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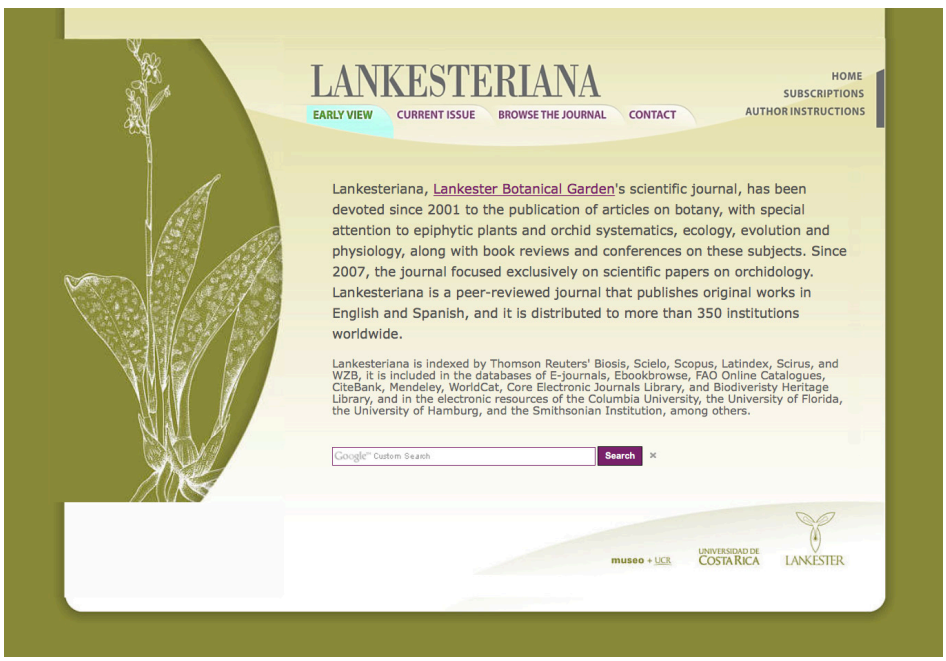

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A NEW SPECIES OF *SELENIPEDIUM* (ORCHIDACEAE: CYPRIPEDIOIDEAE) FROM ECUADOR

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ABSTRACT. A new species of *Selenipedium* (Orchidaceae: Cypripedioideae) from northern Ecuador is described here and its affinities are discussed. A key to the known species of the genus is provided.

KEY WORDS: *Selenipedium*, slipper orchid, Ecuador, new species, dichotomous key

Selenipedium, a small genus of slipper orchid (Orchidaceae: Cypripedioideae) whose range extends from Panama south to Ecuador and east to Trinidad, French Guiana and eastern Brazil, is the basal clade in the subfamily Cypripedioideae. It has recently been revised by Cribb (2009). The seven currently recognised species of *Selenipedium* are very closely allied to each other, having tall bamboo-like stems bearing alternate pleated leaves and terminal inflorescences of successively produced small flowers with a trilocular ovary, a dorsal sepal, similar synsepal, comprising the connate lateral sepals, two tapering lateral petals and a simple obovoid to ellipsoidal somewhat dorsiventrally flattened deeply concave lip with incurved lateral lobes and an incurved margin to the much larger apical lobe (except in the semi-peloric *S. chironianum*). The column is short with two large bilocular stamens on short filaments, a linear to trullate staminode and a pendent trilocular papillose stigma. The best known species is *S. palmifolium* Rchb.f. widespread on the Guiana Shield from Venezuela, Guyana, Surinam, French Guiana and northern Brazil. The other six species are much more restricted in range: *S. aequinoctiale* Garay in north-western Ecuador and adjacent Colombia; *S. chica* Rchb.f. is endemic to Panama; *S. chironianum* Sambin & Braem (2015) from French Guyana; *S. isabelianum* Barb. Rodr. from eastern Brazil; *S. steyermarkii* Foldats from Venezuela; and *S. vanillicarpum* Barb. Rodr. from Goias State in Brazil where it is known only from the type collection.

Calaway Dodson (1999) recognised two species of *Selenipedium* in his checklist of the Orchidaceae for Jørgensen & Leon-Yánez's Catalogue of the Vascular Plants of Ecuador. One of these, *Selenipedium aequinoctiale*, was described from northern Ecuador, whereas he identified the other, based on a sterile specimen from Succumbios Province in north-eastern Ecuador (cited as *Davis 1048* at AMES), as *S. chica*, a species previously considered to be endemic to Panama. Later, Dodson (pers. comm.) sent an updated manuscript to Kew in which he listed a further two collections of this taxon from Pastaza Province, to the south of Succumbios. Perez-Garcia and Mó Mó (2015) recently published a photograph of this orchid by Francisco Tobar under the name *S. chica*. It differs from *S. aequinoctiale* in having a somewhat differently colored flower with a lip with a narrower margin around the orifice and a much larger trullate staminode that is about a third the width of the lip base (rather than less than a quarter the width). It is certainly not *S. chica* which has much longer and narrower leaves and distinctively colored flowers in which the ovary is glabrous, the petals are trinerved and the staminode is spathulate not trullate (Dressler, 1993). The only other candidate for this species is *S. palmifolium*. However, that species differs in having a dorsal sepal that is much narrower than the lip, an obovoid lip with yellow incurved side lobes that just touch in the middle rather than all along the margins and an elliptic orifice marked with purple around the apical two-thirds of the rim and a smaller triangular-cordate staminode.

Only one of the collections (*Holguer Lugo S. 5538* at AMES) cited by Dodson in his unpublished account is fertile and that specimen is the basis for the following description.

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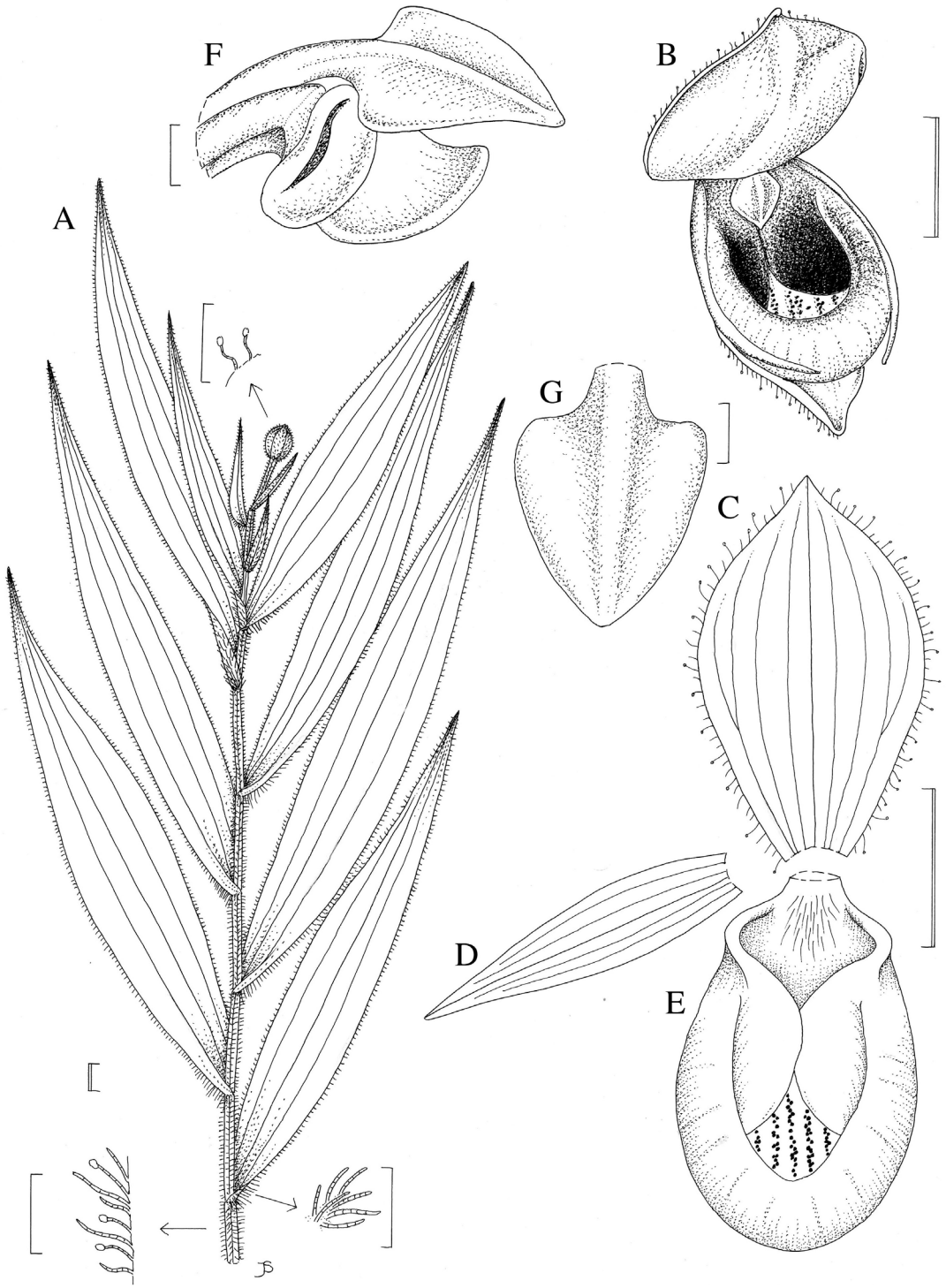

FIGURE 1. *Selenipedium dodsonii* P.J.Cribb. A, habit; B, flower; C, dorsal sepal; D. petal; E, lip; F, column, side view; G, staminode. Double bar = 10 mm; single bar = 1 mm. All drawn by Judi Stone from the type and photographs by Francisco Tobar Suarez.

Selenipedium dodsonii P.J.Cribb, ***sp. nov.***

Selenipedio palmifolio Rchb.f. affine sed floribus tristis flavis lobis oblongibus labello elliptico quam sepalo dorsali aequantibus lobis lateralibus labelli purpureis (vs luteis) et staminodio triangulare distinguendo; a *S. aequinoctiale* Garay sed lobis lateralibus labelli longioribus quam latioribus et staminodio grandiore trullato et a *S. chica* Rchb.f. foliis latioribus 4-6plo longis quam latis sepalo dorsali brunneis labello obovato et staminodio trullato satis differt. TYPE: Ecuador, Pastaza, *Holguer Lugo S. 5538* (holotype AMES!; sketch of type at K!).

A terrestrial *herb* with erect, terete, leafy stems up to 3 m tall, often sparsely branching above; *stems* dark green, covered by coarsely and densely villose leaf-bases. *Leaves* narrowly elliptic-lanceolate, acuminate, cuneate at base of lamina, 17–20 cm long, 2.8–3.8 cm wide, dark green, glabrous above, sparsely pilose at base, about 8-nerved, ciliate, sheathing at base; sheaths minutely puberulent. *Inflorescence* terminal or from axils of upper branches, up to 15 cm long, densely few-flowered; bracts chartaceous, ovate, acute or subacuminate, 10–30 mm long, 3–4 mm broad, pubescent, ciliate. *Flowers* small, produced in succession; sepals and petals light dull yellow, lip yellow, finely spotted with purple within and with two large maroon marks on the incurved side lobes; pedicel and ovary 30-50 mm long, densely glandular-pubescent. *Dorsal sepal* elliptic, acute, 22–25 mm long, 13–14 mm broad. *Synsepal* elliptic-ovate, shortly bidentate at apex, 20–24 mm long, 16 mm broad. *Petals* slightly obliquely narrowly lanceolate, acute, up to 24–25 mm long, 4 mm broad, 5-veined. *Lip* calceolate, broadly elliptic in outline, 17–20 mm long, 12–13 mm broad; inflexed basal margins rounded; side lobes broadly semi-elliptic, overlapping on incurved margins. *Column* 5 mm long; staminode stalked, cordate, acute, 4 mm long, 2 mm broad, yellow, longer than the obtriangular, papillate stigma; anthers large, 2 mm long. *Fruits* not seen. Fig. 1–2.

Distribution. N Ecuador (on Amazonian side of Andes).

Figure 2. *Selenipedium dodsonii*. Photographed *in situ* at Archidona, Napo Province in Ecuador by Francisco Tobar.

Habitat. In damp scrub near rivers in rain forest; 200-900 m elevation. Flowering April-November.

Conservation. Under the IUCN Red Listing criteria (IUCN 2012), *Selenipedium dodsonii* must be classified as Endangered (EN), based on criteria B1a and B2a.

Collections. Succumbios, Rio Quiwado and Rio Tiwaeno, 200 m, 28 April 1981, *E.W. Davis & Yost 1048* (AMES!); Pastaza, Pozo petrolero 'Namoyacu' de UNOCAL, 30 km al sur del pueblo de Curaray, 290 m, 13-30 Nov. 1990, *S. Espinoza & T Coba 670* (MO!, OCNE!). Napo, Archidona, Hakuna Matata Lodge, 900 m, *F. Tobar Suarez* (photograph only, copy at K).

The key below can be used to distinguish the species.

Artificial key to the species of *Selenipedium*

1. Lip petal-like; anthers three ..... ***S. chironianum***
1a. Lip saccate; anthers two 2
2. Largest leaves more than 6 times as long as broad 3
3. Leaves 6–7 times as long as broad; bracts shorter than the pedicel and ovary; ovary not glandular; petals 3-nerved; lip orifice elliptic-subcircular ..... ***S. chica***
3a. Leaves 8–10 times as long as broad; bracts as long as or longer than pedicel and ovary; ovary glandular; petals 5-nerved; lip orifice angular across base and broadest in basal half ..... ***S. steyermarkii***
2a. Largest leaves less than 6 times as long as broad 4
4. Lip incurved side lobes overlapping beneath the staminode 5
5. Lip side lobes more or less as long as broad; staminode a quarter the width of the lip base; dorsal sepal yellow marked with fine purplish flecks ..... ***S. aequinoctiale***
5a. Lip side lobes longer than broad; staminode a third the width of the lip base; dorsal sepal yellow ..... ***S. dodsonii***
4a. Lip side lobes not overlapping beneath the staminode 6
6. Lip lilac ..... ***S. vanillicarpum***
6a. Lip greenish yellow, yellow, brown or orange, with purple marking on apex of side lobes or margins of orifice of the lip 7
7. Leaves densely villose below, glabrescent above, ciliate on margins; sheaths pubescent; bracts longly glandular villose; ovary shortly pubescent, glandular at apex; petals 5-nerved; lip 1.25–1.52 times as long as broad, yellow or brownish yellow maroon-marked around the apical two-thirds of the orifice; staminode triangular-trullate, as broad as long ..... ***S. palmifolium***
7a. Leaves sparsely pubescent beneath, glabrous above and on margins; basally ciliate; sheaths glabrous; petals 1- to 3-nerved; bracts not glandular; ovary pubescent on ribs, not glandular at apex; lip 1.6 times or more longer than broad, orange with two maroon marks near the apex of the orifice; staminode deltoid, longer than broad ..... ***S. isabelianum***

Acknowledgements. We would like to thank Gustavo Romero at AMES for the loan of the type material; Francisco Tobar Suarez of Quito very kindly allowed us to use his photographs taken in the wild; Judi Stone provided the excellent black and white line illustration.

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A NEW NATURAL HYBRID OF *BROUGHTONIA* (ORCHIDACEAE) FROM CUBA

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Abstract. At Cabo San Antonio (Guanahacabibes Peninsula), Cuba in 2004, a single specimen of *Broughtonia ortgiesiana* (Rchb.f.) Dressler, and a related species, *Broughtonia cubensis* (Lindl.) Cogn., were both observed in flower simultaneously. In 2006, fruits were observed on *B. ortgiesiana*, and nine years later (2015) we noted five young plants in anthesis that displayed floral characteristics common to both species. Given the time frame and the blend of floral traits, we conclude that these five plants are the result of a natural hybridization event between the two *Broughtonia* species the details of which are described here.

Keywords: Orchidaceae, natural hybrid, Cuba

Broughtonia R.Br., is a genus of six species, endemic to the Caribbean region. Three of species are present in Cuba: *Broughtonia cubensis* (Lindl.) Cogn., *B. ortgiesiana* (Rchb.f.) Dressler, and *B. lindenii* (Lindl.) Dressler. While *B. cubensis* and *B. ortgiesiana* are both Cuban endemics, *B. lindenii* is also present in the Bahamas. Like Cuba, Jamaica also harbors two endemic *Broughtonia* species, *B. negrilensis* Fowlie, and *B. sanguinea* (Sw.) R.Br. On Hispaniola and Mona island (Puerto Rico) to the east, another species is found, *B. domingensis* (Lindl.) Rolfe (Díaz 2014, in Ackerman and collaborators). In Cuba, the distribution of *B. lindenii* and *B. ortgiesiana* is widespread. *B. cubensis* has been reported for several localities of the provinces Mayabeque (Loma La Coca), Artemisa (north coast of the municipality Mariel) and Pinar del Río (Los Pretiles and Guanahacabibes Peninsula). In Loma La Coca, the species is now extirpated due to habitat destruction and depredation. Reports for the North coast of Mariel and Los Pretiles have yet to be substantiated by the authors. In the Guanahacabibes Peninsula, *B. cubensis* is found in Cabo Corrientes and Cabo San Antonio in association with *B. lindenii* and *B. ortgiesiana* where they are protected by law within the framework of Cuba's National System of Protected Areas. Although it is very difficult to differentiate between the plants on the basis of vegetative characters, their floral morphology and timing of anthesis clearly differ (Díaz Dumas, 1997a, 1997b).

