

Pertusaria alectoronica Elix & A.W.Archer, *Australas. Lichenol.* 60: 20 (2007)

T: Goonoo S.F., 23 km NNE of Dubbo, N.S.W., 32°04'16"S, 148°42'53"E, alt. 330 m, on dead wood, 11 Oct. 2005, *J.A.Elix 36767*; holo: NSW; iso: CANB.

Thallus pale grey-green to grey-white, thick, cracked-areolate, verrucose, dull to slightly shiny, lacking soredia, isidiate. Isidia numerous, simple and cylindrical at first, becoming densely coralloid-branched, dark grey-green; apices ±swollen and becoming dark brown to black-tipped, 0.5–2.0 mm tall, 0.1–0.2 mm diam. Apothecia and pycnidia not seen.

The species is characterised by the sterile, isidiate thallus and the presence of alectoronic acid, a very rare compound in the genus *Pertusaria*.

Thallus on dead wood, containing 4,5-dichlorolichexanthone, not thiophanic acid **a. var. alectoronica**
Thallus on bark, not containing 4,5-dichlorolichexanthone, containing thiophanic acid **b. var. thiophanica**

a. Pertusaria alectoronica Elix & A.W.Archer var. **alectoronica**

Illustration: J.A.Elix & A.W.Archer, *op. cit.* 24, fig. 1.

Chemistry: Cortex K–; medulla K–, C–, KC+ red, P–; containing alectoronic acid (major), 4,5-dichlorolichexanthone (minor).

A very rare, endemic lignicolous lichen in central-western N.S.W.

b. Pertusaria alectoronica var. **thiophanica** Kantvilas, Elix & A.W.Archer, *in* A.W.Archer & Elix, *Australas. Lichenol.* 65: 31 (2009)

T: summit of Mt Killiecrankie, Flinders Island, Tas., 39°49'S, 147°52'E, alt. 310 m, on bark of *Banksia marginata* in sheltered scrub among large boulders, 22 Jan. 2006, *G.Kantvilas 28/06*; holo: HO.

Illustration: A.W.Archer & J.A.Elix *op. cit.* 36, fig. 2.

Chemistry: containing alectoronic acid (major), thiophanic acid (minor), methyl pseudoalectoronate (trace), beta-alectoronic acid (trace).

This very rare corticolous lichen is known only from the type locality in Flinders Island, Bass Strait, Tas.

While this lichen is morphologically identical to var. *alectoronica*, the latter differs chemically in containing 4,5-dichlorolichexanthone (minor) in addition to alectoronic acid (major), while lacking thiophanic acid, and it occurs on lignin rather than on bark.