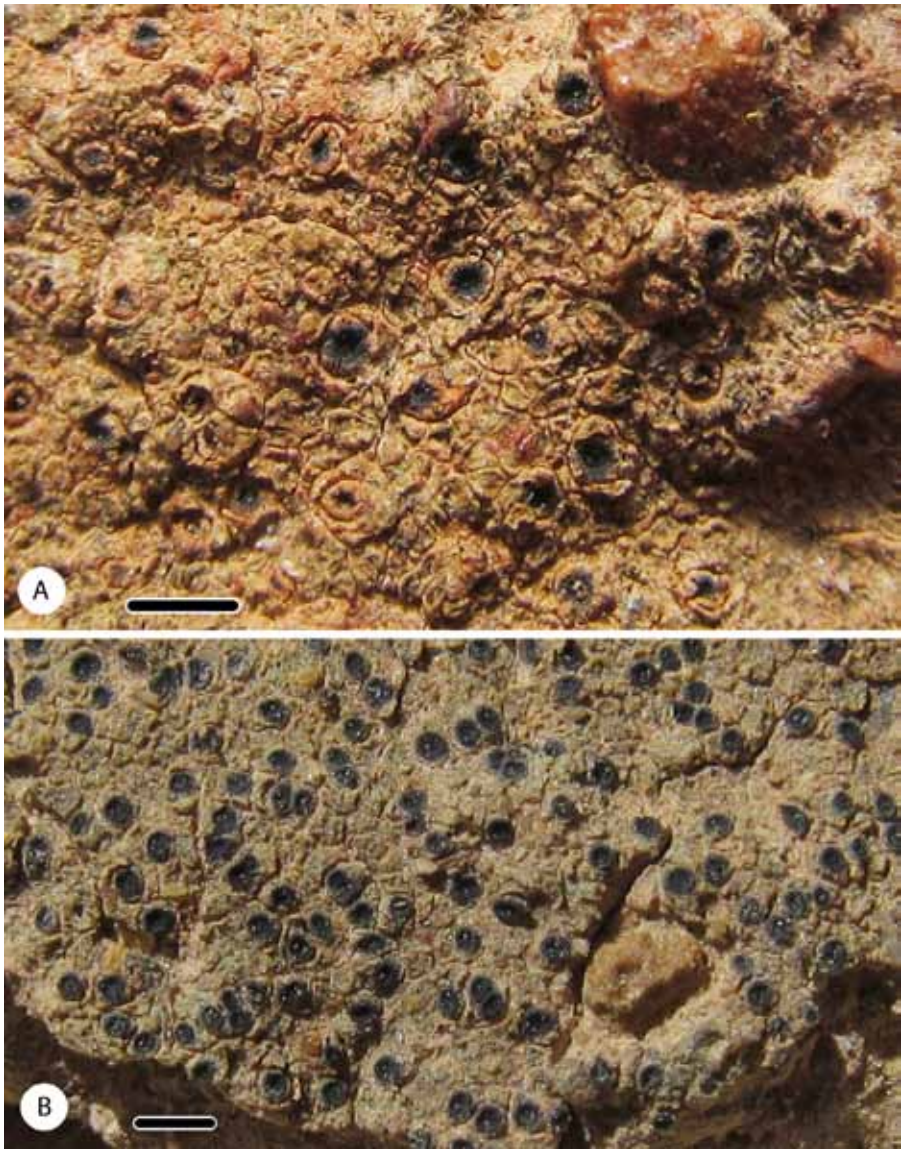

Figure 5. *Sarcogyne terrulenta*. A, holotype; B, *J.A. Elix 46806*. Scales: 1 mm.

A new species of *Cratiria* (Caliciaceae, Ascomycota) from Ascension Island, South Atlantic Ocean

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Abstract
Cratiria jamesiana Elix & H.Mayrhofer, a saxicolous species with *Physconia*- then *Buellia*-type ascospores and bacilliform conidia, and containing thuringione and arthothelin, is described as new to science.

Introduction
This paper is a continuation of our investigations into *Buellia*-like lichens in the Southern Hemisphere (Elix 2018; Elix & McCarthy 2018; Elix *et al.* 2018; Elix 2019a, b and references therein). The genus *Cratiria* Marbach includes species that are characterized by relatively large, submuriform or 1-septate ascospores, 15–28 × 7–13 µm, with apical wall-thickenings, short, bacilliform conidia 4–6 µm long, a hymenium that can be inspersed with oil droplets or not and an excipulum containing lichen substances (Marbach 2000; Elix 2014). In this paper we describe a new saxicolous species of *Cratiria* from Ascension Island in the South Atlantic Ocean. Methods are as described in previous papers cited above.

