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## A NEW *TELIPOGON* FROM MEXICO CLOSE TO *TELIPOGON STANDLEYI* (ORCHIDACEAE: ONCIDIINAE)

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**ABSTRACT.** A new *Telipogon* from Mexico, previously confused with *T. standleyi* from Costa Rica, is described and illustrated. *Telipogon amoanus* is recognized by the pink-purplish flowers, the obliquely ovate, subfalcate sepals, the elliptic, entire petals, the triangular sagittate lip, densely pilose column with short basal hairs, and the pollinarium with the stipe obtrullate. *Telipogon standleyi* is illustrated based on Costa Rican material to facilitate species comparison. Additional comments on both species are provided.

**RESUMEN.** Se describe e ilustra un nuevo *Telipogon* de México, previamente confundido con *T. standleyi* de Costa Rica. *Telipogon amoanus* se reconoce por las flores de color rosa-púrpura, los sépalos oblicuamente ovados, subfalcados, los pétalos elípticos, enteros, el labelo triangular sagitado, densamente piloso, la columna densamente pilosa, con pelos cortos en la base y el estipite del polinario obtrulado. Para facilitar la comparación entre especies se ilustra *Telipogon standleyi* basado en material de Costa Rica. Se proporcionan comentarios adicionales sobre ambas especies.

**KEY WORDS:** *Stellilabium*, *Telipogon amoanus*, new species, taxonomy

Williams *et al.* (2005) evaluated the phylogenetic relationships of *Telipogon* Kunth and related genera by using molecular datasets. Their results showed that *Stellilabium* Schltr. was embedded within *Telipogon*, which consists of one Central American and two South American clades. Traditionally, *Stellilabium* was recognized as having small flowers with a simple column and a tendency to leaflessness, often lacking leaves when the plants are in flower. According to Williams *et al.* (2005) that condition has arisen at least twice, once in South America and once in Central America. *Stellilabium* was treated taxonomically by Braas and Lückel (1982), Garay and Romero-González (1998) and Dressler (1999).

*Telipogon* ranges from Mexico, through Central America and the Caribbean to Bolivia, but the highest species diversity is found in the Andes. In Central America the majority of species are concentrated in Costa Rica and Panama, with few members from Mexico to Nicaragua. Only two species were recorded in Mexico, both classified under the former *Stellilabium*. Salazar & Hágsater (1991) published the first record as *Telipogon* (= *Stellilabium*) *standleyi* Ames from Guerrero. The second record is *Telipogon*

*helleri* (L.O. Williams) N.H. Williams & Dressler, recently documented by Solano *et al.* (2011) from Chiapas.

Oakes Ames described *T. standleyi* from a plant collected by Paul Standley in 1924 in Costa Rica between Tarbaca and Aserri, southeast of San José (Ames 1925). In 2008, during a field trip near the type locality of *T. standleyi*, a plant in flower was collected for documentation and cultivated at Lankester Botanical Garden.

In revising the specimen reported by Salazar and Hágsater (1991), I realized that it markedly differs from the Costa Rican specimens. The Mexican species is treated here as a new to science and it is described hereafter:

***Telipogon amoanus* Bogarín, *sp. nov.***

**TYPE:** MÉXICO. Guerrero: Camino Chilapa-Hueycatenango km 22. Preparado de material cultivado, 15 de noviembre de 1975, E. Hágsater 4641 (holotype, AMO). FIG. 1.

*Telipogon standleyi aemulans, differt floribus roseis, sepalis oblique ovatis subfalcatis, petalis*

