

**Pertusaria elliptica** Müll.Arg., *Bull. Herb. Boissier* 3: 635 (1895)

T: Goodna, Qld, 1893, *J. Shirley 1754 p.p.*; holotype: G.

Thallus thin, off-white or pale grey to pale olive-green, smooth or slightly rough, dull. Soredia and isidia absent. Apothecia numerous, conspicuous, verruciform, scattered, slightly flattened-hemispherical, rounded, elongate or irregular in outline, becoming constricted at the base and concave above, 0.5–1.5 mm diam. Ostioles conspicuous, black, sometimes in a grey translucent zone, 1 or 2 per verruca. Ascospores uniseriate, rough-walled.

*Chemistry*: Thallus K–, KC–, C–, Pd–; containing 2,5-dichlorolichexanthone (major), 2,4,5-trichlorolichexanthone (major),  $\pm$ stictic acid (major), 2-chlorolichexanthone (minor), 2'-*O*-methylperlatolic acid (minor), 2-*O*-methylperlatolic acid (minor), 2,4-dichlorolichexanthone (trace),  $\pm$ planic acid (trace), constictic acid (minor), 4,5-dichlorolichexanthone (trace) and menegazziac acid (trace).

There are two varieties of this corticolous species.

Asci usually with 3 or 4 ascospores; ascospores 80–110  $\mu$ m long ..... **a. var. elliptica**

Asci with 2 ascospores; ascospores (130–) 140–175 (–190)  $\mu$ m long ..... **b. var. bispora**

**a. Pertusaria elliptica** Müll.Arg. var. **elliptica**

Illustration: A.W.Archer, *Biblioth. Lichenol.* 69: 61, fig. 15 (1997).

Ascospores (2 or) 3–4 per ascus, elongate-ellipsoidal to subfusiform, 80–110  $\times$  30–45  $\mu$ m.

A tropical and subtropical variety that occurs in northern N.T., eastern Qld and north-eastern N.S.W.; also in Lord Howe Island, Papua New Guinea and New Caledonia.

N.T.: Litchfield Park, *J.A.Elix 27516, 27627, 27628* (CANB). Qld: Finch Bay, 2 km E of Cooktown, *D.Verdon 5437* (CANB); Rainbow Falls, 36 km SE of Blackwater, *J.A.Elix 34365* (CANB). N.S.W.: Little Bay, 30 km NE of Kempsey, *A.W.Archer P634* (NSW); near Diamond Head, Crowdy Bay Natl Park, *A.W.Archer P609* (NSW).

**b. Pertusaria elliptica** var. **bispora** Elix & A.W.Archer, in J.A.Elix, W.M.Malcolm & A.W.Archer, *Mycotaxon* 53: 275 (1995)

T: by side of Hacking R., c. 37 km SSW of Sydney, N.S.W., 34°07'S, 151°03'E, 10 Feb. 1992, *A.W.Archer P265*; holotype: NSW.

As for var. *elliptica* but with ascospores 2 per ascus, ellipsoidal, (130–) 140–175 (–190)  $\times$  40–50  $\mu$ m.

An uncommon, endemic variety in eastern N.S.W.; its distribution is more southerly than that of var. *elliptica*.

N.S.W.: Twelve-Mile Rd, near Boyd Lookout, Jerrawangla S.F., *A.W.Archer P325* (NSW); near German Point Rd, Watagan S.F., c. 38 km WSW of Newcastle, *A.W.Archer P685* (NSW); Olney S.F., c. 5 km NNW of Coorabong, *A.W.Archer P696* (NSW).

The external morphology and chemistry of the two varieties are identical; they differ only in the size and number of ascospores.