

Pabstiella pseudotrifida L. Kollmann & D. R. Couto (Orchidaceae), a new species from Espírito Santo, Brazil

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Abstract

KOLLMANN, L. J. C. & D. R. COUTO (2014). *Pabstiella pseudotrifida* L. Kollmann & D. R. Couto (Orchidaceae), a new species from Espírito Santo, Brazil. *Candollea* 69: 21-24. In English, English and French abstracts

Pabstiella pseudotrifida L. Kollmann & D. R. Couto (Orchidaceae), a new species from the State of Espírito Santo, Brazil, is described, illustrated, and compared with *Pabstiella trifida* (Lindl.) Luer, a morphologically similar species.

Key-words

ORCHIDACEAE – *Pabstiella* – Atlantic forest – Brazil – Taxonomy

Résumé

KOLLMANN, L. J. C. & D. R. COUTO (2014). *Pabstiella pseudotrifida* L. Kollmann & D. R. Couto (Orchidaceae), une nouvelle espèce d'Espírito Santo, Brésil. *Candollea* 69: 21-24. En anglais, résumés anglais et français.

Pabstiella pseudotrifida L. Kollmann & D. R. Couto (Orchidaceae), une nouvelle espèce de l'Etat d'Espírito Santo, Brésil, est décrite, illustrée et comparée avec *Pabstiella trifida* (Lindl.) Luer, une espèce morphologiquement similaire.

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The genus *Pabstiella* Brieger & Senghas (Orchidaceae) was segregated from *Pleurothallis* R. Br. by BRIEGER & SENGHAS (1976). *Pabstiella* consists of about 100 species (FRAGA & KOLLMANN, 2010; KOLLMANN, 2010; LUER & TOSCANO DE BRITO, 2011) mainly distributed in the Atlantic forest of Southern Brazil. A few species have a wider distribution, occurring in Bolivia, Amazonian Brazil, Colombia, Ecuador, Peru, and Venezuela, with one species reaching Panama and Costa Rica (LUER, 2006).

Pabstiella is characterized by caespitose herbs with lateral sepals mostly adnate to some degree, often forming a spur at the base with the column, a ventral anther, and two pollinia.

The aim of this paper is to describe and illustrate a new species of *Pabstiella*, from south of Espírito Santo state, Brazil.

Pabstiella pseudotrifida L. Kollmann & D. R. Couto, **spec. nova** (Fig. 1).

Typus: BRAZIL. Edo Espírito Santo: Mimoso do Sul, Santa Luzia, ca. , 7.I.2005, fl., D. R. Couto 229 (holo-: MBML).

Pabstiella pseudotrifida is very similar to *P. trifida*, but can be distinguished by the subtruncate to truncate petals, and the smooth lip which is free of callosities and truncate to rounded at apex.

