





http://dx.doi.org/10.11646/phytotaxa.212.1.6

Bryum campylopodioides Müll. Hal., a new species for Southwest Asia

S. SHIRZADIAN¹, S. AKHOONDI DARZIKOLAEI² & J.R. SPENCE³

¹ Department of Botany, Iranian Research Institute of Plant Protection, P.O. Box 19395-1454, Tehran 1985813111, Iran (correspondence author: shirzadian2003@yahoo.co.uk)

² Department of Biology, College of Basic Sciences, Tehran Science and Research Branch, Islamic Azad University, Tehran, Iran

³National Park Service, Glen Canyon National Recreation Area, P.O. Box 1507, Page, AZ 86040, USA

Abstract

Bryum campylopodioides Müll. Hal., previously known only from the type locality in China, is here reported new to Southwest Asia, based on a specimen from West Azerbaijan Province (NW Iran). The species is illustrated and its taxonomic placement discussed.

Keywords: Bryophytes, Bryaceae, W Azerbaijan province, Iran

Introduction

Bryum campylopodioides Müll. Hal. is currently known only from the type, described from Shaanxi province of northcentral China. Here we report a second locality in West Azerbaijan Province (NW Iran), based on collections made in 2012. This species was first reported in an annotated list of mosses of the subfamily Bryoideae in southeast and east Asia (Ochi, 1985).

Results and Discussion

Bryum campylopodioides Müll. Hal., Nuovo Giorn. Bot. Ital., n.s. 3: 95. 1896. Protologue: Schen-si sept.: Monte Khiulin-san, ditante da Sin-gan-ju 4 giornate a poncute c 2 giornate prima di giungere al "Thae-pei-san". Jan. 1894, *Giraldi 936* (BM, FI, isotypes).

Plants pale green to yellow-green, becoming red-brown with age; stems imbricate, not julaceous; leaves ovate, not or weakly decurrent; costa weak below, greenish, becoming strong and colored orange-brown when old, strongly keeled and longly excurrent in long somewhat denticulate awn, awn fragile, easily broken off; distal laminal cells elongate-rhomboidal to hexagonal, 3–4:1 length to width, proximal cells abruptly quadrate to short-rectangular, 1-2:1, limbidium lacking, margins plane throughout or weakly recurved at base only; dioicous (Fig. 1 A–F). Innovation leaves small, very narrowly ovate to lanceolate, with extremely long awns. Perichaetial leaves smaller than vegetative leaves, narrower with a more strongly revolute border and longer awns. Capsules pendulous, pyriform, brown, wide-mouthed with a neck not exceeding half the length of the capsule, lid mamillate; exostome teeth pale brown, endostome membrane high, processes present, cilia present and appendiculate; spores papillose, 16–20 µm (Fig. 1 G–J).

Specimen examined: Iran, W. Azerbaijan province, Piranshahr, Silveh, Mashkan, on soil, 45° 3' E 36° 48' N, 1970 m, 22.06.2012, *M. Eskandari n.s.* (IRAN 0472B).

The type collection of this species is from Shaanxi province of north-central China, and remains the only know specimen prior to the find reported here. The newly reported plant differs slightly from the type specimen in that most of the leaves are either not or weakly decurrent, although a few shoots show stronger decurrencies, compared with the fairly strong decurrencies in the Chinese type. This may be a result of differing growth rates, as rapidly elongating shoots can often produce leaves with strong decurrencies.