Until now, it was assumed that *B. cubensis* and *B. lindenii* are not sympatric. However, field work carried out at Barra La Sorda (Cabo San Antonio) in 2005 revealed that both species were indeed sympatric, affixed to branches of *Plumeria tuberculata* (Apocynaceae) trees. Although their flowering seasons normally do not overlap, occasional natural cross-pollination between *B. cubensis* and *B. lindenii* cannot be ruled out.

In 2004, at the site where we have studied spatial and temporal dynamics of *B. cubensis* (Fig. 1), one individual of *B. ortgiesiana* was observed in flower (Fig. 2) representing the first such report for this species in Cabo San Antonio. In 2007 the authors observed three fruits in this plant and later (2010) two more fruits were documented.

Collectively, these observations confirm that the species are indeed sympatric and possibly capable of

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FIGURE 1. *Broughtonia cubensis* at Cabo San Antonio.

Figure 2. *Broughtonia ortgiesiana*, the first record of this species at Cabo San Antonio.

eventual natural cross-pollination given their overlap in anthesis and geographic location. Evidence for sympatry is not limited to our 2004 observation. In January 2015, both species flowered concurrently again, with a second *B. ortgiesiana* yielding six flowers. Further exploration of this site revealed five individual orchids with intermediate floral characteristics of both species (Fig. 3–4).

Closer examination of *B. cubensis* individuals often reveals subtle floral variation (morphs), but never in the same proportion as those seen in other genera, namely *Encyclia* Hook. and *Tolumnia* Raf. whose morphs are often problematic for taxonomists. Based on our direct field experiences, only rarely do morphs of *B. cubensis* re-occur in the same location or in different sites.

To our knowledge, all *Broughtonia* species are incapable of self-pollination. This fact, coupled with capsule/seed set in *B. ortgiesiana*, argues in favor of natural hybridization with *B. cubensis* – the only other *Broughtonia* species in flower at that location at that time. At two other sites where *B. cubensis* is present, *B. ortgiesiana* was not detected, nor were individuals possessing flowers intermediate in form. Taken together, we conclude that the intermediate forms in the Guanahacabibes Peninsula are the result of natural hybridization.

Broughtonia* × *guanahacabibensis Mújica, E.González et J.M.Díaz, *nothosp. nov*.

Broughtonia cubensis (Lindl.) Cogn. × *Broughtonia ortgiesiana* (Rchb.f.) Dressler.

FIGURE 3. *Broughtonia* × *guanahacabibensis, nothosp. nov.*

TYPE: Cuba. Pinar del Río: Sandino, Cabo San Antonio, near Roncali Lighthouse, originally collected on 23 January 2015. Type: *E. Mujica 241 (*holotype: Herbarium of the Soroa Orchid Garden, not registered).

Plants epiphytic, to 30 cm tall. *Roots* white, numerous, 2-3 mm in diameter. *Pseudobulbs* clustered, cylindric, fusiform, to 3 cm long, 1 cm wide, enclosed by scarious sheaths when young, with 2-3 internodes. *Leaves* 1-2, fleshy, rigid, erose, narrowly oblong, rounded to apiculate, to 8 cm long, 1 cm wide. *Inflorescences* a few-flowered racemes to 30 cm long; peduncle bracts sheathing. *Floral bracts* ovate, acute. Pedicellate *ovary* slender, to 2.5 cm long *Flowers* showy, with white sepals, the petals white with a purple central vein, the lip white, yellow at the center, with purple margin. *Sepals* lanceolate, acute, the dorsal one to 2 cm long, 4 mm wide, the lateral

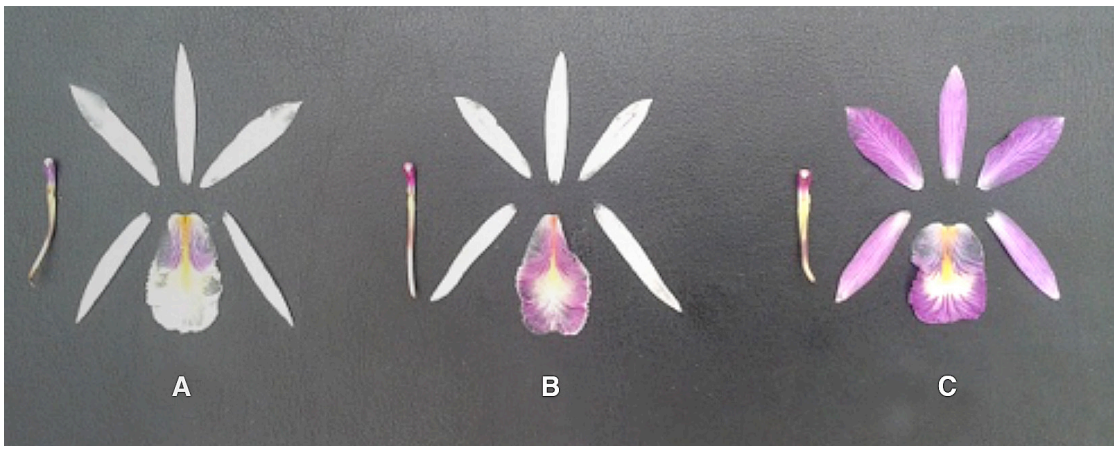

Figure 4. Dissected perianths of A – *Broughtonia cubensis;* B – *B.* × *guanahacabibensis;* C – *B. ortgiesiana*.

ones 2.3 cm long, 3 mm wide. *Petals* obovate-elliptic, acute, 1.8 cm long, 5 mm wide; *labellum* oblong, to 2 cm long, 1.2 cm wide, slightly emarginate, with undulate margins, enclosing the column at the base, the disc provided with branched yellow lines. *Column* white to pink, arcuate, to 1 cm long. *Pollinia* 8, yellow. *Fruit* an ellipsoid capsule, beaked, 12-13 mm long, on slender pedicel 8-10 mm long.

Paratype: Cuba. Pinar del Río: Sandino, Cabo San Antonio, near Roncali Lighthouse, January 2015, *E. Mujica et E. González 179* (Herbarium of the Soroa Orchid Garden [not registered], flowers in spirit).

Etymology: From the Guanahacabibes peninsula, where the nothospecies was found.

Distribution and ecology: The habitat of *Broughtonia* × *guanahacabibensis* consists of xeromorphic sub-coastal vegetation, colonizing *Plumeria tuberculata* - the dominant tree species in the area. It is also sympatric with other orchid species: *Encyclia bocourtii* Mújica & Pupulin, *E. plicata* (Lindl.) Britton & Millspaugh, *Polystachya concreta* (Jacq.) Garay & Sweet and *Tolumnia guibertiana* (A.Rich.) Braem.

The plants of *B. cubensis* and *B. ortgiesiana* are not easy to differentiate morphologically on the basis of their vegetative habit. However, their flowers are clearly different, the latters being very distinctive for their fringed white color labellum with purple color margins. The petals of *B. ortgiesiana* are very similar to those of *B. cubensis* but they differ in having a central nerve purple (fig. 4). This hybrid appears to comprise a viable population, thus introgression may be occurring in this site, resulting in a more variable population.

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ORQUÍDEAS DE BOLIVIA Y PERÚ, NOVEDADES TAXONÓMICAS I (PLEUROTHALLIDINAE)

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Resumen. Se describen e ilustran siete especies nuevas de orquídeas pertenecientes a la subtribu Pleurothallidinae de los bosques montanos de la Cordillera Oriental de los Andes, seis de ellas Bolivia y una de Bolivia y Perú,: *Brachionidium lopez-robertsiae*, *Brachionidium sulcatum*, *Lepanthopsis trulliformis*, *Stelis pertusa*, *Trichosalpinx adnata*, *Trichosalpinx gabi-villegasiae* y *Trichosalpinx giovi-mendietae*. De cada especie se proporcionan datos de hábitat, distribución y fenología. Además se comentan rasgos sobresalientes y afinidades con especies similares.

Abstract. Seven new orchids species belonging to the subtribe Pleurothallidinae from the montane forest of the eastern Andean slopes, six of them from Bolivia and one from Bolivia and Peru, are described and illustrated: *Brachionidium lopez-robertsiae*, *Brachionidium sulcatum*, *Lepanthopsis trulliformis*, *Stelis pertusa*, *Trichosalpinx adnata*, *Trichosalpinx gabi-villegasiae* and *Trichosalpinx giovi-mendietae*. Information on habitat, distribution and phenology is provided for each species. Also critical characters and affinities with similar species are commented.

Palabras clave: bosque montano, orquídeas, Cotapata, Madidi, Tayacaja, Pleurothallidinae

Introducción. Orchidaceae es una de las dos familias más diversas de las plantas superiores junto a Asteraceae y en ambas alrededor de 500 especies nuevas son descritas cada año (Chase *et al.* 2015). En Bolivia este panorama es similar ya que las dos familias son los taxa más grandes de la flora boliviana (Jørgensen et al. 2014). Desde inicios de la década de 1980 hasta mediados del 2000 la publicación de nuevos taxa fue constante, especialmente en los trabajos de R. Vásquez con C. Luer y C.H. Dodson (ver Luer 1981, 1983a, 1983b, 1995, 1997, 1999, 2001, Dodson & Vásquez 1989a, 1989b, Vásquez & Dodson 1982, 1998, 1999, 2001), lo cual condujo a que la subtribu Pleurothallidinae sean las orquídeas mejor conocidas del país (Vásquez & Ibisch, 2000). Aunque la descripción de nuevas especies o registros no ha cesado, la intensidad ha disminuido en los últimos años. Actualmente se conocen en Bolivia 1264 especies de orquídeas (Vásquez et al. 2014), pero si se toman en cuenta las especies no identificadas esta cifra asciende a alrededor de 1500, estimando que existan entre 2000 a 3000 en el país (Vásquez et al.2003). Desde hace 10 años se han encontrado muchas novedades taxonómicas en los viajes realizados a varias zonas de los bosques montanos del departamento de La Paz, ya sea como parte de proyectos ligados al estudio de otras plantas o emprendimientos personales. Algunos resultados fueron publicados por Jiménez-Pérez (2011a, 2011b, 2012).

Este artículo está orientado por un lado a la descripción e ilustración de novedades taxonómicas procedentes de los viajes realizados y revisión de muestras depositadas en herbarios nacionales y por otro lado a generar material para futuros tratamientos taxonómicos. En este primer aporte se describen 7 nuevos taxa de Pleurothallidinae, pertenecientes a los géneros: *Brachionidium* Lindl., *Lepanthopsis* (Cogn.) Ames, *Stelis* Sw. *sensu lato* y *Trichosalpinx* Luer.

Nuevos taxa

Brachionidium lopez-robertsiae I.Jiménez, ***sp. nov.***

TIPO: Bolivia. La Paz: Provincia Nor Yungas, Parque Nacional Cotapata, 67º52'O, 16º15'S, 3200 m, 17

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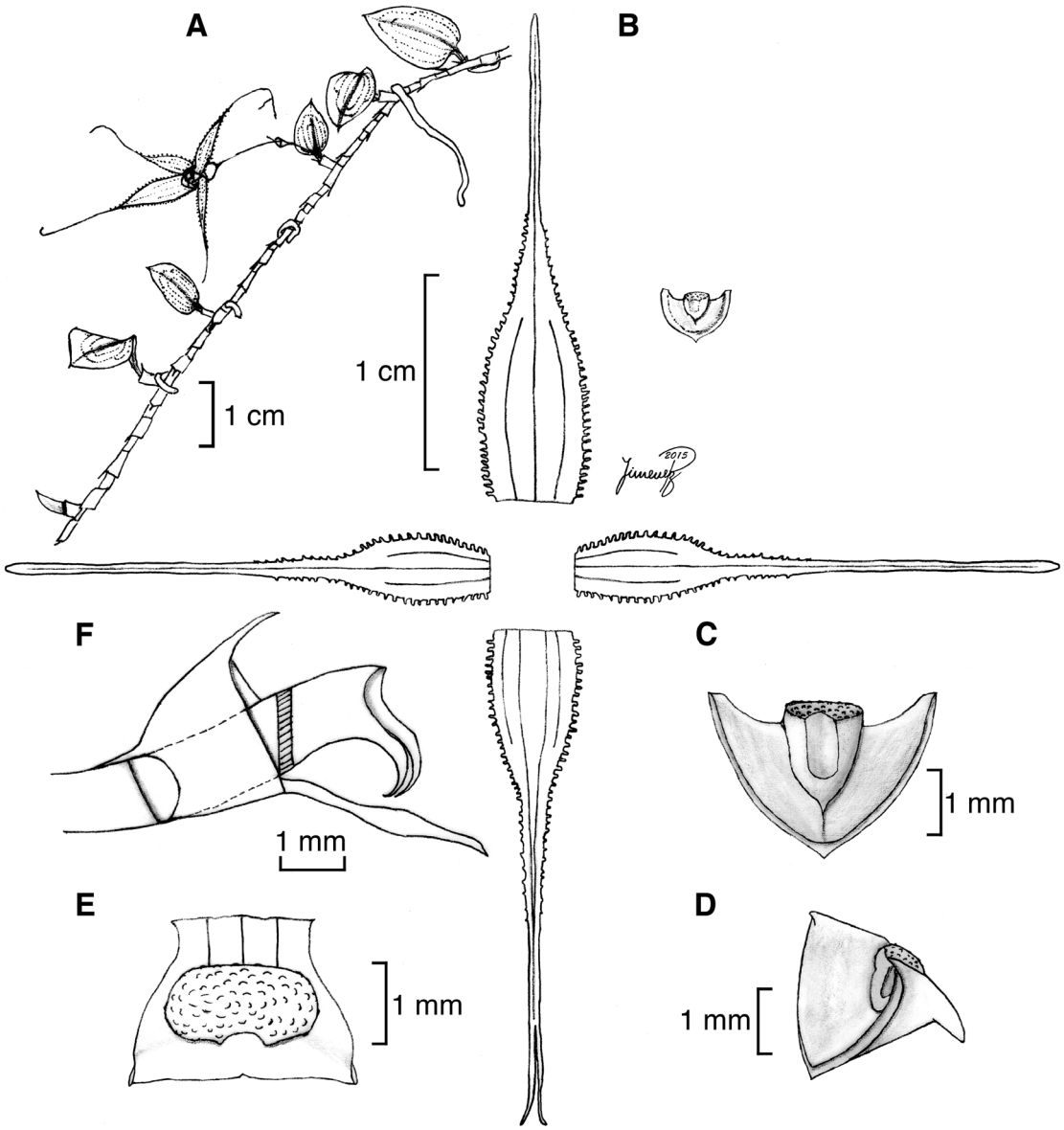

Figura 1. *Brachionidium lopez-robertsiae*. A. Hábito. B. Flor diseccionada. C. Labelo vista frontal. D. Labelo vista lateral. E. Labelo vista dorsal. F. Columna vista lateral. Dibujo a partir del holotipo de I. Jiménez Pérez

diciembre 2010, *I. Jiménez et al. 5620* (holotipo: LPB). Figs. 1, 3A, 3B.

This species is similar to *B. capillare* Luer & Hirtz and *B. muscosum* Luer & Vásquez, but differs from both by the ovate-elliptic to suborbiculate leaves, the large flowers with ciliates sepals and petals, the bimarginate labellum with a suborbiculate verrucose callus and the bidentate column with retrorse apices.

Hierba terrestre o epífita, largamente rastrera, hasta 3.6 cm de alto. *Rizoma* ramificado, una raíz por nudo, entre tallos adyacentes cubierto por 3 vainas tubulares, oblicuas y mucronadas. *Tallo* suberecto a erecto, 10–24(–39) mm de separación entre tallos adyacentes, 2–5 mm de largo, cubierto por (1)2 vainas, ligeramente oblicuas, mucronadas. *Hoja* patente, coriácea, ovado-elíptica a suborbicular, apiculada, 8–17 × 5.0–11.5

mm, de 7 venas, base redondeada, peciolo sulcado, 2–3 mm de largo. *Inflorescencia* erecta, uniflora, pedúnculo delgado, con una bráctea al medio y otra en la base, 14–22 mm de largo; *bráctea floral* en forma de embudo, mucronata, que envuelve el pedicelo y casi totalmente el ovario, 2 mm de largo; *pedicelo* 1 mm de largo; *filamento* 3 mm de largo; *ovario* 2 mm de largo. *Flor* no resupinada, perianto amarillo claro verdoso, ciliado, sépalos laterales y pétalos con rayas longitudinales tenuemente moradas, carinados sobre la vena central, caudas moradas, retrorsas, disco morado al igual que la base de la columna; *sépalo dorsal* elíptico, agudo, 25 × 5 mm incluyendo la cauda, de 3 venas, largamente caudado, cauda 10 mm de largo; *sépalos laterales* unidos en un sinsépalo lanceolado, agudo, 5 mm bífido en el ápice, 25 × 5 mm incluyendo la cauda, de 4 venas, largamente caudado, cauda 10 mm de largo; *pétalo* elíptico, ligeramente oblicuo, agudo, 25 × 3 mm incluyendo la cauda, de 3 venas, largamente caudado, cauda 13 mm de largo; *labelo* subcordato de frente, cortamente apiculado, bimarginado, 2.5 × 3.5 mm no expandida, de 3 venas, apéndices laterales erguidos, subagudos y levemente antrorsos, disco con un callo subgloboso, verrucoso, glenion notorio; *columna* recta, bidentada, de ápices retrorsos, 1.5–2.0 mm de largo; *polinario* no visto.