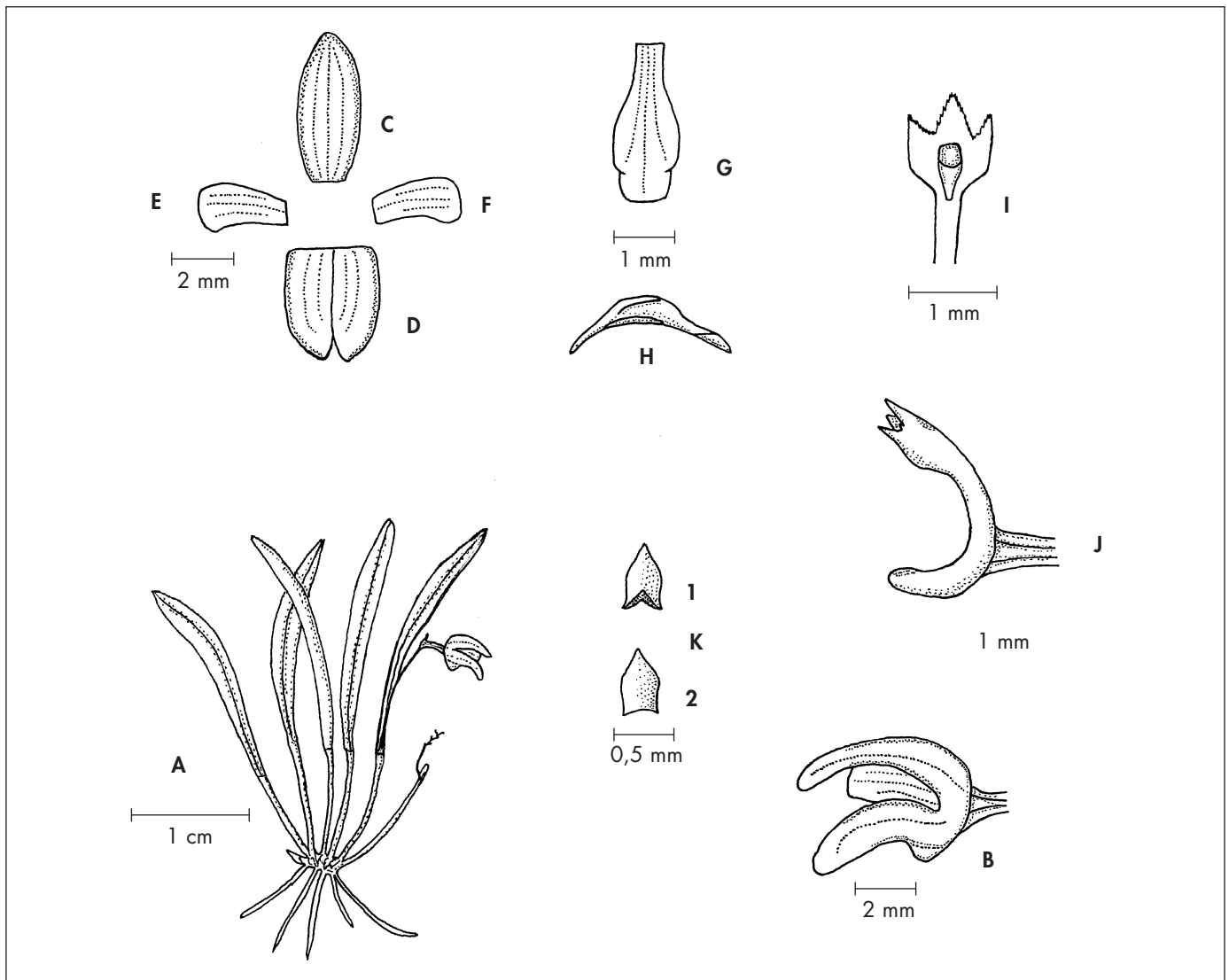


Fig. 1. – *Pabstiella pseudotrifida* L. Kollmann & D. R. Couto. **A.** Habit; **B.** Flower (side view); **C.** Dorsal sepal; **D.** Lateral sepals; **E-F.** Petals; **G.** Lip (spread); **H.** Lip (lateral view); **I.** Column (apical portion spread and from below); **J.** Column and ovary (lateral view); **K.** Anther (1. ventral face, 2. dorsal face).

[D. R. Couto 229, MBML] [Drawn by L. Kollmann]