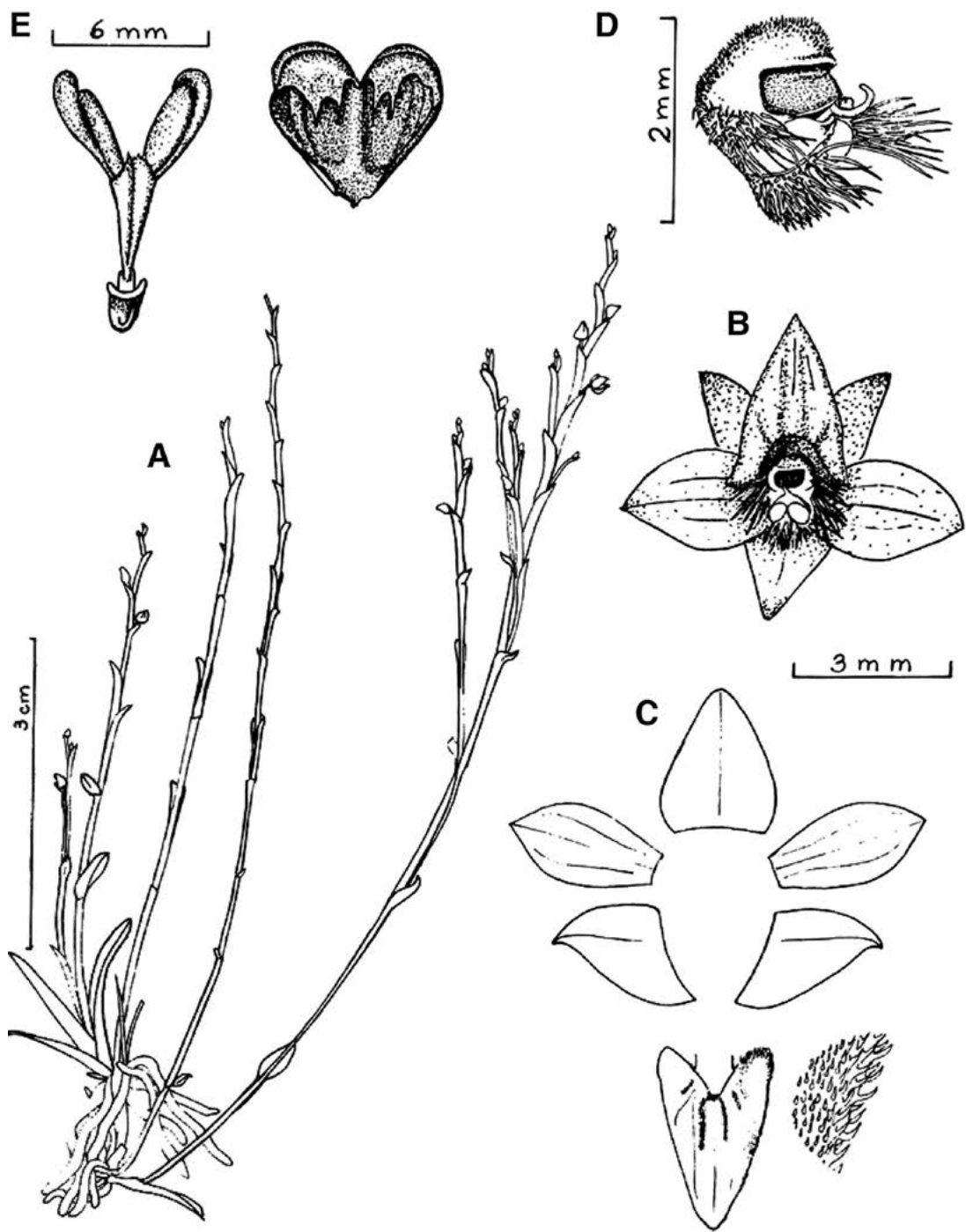


FIGURE 1. *Telipogon amoanus* Bogarín. A — Habit. B — Flower. C — Perianth flatten. D — Column. E — Pollinarium and anther cap. Drawn by E. Hágsater from the holotype.

*ellipticis integris, labello triangulato sagittato dense piloso, columna confertim pilosa basaliter pilis brevis vestita, stipite pollinarii obtrullato.*

