Phytotaxa 161 (2): 165–168
www.mapress.com/phytotaxa/
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Article

ISSN 1179-3155 (print edition)
PHYTOTAXA
ISSN 1179-3163 (online edition)

http://dx.doi.org/10.11646/phytotaxa.161.2.8

A new epiphyllous species of *Cololejeunea* (Lejeuneaceae, Marchantiophyta) from China

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Abstract

Cololejeunea sublatistyla J.Wang & R.L.Zhu *sp. nov.* is described and illustrated from Jianfengling National Nature Reserve, Ledong Co., Hainan Province, China. The new species is similar to *C. latistyla* R.L.Zhu but differs mainly in its rectangular-ovate, triangular or triangular-ovate leaf lobules, the smaller stylus (9–14 cells long and 2–3 cells wide), and female bract lobule without any lobular teeth.

Key words: *Cololejeunea latistyla*, epiphyllous liverwort, Jianfengling National Nature Reserve, Lejeuneaceae

Introduction

Lejeuneaceae Cavers (1910: 291) is the largest family of the liverworts (Marchantiophyta) with at least one thousand species in 68 currently accepted genera (Gradstein 2013). *Cololejeunea* (Spruce 1884: 291) Schiffner (1893: 121), with over 400 published binominals, is the first largest genus of Lejeuneaceae (Yu *et al*. 2013, He *et al*. 2012). It is the most dominant genus of the epiphyllous flora and most species of the genus are distributed in the tropical and subtropical regions (Zhu & So 2001). The important diagnostic features of the genus are the absence of underleaves, and the stem transverse section usually with five cortical cells and one medullary cell (Zhu 2006). During our study on Lejeuneaceae from China, we came across an interesting species of *Cololejeunea* on the living leaves from Hainan which somewhat resembles *Cololejeunea latistyla* R.L.Zhu in Zhu *et al.* (1994: 544) in the hyaline marginal cells of leaf lobe and the large stylus. However, it differs from *C. latistyla* in its variable leaf lobule which is rectangular-ovate, triangular or triangular-ovate, the small stylus (9–14 cells long and 2–3 cells wide), and the female bract lobule without any lobular teeth. It is here described and illustrated as a new species.

Cololejeunea sublatistyla J.Wang & R.L.Zhu, *sp. nov.* (Fig. 1)

Diagnosis. A new species characterized by the autoicous plants; the presence of large, hyaline cells at the apical and dorsal margin of leaf lobe; the rectangular-ovate, triangular or triangular-ovate leaf lobules with two teeth at apex; the large stylus (9–14 cells long and 2–3 cells wide); the female bract lobule with an entire margin.

Type:—CHINA. Hainan. Ledong Co., Jianfengling National Nature Reserve, epiphyllous, 812 m, 19 Jul. 2009, *Ling-Yan Zhou 0323085* (holotype: HSNU!).

Etymology. The epithet refers to the close similarity to *Cololejeunea latistyla*.

Description:—Autoicous. Plants 6–16 mm long, 1.2–1.5 mm wide, pale yellowish in herbarium, irregularly branched, branches of the *Lejeunea*-type. Stems 60–90 µm in diameter, ventral merophyte 2 cells wide, stem in transverse section with 6–7 cortical cells and 1 medullary cell. Rhizoids numerous, fasciculate, hyaline, rhizoid disc absent. Leaves imbricate. Lobe ovate to subelliptical, 0.66–0.80 mm long, 0.54–0.66 mm wide, apex rounded, margin entire, apical and dorsal margin usually bordered by 1–3(–4) rows of hyaline cells. Lobe cells thin-walled,

Accepted by Christine Cargill: 23 Jan. 2014; published: 24 Feb. 2014

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