

A new taxon of *Bazzania* (Lepidoziaceae) collected in Manongarivo Special Reserve, NW Madagascar

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Abstract: Sass-Gyarmati A., Pócs T. (2021): A new taxon of *Bazzania* (Lepidoziaceae) collected in Manongarivo Special Reserve, NW Madagascar. *Frahmia* 24:1-4.

From the rich collections made by Patricia Geissler in Madagascar one taxon of Lepidoziaceae proved to be new to science: *Bazzania decrescens* (Lehm. et Lindenb.) Trevis. ssp. *ambahatrae* Gyarmati et Pócs ssp. nov. and here validly published.

1. Introduction

Patricia Geissler took part in a joint expedition organised by the „Conservatoire et Jardin botaniques de la ville de Genève” in the Manongarivo Massif of Northwest Madagascar in February and March 1999. First results were presented at the XVI International Congress in St. Louis (GEISSLER 1999), but her death prevented her from further elaboration. The rich collection was sent to Tamás Pócs, who with his contributors, identified 640 specimens of it, belonging to 167 taxa. Nineteen of them proved to be new to Madagascar and 4 for the whole of Africa, finally 11 new to science. (PÓCS 2001, SASS-GYARMATI 2001, PÓCS & GEISSLER 2002). The name *Bazzania decrescens* var. *ambahatrae* firstly appeared in the publication of Pócs & Geissler (2002) but without a description, remaining a nom. inval. based on Art 38.1 (ICAFP Shenzhen 2018). It was not mentioned in the world checklist of hornworts and liverworts (SÖDERSTRÖM ET AL. 2016). We here publish it as a new subspecies and a new member of the family Lepidoziaceae (subfamily Bazzanioideae). Its subspecies rank is justified by the significant and constant morphological differences and by its isolated occurrence restricted to the Manongarivo Massif of Northwest Madagascar.

2. Description of *Bazzania decrescens* (Lehm. et Lindenb.) Trevis., Mem. Reale Ist. Lombardo Sci. (Ser. 3), C. Sci. Mat. 4 (13): 414, 1877 (Trevisan 1877) ssp. *ambahatrae* Gyarmati et Pócs, ssp. nova (Plate 1-2, Fig. 1-8)

Diagnosis: *A typo differt foliis brevioribus subrotundis videtur folia concava parte ventrali recurvatis J formiis affixis ad caules. Cellulae foliorum trigonibus amplissimis et confluentis.*

