A NEW COMBINATION AND TWO NOMENCLATURAL UPDATES IN *CERATOSTEMA* (ERICACEAE: VACCINIEAE) FROM SOUTHEASTERN ECUADOR

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ABSTRACT

The new combination **Ceratostema gualaquizaensis** var. **lucida** (Ericaceae: Vaccinieae) from southeastern Ecuador is presented here and the status of *C. portillae* A. Doucette & H. Medina and *C. guachizacae* A. Doucette, H. Medina, & J. Portilla is updated. A key to *Ceratostema gualaquizaensis* complex is provided.

RESUMEN

Se presenta la nueva combinación **Ceratostema gualaquizaensis** var. **lucida** (Ericaceae: Vaccinieae) del sureste de Ecuador y se actualiza el estatus de *C. portillae* A. Doucette & H. Medina y *C. guachizacae* A. Doucette, H. Medina, & J. Portilla. Se provee de una clave para el complejo *Ceratostema gualaquizaensis*.

Key Words: Horticulture, Morona Santiago, Neotropics, Vaccinieae

INTRODUCTION

In 2024, botanical research in southeastern Ecuador, a hotspot of diversity for *Ceratostema* (Ericaceae), has yielded 10 new names in this genus (Cornejo et al. 2024; Cornejo & Luteyn 2024; Jiménez et al. 2024 a, b; Doucette et al. 2024). The independent discovery of taxa with strong morphological similarities based on one or few collections each, however, may reveal variability of characters that in some cases correspond to a taxonomic "complex," or a duplication of efforts that result in the publication of synonyms or invalid names. We herein clarify the *C. gualaquizaensis* M.M. Jiménez & H. Garzón "complex," present the new combination *C. gualaquizaensis* var. *lucida*, and offer new status for *C. portillae* A. Doucette & H. Medina and *C. guachizacae* A. Doucette, H. Medina, & J. Portilla, all in accordance with Art. 11, the principle of priority, of the International Code of Botanical Nomenclature (Turland et al. 2018).

1. Ceratostema gualaquizaensis M.M. Jiménez & H. Garzón var. **lucida** (Cornejo & Luteyn) Cornejo & Luteyn, **comb. nov.** Basyonym: ECUADOR. Morona-Santiago: Parroquia Chiguinda, ca. 3°10′S 78°40′W, 2000 m, Andean eastern slopes, 16 Feb 2024 (fl), *X. Cornejo 10164* [holotype: GUAY (mounted and spirit); isotype: QCA].

***Discussion.*—**On 12 Nov 2024, Jiménez et al. (2024a) published in Phytotaxa the new species *Ceratostema gualaquizensis* M.M. Jiménez & H. Garzón (*H. Garzón 198*, holotype: HUTPL 14828) from southeastern Ecuador. Two weeks later, on 26 Nov 2024, Cornejo and Luteyn (2024) published in the *Journal of the Botanical Research Institute of Texas* three new species and a new variety of *Ceratostema* also from southeastern Ecuador, including *C. portillae* var. *lucida* Cornejo & Luteyn (*X. Cornejo 10164*, holotype: GUAY; isotype: QCA). We maintain that our *C. portillae* var. *lucida* is a good variety but should now be recombined as *C. gualaquizaensis*

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var. *lucida*. This new variety as well as *C. portillae* Cornejo & Luteyn (also published in Cornejo & Luteyn, 2024) are regarded herein as belonging to a *C. gualaquizaensis* "complex," a key to which is presented below. Note also that the orthography of the original specific epithet ("*gualaquizensis*") is corrected since the locality name after which the species was named is Gualaquiza.

Ceratostema gualaquizaensis var. *lucida* is herein newly combined and maintained as a variety because in living plants the characters mentioned in the key below give this variety an overall distinctive appearance, especially when fresh that allows for the taxonomic differentiation important in the horticultural trade and for which reasons this variety is already being sold on the market at the nursery "Ecuagenera" in Ecuador. The recognition of this new variety for ornamental purposes lies primarily in the visual impression of its distinctive glossy leaves and more elongate calyx lobes.

KEY TO *CERATOSTEMA GUALAQUIZAENSIS* COMPLEX

1. Leaves imbricate forming a terminal, loosely pendulous, subtubular arrangement in which the flowers are produced from the interior; leaf base subcordate; petioles villose; calyx lobes narrowly lanceolate, 11–12 mm long _____ **C. portillae** Cornejo & Luteyn
1. Leaves not imbricate and not forming a terminal subtubular arrangement; leaf base obtuse; petioles puberulous; calyx lobes deltate to lanceolate, 3.4–8.5 mm long.
   2. Leaves opaque without, puberulent on both sides; calyx lobes deltoid, 3.4–4.7 mm long, their apices acuminate _____ **C. gualaquizaensis** M.M. Jiménez & H. Garzón
   2. Leaves glossy without, glabrous on both sides; calyx lobes narrowly lanceolate, 5–8.5 mm long, their apices caudate _____ **C. gualaquizaensis** var. **lucida** (Cornejo & Luteyn) Cornejo & Luteyn

2. Ceratostema guachizacae Cornejo & Luteyn, J. Bot. Res. Inst. Texas 18(2):322. 2024. **Type:** ECUADOR. Zamora-Chinchipe: Canton Yacuambi, Yacuambi environs, ca. 3°36′S 78°57′W, 1800 m, 16 Feb 2024 (fl), *X. Cornejo 10164* [holotype: GUAY (mounted and spirit); isotype: QCA].

Ceratostema portillae A. Doucette & H. Medina, The Internet Orchid Species Photo Encyclopedia Nomenclature Notes Page, Vol. 9(1):2, *https://orchidspecies.com/vol912024.pdf*, pl. page 2. https://orchidspecies.com/vol912024photo.pdf [30 Nov 2024], **syn. nov.** Type: ECUADOR. Zamora-Chinchipe: Yacuambi, ca. 1600–1800 m, without date, the wild plant collected by Ecuagenera, EG-506 (holotype: HA).

3. Ceratostema sp.

Ceratostema guachizacae A. Doucette, H. Medina, & J. Portilla, The Internet Orchid Species Photo Encyclopedia Nomenclature Notes Page, Vol. 9(1):2, *https://orchidspecies.com/vol912024.pdf*, pl. page 2. https://orchidspecies.com/vol912024photo.pdf [30 Nov 2024], **homon. inval.** Type: ECUADOR. Zamora- Chinchipe: Barrio Romerillos Alto, near Shaime, ca. 1600 m, without date, the wild plant collected by Ecuagenera, EG-508 (holotype: HA).

Discussion.—At the end of November 2024 (30 Nov 2024), Doucette et al. (2024) published three additional new species in *Ceratostema* two of which (*C. portillae* A. Doucette & H. Medina and *C. guachizacae* A. Doucette, H. Medina, & J. Portilla) yield, in our opinion, invalid names; their status is herein updated.

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