Epiphytic, acaulescent herb, ca. 9 cm tall including the inflorescences. Roots thick, fleshy, slightly flattened, white with green tips, ca. 1.5 mm in diameter. Leaves deciduous when flowering, erect, distichous, linear-lanceolate, acute, somewhat fleshy (very thin and translucent when dry),  $7.5\text{--}22.0 \times 1.5\text{--}2.0$  mm. Inflorescences several (5 in our material), simultaneous, developed from leaf axils, simple or branched, up to 90 mm long, scape compressed, green, 0.5–1.0 mm thick, with 2–3 spaced and small, triangular-ovate, acute-attenuate, green, translucent bracts, with a thickened vein  $2.4\text{--}4.5 \times 0.8\text{--}1.5$  mm. Floral bracts very small, broadly ovate-deltate, acute to shortly acuminate, green, translucent, with a thickened vein,  $1.2\text{--}1.5 \times 1.0\text{--}1.6$  mm. Ovary slightly curved, terete, 2.0–2.5 mm long and 0.5–0.7 mm thick. Flowers small, inconspicuous, 5–7 mm in diameter, sepals and petals rose slightly yellow towards the apex, the lip pink with some yellow apical spine and purple anthers, a few scatter idioblasts containing crystalline material are evident in the floral parts. Dorsal sepal ovate, obtuse-rounded, concave, 1-nerved, glabrous,  $2.5\text{--}3.0 \times 1.6\text{--}2.0$  mm. Lateral sepals obliquely ovate, acute, concave, 1-nerved, glabrous,  $2.5\text{--}3.0 \times 1.8\text{--}2.1$  mm. Petals elliptic, obtuse to subacute, slightly concave or flat, 3-nerved,  $2.8\text{--}3.5 \times 1.5\text{--}2.1$  mm, dense and shortly pilose internally in the basal third, the margins glabrous to conspicuously ciliate on the basal two-thirds, the cilia retrorse. Lip sessile, with a shallow basal groove clearly separated from the column, entire, very fleshy-thickened in basal half, triangular-sagitate, acute, the inner surface densely and shortly pilose, the margins ciliate (cilia and hairs retrorse), outer surface glabrous, 3.0–3.5 mm in total length, including the basal auricles, 2.0–2.5 mm wide between the basal auricles; basal auricles retrorse, free, triangular, subacute, 0.5–0.8 mm long. Column sessile, very short, lobed, 1.5–1.8 mm in diameter, densely and shortly pilose, with slightly longer hairs on the ventral surface and a bundle of very long, rigid, septate hairs at the apex of each lobe (i.e. one apical and one on each side). Anther cordate, apparently bilocular without obvious septa, ca.  $0.8 \times 1.2$  mm. Pollinia 4, subclavate, slightly compressed and overlapping more or less

dorsiventrally, in two pairs, yellow, united to a short, obtrullate, translucent stipe terminating into a large, hooked viscidium, rostellum laminar, projected on a narrowly triangular extension. Stigma suborbicular, slightly concave. Capsule not seen.

HABITAT: According to Salazar and Hågsater (1991), plants grow epiphytic on branches with lichens, in mixed forest of pine and oak approximately between 1500 and 2000 m elevation. Other orchids growing in the area include: *Hintonella mexicana* Ames, *Oncidium ghiesbreghtianum* A. Rich. & Galeotti, *Epidendrum marmoratum* A. Rich. & Galeotti and *Encyclia atrorubens* (Rolfe) Schltr.

DISTRIBUTION: Known only from Guerrero, Mexico.

ETYMOLOGY: it is a pleasure to name this species after the staff and researchers of AMO Herbarium, in recognition of their outstanding contributions to the knowledge of the orchids of Mexico and the Neotropics.

PHENOLOGY: plants flower in cultivation in November and February.

Comparison of the material collected in Mexico with living plants of *T. standleyi* from the type locality in Costa Rica lead to reconsider the application of the name *T. standleyi* for the Mexican populations (Salazar & Hågsater 1991, see picture in Hågsater *et al.* 2005, p. 246). Ames (1925) recognized *T. standleyi* as having the glandular hairs of the column much abbreviated and in being a dwarf plant with foliage present at flowering time. The flowers are yellow with a purple-brown tinged center, the base of the petals and labellum are more deeply colored than the upper half, with a deep purple column. All these characters are consistent with the material studied from the type locality and the type specimen kept at AMES (Fig. 2).

*Telipogon amoanus* can be recognized from *T. standleyi* by the pink-purplish flowers (rather than yellow with a dark purple or crimson center), the sepals obliquely ovate, subfalcate (rather than triangular, acute), the elliptic, entire petals (rather than ovate, ciliate), the lip triangular sagittate, densely pilose (rather than oblong, basally glandular and glabrous towards the apex), the column densely pilose with short hairs basally (rather than with few abbreviated hairs, basally glabrous) and the pollinarium with the stipe obtrullate (rather than filiform).