Paratipo: BOLIVIA. La Paz: Nor Yungas, Hornuni Alto, 66º54' O, 16º11' S, 3140 m, 7 agosto 2003, S. Beck *et al*. 28783 (LPB).

Distribución y ecología: Especie registrada hasta ahora exclusivamente en el norte y sur del Parque Nacional y Área Natural de Manejo Integrado (PN-ANMI) Cotapata, departamento de La Paz. Habita el bosque nublado de ceja de montaña, poco perturbado, dominado por árboles de *Clusia* spp. Forma matas densas en el suelo del sotobosque donde hay formación de humus. Posee una estrecha distribución altitudinal, 3100-3200 m. Florece en diciembre y enero.

Etimología: Esta especie se dedica a María Cristina López Roberts, amiga y colega con buen ojo para descubrir nuevas e interesantes orquídeas, quien alentó y acompaño entusiastamente muchos viajes a la zona de estudio, además de ser una de las promotoras del proyecto que inició el estudio de orquídeas y otras plantas epífitas en el PN-ANMI Cotapata.

Brachionidium lopez-robertsiae se distingue por su rizoma largamente rastrero, hojas ovadas a casi orbiculares, perianto ciliado, largamente caudado, labelo bimarginado con callo verrucoso y columna bidentada con ápices notoriamente retrorsos. Vegetativamente se asemeja a *B. capillare* por tener habito rastrero, hojas orbiculares y flores caudadas; sin embargo, este último posee sépalos y pétalos eciliados, más cortos, de 13 y 10 mm respectivamente y ápice del labelo largamente apiculado (Luer 1995). Localmente solo *B. muscosum* comparte un rizoma largamente rastrero y perianto fimbriado pero los sépalos y pétalos son cortos, de 10.0–10.5 y 7 mm respectivamente y las hojas son elípticas (Luer, 1995). Esta orquídea corresponde a una de las dos especies nuevas citadas en Vásquez *et al.* (2014).

Brachionidium sulcatum I.Jiménez, ***sp. nov.***

TIPO: Bolivia La Paz: Provincia Nor Yungas, Parque Nacional Cotapata, 67º53'O, 16º16'S, 3387 m, 17 diciembre 2010, *I. Jiménez 5619* (holotipo: LPB; isotipo: BOLV). Figs. 2, 3C, 3D.

This species is related to *B. galeatum* Luer & Hirtz, but differs in the creeping rhizome, the subcoriaceous narrowly oblong leaves, with a pair of grooves, and the flowers with a slightly bifurcate synsepal and a partially bimarginate labellum with a subglobose callus.

Hierba pequeña, epigea sobre colchón de musgo, largamente rastrera, hasta 6.5 cm de alto. *Rizoma* decumbente, poco ramificado, una raíz por nudo, entre tallos adyacentes cubierto por vainas tubulares, mucronatas, escabriúsculas. *Tallo* suberecto, 13–25 mm de separación entre tallos adyacentes, cubierto por 2 vainas, mucronatas, 3-5 mm de largo. *Hoja* patente, subcoriácea, oblonga, apiculada, 2-sulcado, 11-20 × 1.0-2.5 mm, de 3 venas, base cortamente atenuado, peciolo sulcado, 0.5-1.0 mm de largo. *Inflorescencia* erecta, uniflora, pedúnculo con una bráctea al medio y otra en la base, 7-16 mm de largo; *bráctea floral* en forma de embudo, mucronata, que envuelve el pedicelo y a veces totalmente el ovario, 1.0-1.5 mm de largo; *pedicelo* 0.5-1.0 mm de largo; *filamento* 2.5 mm de largo; *ovario* 1 mm de largo. *Flor* no resupinada, perianto amarillo claro, eciliada,

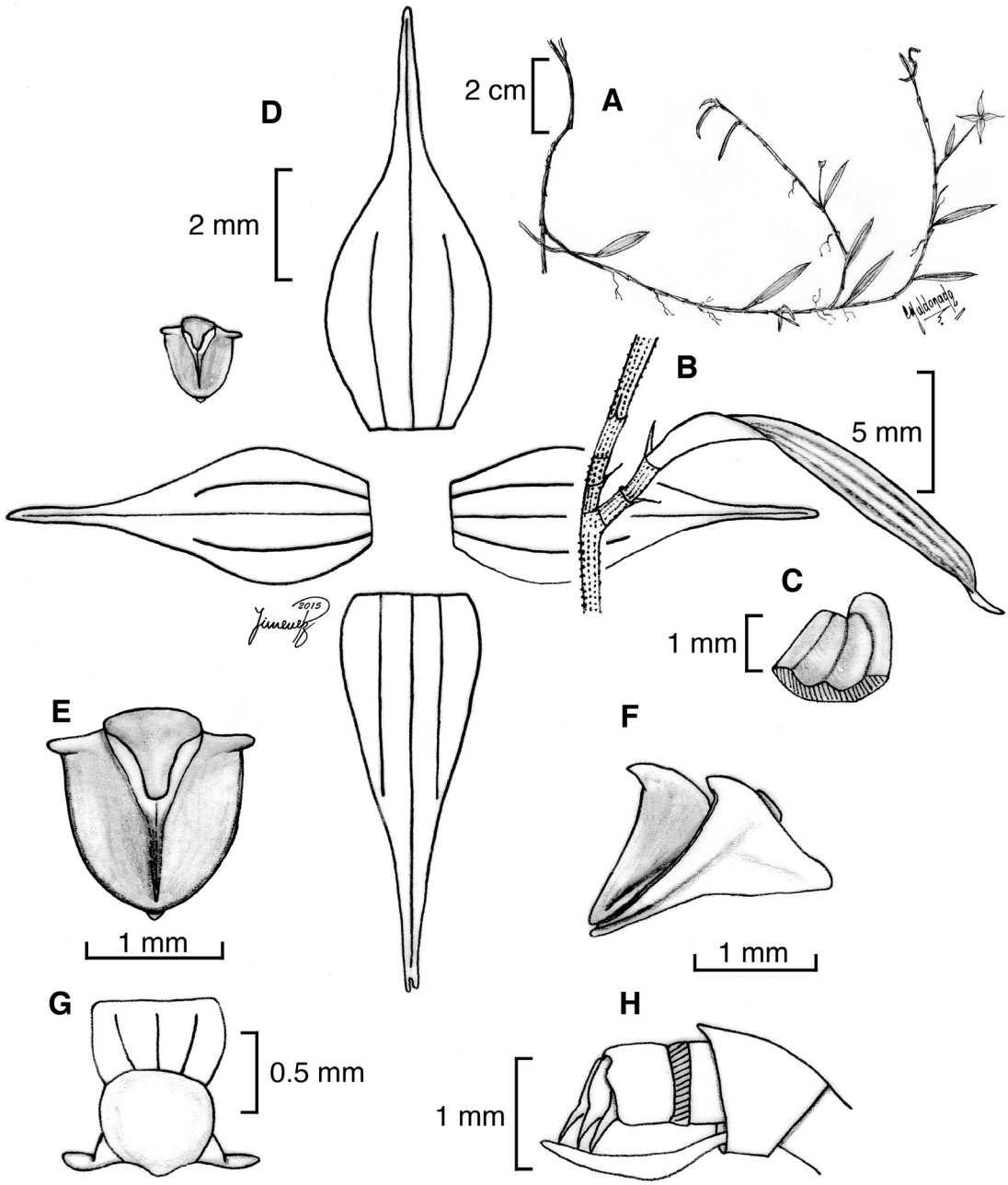

FIGURA 2. *Brachionidium sulcatum*. A. Hábito. B. Hoja vista lateral. C. Hoja corte transversal. D. Flor diseccionada. E. Labelo vista frontal. F. Labelo vista lateral. G. Labelo vista dorsal. H. Columna vista lateral. Dibujo a partir del holotipo de I. Jiménez Pérez y C. Maldonado.

con rayas longitudinales moradas, labelo amarillo claro pero morado en su cara exterior; *sépalo dorsal* ovado, agudo, 7.5 × 3.0 mm, de 3 venas, cortamente acuminado; *sépalos laterales* unidos en un sinsépalo lanceolado, agudo, 0.2 mm bífido en el ápice, 7.0 × 2.5 mm, de 4 venas, cortamente acuminado; *pétalo* ovado, ligeramente oblicuo, agudo, 6.5 × 2.5 mm, de 3 venas, cortamente acuminado; *labelo* ovado-oblongo

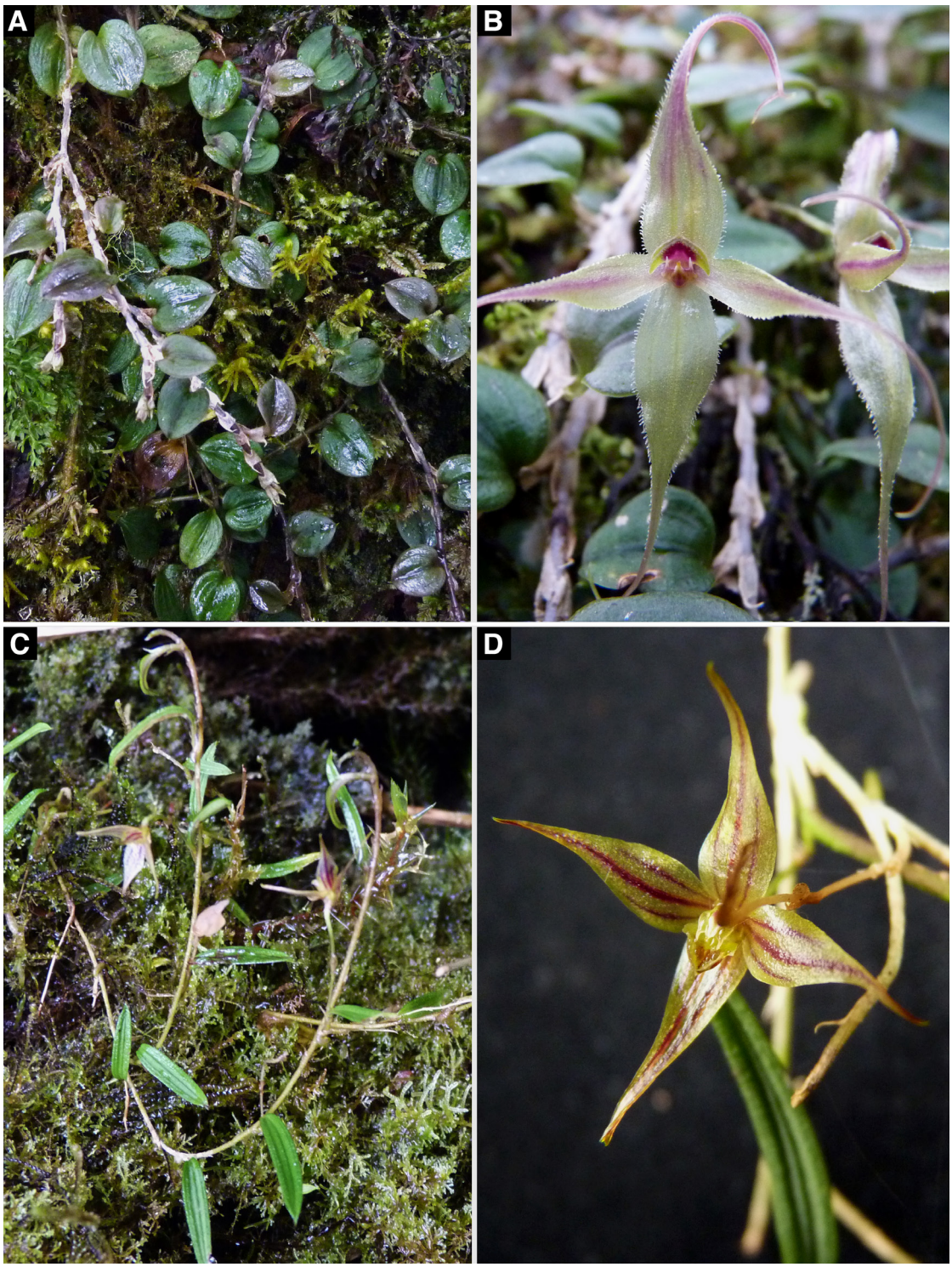

Figura 3. *Brachionidium lopez-robertsiae*. A. Hábito. B. Flor (ambas de *I. Jiménez 5620*). *Brachionidium sulcatum*. C. Hoja. D. Flor (ambas de *I. Jiménez 5619*). Fotografías de I. Jiménez Pérez.

de frente, cóncavo, margen anterior bimarginado, cortamente submamilado, 1.5 × 1.5 mm no expandido, apéndices laterales erguidos, agudos y antrorsos, disco con un callo subgloboso notorio, glenion en la cara anterior; *columna* recta, bidentada, 1.4 mm de largo; *polinario* no visto.

Distribución y ecología: Especie conocida solo de la localidad tipo, al interior del PN-ANMI Cotapata, hallada en el bosque nublado de ceja de montaña. Crece en medio de vegetación herbácea y entremedio de colchones de musgo. Conocida de una pequeña población a 3387 m. Florece en noviembre y diciembre.

Etimología: El nombre deriva del Latín *sulcatus*, sulcado, el cual hace referencia a los dos surcos que se observan en el haz de la hoja.

La combinación de un rizoma delgado, largamente rastrero, hojas estrechamente oblongas con dos surcos laterales en el haz diferencian *B. sulcatum* de cualquier otra especie conocida de *Brachionidium*. La única otra especie con hoja sulcada es *B. Galeatum,* pero ésta es rugosa a lo largo de las venas, elíptica y de rizoma erecto (Luer, 1995). Esta orquídea corresponde a una de las dos especies nuevas citadas en Vásquez *et al.* (2014).

Lepanthopsis trulliformis I.Jiménez, ***sp. nov.***

TIPO: Bolivia. La Paz: Provincia Nor Yungas, Parque Nacional Cotapata, 67º52'O, 16º16'S, 3420 m, 16 octubre 2006, *I. Jiménez y F. Lipa 4146* (LPB) (holotipo: LPB; isotipo: BOLV). Figs. 4, 6A, 6B.

Lepanthopsis trulliformis differs from the other two similar species, *L. apoda* (Garay & Dunst.) Luer and *L. dewildei* Luer & Escobar, by the longer ramicauls (up to 9 cm), and a flower with 2-veined lateral sepals, trullate and retrorse petals with a recurved apex, and a suborbiculate, obtuse and slightly incurved lip.

Hierba pequeña a mediana, epífita, cespitosa, hasta 11.7 cm de alto. *Tallo* retrorso a ascendente, 2.2–9.0 cm de largo, envuelto por (3-)4-6 vainas lepantiformes microscópicamente ciliadas, papiloso y espiculado a lo largo de las costillas. *Hoja* coriácea, ligeramente arcuada, verde oscuro maculado de morado o totalmente morado en el envés, envés verrucoso o glabro, oblonga o elíptica, bordes a veces irregularmente espiculadas, ápice agudo y engrosado, 9–32 × 1.5–7.0 mm, 2.0–2.5 mm de grosor, base cortamente cuneada, peciolo envuelto por la vaina, 2 mm de largo. *Inflorescencia* fasciculada, uniflora, floración continua, pedúnculo basalmente cubierto por una bráctea, 4 mm de largo; *bráctea floral*, infundibuliforme, oblicua, envuelve totalmente al pedicelo, 2.5 mm de largo; *pedicelo* 2.5 mm de largo, *ovario* 1 mm de largo. *Flor* de sépalos y pétalos morados o marrón morados con los bordes translucientes, labelo marrón morado u ocre, columna morada o verde, antera amarilla; *sépalo dorsal* ovado triangular, retrorso, ápice obtuso e incurvado en posición natural, 4.5–5.5 × 2.3–2.4 mm, de 3 venas, largamente acuminado; *sépalos laterales* ovados, oblicuos, ápices obtusos a veces incurvados generando puntas ligeramente convexas, 4.0–5.0 × 2.0–2.5 mm, de 2 venas, nervios centrales carinados, acuminados, connatos por la base 1 mm; *pétalo* trulado, retrorso, ápice obtuso, 4.5–5.0 × 1.5–1.8 mm, de 1 vena, largamente acuminado; *labelo* suborbicular, ápice obtuso y ligeramente incurvado, 2.5 × 1.5–2.0 mm, de 3 venas, unido a la base de la columna, basalmente con amplias aurículas erectas que envuelven a la columna, disco con una costilla transversal en la base; *columna* terete, 0.8 mm de largo, antera y estigma apicales; *polinario* no visto.

Paratipos: Bolivia. La Paz: Nor Yungas, Parque Nacional Cotapata, sendero Chojllapata, 67º52'O, 16º16'S, 3400 m, 27 diciembre 2005, I. Jiménez *et al*. 3586 (LPB); ibid, 67º52'O, 16º15'S, 3250 m, 18 noviembre 2005, F. Miranda *et al*. 1005 (LPB). Perú. Huancavelica: Tayacaja, Huachocolpa, 2800-3400 m, 9 julio 1999, M. León *et al.* 3034 (MOL).

