

TRYPETHELIUM

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Trypethelium Spreng., *Anleit. Kenntn. Gew.* 3: 350 (1804); from the Greek *trype* (a hole) and *thele* (a nipple), in reference to the many locules and the shape of the ascomata.

Type: *T. eluteriae* Spreng.

Thallus green to grey or yellowish, smooth to somewhat bullate, corticate. Ascomata simple, black, with or without pseudostromatic tissues, globose, immersed in pseudostromata or erumpent, often at least the sides covered by the thallus. Hamathecium colourless, occasionally interspersed with oil droplets. Ascospores 8 per ascus, IKI-, irregularly biseriate, colourless, fusiform with subacute ends, symmetrically 3–19-septate (in non-Australian species to 33-septate), not constricted at the septa; immature ascospores with a gelatinous sheath; lumina diamond-shaped. Conidiomata rather rare.

Chemistry: Thallus and/or pseudostroma often containing lichexanthone (or 1,8-dihydroxy-3,6-dimethoxyxanthone) or anthraquinone.

A genus of c. 25 species, mostly tropical epiphytes; eight species are known from northern Australia.

U.Makhija & P.G.Patwardhan, Nomenclatural notes on some species of *Trypethelium*, *Int. J. Mycol. Lichenol.* 5: 237–251 (1992); U.Makhija & P.G.Patwardhan, A contribution to our knowledge of the lichen genus *Trypethelium* (family Trypetheliaceae), *J. Hattori Bot. Lab.* 73: 183–219 (1993); R.C.Harris, A preliminary revision of *Pseudopyrenula* Müll.Arg. (lichenized Ascomycetes, Trypetheliaceae) with a redistribution of the names previously assigned to the genus, *Lichenogr. Thomsoniana* 133–148 (1998).

1	Ascospores 5–19-septate.....	2
1:	Ascospores 3-septate.....	5
2	Thallus UV+ yellow, containing lichexanthone (1).....	2. T. cinereorosellum
2:	Thallus UV- or UV+ reddish, not containing lichexanthone.....	3
3	Pseudostromata with yellow to orange K+ purple and UV+ red pigment (2:).....	2. T. eluteriae
3:	Pseudostromata without pigments.....	4
4	Ascospores 9–19-septate (3:).....	3. T. elmeri
4:	Ascospores 5–7-septate.....	5. T. epileucodes
5	Thallus UV+ yellow, containing lichexanthone (1:).....	7. T. ochroleucum
5:	Thallus UV- or UV+ red, not containing lichexanthone.....	6
6	Thallus orange, K+ purple, UV+ red (5:).....	1. T. aeneum
6:	Thallus green to yellowish or brown, K-.....	7
7	Ascomata solitary, superficial (6:).....	8. T. tropicum
7:	Ascomata aggregated, largely immersed in pseudostromata.....	6. T. nitidiusculum