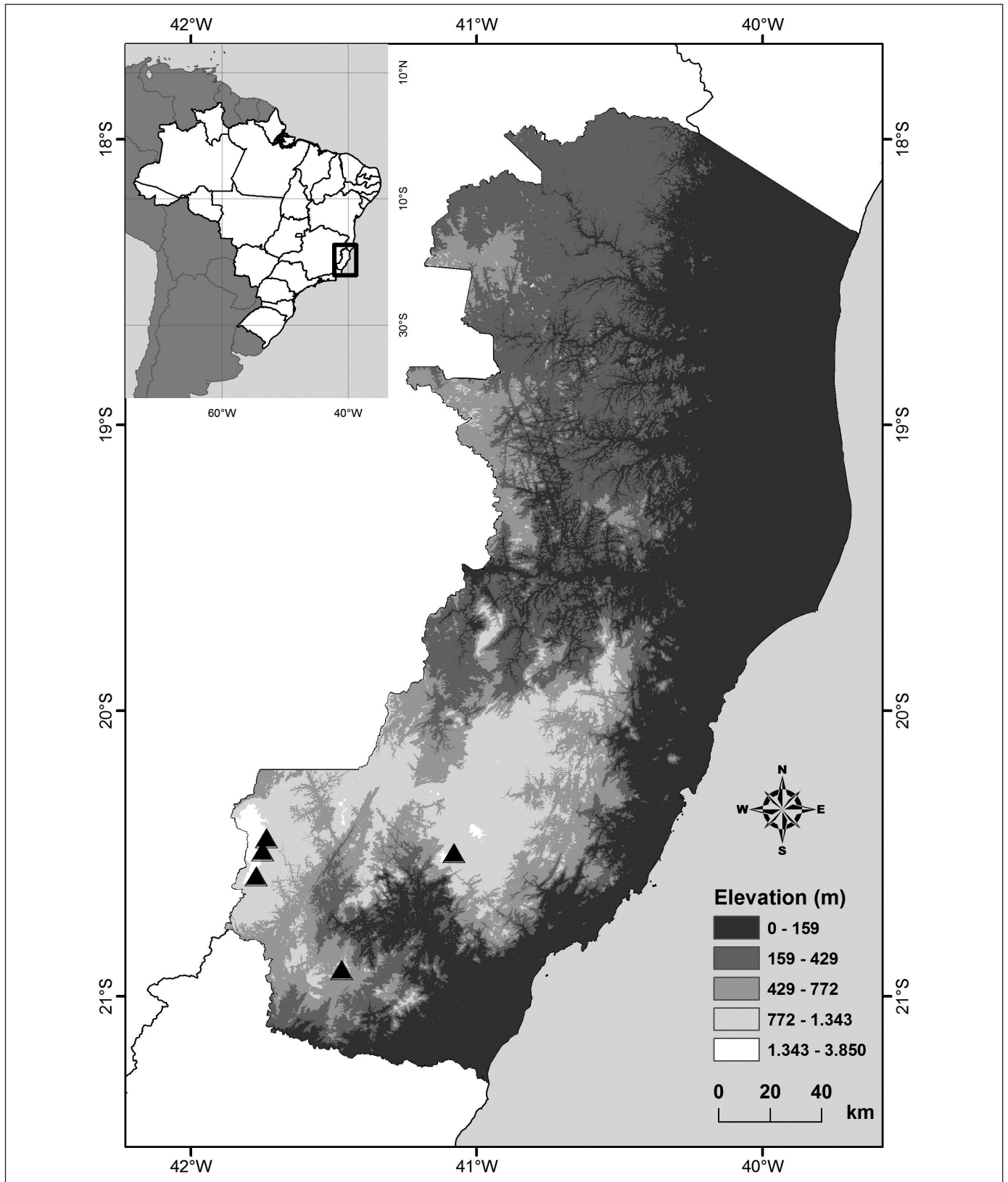


Fig. 2. – Distribution of *Pabstiella pseudotrifida* L. Kollmann & D. R. Couto (triangles) in Southern Espírito Santo, Brazil.

Plant epiphytic, 2-4 cm tall, caespitose, erect. *Roots* whitish, terete, flexuose, glabrous. *Ramicauls* 5.5-7 mm long., green, cylindrical, enclosed by tubular, acute, pale green sheaths that are paleaceous and whitish when dried. *Leaves* 16-28 × 3-3.5 mm, 0.8-1.6 mm thick, green, linear-elliptic, the base subpetiolate, the apex minutely 3-dentate, *Inflorescence* a congested, successively several-flowered raceme, 1.2-1.7 cm long, shorter than the leaves. *Floral bracts* ca. 1.5 mm long, translucent, pale green, tubular, acute. Flowers resupinate, glabrous. *Pedicels* 1.5-2 mm long. *Ovary* 1-1.2 mm long. *Sepals* yellow, translucent, with orange margins, 3-veined, carinate abaxially, the dorsal sepal 5-5.5 × 1.9-2 mm, oblong-elliptic, obtuse, the laterals sepal 4-4.1 × 1.4-1.5 mm, connate to above the middle into a oblong synsepal with acute apices, forming a small mentum below the tip of the column-foot. *Petals* 2.6-3.3 × 1.2-1.4 mm, spatulate, curved, 3-veined, translucent yellow with orange veins, slightly carinate abaxially, subtruncate to truncate. *Lip* 2.5-2.6 × 0.91 mm, orange, slightly purplish-lilac at base, green at the attachment with the column-foot, 3-lobed, unguiculate, 3-veined, the midvein longer than the laterals, smooth, free of callosities, the lateral lobes more or less below the middle, erect, broadly rounded, the apical lobe truncate to rounded. *Column* ca. 2.5 mm long, greenish, winged above the middle, white and 3-dentate at apex, the teeth straight and acute; column-foot 1.3-1.8 mm long with two callosities at base the apex papillose. *Anther* ca. 0.7 mm long, yellowish-white; pollinia two, yellow. *Capsule* unknown.

Etymology. – The specific epithet refers to its similarity to *P. trifida* (Lindl.) Luer.

Habitat, distribution. – This species is apparently endemic to the Atlantic forest of southern Espírito Santo, growing as an epiphyte in dense rainforest remnants, from 800 to 1600 m altitude. It is partially protected in the mountain forests of the Caparaó National Park (Fig. 2).

Conservation status. – Due to the apparently endemic distribution of *P. pseudotrifida*, and on the basis of the extension of its occurrence in the State of Espírito Santo, which is estimated to be less than 500 km², it seems appropriate to include this new species in the “Endangered” (EN) category (B2a(iii)), according to the IUCN (2001).

Taxonomical notes. – *Pabstiella pseudotrifida* is most similar to *P. trifida*, from which it may be distinguished by its petal and lip morphology. In *P. pseudotrifida* the petals are subtruncate or truncate, and the lip is smooth, free of callosities, truncate or rounded at apex, with side lobes above the middle. In *P. trifida*, the petals are obtuse or acute, the lip is papillose or verrucose, the side lobes are near or below the middle, and the disc is shallowly channelled between a pair of verrucose, intramural calli.

Paratypes. – **BRAZIL. Edo Espírito Santo:** Divino de São Lourenço, Patrimônio da Penha, Dense Ombrofilous Forest, border of Caparaó National Park, ca. 1100 m, 20.III.2009, fl., *D. R. Couto 1433* (VIES); Ibitirama, Caparaó National Park, Rio Santa Marta valley, ca. 1600 m, Altimontane Dense Ombrofilous Forest, 22.I.2013, fl., *H. M. Dias, A. E. Silva & al. 827* (VIES); Castelo, Forno Grande, 1000 m, 10.V.2006, fl., *A. Gussão s.n.*; s.loc., fl. cult. 21.VII.2008, *L. Kollmann & al. 11495*, (MBML).

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