



Ulota larrainii (Orthotrichoideae, Orthotrichaceae, Bryophyta) a new species from Chile, with comments on the worldwide diversification of the genus

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Abstract

A new species of *Ulota* D. Mohr, *U. larrainii*, is described from the Aysén Region, southern Chile. The characters that discriminate the new moss are the prostrate habit, leaves not crisped, marginal cells of the leaf base differentiated in 1(2) rows, vaginula hairy, exostome of 8 pairs of orange, recurved teeth, endostome of 16 broad and hyaline segments, and large, multicellular spores. The new moss is illustrated and compared with similar taxa. In addition, the presence of multicellular spores in the genus *Ulota* is summarized and evaluated from an updated list of currently accepted species. Finally, the distribution, species richness and levels of endemism in the different regions where *Ulota* taxa occur are summarised and discussed with the help of a world map.

Key words: diversity centres, endemism, multicellular spores, peristome, South America, Southern Hemisphere, taxonomy, *Ulota magellanica*, *Ulota billbuckii*

Introduction

Ulota D. Mohr (1806: 540) is a complex and large genus with a bipolar distribution. It may be found in epiphytic, rarely saxicolous, habitats, mainly in temperate areas subject to an oceanic to hyper-oceanic climate in both hemispheres.

Recent collections in southern South America have included a considerable number of *Ulota* specimens, many of them from areas whose bryoflora is poorly explored. As a result, two new species, *U. billbuckii* Garilletei *et al.* (2012: 587), and *U. streptodon* Garilletei *et al.* (2012: 594) have been recently described, and a third one is here proposed. Notably, these three species share an uncommon character, the production of multicellular spores. In view of this strong differentiating character, it may be inferred that the failure to study and describe them correctly until now can probably be attributed to the low levels of collecting in the area.

The genus *Ulota* was revised for South America by Malta (1927). Almost a century later, this work remains the only revision of this group in the area. Malta's extraordinarily perceptive research makes this a remarkable work that includes very accurate descriptions. Despite some taxonomic weaknesses, due mainly to the limited number of specimens available for analysis at the time, it is still a fundamental reference work.

Taxonomy

Ulota larrainii Garilletei, Mazimpaka & F. Lara, *sp. nov.*, Figs. 1–19

Plantae caulibus principalibus procumbentibus; folia sinuosa, non contorta, linearia ad linear-lanceolata basi dilatata, marginalibus cellulis in 1(2) seriebus differentiatis et dilatata basi restrictis. Vaginula pilis 2(3)–seriatis curtis, coloratis papillosisque. Seta 1.6–1.8 mm longa. Capsula exserta, urna in sicco vacuoque curte cylindrica ad ovatam. Peristomium duplex. Exostomii dentes 16, aurantiaci, opaci, revoluti. Endostomium hyalinum, evolutissimum, 16 latis planisque segmentis, in sicco incurvatis. Calyptra conica, plicata, luteola obscuro rostro munita, pilosa. Sporae multicellulares, obscure virides, sphaericae, 100–140 µm.