Distribución y ecología: Especie andina distribuida desde el centro sur del Perú hasta el oeste de Bolivia, en laderas y crestas del bosque nublado de la cordillera de los Andes. Crece generalmente en la zona ventral de ramas de pequeños árboles remanentes, donde a veces forma poblaciones densas. Se distribuye de 2800-3400 m. Florece todo el año.

Etimología: El nombre específico deriva del Latín *trulliformis*, trulado, en referencia a la forma romboidal de los pétalos.

En Bolivia, *L. trulliformis* habita por encima de los 3200 m de elevación, posee tallos de hasta 9 cm de largo, flor morada, sépalos laterales de 2 venas,

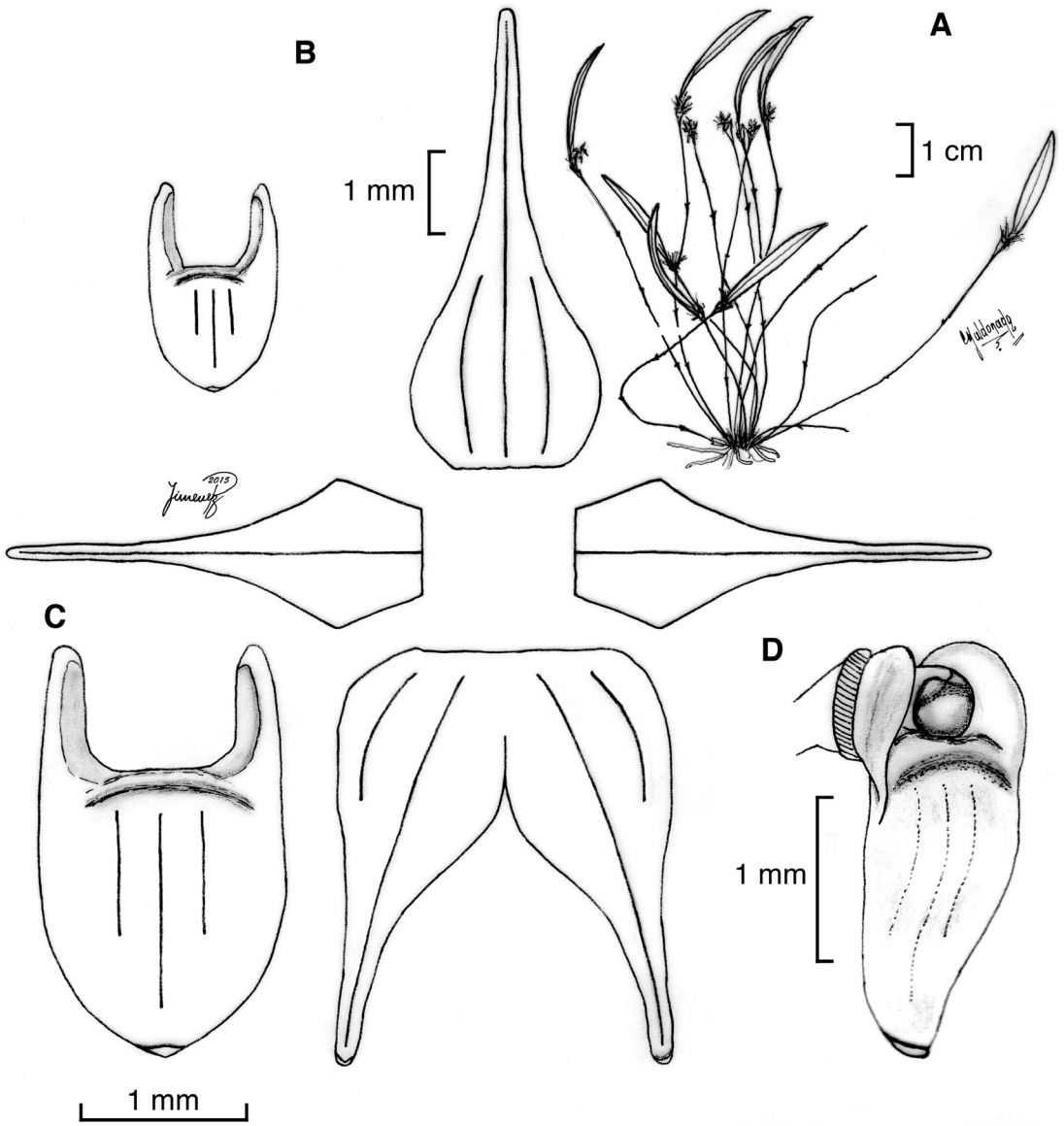

Figura 4. *Lepanthopsis trulliformis*. A. Hábito. B. Flor diseccionada. C. Labelo vista frontal. D. Columna y labelo, vista lateral. Dibujo a partir del holotipo de I. Jiménez Pérez y C. Maldonado.

aunque connatos no son cóncavos, pétalos trulados y labelo suborbicular con ápice obtuso y ligeramente incurvado. Una especie similar que habita en la misma región es *L. apoda*, especie de amplia distribución, con inflorescencia uniflora, pero a diferencia de la primera, en Bolivia se encuentra en elevaciones medias, 1400-2600 m (Vásquez & Ibisch 2000), la planta es más pequeña (tallos de hasta 5 cm de largo), la flor amarilla, los sépalos laterales con 1 vena, connatos, que forman un sinsépalo cóncavo y pétalos ovados (Figs. 6C, 6D). Morfológicamente es más similar a *L. dewildei*, pero se diferencia de ésta por tener hojas mas delgadas, 1.5–4.5 mm (vs 5–6 mm), ápice de los sépalos incurvados (vs ápices planos) y pétalos trulados y retrorsos (vs pétalos ovados y no retrorsos). La principal diferencia con la muestra peruana es que tiene hojas elípticas más cortas y más anchas (15-20 x 3–7 mm), sépalos mas cortos (4.0–4.5 mm), labelo ocre y crece por debajo los 3200 m.

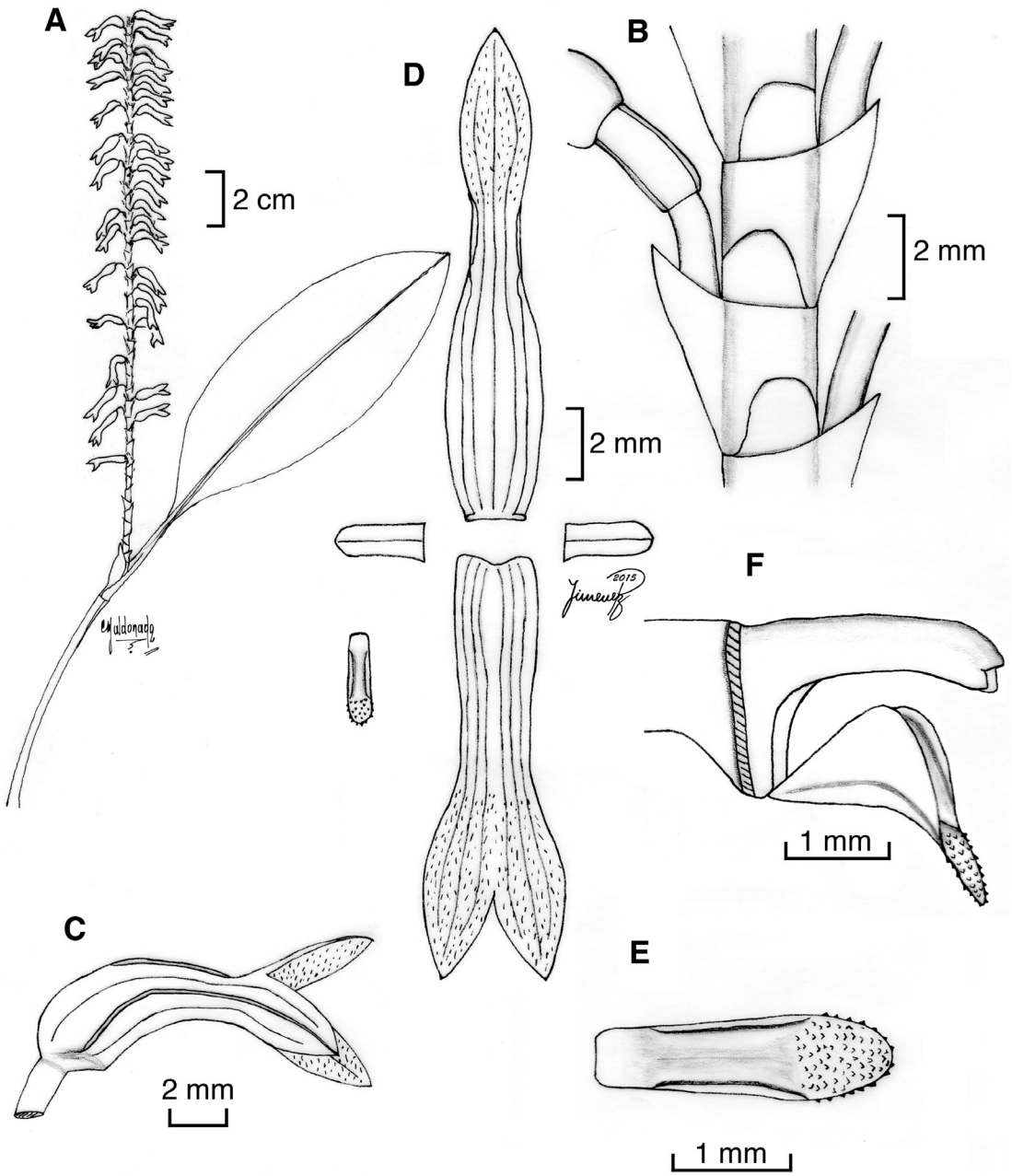

Figura 5. *Stelis pertusa*. A. Hábito. B. Brácteas florales. C. Flor vista lateral. D. Flor diseccionada. E. Labelo vista dorsal. F. Columna y labelo, vista lateral. Dibujo a partir del holotipo de I. Jiménez Pérez y C. Maldonado.

La inflorescencia puede tener hasta dos flores abiertas simultáneamente (B. Collantes, com. pers. 2015). Fue erróneamente identificada como *Lepanthopsis apoda* por Bennett & Christenson (2001). Esta orquídea es señalada como *Expedicula* Luer especie nueva en Vásquez *et al.* (2014).

Stelis pertusa I.Jiménez, ***sp. nov.***

TIPO: Bolivia. La Paz: Provincia Franz Tamayo, Parque Nacional Madidi, Sumpulo, cruzando el río Mojos, 14º34'S, 68º46'O, 1460 m, 8 julio 2008, *I. Jiménez 5404* (holotipo: LPB). Fig. 5, 7, 8.

Figura 6. *Lepanthopsis trulliformis*. A. Hábito. B. Flor. *Lepanthopsis apoda*. C. Hábito. D. Flor (ambas de *I. Jiménez 6233*). Fotografías de I. Jiménez Pérez.

Stelis pertusa differs from all others species of *Stelis* with connate sepals by a distichous inflorescence, floral bracts with a notch on the basal margin, flowers with the inner surface of the free lobe of the sepals hirsutulous, oblong petals, lip with a spiculate midlobe, and a completely alate column.

Hierba mediana, epífita, cespitosa, 28 cm de alto aproximadamente. *Tallo* erecto, unifoliado, 11.5 cm de largo, envuelto por 1 vaina situada abajo del medio. *Hoja* erecta, coriácea, lisa, angostamente elíptica, obtusa, 13.9 × 4.5 mm, base cuneada, pecíolo 3.1 mm de largo. *Inflorescencia* un racimo solitario, erecta, multiflora, dística, 19.5 cm de largo, pedúnculo 13 mm de largo; *bráctea floral*, oblicua, con una muesca sobre el lado más corto, que abarca ambas caras, 5 mm el lado más largo; *pedicelo* 6 mm de largo; *ovario* carinado, 2.5 mm de largo. *Flor* de perianto y ginostemo amarillo claro, aroma dulce, sépalos connatos que forman un tubo sepalino desde los 2 tercios hacia la base, constricto por debajo de las partes libres, éstos densamente hírtulos por dentro, nervios centrales carinados prolongándose a todo el largo del tubo sepalino; *sépalo dorsal* elíptico en su parte libre, apiculado, 14 × 2 mm, de 3 venas, connato a los sépalos laterales 9 mm; *sépalos laterales* elípticos en su parte libre, apiculados, 12.0 × 2.2 mm, de 3 venas, connatos 7 mm; *pétalo* oblongo, ápice obtuso, 2.5 × 0.9 mm, de 1 vena; *labelo* estrechamente obovado, arcuado, ápice obtuso y espiculado, trilobulado en extensión, 2.5 × 0.7 mm sin expandir, de 3 venas, carinado a lo largo de las

FIGURA 7. Hábito de *Stelis pertusa* (*I. Jiménez 5404*). Fotografía de M. López.

venas, lóbulos laterales subdeltoides, erectos, obtusos, flanqueados por una cresta paralela a los lóbulos, base truncada, articulado al pie de la columna; *columna* semiterete, alada, 2.7 mm de largo, pie 1 mm de largo, antera y estigma ventrales; *polinario* no visto.

DISTRIBUCIÓN Y ECOLOGÍA: Hallada en el noroeste del departamento de La Paz, en bosque montano estacionalmente húmedo del Parque Nacional Madidi. Este especie representa la distribución más austral de este grupo de orquídeas. Habita bosques de 20 a 25 m de alto, con sotobosque denso, abundantes lianas y piso con mucha hojarasca. Solo se encontró un individuo. Conocida por el momento solo de la localidad tipo a 1460 m. Floreció en cultivo en marzo y abril del 2009.

ETIMOLOGÍA: El nombre deriva del Latín *pertusus* = perforado, en referencia a la muesca que poseen las brácteas florales.

A simple vista la principal diferencia de *Stelis pertusa* con las otras 4 especies de este género que

FIGURA 8. Brácteas florales y flores de *Stelis pertusa* (*I. Jiménez 5404*). Fotografía de M. López.

poseen sépalos connatos es la disposición de las flores, en la primera es dística y en las otras es secunda. Otros rasgos que la identifican son: brácteas florales con una muesca, lóbulos libres de los sépalos interiormente hírtulos, pétalos oblongos, lóbulo medio del labelo espiculado y columna totalmente alada. En *S. asperrima* del Ecuador, los sépalos interiormente son pubescentes y los pétalos son oblongos, sin embargo, el lóbulo medio del labelo es agudo y bicarinado. Las otras especies aunque en mayor o menor grado poseen el lóbulo medio del labelo verrucoso o glandular-papiloso, todas poseen pétalos obovados < a 2 mm y sépalos interiormente glabros, excepto *S. tacanensis* que es pubescente pero en la parte media de los sépalos connatos y columna alada solo en la mitad superior. Sin embargo, ninguna de las especies afines poseen brácteas florales con muescas. Esta orquídea es indicada como *Physosiphon* Lindl. especie nueva en Vásquez *et al.* (2014).

Trichosalpinx adnata I.Jiménez, ***sp. nov.***

TIPO: Bolivia. La Paz: Provincia Nor Yungas, Parque Nacional Cotapata, 67º53'O, 16º17'S, 3458 m, 26 marzo 2011, *I. Jiménez 5624* (holotipo: LPB; isotipo: BOLV, HSB, USZ). Figs. 9, 12A, 12B.