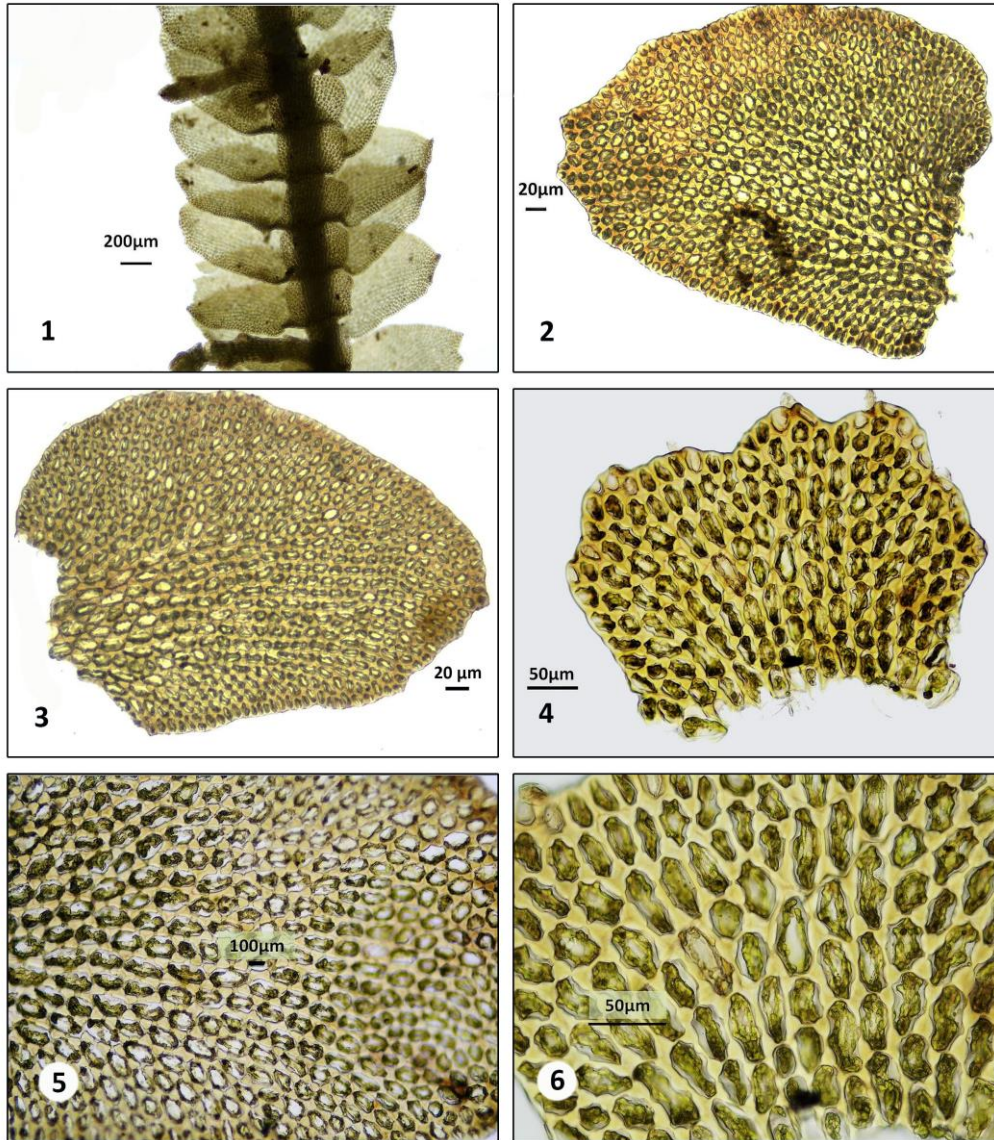


Plate 1. *Bazzania decrescens* (Lehm. et Lindenb.) Trevis. ssp. *ambahatrae* Gyarmati et Pócs
Fig. 1. Habit, ventral view **figs. 2-3.** leaves **fig 4.** amphigastria **fig. 5** median leaf cells **fig. 6.**
 underleaf cells [figures from P. Geissler 19742, *Holotype* G]

Differs from the type of *Bazzania decrescens* (Lehm. et Lindb.) Trevis, ssp. *decrescens* by the shorter, roundish, apparently concave leaves with recurved ventral side, J shaped attachments to stem. Leaf cells with very large and confluent trigones. (see fig. 9-10).

Type: MADAGASCAR, Prov. Antsiranana (Diego-Suarez) – Réserve spéciale de Manongarivo Ambahatra, cours supérieur; 13°59'S; 48°26'E. Crête entre les deux bras de l'Ambahatra 0,8-0,3 km au N du point côté 1528. Alt.: 1350-1400m. Habitat: première arête dans une forêt montagnarde. Substrat: tronc. Holotype: *P. Geissler*. 19742. Date: 10.03.1999 (G).

Other specimens examined:

Isotype: *P. Geissler*. 19742. (EGR); Paratype: *P. Geissler*, same locality. 19734/1 (G); Isoparatype: *P. Geissler*. 19734/1 (EGR).

