Wulfenia **25** (2018): 157–160

Wulfenia
Mitteilungen des
Kärntner Botanikzentrums
Klagenfurt

Validation of *Elleanthus thomasii* (Orchidaceae, Sobralieae)

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Summary: The name *Elleanthus thomasii* (Orchidaceae) was used by Dodson for a specimen collected during an expedition to Ecuador [MO: *Dodson et al. 17076*]. The name was written only on the label of the herbarium sheet and it has never been published properly and validly. The aim of this paper is to validate the name *Elleanthus thomasii*. Additionally, we provide a full description and figures of this taxon.

Keywords: *Elleanthus*, *nomen nudum*, Orchidaceae, validation

During our studies on Neotropical orchids conducted at the herbarium of the Missouri Botanical Garden, we came across material bearing the name *Elleanthus thomasii* [MO 3577768]. The specimens were collected by the distinguished botanist, orchidologist and conservationist Calaway Homer Dodson and his team while exploring the Ecuadorian Province Napo in 1987. Dodson made numerous expeditions to South America, where he collected specimens and discovered new species of different genera including *Elleanthus* C. Presl (https://www.revolvy.com/main/index.php?s=Calaway%20H.%20Dodson). He has been describing six species of this genus so far (*E. carnevali*, *E. condorensis*, *E. escobarii*, *E. hirtzii*, *E. scharfii*, *E. tandapianus*).

The name *E. thomasii*, however, has never been published. In our opinion, it fully deserves the status of a separate species. Following the rules of the International Code of Botanical Nomenclature (McNeill et al. 2012: Art. 29.1), *E. thomasii* is a *nomen nudum* (naked name). Therefore, as the author did not publish his discovery, we provide a validation, description and notes on the taxonomic affinities of *E. thomasii* in this paper.

The new species is most similar to the taxa classified in the section *Hymenophora* Garay. This group of *Elleanthus* is characterized by apical, elongate inflorescence, lip with transverse membrane dividing it into two chambers and the basal part harboring a pair of corpuscules (Garay 1978).

Taxonomic treatment

Elleanthus thomasii Dodson ex Dudek & Szlach., sp. nov. (Fig. 1)

Diagnosis. *E. thomasii* is similar to *E. wercklei* Schltr., from which it can be distinguished by the elliptic, acute dorsal sepal (vs ovate, acuminate), lateral sepals with oblanceolate, rounded petals dorsally keeled towards apex (vs obliquely ligulate, obtuse), shape of the lip as well as form of the basal calli.

Type. Ecuador, Prov. Napo, Cordillera de Guacamayo. On road from Baeza to Tena, km 29 to 35, elevation 2100–1900 m, 31 Apr 1987, *C.H. Dodson*, *P. Scharf*, *D. Allison 17076* [MO, holotype!].

Description. Terrestrial, caespitose plants, up to 28 cm tall. Stem simple, several-leaved above, sheathed below. Leaves up to 6 × 0.9 cm, elliptic to lanceolate, long acuminate, sessile, plicate,

