

***Pertusaria petrophyes* C.Knight, *Trans. Linn. Soc. London*, ser. 2, 2: 47 (1881)**

T: [near Sydney], N.S.W., *C.Knight s.n.*; holo: WELT; iso: H-NYL 23608.

Pertusaria leucoxantha Müll.Arg., *Bull. Herb. Boissier* 3: 637 (1895). T: Thursday Is., Qld, 1887, *C.Knight* 280; holo: G.

Illustration: A.W.Archer, *Biblioth. Lichenol.* 69: 132, fig. 43 (1997).

Thallus pale fawn or pale yellowish green, thin to effuse, smooth and dull. Soredia and isidia absent. Apothecia few to numerous, verruciform, occasionally confluent, flattened-hemispherical or irregular in outline, 0.5–1.5 mm diam. Ostioles black, 1 or 2 per verruca, sometimes raised. Ascospores 8 per ascus, irregularly uniseriate, ellipsoidal, smooth, 60–85 × 25–45 µm.

Chemistry: Thallus K–, KC+ weak orange, C+ weak orange, Pd–; containing thiophanic acid (major), 2-*O*-methylperlatolic acid (major) and 2-chloro-6-*O*-methylnorlichexanthone (trace).

A widely distributed, saxicolous species found in Qld, N.S.W. and Vic.; also in Papua New Guinea, Lord Howe Is. and New Zealand.

Qld: Pine Mtn, 24 km NE of Rockhampton, *J.A.Elix* 34717 (CANB); Cunninghams Gap Natl Park, *J.Hafellner* 15304 (GZU). N.S.W.: Waihou Trig., 25 km NW of Coffs Harbour, *D.Verdon* 3796 (CANB); Hat Head summit, Hat Head Natl Park, *A.W.Archer* P386 (NSW). Vic.: Mallacoota Inlet, Mallacoota, *A.W.Archer* P548 (NSW).

The species is characterised by the 8-spored asci and the presence of thiophanic and 2-*O*-methylperlatolic acids in the thallus. *Pertusaria petrophyes* C.Knight var. *hokiensis* Vain. is synonymous with the corticolous, Japanese species *P. composita* Zahlbr.