Morphologically *Trichosalpinx adnata* is similar to the sympatric *T. chamaelepanthes* (Rchb.f.) Luer but differs in the lip with short lateral lobes and a slightly furrowed disc and the column-foot adnate to the concave base of the laterals sepals

Hierba pequeña, epífita y terrestre sobre gruesas

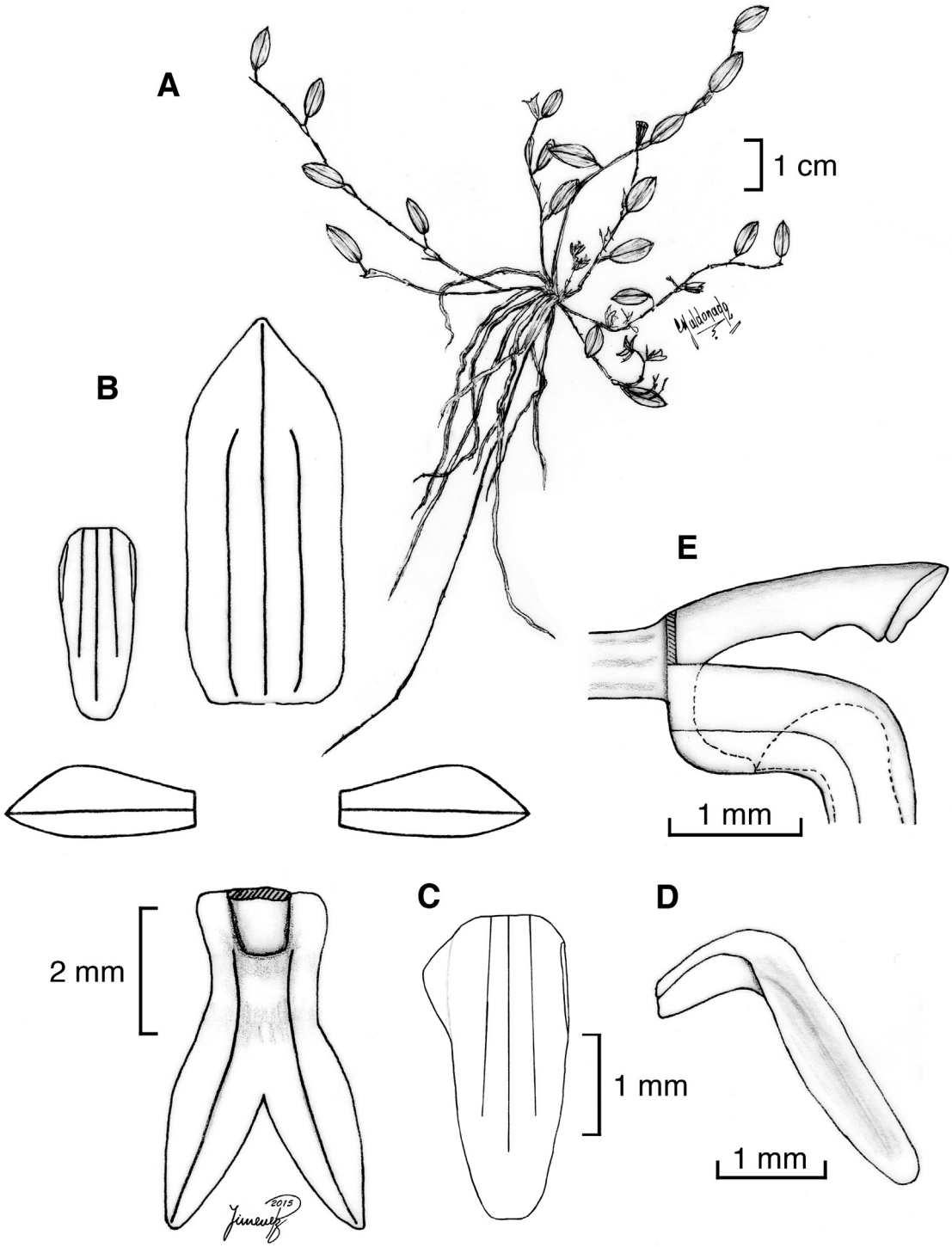

Figura 9. *Trichosalpinx adnata*. A. Hábito. B. Flor diseccionada. C. Labelo vista dorsal. D. Labelo vista lateral. E. Columna y sépalo lateral, vista lateral. Dibujo a partir del holotipo de I. Jiménez Pérez y C. Maldonado.

capas de musgo, cespitosa, hasta 12.5 cm de alto. Tallo ascendente, prolífico, (1.0–)1.2–7.0(–9.3) cm de largo, envuelto por 3–6(–7) vainas lepantiformes microscópicamente ciliadas. *Hoja* erecta, coriácea, oblonga-elíptica, obtusa, papiloso al final de la vena media, 6–18 × 3.5–6.0(–7.0) mm, base cortamente cuneada, pecíolo sulcado, 0.5–10.0 mm de largo. *Inflorescencia* racemosa, pauciflora, flexuosa, con hasta 3 flores, 1 a 3 flores abiertas simultáneamente, 0.5–1.5 cm de largo, pedúnculo con 1 o 2 brácteas, 1–6 mm de largo; *bráctea floral* infundibuliforme, 1.0–1.5 mm de largo; *pedicelo* cubierto parcial o totalmente por la bráctea, 1.5 mm de largo; *ovario* levemente sulcado, 0.5 mm de largo. *Flor* de sépalos y pétalos tenuemente amarillo o blanco translúcido, con 1 a 3 rayas longitudinales tenuemente moradas, labelo morado, bordes claros, columna amarilla clara, sépalos carinados; *sépalo dorsal* oblongo, cóncavo, ápice obtuso, 5.0-6.0 × 2.5 mm, de 3 venas; *sépalos laterales* oblongos, cóncavos en la base, ápices obtusos, recurvados, 5.0-5.5 × 1.4 mm, de 1 vena, connatos 1.5-2.0 mm, formando un mento con el pie de la columna; *pétalo* elíptico-obovado, ápice agudo, oblicuo, 2-3 × 1 mm, de 1 vena; *labelo* ovado-oblongo, ápice obtuso, trilobulado en extensión, 3.0 × 1.2 mm no expandido, de 3 venas, lóbulos laterales erectos, cortos, suborbicular, disco ligeramente sulcado, base truncada, articulado al pie de la columna; *columna* terete, el ápice con un par de dientes cónicos, obtusos, retrorsos, 1.5-2.0 mm de largo, pie de la columna adnato a la base de los sépalos laterales, 1 mm de largo, antera subapical, estigma ventral; *polinios* un par.

Paratipo: Bolivia. La Paz: Nor Yungas, Parque Nacional Cotapata, sendero Chojllapata, 67º52'O, 16º16'S, 3294 m, 22 octubre 2010, I. Jiménez 5605 (LPB).

Distribución y ecología: Hallada al interior del PN-ANMI Cotapata, en el bosque nublado de ceja de montaña. Puede formar poblaciones densas en la base del tronco o de pocos individuos colgados en las ramas. Se distribuye entre 3200-3400 m. Florece en octubre, febrero y marzo.

Etimología: El nombre deriva del Latín *adnatus*, adnato, en referencia al pie de la columna que es adnato a la base de los sépalos laterales.

Trichosalpinx adnata pertenece al subgénero *Tubella* Luer, se caracteriza por ser pauciflora, con 1 a 3 flores por inflorescencia, el sépalo dorsal casi tan ancho como los sépalos laterales juntos, el labelo con lóbulos laterales cortos y el disco ligeramente sulcado y el pie de la columna adnato a la base cóncava de los sépalos laterales. En la misma zona crece *T. chamaelepanthes*, especie ampliamente difundida en los Andes, a la cual se parece por tener tallos prolíficos, hojas elípticas, inflorescencia pauciflora y sépalo dorsal ancho; sin embargo, esta última se diferencia de *T. adnata* por tener sépalos equinados en los márgenes (vs. sépalos no equinados), pie de la columna adnato a la base de los sépalos laterales (vs pie de la columna libre) y labelo ligeramente cóncavo (vs. labelo ligeramente sulcado). Esta orquídea corresponde a una de las cuatro especies nuevas citadas en Vásquez *et al.* (2014).

Trichosalpinx gabi-villegasiae I.Jiménez, ***sp. nov.***

TIPO: Bolivia. La Paz: Provincia Nor Yungas, Parque Nacional Cotapata, sendero Chojllapata, 67º52'O, 16º16'S, 3435 m, 15 agosto 2009, *I. Jiménez et al. 5500* (holotipo: LPB). Figs. 10, 13, 14.

Trichosalpinx gabi-villegasiae is related to *T. tenuis* (C.Schweinf.) Luer but differs in the pendent multiflowered inflorescence, the dorsal sepal with recurved apex, the patent lateral sepals, the ligulate lip with a reflexed apex and the disc with a pair of low crests.

Hierba pequeña, epífita, cespitosa, hasta 10 cm de longitud. *Tallo* erecto, 1.7–5.4 cm de largo, envuelto por 3–5 vainas lepantiformes microscópicamente ciliadas. *Hoja* erecta, coriácea, elíptica-oblonga, apiculada, 18-40 × 5-8 mm, base cortamente cuneada, peciolo sulcado, 1–2 mm de largo. *Inflorescencia* racemosa, multiflora, péndula, laxa, con 5–9 flores abiertas simultáneamente, 3.5–8.1 cm de largo, pedúnculo con 3 brácteas, 12-25 mm de largo; *bráctea floral* infundibuliforme, oblicua, 2 mm de largo; *pedicelo* 3–6 mm de largo; *ovario* 1 mm de largo. *Flor* de perianto y ginostemo amarillo claro a amarillo verdoso, sépalos carinados; *sépalo dorsal* ovado-oblongo, cóncavo, ápice agudo, notoriamente recurvado, 8 × 2 mm, de 3 venas, nervios laterales finos, acuminado; *sépalos laterales* patentes, angostamente triangular atenuados, falcados y divaricados, ápice agudo,

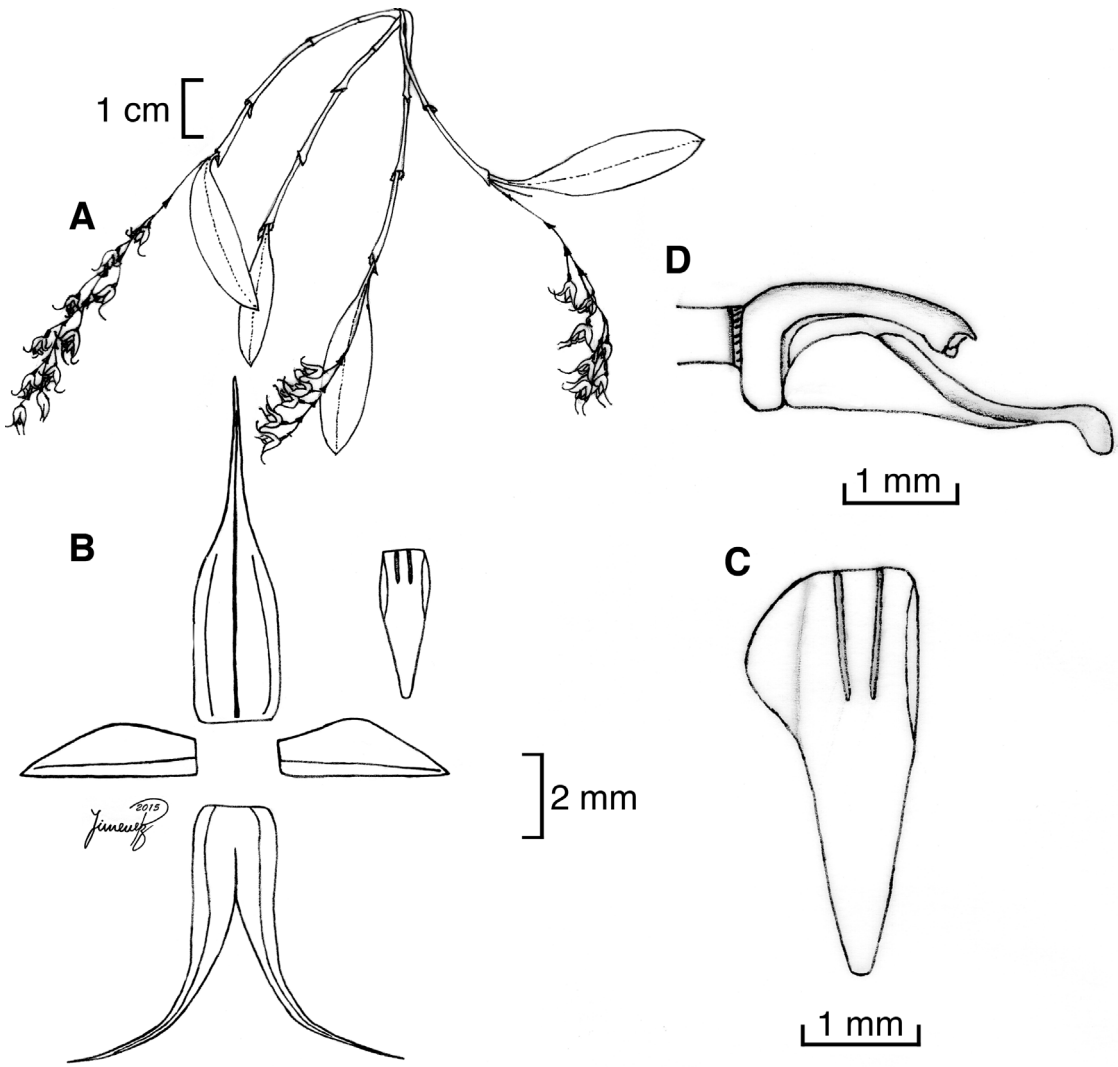

Figura 10. *Trichosalpinx gabi-villegasii*. A. Hábito. B. Flor diseccionada. C. Labelo vista dorsal D. Columna y labelo, vista lateral. Dibujo a partir del holotipo de I. Jiménez Pérez.

ligeramente recurvados, 8 × 2 mm, de 1 vena, connatos 2.5 mm; *pétalo* elíptico, ápice agudo, oblicuo, 4.0 × 1.3 mm, de 1 vena; *labelo* lingüiforme oblongo-triangular, ápice subagudo, reflexo, trilobulado en extensión, 3 × 1 mm no expandido, lóbulos laterales erectos, suborbiculares, disco basalmente con un par de costillas longitudinales, base truncada, articulado al pie de la columna; *columna* terete, 2 mm de largo, pie 0.5 mm de largo, antera y estigma ventrales; *polinario* no visto.

Paratipo: Bolivia. La Paz: Nor Yungas, Parque Nacional Cotapata, sendero Chojllapata, 67º52'O, 16º16'S, 3430 m, 18 septiembre 2010, I. Jiménez 5601 (LPB).

Distribución y ecología: Encontrada al interior del PN-ANMI Cotapata, en el bosque nublado de ceja de montaña. Crece en el tronco y ramas de árboles pequeños, no mayores a 5 m. Solo se conocen dos pequeñas poblaciones situadas en el rango de 3400 m. Florece en marzo-abril y agosto-septiembre.

Etimología: Esta orquídea se dedica a Gabriela (Gabi) Villegas Alvarado, amiga y colega que alentó y acompañó animadamente muchos viajes a la zona

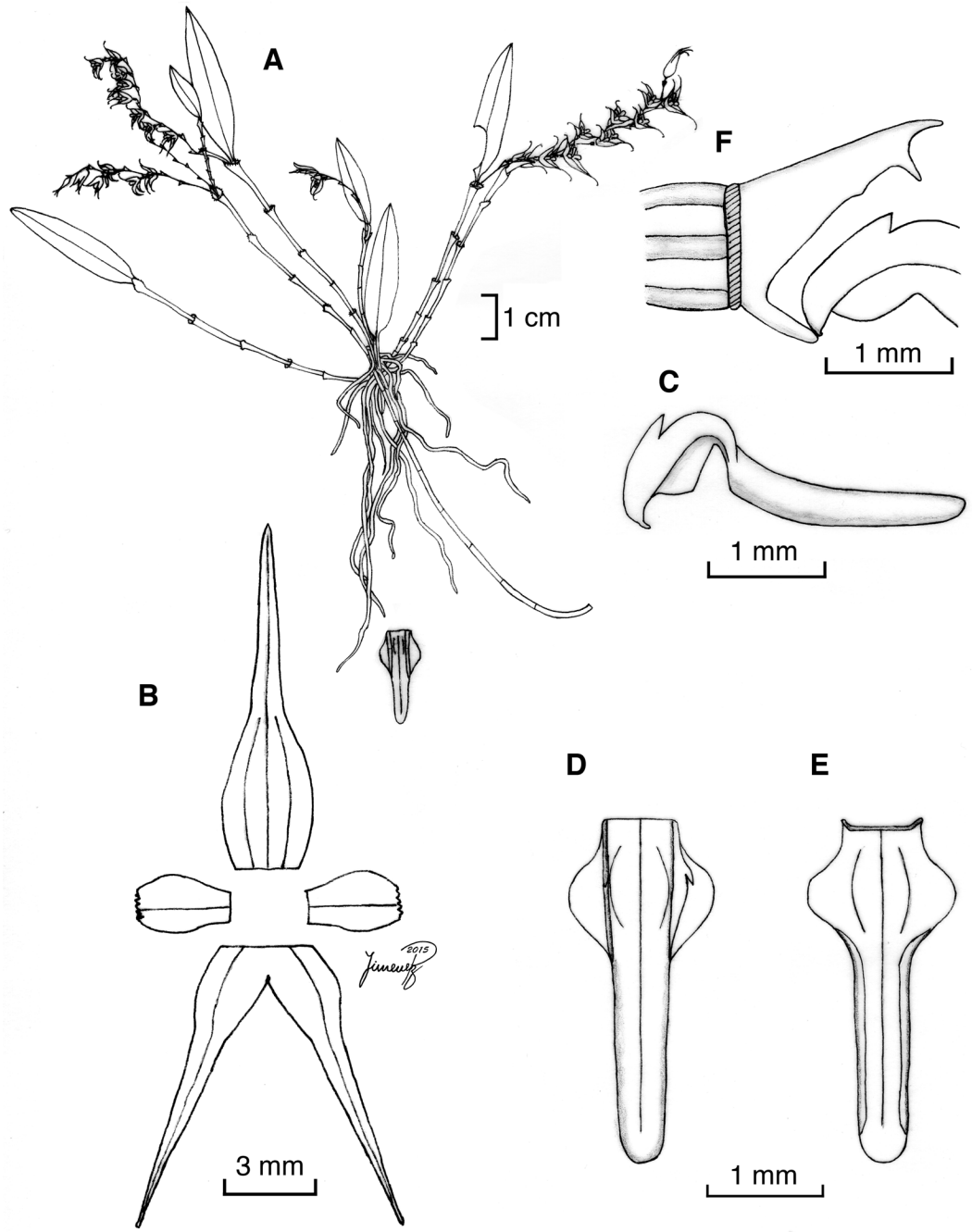

Figura 11. *Trichosalpinx giovi-mendietae*. A. Hábito. B. Flor diseccionada. C. Labelo vista lateral. D. Labelo vista dorsal. E. Labelo vista ventral. F. Columna y labelo, vista lateral. Dibujo a partir del holotipo de I. Jiménez Pérez.

de estudio, además de ser una de las propiciadoras del proyecto que inicio el estudio de orquídeas y otras epífitas en el PN-ANMI Cotapata.

