

Some bryophytes newly reported for the Australian continent

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Abstract

Anoetangium euchloron (Schwägr.) Mitt., *Campyliadelphus chrysophyllus* (Brid.) R.S. Chopra and *Tortula caucasica* Broth. are reported as new for the Australian continent.

Introduction

Ben Van Zanten made several expeditions to Australia in 1968, 1982 and 1993, and made preliminary identifications of most specimens. From 2005 onwards, Heinjo During fully identified many specimens with well-developed sporophytes. Many of these collections had been used by van Zanten for his long-range dispersal experiments – see van Zanten (1978) and van Zanten and Pócs (1981) for further information.

During the identification process, a few taxa were identified which apparently had been collected for the first time in Australia. Furthermore, material has been included that the third author came across while studying pottiaceous material from several herbaria. We report three new bryophyte records for Australia, and additional observations of one overlooked species, here.

Pottiaceae Schimp.

Anoetangium euchloron (Schwägr.) Mitt.

North Queensland, coastal escarpment, Gillies Highway between Gordonvale and Atherton, steep slope, grassy eucalypt forest, on shaded rocks, no sporophytes, s. alt., 20 April 1968, W.A. Weber B. 31.880, det. P. Sollman, 2017, hb. COLO, L, MICH.

The plants are commonly distinctly rosulate. Leaf shape elliptical to ligulate, margins parallel, leaf apex broadly rounded with a small apiculus. *Anoetangium euchloron* is distinct from the widespread and related *A. aestivum* (Hedw.) Mitt., which has the leaves widest near the base, with an elliptic-lanceolate outline and an acute apex. Both species are described in Zander (2019). *Anoetangium euchloron* is illustrated in Cano and Jiménez (2013), and is mainly distributed in tropical parts of the world, but is not mentioned in Streimann and Klazenga (2002).

Chionoloma tenuirostre (Hook. & Taylor) M.Alonso, M.J.Cano & J.A.Jiménez var. ***tenuirostre***

We considered it worthwhile to include this species here, because it is easily overlooked in the large publications of Alonso (2016) and Alonso *et al.* (2019). It is listed there as new for Australia. It is not mentioned in Streimann and Klazenga (2002).

Tortula caucasica Broth.

New South Wales, Sydney, Epping, in garden, exposed, on open soil, alt. c. 100 m., with sporophytes, 4 February 1982, leg. B.O. van Zanten no. 82.02.03, det. H.J. During (2015), P. Sollman (2020), hb. L.

According to Streimann and Klazenga (2002: 176), the Australian material of *Pottia truncata* (Hedw.) Bruch & Schimp. belongs to the type variety (var. *truncata*). This species is now placed in the genus *Tortula* as *Tortula truncata* (Hedw.) Mitt. s. str. (c.f. Ros *et al.* 2008). Furthermore, the third author has identified many pottiaceous collections in the recent past from herbarium Canberra (CANB), most of them collected by H. Streimann in Australia. In this material only *Tortula truncata* (Hedw.) Mitt. s. str. is present. In most recent floras, *Tortula truncata* and *T. caucasica* (usually under its synonym *Tortula modica* R.H. Zander, see Ros *et al.* 2008) are accepted as distinct species, differing, *i.a.*, in the shape of the sporophyte (widest at mouth in *T. truncata*, constricted at the orifice in *T. caucasica*). Further differences are indicated in Smith (2006). The specimen van Zanten 82.02.03 seems to represent the first collection of *T. caucasica* in Australia.

Amblystegiaceae Kindb.***Campyliadelphus chrysophyllus*** (Brid.) R.S. Chopra

New South Wales, Mt. Kosciusko National Park, Wilsons Valley, dry sclerophyll forest, on small dry log, in half-shade, about 20 – 50 m above Wilsons Creek, alt. c. 1200 m., without sporophytes, 24 February 1982, leg. B.O. van Zanten no. 82.02.829, det. L. Hedenäs, hb. L, S.

This species is not mentioned in Streimann and Klazenga (2002). *Campyliadelphus chrysophyllus* is well-described, discussed and illustrated by Smith (2006). In the Southern Hemisphere it is known from Patagonia in southern South America (Smith 2006). O’Shea (2006) lists this plant from Lesotho in southern South Africa.

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