



Validation of *Plagiochila fracta nomen nudum* (Jungermanniopsida). East African bryophytes XXXI.

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Abstract

The *nomen nudum* *Plagiochila fracta* Pócs was used for a species collected by Patricia Geissler during March of 1999 in Madagascar. The name was used in three publications, but was never properly and validly described. The aim of this paper is to provide a full description to this peculiar species, which seems to be endemic to the north-western region of Madagascar.

Key words: caducous leaves, liverworts, Madagascar, Manongarivo Massif, *Plagiochila artsii*.

Introduction

A species of *Plagiochila* (Dumortier 1831: 42) Dumortier (1835:14) was collected by the late Patricia Geissler in an expedition aiming at a biological inventory of Manongarivo Massif (Antsiranana Province, NW Madagascar), which yielded in 19 taxa new to Madagascar, four for the whole of Africa, and another seven proved to be new to science (Pócs 2001, Pócs & Geissler 2002, Pócs & Váňa 2002, Sass-Gyarmati 2001). Some of them are still undescribed. The name *Plagiochila fracta* Pócs was used in Pócs & Geissler (2002: 61) without description for an interesting tiny species with leaf fragmentation most probably serving as a means of vegetative propagation. The species was later placed in sectio *Rutilantes* Carl (1931: 83) by Heinrichs *et al.* (2005: 322) in their sectional subdivision of the tropical African representatives of the genus. The *nomen nudum* *Plagiochila fracta* is here validated and the species is described.

Taxonomy

Plagiochila fracta Pócs *sp. nov.* (Figs 1–3).

Type:—MADAGASCAR. Antsiranana (Diego Suarez) Prov. Réserve spéciale de Manongarivo Ambahatra, cours supérieur; 13°59'S; 48°26'E. Crête entre les deux bras de l'Ambahatra, ca 800 m au N point côte au-dessus du camp 2, elevation: 1250–1300 m. Arête, dans une forêt montagnarde. Substrat: Rocher. (fragments of decaying wood can be observed on the lower side of the specimen). 9 March 1999, *P. Geissler19691/1* (holotype: G!, isotypes: EGR!, GOET!).

Diagnosis:—In herbarium dark green plant with irregular branching, forming dense, adherent mat of 3–5 cm diameter. From the creeping, leafless but with scattered rhizoids covered, rhizomatous primary stem 5–10 mm long, often bifurcate branches arise. Leafy shoots 0.8–1.3 mm wide, sometimes flagelliform shoots also occur with reduced leaves (Fig. 1 A–B). Stem 80–130 µm thick, with 1(–2) layered cortex with pale rusty colored cell walls and 6–8 cells thick medulla of smaller cells with thinner, colorless walls (Fig. 1 C). Leaves, if intact, somewhat elongate, falcate with parallel and entire sides, convex, 400–500 µm long and 200–250 µm wide, apex rounded or 2–4 lobulate (Fig. 2). Insertion inverted J shaped, dorsal base cuneate, ventral base shortly decurrent to the midline of the stem, where very rarely filiform amphigastria occur (Fig. 1 D–E). The leaves are extremely fragile, many of them already at the habitat broken away along the midline of cell walls, forming an irregular dehiscence line (Fig. 3 A). The leaf fragments probably serve the

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