Trichosalpinx gabi-villegasiae pertenece al subgénero *Tubella*, se caracteriza por llevar una inflorescencia multiflora péndula, sépalos laterales patentes, sépalo dorsal con ápice notoriamente recurvado, labelo ligulado con un par de crestas

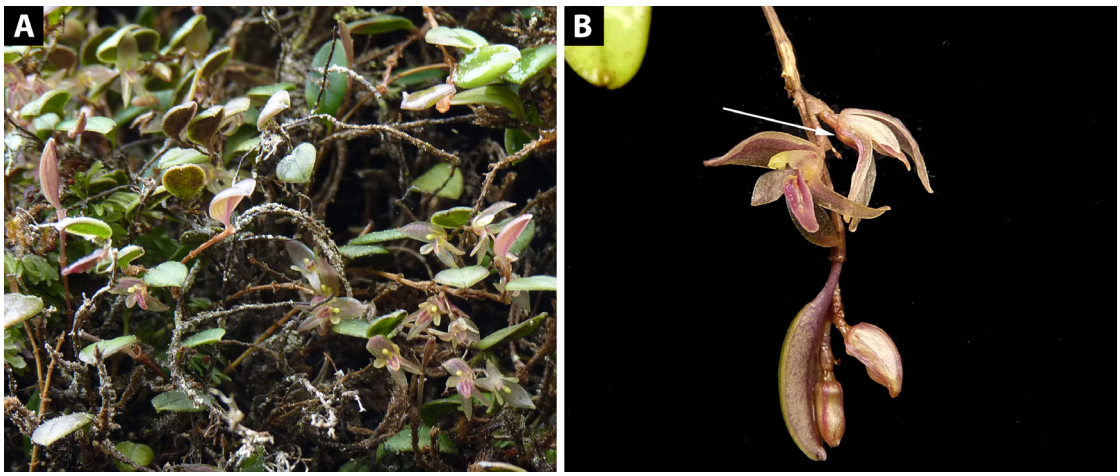

Figura 12. *Trichosalpinx adnata*. A. Hábito (*I. Jiménez 5624*). B. Flor, la flecha indica la ubicación del mento (*I. Jiménez 5605*). Fotografías de I. Jiménez Pérez.

longitudinales y ápice reflexo. Con *T. tenuis* comparten rasgos como: sépalos carinados, sépalos laterales angostamente triangulares, ápice agudo y atenuado, pétalos elípticos, oblicuos y agudos y labelo lingüiforme (Luer, 1997), pero la inflorescencia es suberecta y secunda y el labelo arriba de la base posee un callo longitudinalmente hendido. Otra especie relacionada es *T. ligulata* Luer & Hirtz que también posee un labelo lingüiforme, sin embargo, no tiene costillas ni el ápice reflexo, además la inflorescencia es pauciflora y erecta y los sépalos laterales no son patentes. Esta orquídea corresponde a una de las cuatro especies nuevas citadas en Vásquez *et al.* (2014).

Trichosalpinx giovi-mendietae I.Jiménez, ***sp. nov.***

TIPO: Bolivia. La Paz: Provincia Nor Yungas, Parque Nacional Cotapata, sendero Chojllapata, 67º52'O, 16º16'S, 3333 m, 26 febrero 2010, *I. Jiménez 5623* (holotipo: LPB; isotipo: BOLV). Figs. 11, 15A–B.

Trichosalpinx giovi-mendietae is similar to *T. dirhamphis* (Luer) Luer but differs in having a trilobulate labellum with patents and rounded lateral lobes, the base of the labellum with a pair of crests ending in small antrorse tooth and a column with ligulate clinandrium.

Hierba mediana, epífita y terrestre sobre gruesas capas de musgo, cespitosa, hasta 21.5 cm de alto. *Tallo* ascendente, a veces prolíficos, 1.4–12.5 cm de largo, envuelto por 4-9 vainas lepantiformes

Figura 13. Hábito de *Trichosalpinx gabi-villegasii* (*I. Jiménez 5500*). Fotografía de I. Jiménez Pérez.

microscópicamente ciliadas. *Hoja* erecta, coriácea, oblonga-lanceolada, apiculada, carinada en la base y el ápice, 12–41 × 4.5–9.0 mm, base cortamente cuneada, pecíolo sulcado, 1–3 mm de largo. *Inflorescencia* racemosa, multiflora, laxa, con 5–9(–10) flores abiertas simultáneamente, 1.7–5.7 cm de largo, pedúnculo 2–12 mm de largo; *bráctea floral* infundibuliforme, oblicua, 2.0–2.5 mm de largo; *pedicelo* 1.0–1.5 mm de largo, *ovario* 1 mm de largo. *Flor* de sépalos y pétalos amarillos, labelo rojo oscuro sobretodo al medio y en los lóbulos laterales al igual que los bordes de la columna, sépalos carinados; *sépalo dorsal* ovado, cóncavo. ápice agudo, 11 × 3 mm, de 3 venas, largamente acuminado; *sépalos laterales* ovado triangular, atenuados, ápice agudo, 8.5–9.5 × 1.5 mm, de 1 vena, connatos 1 mm; *pétalo* obovado, oblicuo, ápice truncado, borde eroso, 3.0 × 1.9 mm, de 1 vena; *labelo* ovado-oblongo, con los márgenes laterales revolutos o recurvados mas allá de los lóbulos laterales, ápice obtuso, trilobulado, 3.0 × 1.3–1.5 mm, de 1 vena, lóbulos laterales cortos, patentes, obtusos, flanqueado por un par de crestas erectas, obtusas, cada una basalmente lleva un diente antrorso, base truncada, articulado al pie de la columna; *columna* terete en la mitad distal y luego va engrosándose gradualmente hacia la base, clinandrio ligulado, 1.6 mm de largo, pie 0.5 mm de largo, antera y estigma ventrales, rostelo ligulado, retrorso, amarillento; *polinario* no visto.

Paratipo: BOLIVIA. La Paz: Nor Yungas, Parque Nacional Cotapata, 67º51'O, 16º16'S, 3000 m, 9 enero 2010, I. Jiménez *et al*. 5528 (LPB).

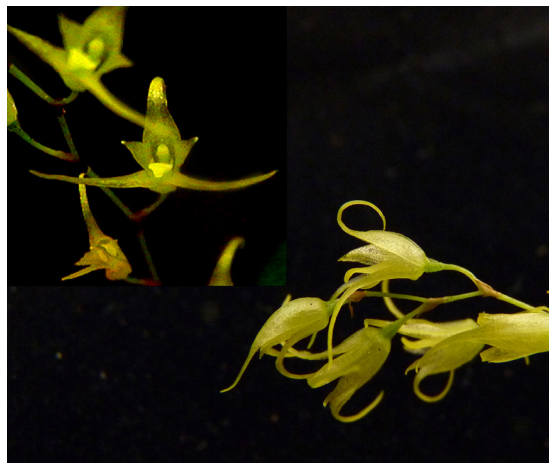

Figura 14. Flor de *Trichosalpinx gabi-villegasii* (*I. Jiménez 5500*). Fotografía de I. Jiménez Pérez.

Distribución y ecología: Especie distribuida dentro el PN-ANMI Cotapata, en el bosque nublado de ceja de montaña y franja superior del bosque montano pluviestacional. Crece terrestre entre vegetación secundaria y epífito en árboles remanentes o bosque poco perturbado, donde puede formar poblaciones densas o de pocos individuos. Se la encuentra entre 2800-3400 m. Florece de enero a marzo.

Etimología: Se dedica esta especie a la bióloga Geovanna (Giovi) Mendieta†, amiga y compañera de estudios, a quien recordamos con gran cariño.

Trichosalpinx giovi-mendietae pertenece al subgénero *Tubella*, posee un rasgo que la distingue

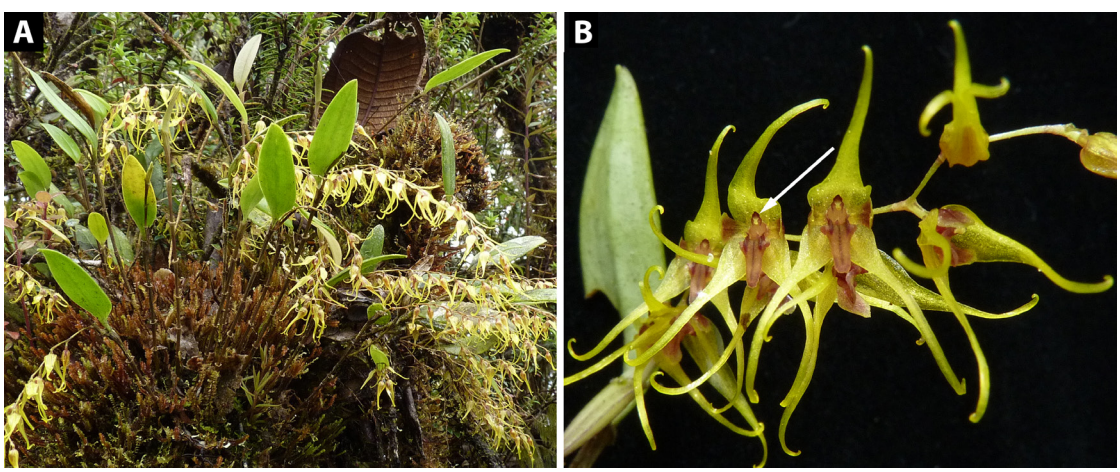

Figura 15. *Trichosalpinx giovi-mendietae*. A. Hábito. B. Flor, la flecha muestra la ubicación del clinandrio y rostelo (ambas de *I. Jiménez 5623*). Fotografías de I. Jiménez Pérez.

claramente de la mayoría de las otras especies, el labelo tiene un par de crestas, cada una con un pequeño diente antrorso. La única otra especie que tiene un rasgo similar es *T. quitensis* (Rchb.f.) Luer, sin embargo, la inflorescencia es pauciflora (vs. multiflora), sépalos cortamente acuminados (vs. largamente acuminados), pétalos obtusos (vs. truncados), labelo amarillo claro, ovoide, margen no revoluto, 2.0–2.5 mm de largo (vs. labelo rojo oscuro, ovado-oblongo, margen revoluto, 3 mm de largo). Aunque con *T. dirhamphis* existen varios rasgos en común tales como: tamaño de la planta, tallos a veces prolíficos, inflorescencia multiflora, coloración, forma y tamaño de los sépalos, forma y tamaño de los pétalos y forma del lóbulo medio del labelo, pero el labelo tiene lóbulos basales, erectos y antrorsos (vs lóbulos no basales, patentes y redondeados), disco con un par de pequeños callos engrosados que se extienden desde la base de los lóbulos hasta casi la mitad (vs disco con un par de crestas, cada una con un pequeño diente antrorso) y clinandrio no ligulado (vs clinandrio abruptamente ligulado). Esta orquídea corresponde a una de las cuatro especies nuevas citadas en Vásquez *et al.* (2014).

Agradecimientos. Un agradecimiento profundo a M. López y G. Villegas que propiciaron y alentaron el estudio de orquídeas en el PN-ANMI Cotapata. Los comentarios y sugerencias de B. Collantes, D. Bogarín y un revisor anónimo coadyuvaron en gran manera a mejorar el manuscrito. A D. Trujillo por confirmar y enviar fotos de la muestra de *S. trulliformis* en el herbario Forestal MOL y C. Maldonado por los dibujos adicionales. Asimismo a los proyectos: "Estudio del potencial de aprovechamiento sostenible de epífitas en el Parque Nacional y Área Natural de Manejo Integrado Cotapata (PN-ANMI Cotapata)" financiado por el Fondo Flamenco para la Conservación de los Bosques Tropicales e "Inventario florístico de la región del Madidi" que apoyaron exploraciones que permitieron descubrir y colectar algunas de las especies descritas.

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RIQUEZA DE LA FAMILIA ORCHIDACEAE EN LA ZONA DE VISITANTES DEL PARQUE NACIONAL CERRO AZUL MEÁMBAR DE HONDURAS

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Resumen. Se presentan las especies de orquídeas encontradas en la zona de visitas del Parque Nacional Cerro Azul Meámbar (Panacam), Comayagua, Honduras. A partir de las observaciones de orquídeas se generó una matriz de presencia-ausencia mensual basada en la floración observada de cada especie. En esta matriz se hizo un análisis de riqueza de especies usando el estimador j*ackknife* de primer orden. Se agrupan los meses del año en función de la riqueza de las especies de orquídeas con flor para cada mes. Se registran 101 especies más de orquídeas para el parque y se predice la presencia de aproximadamente 140 en su zona de visitantes.

Abstract. A list of orchids found in the visitors zone of Parque Nacional Cerro Azul Meámbar, Comayagua, Honduras, is presented. A monthly absence- presence matrix was made for the orchids found with flowers of each species; with this matrix we made a richness analysis using the first order *jackknife* estimator. The months of the year were grouped in function of the orchid species in flower for each month. An additional 101 species of orchids are reported for the park, and 140 species are predicted for the visitor's zone.

Palabras Clave / Key Words: Bosque Muy Húmedo Subtropical, Subtropical Wet Forest, Honduras, Orchidaceae, Panacam, Proyecto Aldea Global

Introducción. Honduras tiene registradas 7,299 plantas vasculares espermatófitas; de éstas, las familias más numerosas son las leguminosas y las orquídeas (Orchidaceae 693 especies, 1 subespecie y 8 variedades) (Nelson, 2008, 2010, Archila 2013, Vega *et al.* 2014).

La familia Orchidaceae, además de ser una de la familias con flor más numerosas en Honduras, es una de las más numerosas en el planeta tierra (Dressler 2005). Las orquídeas despiertan gran interés en el mundo científico, turístico, industrial (comercial–ornamental) y conservación (Hágsater & Dumont 1996), siendo este interés una de las principales razones para abordar este grupo de plantas.

Existen pocos estudios sobre la flora del Parque Nacional Cerro Azul Meámbar (Panacam). Hazlett (1980) publicó sobre la vegetación del parque haciendo énfasis en árboles, pero no menciona las especies de orquídeas observadas. Hawkins (1993) reporta tres especies de orquídeas, *Maxillaria cucullata*, *Arpophyllum giganteum* y una especie desconocida. En un anexo de esa publicación se presenta la lista de plantas depositadas en el Herbario de la Escuela Nacional de Ciencias Forestales (ESNACIFOR) que provienen de Panacam, sin definir la localidad específica de cada espécimen, listando las especies de orquídeas *Encyclia* (= *Prosthechea*) *brassavolae*, *Lockhartia hercodonta* y *Pleurothallis cardiothallis*, todas colectadas por Donald Hazlett.

Borjas *et al.* (1997) reportan las orquídeas *Maxillaria cucullata* y *Habenaria sp.,* en los planes de manejo para Panacam de 1998, 2000 y, el más reciente para el período 2012 – 2016 (Afe-Cohdefor, 1998, 2000, ICF 2012), se menciona la presencia de *Epidendrum comayaguense* (= *Epidendrum cerinum*) y de varias otras especies numeradas como desconocidas. Vega *et al.* (2014) reportan *Specklinia spectabilis* y *Microchilus killipii* para la zona de visitantes de Panacam.

Nelson y Ortiz (2007) publican la colección de orquídeas del Herbario TEFH en donde se menciona *Epidendrum radicans* para la localidad Cerro Azul Meámbar, así como *Encyclia alata* y *Oncidium graminifolium* para la localidad de Meámbar, Comayagua. Para río Yure se enumeran las especies *Dimerandra emarginata, Encyclia nematocaulon, Epidendrum schlechterianum, Liparis nervosa,*

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Notylia barkeri, *Polystachya foliosa* (= *Polystachya caracasana*, siguiendo a Peraza-Flores *et al.* 2011), *Prosthechea radiata, Barkeria obovata, Catasetum integerrimum y Cattleya* (= *Guarianthe*) *skinneri.* Finalmente se menciona la localidad Santa Elena, Comayagua, con la especie *Sobralia decora*.

También se revisaron algunas bases de datos digitales de herbarios. En Tropicos (2015) de los 1206 registros de orquídeas para Honduras disponibles, se encontraron 15 registros de orquídeas para Panacam; de éstas, 12 son colectas de James B. Edwards realizadas entre 1932 y 1933: *Brassia caudata, Comparettia falcata, Cryptarrhena lunata, Dichaea acroblephara, Habenaria lactiflora, H. repens, Hexisea* (= *Scaphyglottis*) *imbricata, Jacquiniella cobanensis, Oncidium ensatum, Oncidium leucochilum, Psygmorchis* (= *Erycina*) *crista-galli* y *Trichocentrum lindenii*. Las tres plantas restantes fueron colectadas por Randall J. Evans; William E. Harmon & José A. Fuentes y Thomas Hawkins, Bruce Allen & Randall J. Evans, siendo estas *Epidendrum verrucosum*, *Epidendrum difforme* (probablemente una especie afín, ya que esta especie es endemica de las Antillas Menores) y *Maxillaria cucullata*. Ninguna de éstas plantas se encuentra en las zona de visitantes del Parque. En el herbario virtual C. V. Starr del Jardín Botánico de New York existe registro de 56 orquídeas de Honduras (C. V. Starr Virtual Herbarium, 2015), ninguna de éstas dentro de los límites del Panacam. En los Especímenes Neotropicales del Museo Field de Chicago se encontraron 42 registros de orquídeas para Honduras, de éstas, ninguna corresponde al área del Panacam.

