

**Pertusaria barbatica** A.W.Archer & Elix, in A.W.Archer, *Biblioth. Lichenol.* 69: 178 (1997)

T: Alfred Natl Park, 19 km E of Cann River, Vic., 21 Sept. 1978, *J.A.Elix* 5249; holo: CANB.

Illustration: A.W.Archer, *op. cit.* 183, fig. 68 (1997).

Thallus pale olive-green, thin, smooth and dull. Soredia absent. Isidia numerous, inconspicuous, simple, rarely branching, concolorous with the thallus, 0.2–0.3 mm tall, c. 0.1 mm wide. Apothecia not seen.

*Chemistry*: Thallus K–, KC–, C–, Pd–; containing barbatic acid (major), 4-*O*-demethylbarbatic acid (minor to trace) and 3 $\beta$ -hydroxybarbatic acid (trace).

An uncommon, corticolous species in south-eastern Australia (N.S.W., Vic. and Tas.); also in New Zealand.

N.S.W.: Plateau Beech Picnic Area, Werrikimbe Natl Park, *A.W.Archer* P810 (NSW); Sassafras Ck, Springwood, 65 km W of Sydney, *A.W.Archer* P919 (NSW). Vic.: Drummer Rainforset Walk, 10 km E of Cann River, *J.A. Elix* 43572 (CANB). Tas.: 25 km NW of Smithton, *J.A.Elix* 40284 (CANB).

The species is one of several sterile, isidiate Australian taxa that are differentiated by chemistry. It resembles *Neophyllis melacarpa* (F.Wilson) F.Wilson (Cladoniaceae), but the latter contains fumarprotocetraric acid (Pd+ red).