Cratiria jamesiana Elix & H.Mayrhofer, sp. nov. Figs 1, 2
MycoBank number: **MB 832570**

Similar to *Cratiria chloraceus* Marbach, but differs in being saxicolous and in having a K– excipulum and hypothecium.

Type: Ascension Island, Green Mountain, Monkey Rock, [07.9500°S, 14.3500°W], 460 m alt., on volcanic rock, *P.W. James s.n.*, 3.xi.1976 (BM – holotype).

Thallus crustose, continuous, to 55 mm wide and up to 1 mm thick; upper surface pale grey to pale yellow-grey, verruculose, matt; warts 0.1–1 mm wide; prothallus black, marginal when abutting other lichens; medulla white, lacking calcium oxalate (H_2SO_4–), I–; photobiont cells 8–14 µm diam. *Apothecia* 0.4–1.5 mm wide, lecideine, scattered, sessile; disc black, pale grey-pruinose, concave to ± plane; proper exciple thick, concolorous with the disc, entire, persistent, cupuliform, in section 75–100 µm thick; outer zone opaque brown-black with crystals, K–, N–; inner zone brown. *Hypothecium* 190–240 µm thick, dark brown to brown-black, K–. *Epihymenium* 10–15 µm thick, pale brown to grey-brown, with crystals soluble in K, K–, N–. *Hymenium* 90–110 µm thick, colourless, inspersed with oil droplets; subhymenium 25–35 µm thick, pale brown; paraphyses 1.7–2.0 µm wide, simple to branched, capitate, with apices dark brown, 3–3.5 µm wide; asci approximating the *Bacidia*- type, with 8 or fewer spores. *Ascospores* at first of the *Physconia*-type, then of the *Buellia*-type, 1-septate, olive-brown to brown, ellipsoid, 15–[*16.6*]–20 × 8–[*8.9*]–10 µm, rarely constricted at the septum, with apical wall-thickenings; outer spore-wall rugulate. *Pycnidia* immersed; conidia bacilliform, straight, 4–5 × 0.7–1 µm.
Chemistry: Thallus K–, C–, P–, UV+ orange; containing thuringione (major), arthothelin (major), 3-*O*-methylthiophanic acid (minor).

Etymology: the species is named after the collector of the type specimen, the late British lichenologist Peter James.

Remarks

This new species is characterized by the verrucose-areolate, pale grey to pale yellow-grey crustose thallus, with a non-amyloid medulla lacking calcium oxalate, the sessile, lecideine apothecia with pruinose discs, an inspersed hymenium, *Physconia*- then *Buellia*-type ascospores, 15–20 × 8–10 µm, the bacilliform conidia, 4–5 µm long, and the presence of thuringione and arthothelin. Its chemistry and anatomy closely resemble those of *C. chloraceus*, a corticolous species known from Australia, Papua New Guinea and New Caledonia (Elix *et al.* 2017). However, the thallus of *C. chloraceus* differs in being corticolous and significantly thinner, and the hypothecium reacts K+ intense crimson-purple. *Cratiria jamesiana* could be confused with *Buellia halonia* (Ach.) Tuck., which has been reported from Ascension Island (Aptroot 2008). Both species have similar-sized *Physconia*- then *Buellia*-type ascospores, and both contain xanthones. However, *B. halonia* has a non-inspersed hymenium, an epihymenium that is often aeruginose in part, and ascospores lacking apical wall-thickenings. In addition, it contains isoarthothelin (major), roccellic acid (major) and minor quantities of atranorin. *Cratiria jamesiana* is the first saxicolous species of *Cratiria* known to contain xanthones.

At present, the new species is known only from the type collection.

Acknowledgement

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Figure 1. *Cratiria jamesiana* (holotype in BM). Bar = 2 mm.

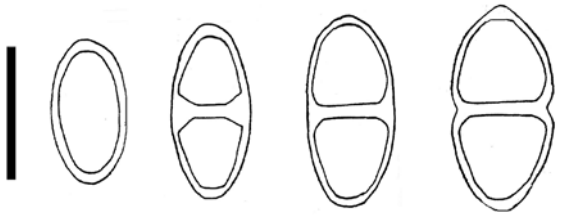

Figure 2. Ascospore ontogeny of *C. jamesiana*. Bar = 10 µm.