

Lichens of Great Britain & Ireland edn 3

Draft genus account version 1.1, February 2018

Prepared by Paul Cannon, based on the LGBI2 account of *Thelotrema* by James & Hawksworth (2009)

CRUTARNDINA Parmen, Lücking & Lumbsch (2012)

As this is a monotypic genus, the description below (*C. petractoides*) constitutes the generic description. It is distinguished from *Thelotrema* by its stellate-lacerate true exciple, and has been shown to be quite separate from that genus using molecular phylogenetic techniques.

Literature:

Frisch, A., Kalb, K. & Grube, M. (2006). Contributions towards a new systematics of the lichen family Thelotremataceae III. Molecular phylogeny of the Thelotremataceae. *Bibliotheca lich.* **92**: 517-539.

James, P.W. & Hawksworth, D.L. (2009). *Thelotrema*. In *Lichens of Great Britain and Ireland* (Smith, C.W., Aptroot, A., Coppins, B.J., Fletcher, A., Gilbert, O.L., James, P.W. & Wolselsey, P.A. eds): 891-893. London: British Lichen Society.

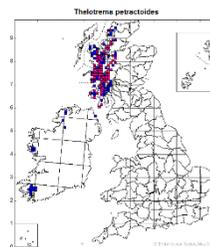
Parmen, S., Lücking, R. & Lumbsch, H.T. (2012). Phylogenetic classification at generic level in the absence of distinct phylogenetic patterns of phenotypical variation: a case study in Graphidaceae (Ascomycota). *PLoS ONE* **7**(12): e51392.

Crutarndina petractoides (P.M. Jørg. & Brodo) Parmen, Lücking & Lumbsch (2012)

LC IR

Thelotrema petractoides P.M. Jørg. & Brodo (1995)

Thallus cream, white or pale ochraceous, uniformly thin, somewhat immersed, ± continuous, cortex an ill-defined, superficial layer of necrotic cells mixed with sloughed bark cells, interspersed with calcium oxalate crystals; prothallus absent. Soredia and isidia absent. Photobiont *Trentepohlia*. Apothecia 0.4-0.7 (-0.8) mm diam., flattened, not immersed in warts, erumpent, urceolate; ostiolar opening to 0.3 mm wide; true exciple free, colourless, ± radially stellate-lacerate, partly obscuring the black to ± densely grey-white pruinose apothecial disc; hymenium (90-) 100-120 (-130) µm, colourless, I-; hypothecium colourless; epithecium colourless to pale brown, encrusted with numerous, small, irregular crystals. Hamathecium of filamentous, unbranched, rarely septate paraphyses; periphysoids lining the upper inner surface of the true exciple. Asci subcylindrical, with a single functional wall layer, abruptly thickened at the apex, sometimes with a minute internal apical beak, K/I-, (4-) 6- to 8-spored. Ascospores (30-) 35-50 (-55) × (7-) 8-10 µm, cylindrical to broadly cylindrical-fusiform with rounded ends, remaining colourless when mature, with (7-) 9-11 (-12) strongly thickened lateral distosepta and no longitudinal septa, I+ purplish blue, with a perispore that is constricted at the septa. Conidiomata not known. Thallus C-, K-, KC-, Pd-, UV- (no lichen products detected by TLC). **BLS 1412**.



An oceanic species on ± shaded, smooth bark, mainly of *Corylus* and *Sorbus*, more rarely of other broadleaved trees, in sheltered woodlands and boggy areas; locally abundant. W. Scotland, W. & S.W. Ireland. W. Norway, Macaronesia.

The flattened apothecia ± level with the thallus surface, with a well-developed, stellate-lacerate true exciple and pruinose disc, plus the eroding thalline margin are useful field characters separating this species from *Thelotrema lepadinum*. British specimens were previously referred to *T. subtile* but this species appears to be restricted to eastern N. America in the Northern Hemisphere.

Crutarndina petractoides is occasionally infested by *Opegrapha brevis*.