Este trabajo tiene por objetivo presentar las especies de orquídeas de la zona de visitantes del Parque Nacional Cerro Azul Meámbar como una herramienta para entender las orquídeas en ese sitio. Es un insumo para elaborar estrategias eficientes para su manejo y conservación.

Área de estudio. El Panacam está ubicado en los departamentos de Comayagua y Cortés, Honduras. Esta comprendido entre los 600 y 2047 msnm, fue creado en el año 1987 bajo la ley de bosques nublados 87-87 (Cruz 1993). Es comanejado por el Proyecto Aldea Global (PAG). Su zona de visitantes está definida en este estudio empezando con la calle que une Santa Elena con el Centro de Visitantes El Pino de Panacam (4.1 km), los senderos Sinaí (5.2 km) y Los Vencejos (0.6 km) dentro del área de uso público del Parque (Fig. 1). En términos de área, el recorrido general representa aproximadamente 4.04 hectáreas (0.0404 km cuadrados).

La zona de visitantes es un Bosque Muy Húmedo Sub Tropical (Holdridge 1962), y se encuentra entre los 600 y 1200 msnm. Se puede separar en dos tipos según su intervención actual. Primero, el camino entre Santa Elena y El Pino está muy intervenido con agricultura tradicional: café, asentamientos humanos, proyecto de generación eléctrica (represa Yure). Segundo, dentro del área de uso público se presenta un paisaje no intervenido de bosque latifoliado.

La precipitación promedio anual es de 2,892.3 mm, el mes de septiembre presenta el promedio más alto con 459.4 mm y el mes de marzo tiene promedio más bajo con 66.4 mm. La temperatura promedio anual es de 21.44°C, el mes más frío es diciembre con 17.86°C y el más caliente es mayo con 23.53°C. Estos datos fueron extraídos de la estación Santa Elena de la Empresa Nacional de Energía Eléctrica (ENEE).

Metodología

Esfuerzo –. Se realizaron 18 visitas que comenzaron en enero de 2011 y finalizaron en marzo de 2014. En 2011, se visitó en los meses de enero, marzo, mayo, agosto, octubre y diciembre. En 2012, febrero, abril, junio, julio y septiembre. En 2013, enero, abril, julio, septiembre, noviembre y diciembre, y durante 2014 se hizo una visita en marzo. Se procuró visitar el área de interés al menos una vez por cada mes del año buscando tener acceso a la mayor representatividad temporal de orquídeas en flor. En cada viaje se recorría la zona de interés haciendo el mismo esfuerzo: sendero Sinaí ocho horas, Sendero Los Vencejos, dos horas, camino entre el Centro de Visitantes Pino y Santa Elena, tres horas. Cada orquídea encontrada con flor era fotografiada con detalle y se tomaban las medidas que permitieran su determinación. No se colectó ninguna muestra pues no se contó con los permisos de colecta correspondientes; las imágenes de cada especie están consolidadas en una base de datos a la que se puede acceder contactando al autor.

Riqueza y agrupación –. Para estimar la riqueza

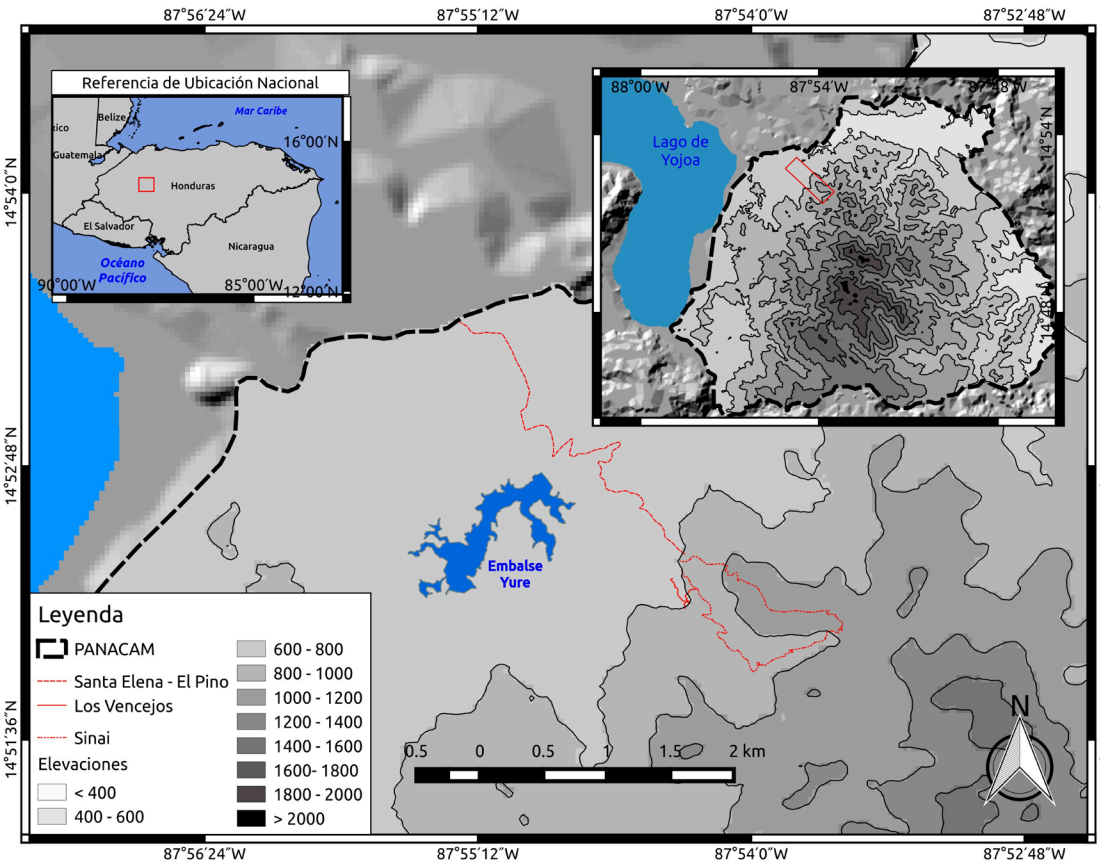

Figura 1. Zona de visitantes Parque Nacional Cerro Azul Meámbar (Elaborado con QGIS Development Team [2015]).

esperada de especies, se usó una matriz de presencia–ausencia de orquídeas en flor por cada mes. Una orquídea con flor se contabilizaba como presencia para la especie que representaba. Esta matriz fue analizada usando el paquete *fossil* (Vavrek 2011) del programa R (R Core Team 2013) con el algoritmo *jackknife* de primer orden.

Los meses fueron agrupados según su riqueza, usando una matriz de distancia euclidiana entre los meses para luego ser graficados en un árbol binario *unrooted* usando el paquete APE de la aplicación R (Paradis *et al.* 2004).

Resultados

Listado de especies –. Adicionalmente a las especies que se lograron encontrar en flor, se agregaron orquídeas que se podían determinar, hasta donde fuese posible, en estado estéril. En la Tabla 1 se presenta la lista de orquídeas encontradas en la zona de visitantes de Panacam ordenadas alfabéticamente. Los nombres usados para las especies son en su mayoría los aceptados por Govaerts *et al.* (2011) y Chase *et al.* (2015). Además, se incluye si la especie es cultivada, invasora y comentarios.

Análisis de riqueza –. El resultado de la acumulación de especies (Fig. 2) utilizando *jackknife* de primer orden (Vavrek 2011) proyecta la presencia de aproximadamente 140 especies en las zona de visitantes de Panacam.

Agrupación de meses según riqueza en floración –. Al agrupar los meses en función de la riqueza de las especies en floración encontramos dos grupos: G–1 y G–2 (ver Fig. 3). El primero presenta los picos más altos de floración. Este grupo se divide en dos subgrupos G–1a y G–1b. G–1a está representado por los meses de agosto, septiembre, octubre y noviembre; G–1b se forma en los meses diciembre, enero y febrero. Se hace

Tabla 1. Orquídeas de la zona de visitantes del Panacam.

Arpophyllum sp.	*Gongora truncata* Lindl.*
Arundina graminifolia (D.Don) Hochr. * [1]	*Guarianthe skinneri* (Bateman) Dressler & W.E.Higgins [1]
Bletia purpurea (Lam.) A.DC *	*Habenaria sp.*
Brassavola sp.*	*Ionopsis utricularioides* (Sw.) Lindl.*
Brassia verrucosa Bateman ex Lindl.*	*Isochilus linearis (Jacq.) R.Br.* Schltr.*
Campylocentrum schiedei (Rchb.f.) Benth. ex Hemsl. *	*Jacquiniella teretifolia* (Sw.) Britton & P.Wilson*
Catasetum integerrimum Hook.	*Lepanthes acuminata* Schltr.*
Comparettia falcata Poepp. & Endl.*	*scopula* Schltr.*
Cranichis wageneri Rchb.f.*	sp. *1**
Cranichis sp.*	sp. *2 **
Cyclopogon comosus (Rchb.f.) Burns-Bal. & E.W.Greenw.*	*Lepanthopsis floripecten* (Rchb.f.) Ames*
cranichoides (Griseb.) Schltr.*	*Lockhartia hercodonta* Rchb.f. ex Kraenzl.
Cyrtopodium macrobulbon (Lex.) G.A.Romero & Carnevali * [3]	*Malaxis sp. **
Dichaea glauca (Sw.) Lindl.*	*Maxillaria aciantha* Rchb.f.*
hystricina Rchb.f.*	*anceps* Ames & C.Schweinf.*
muricatoides Hamer & Garay*	*cobanensis* Schltr.*
panamensis Lindl.*	*friedrichsthalii* Rchb.f.*
trulla Rchb.f.*	*fulgens* (Rchb.f.) L.O.Williams *
tuerckheimii Schltr.*	*ringens* Rchb.f.*
sp.*	*uncata* Lindl.*
Dimerandra emarginata (G.Mey.) Hoehne	*variabilis* Bateman ex Lindl.*
Dinema polybulbon (Sw.) Lindl.*	*Mormodes ephippilabia* Fowlie*
Elleanthus capitatus (Poepp. & Endl.) Rchb.f.*	*sotoana* Salazar*
caricoides Nash*	*Nidema boothii* (Lindl.) Schltr.*
graminifolius (Barb.Rodr.) Løjtnant*	*Notylia barkeri* Lindl.
poiformis Schltr.*	*Oeceoclades maculata* (Lindl.) Lindl.* [2]
Encyclia tuerckheimii Schltr.*	*Oncidium sphacelatum* Lindl.* [1]
sp.*	*Ornithocephalus numenius* Toscano & Dressler *
Epidendrum flexuosum G.Mey.*	*Pelexia funckiana* (A.Rich. & Galeotti) Schltr. *
glumarum Hamer & Garay*	*Platystele oxyglossa* (Schltr.) Garay*
i*somerum* Schltr.*	*stenostachya* (Rchb.f.) Garay*
melistagum Hágsater*	sp.*
mixtum Schltr.*	*Platythelys querceticola* (Lindl.) Garay* [4]
nocturnum Jacq.*	*Pleurothallis cardiothallis* Rchb.f.
paranthicum Rchb.f.*	*correllii* Luer*
radicans Pav. ex Lindl.	*pansamalae* Schltr.*
rigidum jacq.*	*pruinosa* Lindl.*
veroscriptum Hágsater*	sp.*
yojoaënse Hágsater & L.Sánchez*	*Polystachya caracasana* Rchb.f.
Erycina crista-galli (Rchb.f.) N.H.Williams & M.W.Chase	*Prescottia stachyodes* (Sw.) Lindl.*
Gongora leucochila Lem.*	*Prosthechea baculus* (Rchb.f.) W.E.Higgins*

continúa

Tabla 1. Sigue.

Prosthechea cochleata (L.) W.E.Higgins * [2]	*Specklinia spectabilis* (Ames & C.Schweinf.) Pupulin & Karremans
livida (Lindl.) W.E.Higgins *	*tribuloides* (Sw.) Pridgeon & M.W.Chase *
pygmaea (Hook.) W.E.Higgins *	*Stanhopea oculata* (Lodd.) Lindl.*
radiata (Lindl.) W.E.Higgins	sp. *
Psilochilus macrophyllus (Lindl.) Ames *	*Stelis gracilis* Ames *
Restrepia muscifera (Lindl.) Rchb.f. ex Lindl. *	*megachlamys* (Schltr.) Pupulin *
Sacoila lanceolata (Aubl.) Garay *	*segoviensis* (Rchb.f.) Pridgeon & M.W.Chase *
Scaphyglottis confusa (Schltr.) Ames & Correll *	sp. *1* *
lindeniana (A.Rich. & Galeotti) L.O.Williams *	sp. *2* *
livida (Lindl.) Schltr. *	sp. *3* *
longicaulis S.Watson *	*Trichocentrum ascendens* (Lindl.) M.W.Chase & N.H.Williams *
prolifera (R.Br.) Cogn. *	*luridum* (Lindl.) M.W.Chase & N.H.Williams *
Sobralia decora Bateman	*Trichopilia tortilis* Lindl. *
macrantha Lindl. *	*Trichosalpinx blaisdellii* (S.Watson) Luer *
Specklinia glandulosa (Ames) Pridgeon & M.W.Chase *	*Trigonidium egertonianum* Bateman ex Lindl. * [5]
grobyi (Bateman ex Lindl.) F.Barros *	

* = Registrada en el presente trabajo, 1 = Cultivada, 2 = Invasora, 3 = Comúnmente confundida en Honduras con *C. punctatum* (Romero-González *et al.* 2008), 4 = Género trasladado a *Aspidogyne* por Chase et al. (2015), 5 = Género trasladado a *Maxillaria* por Chase *et al.* (2015).

esta segregación pues a pesar que en estos meses se presenta la mayor cantidad de orquídeas en flor se observa una cantidad mayor en la agrupación G-1b y se considera importante mencionar que existen diferencias entre los meses que conforman el grupo G-1. G–2 está conformado por marzo, abril, mayo, junio y julio.

Discusión. Hasta el momento se había reportado la cantidad de 38 especies de orquídeas para el área total de Panacam (Hawkins 1993, Borjas *et al.* 1997, Afecohdefor 1998, 2000, Nelson & Ortiz 2007, ICF 2012, Vega *et al.,* 2014, Tropicos 2014, C.V. Starr Virtual Herbarium, 2015). En el presente estudio se encontraron 116 especies que pertenecen a 54 géneros, 17 subtribus, nueve tribus y dos subfamilias, usando la clasificación propuesta por Chase *et al.* (2015), de las cuales 101 son nuevos registros para el Parque. Se pueden enumerar por lo menos 139 especies de orquídeas para el Parque.

Se predice la presencia de aproximadamente 140

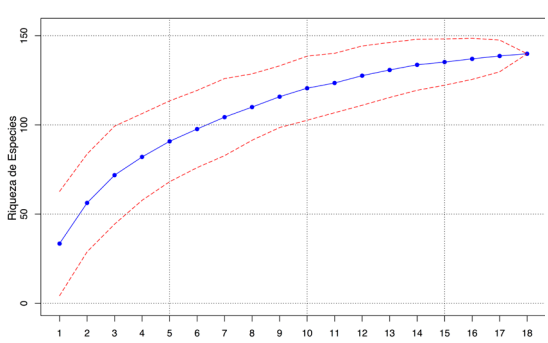

Figura 2. Curva de acumulación de especies.

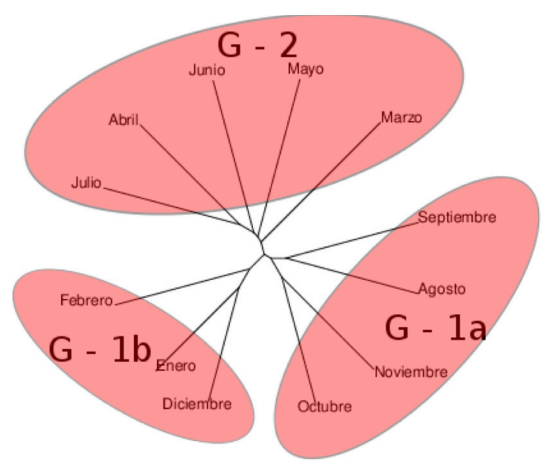

Figura 3. Agrupación de meses por riqueza (unrooted binary tree).

