391–400 (1988); J.A.Elix, New species in the lichen family Parmeliaceae (Ascomycotina) from Australia, *Mycotaxon* 47: 101–129 (1993).

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|----|---|------------------------------------|
| 1 | Thallus sorediate or dactylate | 2 |
| 1: | Thallus lacking soredia and dactyls..... | 7 |
| 2 | Thallus dactylate; dactyls rarely bursting apically and becoming sorediate; protocetraric acid present (1)..... | 4. F. haysomii |
| 2: | Thallus sorediate or pustulate-sorediate; dactyls lacking; protocetraric acid present or absent | 3 |
| 3 | Lower medulla yellow-orange; euplectin present (2:) | 4 |
| 3: | Medulla white throughout; euplectin absent | 5 |
| 4 | Thallus thin, fragile; succinprotocetraric acid present (3)..... | 13. F. succinprotocetrarica |
| 4: | Thallus thick, leathery; protocetraric acid present | 2. F. euplecta |
| 5 | Medulla K+ yellow then red; salazinic acid present (3:) | 11. F. soredians |
| 5: | Medulla K- or K+ dingy yellow; salazinic acid absent | 6 |
| 6 | Thallus pustulate-sorediate; protocetraric acid present (5:) | 6. F. kantvilasii |
| 6: | Thallus with capitate soralia which coalesce and become pulvinate; physodalic acid present | 12. F. springtonensis |

7	Medulla yellow throughout; medulla K-; secalononic acid A present (<i>I</i> :)	10. F. secalonica
7:	Medulla white at least in part; medulla K- or K+; secalononic acid A present or absent	8
8	Lower medulla orange; orange pigment K+ red-purple; euplectin present (<i>7</i> :)	7. F. proeuplecta
8:	Medulla white or with scattered patches of yellow; yellow pigment (when present) K-; secalononic acid A present or absent	9
9	Medulla P-; scabrosin 4,4'-diacetate (major) or barbatic (major) acid present (<i>8</i> :)	10
9:	Medulla P+ orange; protocetraric and/or physodalic acids present; ±barbatic acid (trace) present	11
10	Medulla KC+ brownish orange; barbatic acid present (<i>9</i>)	5. F. helmsii
10:	Medulla KC-; scabrosin 4,4'-diacetate present	9. F. scabrosina
11	Conidia fusiform; physodalic acid present; protocetraric acid (traces only) present (<i>9</i> :)	3. F. ferax
11:	Conidia weakly bifusiform or bacilliform; physodalic acid absent; protocetraric acid present	12
12	Ascospores 11–14 × 6–8 μm; conidia weakly bifusiform; protocetraric and diffractaic acids present (<i>11</i> :)	1. F. diffractaica
12:	Ascospores 12–16 × 8–11 μm; conidia bacilliform; protocetraric acid present	8. F. rutidota