

PARMELINOPSIS

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Parmelinopsis Elix & Hale, *Mycotaxon* 29: 242 (1987); from the Greek *-opsis* (a suffix indicating appearance, resemblance), in reference to the genus *Parmelina*.

Type: *P. horrescens* (Taylor) Elix & Hale

Thallus foliose, loosely to tightly adnate. Lobes flat, linear to sublinear-elongate or sublinear, dichotomously to irregularly branched, 0.5–5 mm wide; margins ciliate, sometimes crenate; apices truncate; cilia sparse to dense, \pm evenly distributed, simple or rarely branched, slender, not bulbate, black. Upper surface grey, sometimes darkening (atranorin and chloroatranorin), without pseudocyphellae, emaculate, rarely sparingly maculate, with or without soredia, pustules and isidia; upper cortex palisade plectenchymatous, with a perforate polysaccharide layer (pored epicortex). Cell walls containing isolichenan. Medulla white, or, rarely, partly pale yellow. Lower surface ivory to pale brown or black; rhizines sparse to dense, simple or sparsely furcate to squarrosely or dichotomously branched. Ascomata apothecial, laminal, sessile to subpedicellate; disc imperforate, sometimes radially split with age, pale brown to dark brown. Ascospores ellipsoidal, with thick walls, 8 per ascus, $9\text{--}20 \times 6\text{--}14 \mu\text{m}$. Conidiomata pycnidial, laminal, immersed. Conidia cylindrical or bacilliform to bifusiform, $3\text{--}8 \times 0.5\text{--}1 \mu\text{m}$.

Parmelinopsis is a relatively recent segregate of the older, heterogeneous genus *Parmelina* (Elix & Hale 1987). It contains 20 species world-wide, 17 of which are distributed in the Americas, Australia and southern Africa, with a further three pantemperate species: *P. horrescens*, *P. minarum* and *P. spumosa*. Most of the species occur in moist temperate, subtropical and montane tropical woodlands, on bark or less commonly rock. There are nine species in Australia.

M.E.Hale, *Bulbothrix*, *Parmelina*, *Relicina* and *Xanthoparmelia*, four new genera in the Parmeliaceae (lichenes), *Phytologia* 28: 479–490 (1974); M.E.Hale, A monograph of the lichen genus *Parmelina* Hale (Parmeliaceae), *Smithsonian Contr. Bot.* 33: 1–60 (1976); J.A.Elix & J.Johnston, New species of *Parmelina* (Lichenised Ascomycotina) from Australia and New Zealand, *Brunonia* 9: 155–161 (1987); J.A.Elix & M.E.Hale, *Canomaculina*, *Myelochroa*, *Parmelinella*, *Parmelinopsis* and *Parmotremopsis*, five new genera in the Parmeliaceae (lichenised Ascomycotina), *Mycotaxon* 29: 233–244 (1987); J.A.Elix, New species in the lichen family Parmeliaceae (Ascomycotina) from Australia, *Mycotaxon* 47: 101–129 (1993).

- 1 Upper surface lacking soredia, isidia and pustules.....**P. neodamaziana**
- 1: Upper surface sorediate, isidiolate or pustulate2
- 2 Thallus with cylindrical or slightly flattened isidia, lacking soredia and pustules (1:)3
- 2: Thallus with soredia, pustules or pustulate isidia.....6
- 3 Isidia apically ciliate (2)**P. horrescens**
- 3: Isidia not apically ciliate4
- 4 Medulla C-, KC-; isidia simple, to 0.3 mm tall; malonprotocetraric acid present (3:) **P. jamesii**
- 4: Medulla C+ rose, KC+ red; isidia often branched, to 0.5 mm tall; gyrophoric acid present.....5
- 5 Lobes 1–3 mm wide; medulla P-; isidia erect; protocetraric acid absent (4:) **P. minarum**
- 5: Lobes 0.8–1.2 mm wide; medulla P+ red; isidia becoming procumbent and flattened; protocetraric acid present**P. protocetrarica**
- 6 Thallus with \pm capitate soralia, lacking pustules; medulla K+ yellow then red; salazinic acid present (2:)..... **P. radiculata**
- 6: Thallus lacking capitate soralia, pustulate; medulla K-; salazinic acid absent7

- 7 Medulla C-; 3-methoxy-2,4-di-*O*-methylgyrophoric acid (major), gyrophoric acid (minor) (6:) **P. subfaticens**
- 7: Medulla C+ rose or pink; gyrophoric acid present, 3-methoxy-2,4-di-*O*-methylgyrophoric acid absent8
- 8 Pustules soresiate; no isidia present; medulla white (7:)**P. afrorevoluta**
- 8: Pustules not or only sparingly soresiate, arising from isidia; medulla partly pale yellow..... **P. spumosa**