

***Pertusaria trimera* (Müll.Arg.) A.W.Archer, *Telopea* 4: 179 (1991)**

*Pertusaria pustulata* (Ach.) Duby var. *trimera* Müll.Arg., *Bull. Herb. Boissier* 1: 42 (1893). T: "at Kew, at Oakleigh & at Camperdown" [Although there are three localities on the label, there is only one specimen.], Vic., *F.R.M.Wilson* 473; lecto: G, *vide* A.W.Archer, *Telopea* 4: 179 (1991).

*Pertusaria melaleuca* (Sm. & Sowerby) Duby var. *trisporea* Müll.Arg., *Bull. Herb. Boissier* 1: 42 (1893). T: "at Kew, at Youyangs and at Doncaster" [Although there are three localities on the label, there is only one specimen.], Vic., *F.R.M.Wilson* 474; syn: G, NSW.

Illustration: A.W.Archer, *Biblioth. Lichenol.* 69: 163, fig. 61 (1997).

Thallus pale greyish green to pale yellowish green, thin, slightly cracked, smooth and dull. Soredia and isidia absent. Apothecia conspicuous, verruciform, scattered, rarely confluent, strongly flattened-hemispherical, 0.4–0.8 mm diam. Ostioles conspicuous, black, 1–4 per verruca. Ascospores 3 or 4 per ascus, uniseriate, elongate-ellipsoidal, smooth, 70–110 × 30–40 µm.

*Chemistry*: Thallus K<sup>-</sup> or K<sup>+</sup> yellow → red, KC<sup>+</sup> orange or red, C<sup>+</sup> orange, Pd<sup>-</sup> or Pd<sup>+</sup> yellow; containing thiophaninic acid (major or minor), 2-chloro-6-*O*-methylnorlichexanthone (minor or trace), ±norstictic acid (major), ±connorstictic acid (trace), ±2-*O*-methylperlatolic acid (major or minor) or 2, 2'-di-*O*-methylstenosporic acid (major to minor) or confluent acid (major or minor).

A widely distributed, endemic, corticolous species in W.A., S.A., N.S.W., Vic. and Tas.; usually in the rather dry habitats.

W.A.: Eyre Hwy, 160 km E of Balladonia, *N.Donner* 3108 (AD, COLO). S.A.: Talbots Reserve, Mount Lofty Ra., *J.A.Elix* 9414 (CANB). N.S.W.: Modriguy Forest road, 5 km E of Modriguy, Goonoo S.F., 23 km NNE of Dubbo, *J.A.Elix* 36773 (CANB). Vic.: Dimboola, 30 km NW of Horsham, June 1896, *F.Reader* s.n. (NSW). Tas.: near Broadmarsh Post Office, c. 30 km NNE of Hobart, *G.C.Bratt* 68/541 (HO).

The species is characterised by the yellowish thallus, apothecia with conspicuous, black ostioles and asci with 3 or 4 ascospores. It contains thiophaninic acid usually together with norstictic acid or a depside, but rarely with both. Specimens from Tas. lack depsides, and confluent acid is known only from collections from W.A.