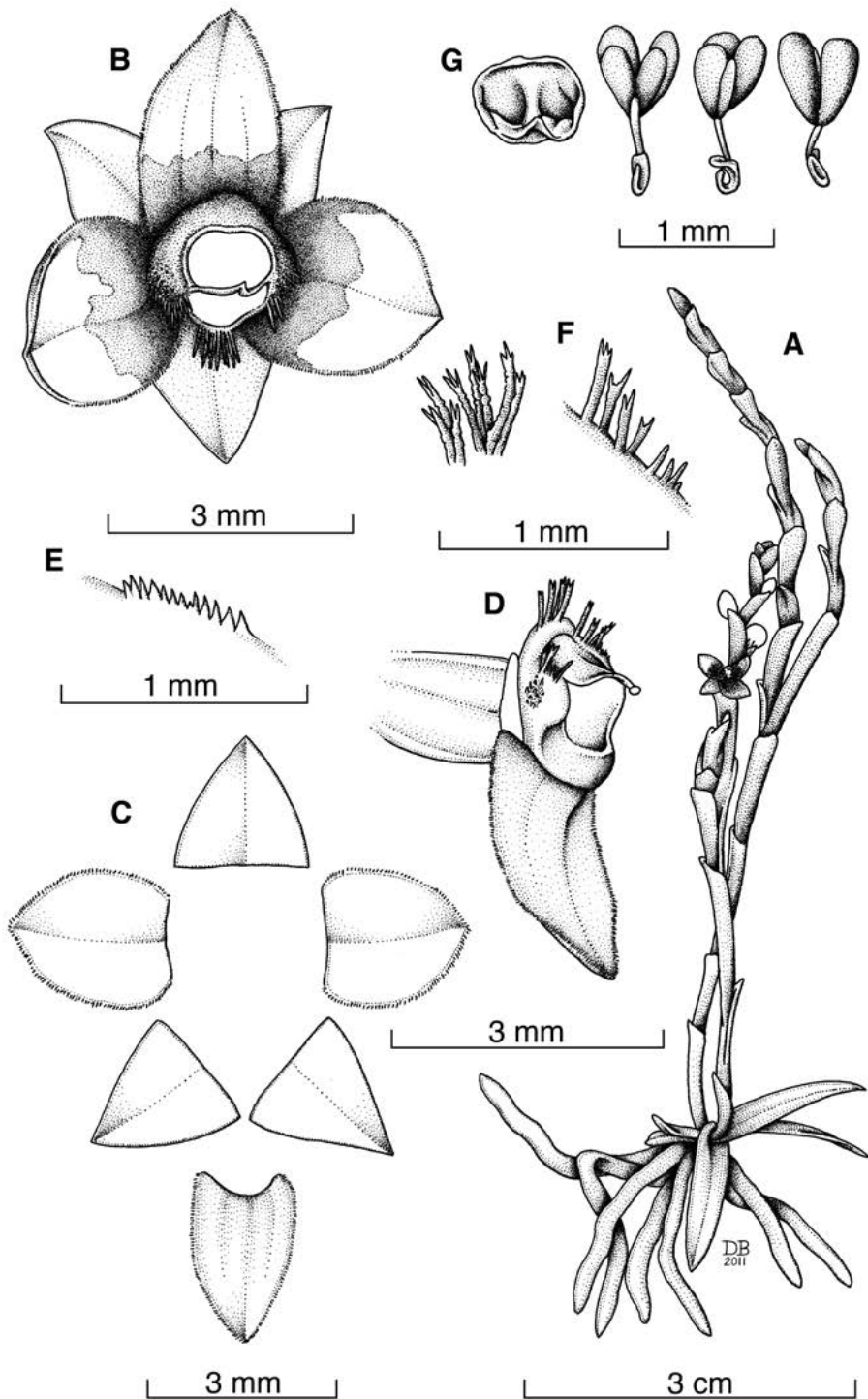


FIGURE 2. *Telipogon standleyi* Ames. A — Habit. B — Flower. C — Perianth flatten. D — Column and lip, lateral view. E — Margin of lip. F — Bristles of the column. G — Anther cap and pollinarium. Drawn by D. Bogarín based on *Bogarín 5138* (JBL-spirit).



FIGURE 3. Photo of: A — *Telipogon amoanus* (from Hágsater 4641). B — *T. standleyi* (from Bogarín 5138). Photographs by E. Hágsater (A) and D. Bogarín (B).

*Telipogon amoanus* is also similar to *Telipogon helleri*, which is distinguished by having a fringe of hairs in front of the column and lacking the hairs at the apex of the column (present in *T. amoanus* and *T. standleyi*) (Hamer 1985; Solano *et al.* 2011).

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