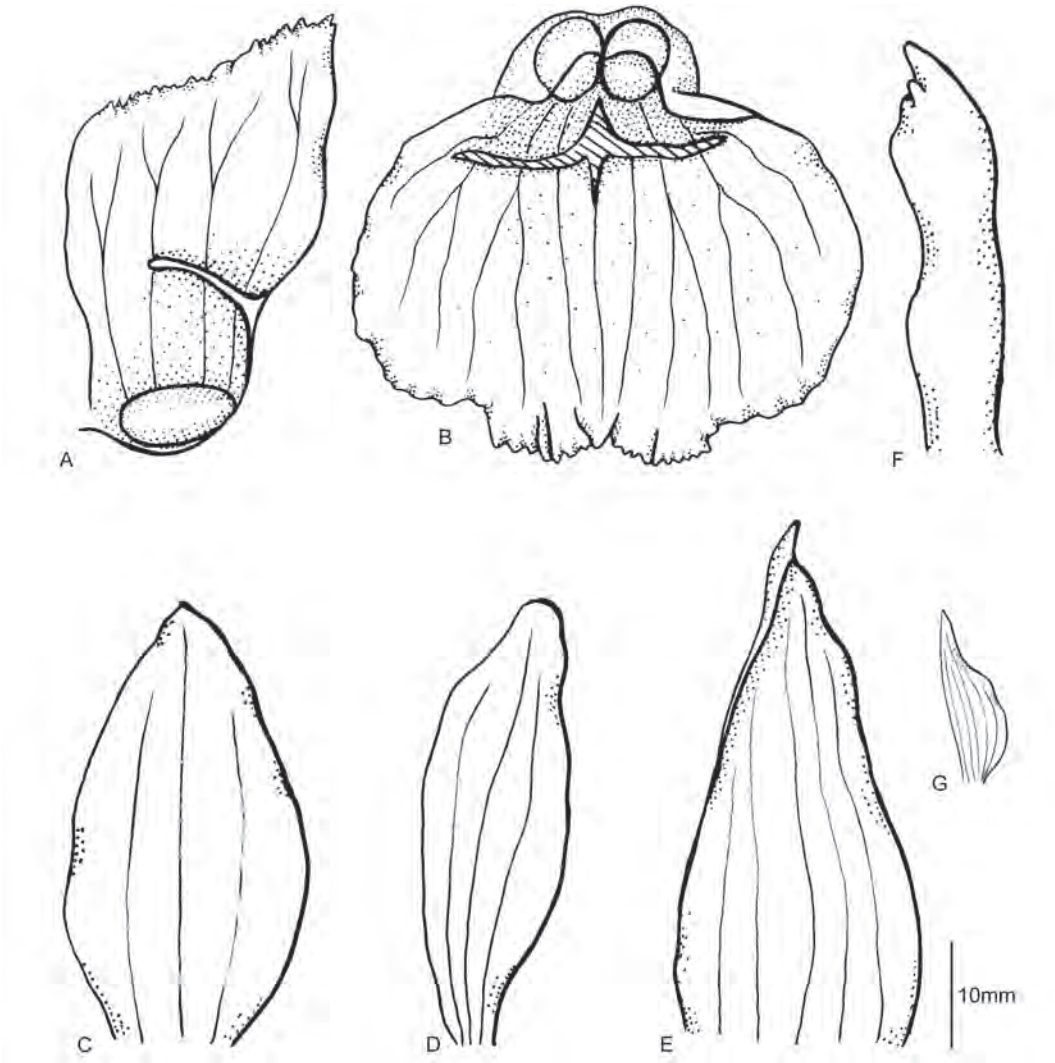

Figure 1. *Elleanthus thomasii* Dodson ex Dudek & Szlach. A–B lip; C – dorsal sepal; D – petal; E – lateral sepals; F – gynostemium; G – floral bracts. Scale bar = 10 mm (A–G). Drawn by P. Baranow from the holotype.

rather rigid. Inflorescence terminal, spicate, short, up to 2 cm long, densely several-flowered (ca 10-flowered). Flowers small, white. Floral bracts up to 15 mm long, lanceolate-ovate, narrowly cuneate, obtuse, somewhat longer than flowers, green-white, glabrous. Ovary 2 mm long, papillate. Sepals glabrous. Dorsal sepal 4.2 × 1.5 mm, elliptic, acute, 3-veined, lateral veins simple, margins entire. Lateral sepals 5.2 × 2.1 mm, ovate-lanceolate, acuminate, dorsally with the median vein keeled towards apex, 5-veined, margins entire. Petals 4.2 × 1.1 mm, somewhat falcate, oblanceolate, rounded, 3-veined, glabrous. Lip 4.2 × 6 mm, basal part subglobose, concave, margins entire; the apical part flabellate, margins irregular, erose, in front slightly bilobed and undulate; both lip parts divided into two compartments by prominent transverse membrane. The basal calli rather small, ellipsoid, approximate. Gynostemium 4 mm long, slender, erect.

Etymology. The author did not provide any notes concerning derivation of the species epithet. We suppose, however, that the author's intention was to dedicate this species to his son, Thomas A. Dodson.

Table 1. Comparative morphology of *E. thomasii* and *E. wercklei*.

	E. thomasii	*E. wercklei*
Plant size	up to 28 cm	23–45 cm
Leaf size	6 × 0.9 cm	4.5–7 × 0.7–1 cm
Leaf apex	acuminate	acuminate mucronate
Flower color	white	brightly pink
Dorsal sepal	elliptic and acute	ovate and acuminate
Lateral sepals	with dorsal keel along median vein towards apex	without keel
Petals	oblanceolate and rounded	obliquely ligulate and obtuse
Lip basal calli	small, ellipsoid, approximate, transverse membrane slightly below calli	obliquely oblong, separated and covered by semilunate, transverse membrane
Lip disc	subglobose, concave in basal part, slightly bilobed in front, irregular, erose margin in apical part	nearly orbicular with minutely denticulate-erose margins and saccate basal part
Column length	4 mm	2.25 mm

Distribution. Known so far exclusively from the type collection. According to the field note, the species is locally common.

Habitat and ecology. Terrestrial on road embankment. It was found growing at altitudes of about 1900–2100 m. Only flowering in May.

Notes. The new species resembles *Elleanthus wercklei* Schltr. in having a simple, erect stem with leaves only in the upper part and elliptic-lanceolate, long acuminate, subcoriaceus and glabrous leaves. However, the two species exhibit several differences (Table 1). The dorsal sepal of *E. wercklei* is ovate and acuminate (vs elliptic and acute in *E. thomasii*). The petals are clearly distinguished by shape; in the new species they are oblanceolate and rounded while in *E. wercklei* obliquely ligulate and obtuse. Though the form of the lateral sepals is similar in both species, in *E. thomasii* we can observe a dorsal keel along the median vein towards the apex, which is missing in *E. wercklei*. The lip structure of the two species is also different. In *E. thomasii*, calli are small, ellipsoid, approximate, while in *E. wercklei* they are obliquely oblong, separated and covered by a semilunate, transverse membrane. Another difference is observed in the lip form. It is subglobose, concave in basal part, slightly bilobed in front and flabellate with irregular, erose margin in apical part in *E. thomasii*. In *E. wercklei*, the lip is nearly orbicular with minutely denticulate-erose margins and saccate basal part.

Acknowledgements

The curators and staff of the cited herbaria are thanked for their kind hospitality and assistance during visits. We are grateful to Przemyslaw Baranow for preparing illustrations. The research described here has been supported by the Polish Ministry of Science and Higher Education (research grant no. N NO303 343735).

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