



Leptochilus oblongus (Polypodiaceae), a new fern species from northern Vietnam

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Abstract

A new fern species, *Leptochilus oblongus* of Polypodiaceae is described and illustrated from Hoa Binh Province, northern Vietnam. *Leptochilus oblongus* is most similar to *L. ellipticus*, but the sori of the former are oblong, close to the lobe margins, and parallel with costule. In contrast, those of the latter are linear, located on main lateral veins, and forming a ca. 45 degree angle with costule.

Key words: *Leptochilus*, limestone, sori, Vietnam

Introduction

The microsorioid ferns are one of most diverse lineages in the family Polypodiaceae (Kreier *et al.* 2008). Within microsorioid ferns, the genus *Leptochilus* Kaulfuss (1827: 147) sensu Nootboom (1997) was estimated to contain 20–30 by Zhang & Nootboom (2013), but there has not been a modern revision of the genus published. Species of the newly defined *Leptochilus* with *Kontumia* S.K.Wu & K.L.Phan (2005: 245) included (Kim *et al.* 2013) are morphologically variable. Their lamina can be simple, partially lobed to deeply 1-pinnatifid, and exceptionally 3-pinnatifid (in *Kontumia*; Wu *et al.* 2005). In addition, the habit, dimorphism, shape of sori are also diverse in the genus.

A large number of endemic ferns which have been partially described in the recent studies occur in the limestone areas of southern eastern Asia (e.g., He & Zhang 2010, Lu *et al.* 2014). In our fieldwork in the limestone areas of northern Vietnam in 2013, we collected some samples of *Leptochilus*. These samples have regularly 1-pinnatifid lamina, similar to *L. ellipticus* and the related species, but the sori of the these samples are oblong and close to the leaf margins, different from all other species in the genus. We describe it here as *Leptochilus oblongus*.

Taxonomy

Leptochilus oblongus Li Bing Zhang, Liang Zhang & Ngan T. Lu, *sp. nov.* (Figure 1). Type:—VIETNAM. Hoa Binh Province: Lac Son District, Ngoc Son Ngo Luong Nature Reserve, elev. 640–700 m, 20°25'N/105°20'E, on limestone rocks in disturbed rainforest, 20 November 2013, L.-B. Zhang, L. Zhang & N. T. Lu 6299 (holotype VNMN!; isotypes CDBI!, MO!).

Diagnosis: *Leptochilus oblongus* is most similar to *L. ellipticus* in having 1-pinnatifid lamina but the former has oblong sori close to the lobe margins and nearly parallel to costule, while the latter has linear sori located on main lateral veins and forming an angle with costule.