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Research article

Lectotypification of *Andreaea vilocensis* (Andreaeaceae, Bryophyta)

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Subject Editor: Nils Cronberg Editor-in-Chief: Nils Cronberg Accepted 17 April 2024 The name *Andreaea vilocensis* Broth. (Andreaeaceae, Bryophyta) from Bolivia is lectotypified. Description is provided along with figures.

Keywords: Bolivia, bryophytes, mosses, type specimens

Andreaea vilocensis Broth. in Herzog (1916), an uncommon moss, was described on the basis of two collections from Bolivia by T. Herzog, viz 3189 and 3190. During the study of Andean species of *Andreaea* Hedw. collections in JE both syntypes were found (JE04000679 and JE04000680).

In the protologue, V. F. Brotherus did not designate the holotype (Herzog 1916). Hence, it is necessary to select a lectotype for the species name (ICN2018 Art. 8.1; Turland et al. 2018).

Formal treatment

Andreaea vilocensis Broth. Biblioth. Bot. 87(1): 9, 1916 (Herzog 1916) (Fig. 1–2)

Original citation

Hochtal Viloco, Quimzacruz no. 3189, 3190.

Lectotype (here designated); Bolivia, Hochtal Viloco, Herzog 3189 (JE04000679 https://www.jacq.org/detail.php?ID=160335; isolectotypes W 1914-0004181 [digital image!] https://w.jacq.org/W19140004181, PC0657736 [digital image!] https://science.mnhn.fr/institution/mnhn/collection/pc/item/pc0657736?listIndex=&list Count=728; synlectotype Herzog 3190 JE04000680 https://www.jacq.org/detail.php?ID=160335).

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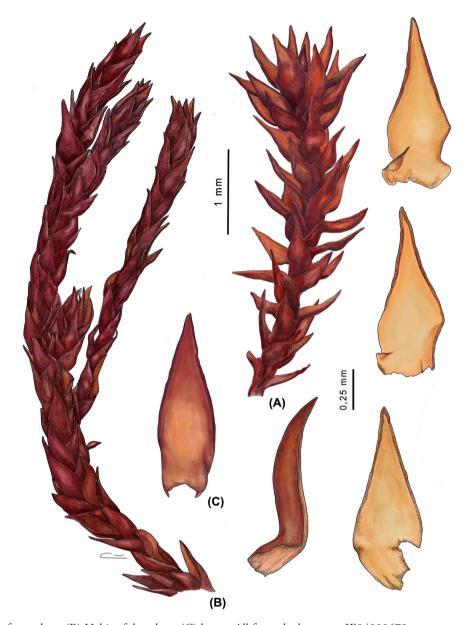


Figure 1. (A) Habit of wet plant, (B) Habit of dry plant, (C) leaves. All from the lectotype JE04000679.

Note

Plants medium sized to large, red-brown to dark-purple. Stem 40–70 mm high. Axillary hairs 2 celled, brownish, 40–50 µm. Leaves (0.9–)1.0–1.3(–1.5) \times 0.3–0.5(–0.6) mm, appressed to imbricate when dry, erect-patent when wet, squarrose, concave, panduriform to oblong lanceolate, more rarely, ovate lanceolate, with strongly incurved margins in the upper tiers of the leaves, cucullate and incurved apex. Costa absent. Lamina unistratose, papillose in the back; upper and mid cells \pm isodiametric, polygonal to subquadrate, oblates in the margins. Basal cells short to long rectangular, with \pm thick longitudinal walls, frequently pitted,

sometimes nodose. Basal marginal cells mostly rectangular, sometimes subquadrate.

Bolivia, renowned for its rich biodiversity, is home to several *Andreaea* species that remain little known, because they have not been studied since their description (Suárez 2024). However, *A. vilocensis* shares its habitat with some well-documented species. Among them, the costate species stand out, which include *A. nitida* Hook.f. & Wilson, characterized by ovate-oblong to elliptical leaves with obtuse-rounded apices and a short, wide costa; and *A. subulata* Harv., distinguished by its long, filiform, falcate leaves and elongated costa. In contrast, the ecostate species comprise *A. acutifolia* Hook.f. & Wilson, recognized by its reddish coloration, long

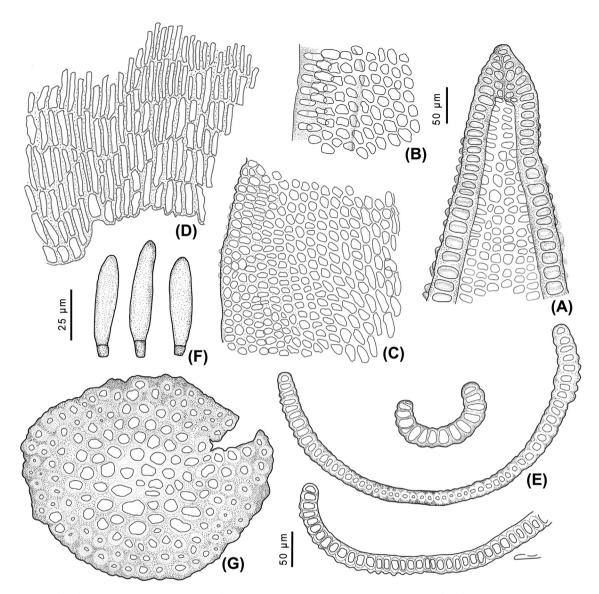


Figure 2. (A) Tip of leaf, (B–C) marginal median leaf cells, (D) basal leaf cells, (E) cross sections of leaf, (F) axillary hairs, (G) cross section of stem. All from the lectotype JE04000679.

lanceolate, clearly vaginate vegetative leaves; and *A. rupestris* Hedw., identifiable by its blackish appearance and lanceolate leaves. *Andreaea vilocensis* is an ecostate species characterized its red-brown to dark-purple coloration, panduriform to oblong lanceolate leaves with laminal cells papillose on the dorsal side.

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References

Herzog, T. 1916. Die Bryophyten meiner Zweiten Reise durch Bolivia. – Biblioth Bot. 87: [ii–iii], [1]–168, pl. 1–4.

Suárez, G. M. 2024. Taxonomical status of *Andreaea clavata* var. tenuior Broth. (Bryophyta, Andreaeaceae). – Phytotaxa 642: 225–228

Turland, N. J., Wiersema, J. H., Barrie, F. R., Greuter, W., Hawksworth, D. L., Herendeen, P. S., Knapp, S., Kusber, W.-H., Li, D.-Z., Marhold, K., May, T. W., McNeill, J., Monro, A. M., Prado, J., Price, M. J. and Smith, G. F. 2018. International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code). – Reg. Veg. 159: 1–254.