

HAEMATOMMATACEAE

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[From *Flora of Australia* volume 56A (2004)]

Haematommataceae Hafellner, *Beih. Nova Hedwigia* 79: 281 (1984).

Type: *Haematomma* A.Massal.

Thallus crustose, corticate or not, with or without soredia. Photobiont a unicellular green alga. Ascomata apothecia, lecanorine, sessile or immersed in the thallus; disc orange, red or red-brown, round or somewhat irregular; proper excipulum, if evident, thin, red or brown; thalline excipulum concolorous with the thallus or, rarely, infused with red pigments from the disc, well developed or sorediate and excluded. Hymenial layers with red pigments mostly concentrated above the ascus tips (i.e. in the epihymenium). Paraphyses thin, richly branched and anastomosing, not or only slightly thickened at the apices. Hypothecium hyaline. Asci clavate, of the *Lecanora*-type, 8-spored; tholus strongly amyloid, with a distinct ocular chamber and weakly amyloid *masse axiale* encased in a uniformly amyloid apical dome. Ascospores 8 per ascus, fusiform to broadly acicular, transversely 3–25-septate, hyaline, thin-walled, usually helically coiled in the ascus, non-halonate. Pycnidia immersed; ostiolar region red or hyaline; conidiophores branched; conidiogenous cells terminal and intercalary, ampulliform (“type V” of G.Vobis, *Biblioth. Lichenol.* 14: 1–141, 1980). Conidia curved-filiform or bacilliform, simple, colourless.

This monotypic family is common in temperate and tropical regions of the world.

J.Hafellner, Studien in Richtung einer natürlicheren Gliederung der Sammelfamilien Lecanoraceae und Lecideaceae, *Beih. Nova Hedwigia* 79: 241–371 (1984).

HAEMATOMMA

Haematomma A.Massal., *Ric. Auton. Lich. Crost.* 32 (1852); from the Greek *haema* or *haemat* (blood) and *omma* (an eye), in reference to red apothecial discs of the genus.

Type: *H. vulgare* A.Massal.

Description as for the family.

Haematomma comprises approximately 35 species, with Australia and South America being the main centres of diversity. Eleven species are known from bark and rock in Australia.

R.W.Rogers, The corticolous species of *Haematomma* in Australia, *Lichenologist* 14: 115–129 (1982); R.W.Rogers, Additional notes on *Haematomma* in Australia, *Lichenologist* 17: 307–309 (1985); R.W.Rogers & J.K.Bartlett, The lichen genus *Haematomma* in New Zealand, *Lichenologist* 18: 247–255 (1986); R.W.Rogers & J.Hafellner, *Haematomma* and *Ophioparma*: two superficially similar genera of lichenized fungi, *Lichenologist* 20: 167–174 (1988); B.Staiger & K.Kalb, *Haematomma*-Studien 1. Die Flechtengattung *Haematomma*, *Biblioth. Lichenol.* 59: 1–198 (1995).

1	Thallus saxicolous	H. collatum
1:	Thallus corticolous	2
2	Thallus sorediate (<i>I.</i>)	H. sorediatum
2:	Thallus esorediate	3
3	Epihymenium with haematommone; when treated with KOH under a cover slip a violet cloud appears, then the epihymenium becomes colourless and no crystals form (2.)	4
3:	Epihymenium with russulone; when treated with KOH under a cover slip the solution becomes red and red crystals rapidly form and the epihymenium remains rose-red	6

4	Ascospores 9–19-septate (3).....	H. africanum
4:	Ascospores with fewer than 9 septa.....	5
5	Disc cinnabar-red; thallus containing placodiolic acid (4:)	H. accolens
5:	Disc crimson to purple-red; thallus containing isoplacodiolic and isopseudoplacodiolic acids	H. flexuosum
6	Thallus containing sphaerophorin and isosphaeric acid (4:)	7
6:	Thallus lacking sphaerophorin and isosphaeric acid	9
7	Ascospores 9–15-septate; margin of apothecia distinctly crenulate (6).....	H. collatum
7:	Ascospores 5–9-septate; margin of apothecia smooth or only slightly crenulate.....	8
8	Ascospores 5–7-septate; apothecia often immersed in the thallus or broadly attached; disc scarlet to cinnabar-red (7:)	H. personii
8:	Ascospores 7–9-septate; apothecia sessile with a constricted base; disc orange-red.....	H. stevensiae
9	Colour of disc penetrating the margin of the apothecia; apothecial margin evanescent with age; cortex fragile, appearing soresiate; thallus thin, smooth, varnish-like (6:).....	H. nothofagi
9:	Apothecial margin concolorous with the thallus, not evanescent with age; thallus thick, ±warty.....	10
10	Ascospores 7–24-septate (9:)	H. rufidulum
10:	Ascospores 5–11-septate	11
11	Apothecia constricted at the base; disc scarlet-red, often densely white-pruinose; margin thin, often evanescent; W.A. (10:)	H. eremaicum
11:	Apothecia broadly attached to the thallus, not constricted at base; disc red with a brownish tinge, rarely slightly pruinose; margin thick; Qld, N.S.W.	H. infusum