

Pertusaria alboaspera A.W.Archer & Elix, *Mycotaxon* 49: 143 (1993)

Thallus pale yellowish white, thin, areolate and cracked, smooth and dull. Soredia and isidia absent. Apothecia numerous, verruciform, concolorous with the thallus, sometimes confluent, hemispherical to flattened-hemispherical, not constricted at the base, 0.5–1.0 mm diam. Ostiole inconspicuous, pale, translucent, 1 per verruca. Ascospores 8 per ascus, biseriate, ellipsoidal, smooth, $90\text{--}100 \times 30\text{--}37 \mu\text{m}$.

The species is characterised by 4 or 8 biseriate ascospores in each ascus and by its chemistry. *Pertusaria verruculifera* Vain. has \pm identical chemistry, but the asci contain 8 smaller, uniseriate ascospores.

Ascospores 4 per ascus **b. var. tetraspora**
Ascospores 8 per ascus **a. var. alboaspera**

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

T: Sawpit Ck, Border Ranges Natl Park, c. 30 km NNW of Kyogle, N.S.W., $28^{\circ}22'S$, $152^{\circ}50'E$, 30 Aug. 1992, *A.W.Archer P422*; holo: NSW.

Illustration: A.W.Archer & J.A.Elix, *op. cit.* 145, fig. 1.

Ascospores 8 per ascus.

Chemistry: Thallus K $^-$, KC $^-$, C $^-$, Pd $^-$, UV $^+$ yellow; containing lichexanthone (major), 2,2'-di-*O*-methylstenosporic acid (major), stictic acid (major) and constictic acid (minor).

This rare, endemic, corticolous lichen is known only from the type locality in north-eastern N.S.W.

Pertusaria verruculifera Vain. has identical chemistry, but the asci contain smaller, uniseriate ascospores.

b. Pertusaria alboaspera var. **tetraspora** Jariangprasert, *Mycotaxon* 91: 280 (2005)

T: near Pha Chang Phan Cliff, Phu Luang Wildlife Sanctuary, Loei Province, Thailand, in oak-dipterocarp forest, alt. 1510 m, 3 Feb. 2002, *S.Jariangprasert 2248*; holo: QBG.

Illustration: A.W.Archer & J.A.Elix, *Australas. Lichenol.* 67: 21, figs 9, 10 (2010).

Thallus corticolous, off-white to pale fawn, subtuberculate and slightly glossy, lacking isidia and soredia. Apothecia numerous, scattered, conspicuous, verruciform, flattened-hemispherical, rarely confluent, 0.6–1.5 mm diam; ostioles hyaline, inconspicuous, 1–2 per verruca. Ascospores 4 per ascus, hyaline, smooth-walled, ellipsoidal, $80\text{--}85 \times 30\text{--}35 \mu\text{m}$.

Chemistry: containing lichexanthone (major or minor), 2,2'-di-*O*-methylstenosporic acid (major), stictic acid (major), constictic acid (minor), planaic acid (trace), methyl 2,2'-di-*O*-methylstenosporate (trace).

A very rare corticolous species in northern N.S.W.; also in montane areas of northern and north-eastern Thailand.

N.S.W.: Mount Warning Natl Park, by side of track near foot of mountain, *A.W. Archer P514* (NSW).