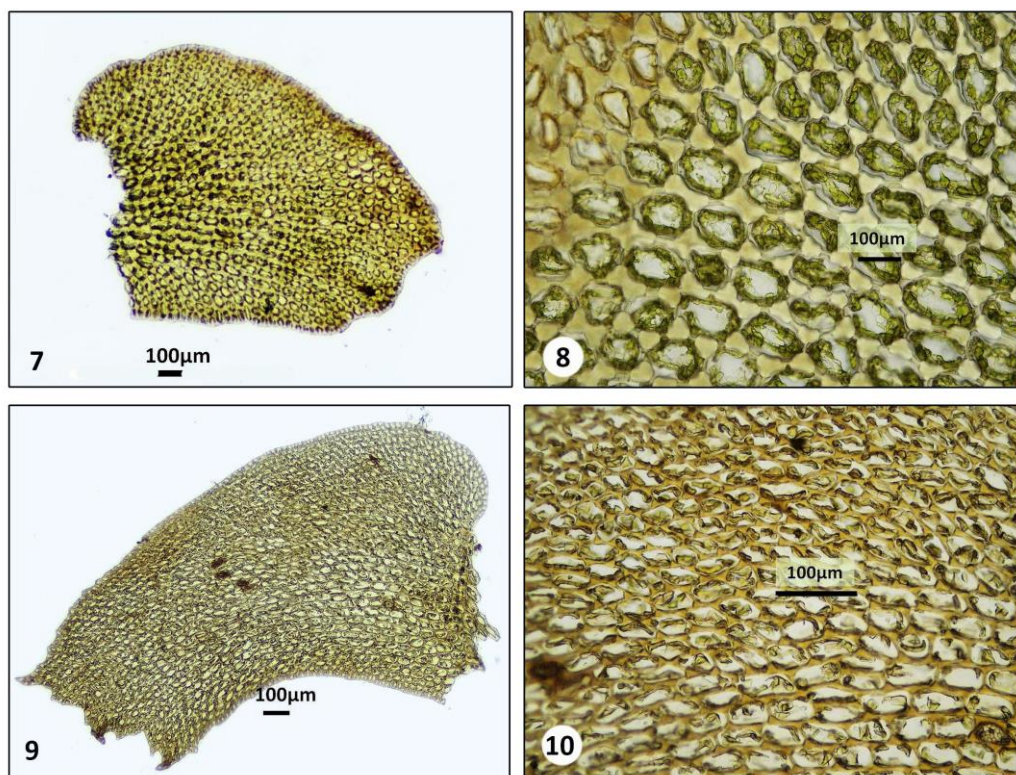


Plate 2. Comparison of *Bazzania decrescens* ssp. *ambahatrae* Gyarmati et Pócs with *Bazzania decrescens* (Lehm. et Lindenb.) Trevis.

Fig. 7. Leaf of *Bazzania decrescens* ssp. *ambahatrae* **fig. 8.** median leaf cells of *Bazzania decrescens* ssp. *ambahatrae* showing trigones [*P. Geissler* 19742, *Holotype* G] **fig. 9.** Leaf of *Bazzania decrescens* (Lehm. et Lindenb.) Trevis. **fig. 10.** median leaf cells of *Bazzania decrescens* (Lehm. et Lindenb.) Trevis. [*P. Geissler* 19400/1].

3. Discussion

Based on MARLINE (2012) *Bazzania decrescens* ssp. *pumila* (Mitt.) Pócs also occurs in Madagascar, which differs from ssp. *decrescens* by the caducous leaves and its distribution restricted to East Africa and Madagascar. This is a vicariant subspecies with *Bazzania decrescens* ssp. *molleri* (Steph.) Jones distributed in western Africa (WIGGINTON 2018). Recently another new subspecies, *Bazzania decrescens* ssp. *curvidens* (Steph.) Gyarmati was published based on the recurved teeth of the leaves and underleaves from Madagascar (SASS-GYARMATI & REEB 2021). The newly described *Bazzania decrescens* ssp. *ambahatrae* Gyarmati et Pócs on the present knowledge is restricted to the Manongarivo Massif of Northwest Madagascar.

4. Acknowledgments

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