

BRIGANTIAEA

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Brigantiaea Trevis., *Riv. Period. Lav. Accad. Sci. Lett. Arti Padova* 249 (1853); named after the Italian lichenologist Francesco Briganti (1802–1865).

Type: *B. mariae* Trevis. [= *B. leucoxantha* (Spreng.) R.Sant. & Hafellner]

Thallus crustose, superficial, spreading, thin and smooth to verrucose, whitish to pale grey or greenish, corticate, with or without lobules and soredia. Photobiont a unicellular green alga. Ascomata apothecia, biatorine, rarely lecanorine or lecideine, sessile, commonly basally constricted or rarely slightly pedicellate, ±round, plane to slightly convex; disc yellow, orange, brown or black; thalline exciple (when present) concolorous with the thallus; proper exciple usually prominent, entire, similar in colour to the disc, rarely black or concolorous with the thallus, composed of conglutinate thick-walled radially orientated hyphae, often encrusted with yellow-orange crystals. Epithymenium yellow or orange-brown, with orange-red to brownish crystals, K⁺ reddish, purple or blue (in section). Hymenium colourless, clear or interspersed with oil droplets, 120–220 µm thick; hypothecium colourless, yellow or pale brown. Asci broadly clavate, of the *Brigantiaea*-type, with a thick amyloid outer wall; amyloid tholus without an axial body and an amyloid innermost wall layer. Paraphyses thin, septate, rarely branched, 1.5–2.0 µm wide, not or only slightly thickened at the apex. Ascospores 1 per ascus, muriform, ellipsoidal to oblong, the colourless or cellular contents slightly brownish with age, 65–160 × 22–45 µm; external spore wall thicker than septa, without a prominent endospore; mature ascospores often forming phialidic microconidia. Conidiomata pycnidial, immersed or absent; conidiogenous cells intercalary and terminal; conidiophores of type VII (*sensu* Vobis, 1980). Conidia bacilliform to subfusiform.

Brigantiaea is a cosmopolitan genus of 15 species, five of which occur in Australia. They are found in tropical to temperate areas where they grow on bark, decorticated wood and bryophytes.

G.Vobis, Bau und Entwicklung der Flechten-Pycnidien und ihrer Conidien, *Biblioth. Lichenol.* 14: 1–141 (1980); J.Hafellner, Studien in Richtung einer natürlicheren Gliederung der Sammenfamilien Lecanoraceae und Lecideaceae, *Beih. Nova Hedwigia* 79: 241–371 (1984); J.Hafellner, *Brigantiaea* Trevisan, 1853, in D.J.Galloway, *Flora of New Zealand Lichens* 40–42 (1985); O.W.Purvis, *Brigantiaea* Trevisan (1853), in O.W.Purvis, B.J.Coppins, D.L.Hawksworth, P.W.James & D.M.Moore (eds), *The Lichen Flora of Great Britain and Ireland* 123 (1992); J.Hafellner, A world monograph of *Brigantiaea* (lichenized Ascomycotina, Lecanorales), *Symb. Bot. Upsal.* 32(1): 35–74 (1997).

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| 1 | Thallus with small suberect lobules | 2. B. lobulata |
| 1: | Thallus without lobules | 2 |
| 2 | Apothecial margin containing algal cells (1:) | 3. B. microcarpa |
| 2: | Apothecial margin lacking algal cells | 3 |
| 3 | Thallus growing on bark-inhabiting bryophytes; zeorin absent (2:) | 4. B. phaeomma |
| 3: | Thallus growing directly on bark or, rarely, on wood; zeorin present | 4 |
| 4 | Apothecial margin deep orange to red-brown, K+ blue to black; disc brown, often yellow-pruinose (3:) | 5. B. tricolor |
| 4: | Apothecial margin vivid orange, K+ purple; disc vivid orange, often with yellow-orange pruina | 1. B. leucoxantha |