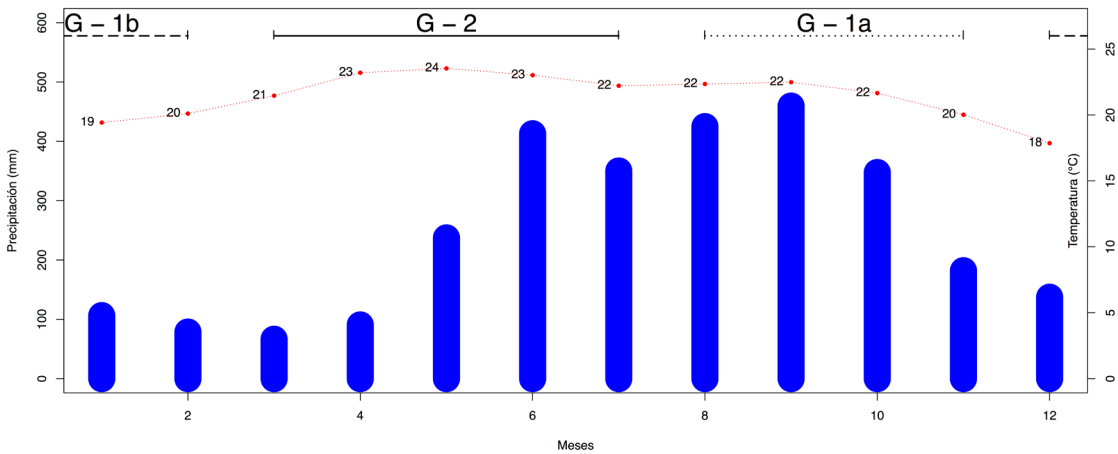

Figura 4. Grupos mensuales de floración de orquídeas en visitas a la zona de visitantes del PANACAM versus temperatura y precipitación (la línea roja punteada expresa la temperatura promedio mensual en grados centígrados, las barras azules muestran la precipitación promedio mensual, la línea negra punteada muestra la agrupación G-1a, la línea negra con espacios intercalados la agrupación G-1b y la línea negra sólida demarca la agrupación G-2 de floración).

especies de orquídeas en la zona de visitantes de PANACAM (Fig. 2), una cantidad que representa el 20% de las orquídeas de Honduras registradas por Nelson (2008, 2010), Archila (2013) y Vega *et al.* (2014), en un área que corresponde a 0.0001% de la totalidad del Panacam.

Aunque el objetivo de este estudio recae en la riqueza de las orquídeas de la zona de visitantes de Panacam, es importante aportar las observaciones realizadas en cuanto a otras variables que nos ayuden a entender esta riqueza y su temporalidad.

Si se comparan las agrupaciones de meses contra la precipitación y temperatura, cada grupo parece estar relacionado con el clima (Fig. 4). G–1a presenta altas precipitaciones (181–424 mm) y temperaturas promedio que van desde los 20 hasta 22°C. G–1b presenta precipitaciones bajas (78–137 mm) y temperaturas promedio bajas 18–20°C, las más bajas del año. Ambos subgrupos se podrían beneficiar del acumulado de humedad en el ambiente por los primeros meses de lluvia en el año. G–2 presenta precipitaciones bajas (66–237 mm), exceptuando junio y julio, que son meses con precipitaciones altas (350–412 mm), pero con temperaturas altas (21–23.5 °C), las más altas del año. Se podría emitir la hipótesis que la relación depende de la disponibilidad de agua, donde la precipitación representa la entrada de agua al sistema, y la temperatura, en forma de evaporación, la salida.

Estos resultados sugieren una relación entre el clima y la fenología de floración de las orquídeas, como menciona Dressler (1981), sin embargo esta sólo es la primera parte del proceso, donde el verdadero éxito de la especie se ve reflejado en la mayor posibilidad de germinación y consolidación de nuevos individuos. Plantas que dan flor en enero y plantas que dan flor en junio, suponemos tienen estrategias diferentes de preparación de fruto, dispersión de semillas y germinación, buscando las mejores condiciones ambientales para la germinación de su semilla y establecimiento de la planta (Dressler, 1981).

En base a que el área de estudio es pequeña y que de acuerdo a *jackknife* de primer orden se predice la presencia de más especies en el Parque, es necesario seguir este proceso de investigación de la historia natural de los organismos, dándole seguimiento al desarrollo de los frutos hasta el punto de la dispersión de su semilla y ver su relación con las variables climáticas. Para esto es de vital importancia la medición de disponibilidad de agua y otras variables que nos ayuden a entender de mejor forma la estrategia de estas plantas en el Parque. De igual forma, es necesario ampliar el área de investigación a la totalidad de Panacam y procurar llegar a las partes más alta del parque donde se encuentra el bosque nublado donde estará la mayor diversidad de especies.

Los estudios a largo plazo, donde se puede abarcar

mejor la riqueza de los grupos de plantas y animales, se perfilan de gran importancia para plantear planes de manejo efectivos de recursos naturales en las áreas protegidas hondureñas. Sin información de este tipo se puede dejar de lado las condiciones específicas de cada grupo y especie representados dentro de los límites que se desean proteger, lo que llevaría a una planificación a oscuras.

Agradecimientos. El autor quiere agradecer al personal del Proyecto Aldea Global por el apoyo y trato amable, a la Empresa Nacional de Energía Eléctrica, que a través de su departamento de meteorología, facilitó los datos climáticos de la estación meteorológica de Santa Elena, a J. L. Linares por la revisión de la determinación de gran parte de las especies, a J. E. Mérida y G. A. Cruz por la constante motivación, aporte de ideas y comentarios al manuscrito, a J. L. Murillo por la asistencia en cada viaje, a G. H. Wiese por ser inspiración sin saberlo y a dos revisores anónimos por los oportunos comentarios.

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A COLORFUL NEW SPECIES OF *NEOOREOPHILUS* (ORCHIDACEAE: PLEUROTHALLIDINAE) FROM THE EASTERN ANDES OF COLOMBIA AND ECUADOR

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Abstract. A new species of *Neooreophilus* from the eastern Andes of Colombia and Ecuador is described and illustrated. *Neooreophilus chaoae* is related to a group of species that includes *N. cordilabius*, *N. chelosepalus* and *N. werneri* characterized by having an obovate, pubescent dorsal sepal and spread or reflexed, non-pubescent lateral sepals ending with an apiculum. The new species can be distinguished by its narrowly triangular lateral sepals and its lip with lateral lobes not extending beyond the column. Notes about its natural habitat and conservation status are also given.

Keywords: *Neooreophilus*, Pleurothallidinae, new species, eastern Andes

Neooreophilus Archila, formerly known as *Oreophilus* W.E. Higgins & Archila, *Brachycladium* Luer, or *Lepanthes* subg. *Brachycladium* Luer, is one of the most cryptic and poorly known genera of subtribe Pleurothallidinae (Orchidaceae). The genus is more closely related to *Andinia* Luer (Wilson & Jost, 2011) than to *Lepanthes* Sw., where most of the species had originally been placed. Plants of this genus are epiphytes and form long pendent chains (sometimes exceeding one meter in length) of tiny alternating ovate leaves (5-12 mm long), each on a very short (less than 2 mm) ramicaul. The chains hang from tree branches or trunks in very wet mossy cloud forests with good air movement, and closely resemble some pendent fern fronds found in the same habitat. Older leaves are often covered with bryophytes and algae. Inconspicuous tiny but complex flowers are born on racemes from a joint in the ramicaul. The plants are often restricted to narrow elevation bands and are usually rare even in suitable habitat, though when one species is present on a tree, individuals of other species of the same genus often accompany it. Non-specialist botanists rarely notice the flowers, or even the plants, so members of this genus are poorly represented in the world's herbaria.

The new species described below was discovered independently about 10 years apart in two widely separated locations: the Cordillera Abitagua in the east-central Andes of Ecuador, and the Sibundoy Valley in the southeastern Andes of Colombia, ca. 300 km away. On morphological grounds it appears to be most closely related to *Neooreophilus werneri* (Luer) Archila and *N. cordilabius* (Luer) Archila from the Andes of southeastern Ecuador, and *N. chelosepalus* (Luer & Hirtz) Archila, which is thought to have been collected in the Andes of western Ecuador.

Neooreophilus chaoae S. Vieira-Uribe & L. Jost, *sp. nov.*

TYPE: COLOMBIA. Putumayo: municipio de San Francisco, Vereda Porotal, Reserva Yumartán, 2200 m. Jun. 26 2015. Collected by Miguel M. Bonilla. *S. Vieira 0020* (holotype: JAUM!). (Fig. 1–2).

Diagnosis.- This species is most similar to *Neooreophilus chelosepalus*; however, it can be recognized by its narrowly triangular lateral sepals more than twice as long as wide, sub-orbicular lip with lateral lobes not extending beyond the column, and its involute, pubescent petals.

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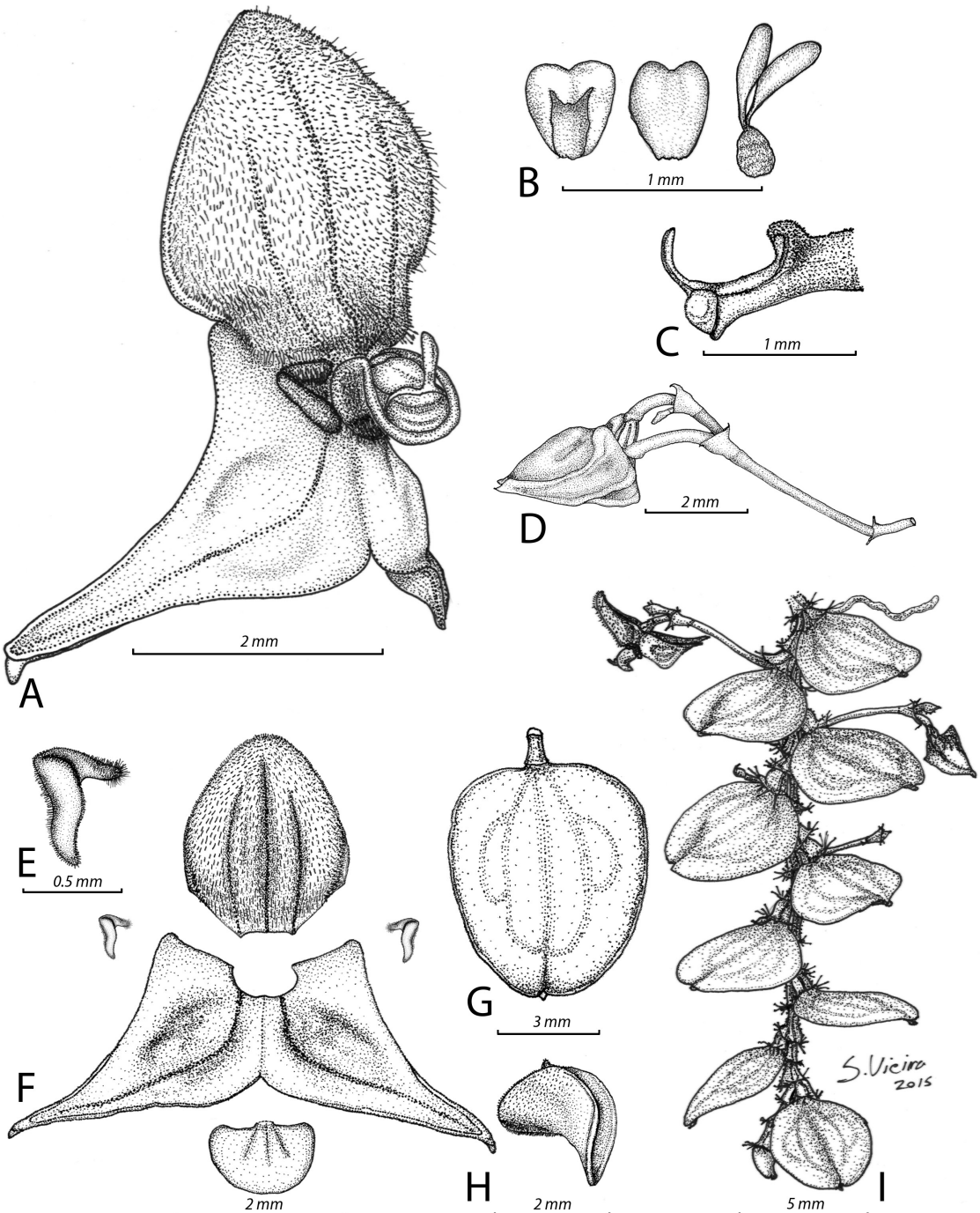

FIGURE 1. Drawing of *Neooreophilus chaoae* S. Vieira-Uribe & L. Jost. **A.** Flower. **B.** Pollinia and anther cap. **C.** Column, profile view (pollinia and anther cap absent). **D.** Inflorescence. **E.** Petal. **F.** Dissected perianth. **G.** Leaf. **H.** Lip, profile view. **I.** Habit. Drawn by S. Vieira-Uribe from *S.Vieira 0020* (holotype: JAUM).

Plant epiphytic, repent and pendent, up to 50 cm long. *Stem* 2.5-3.0 mm long between ramicauls, each segment enclosed by two imbricating, membranaceous, infundibular sheaths, ciliate along the ribs, with dilated, ciliated ostia. *Roots* slender, flexuous, ca. 0.4 mm in diameter. *Ramicauls* 1 mm long, enclosed by a single membranaceous, infundibular sheath ciliate along the ribs, with dilated, ciliate ostia. *Leaves* 5.5 × 4.5-5.0 mm, green, suffused with purple along the veins, thickly coriaceous, ovate, obtuse, glabrous, retuse with a short abaxial apiculum at the sinus, the rounded base narrowing into a short petiole less than 0.2 mm long. *Inflorescence* a congested, successively flowered raceme placed well above the leaf surface, producing several flowers, often with a last non-developing flower that remains as a vestigial bud; borne by a slender, ascending peduncle 5 mm long, with a glabrous, tubular sheath, ciliate along the margins, 1 mm long; up to five inflorescences are borne successively from near the base of each ramicaul; rachis segments ca. 1.5 mm long; floral bracts infundibular, oblique, acuminate, membranaceous, sparsely ciliate along its margins, ca. 0.8 mm long; pedicels slender, persistent, 1 mm long; ovary glabrous, ca. 0.6 mm long. *Flowers* facing down. *Dorsal sepal* 2.3 × 2.0 mm, orange-red, suffused with burgundy basally, ovate, obtuse, revolute, entire, pubescent, 3-veined, abaxially carinate along the main vein, connate to the lateral sepals for about 1.0 mm. *Lateral sepals* 3.2 × 1.5 mm, yellow, suffused with burgundy in the middle, narrowly triangular, acute, reflexed, entire, glabrous, 2-veined, abaxially carinate along the main vein, the carinae ending at the apex with an apiculum, connate for about 0.8 mm. *Petals* 0.3 × 0.5 mm, orange-red, transversally bilobed; the upper lobe triangular, pubescent, 0.4 mm long; the lower lobe oblong to triangular, slightly sigmoid, involute, puberulous, 0.5 mm long. *Lip* 0.8 × 1.1 mm when expanded, fulvous, suffused with burgundy in the center, sub-orbicular, entire, glabrous, abaxially puberulous along the veins, 3-veined, embracing the column, cuneate at the base, adnate to the base of the column. *Column* 1.6 mm long including the rostellum, white, suffused with lilac, terete, papillulose, the anther and stigma apical; the rostellum apically yellow, oblanceolate, antrorse, conspicuous. *Pollinia* two, yellow, ovoid, basally filiform, with a transparent drop-like viscidium. *Anther cap* cream, triangular, cucullate.

Eponymy: We name this species after Dr. Anne Chao of the Institute of Statistics, National Tsing Hua University, Taiwan, in honor of her support for conservation of Fundacion EcoMinga, whose Rio Zuñac Reserve in Ecuador now protects the site where this species was originally discovered. It is also appropriate to name this species in honor of Dr. Chao for her groundbreaking work on the estimation of the number of undetected species in an ecosystem, and for her other important work on the mathematics of biodiversity.

Additional material examined: ECUADOR. Tungurahua: Baños township, Cordillera Abitagua, Rio Zuñac watershed, ca. 2300 m. Nov. 2001. *Lou Jost 3408* (QCA!) (Fig. 3B).

Neooreophilus chaoae is vegetatively similar to many of its congeners, with glabrous ovate leaves whose main veins are usually purple (most obvious on young leaves). It belongs to a group of similarly flowered species, with ovate, pubescent dorsal sepal, and reflexed non-pubescent lateral sepals with an apiculum. Its inflorescence is longer than the leaf and the flowers are unusual for the genus in facing downwards. Its glabrous, triangular lateral sepals longer than the dorsal sepal easily distinguish it from all congeners except *N. cordilabius*, *N. chelosepalus* and *N. werneri*. It can be distinguished from *N. chelosepalus* (Fig. 3A) and *N. werneri* (Fig. 3C) by the narrowly triangular lateral sepals more than twice as long as wide (rather than less than twice as long as wide), its sub-orbicular lip with lateral lobes not extending beyond the column (rather than extending vertically beyond the column [Luer 2002, 2009]) and its pubescent petals (rather than glabrous or cellular glandular). From *N. cordilabius*, it can be distinguished by its narrowly triangular, glabrous lateral sepals (rather than elliptical-oblong and microscopically pubescent [Luer 2002]), its glabrous ovary (rather than long ciliate-spiculate) and its involute, oblong petals with the upper lobe smaller than the lower lobe (rather than lunate, with lobes equal).

Habitat and conservation status: *Neooreophilus chaoae* is rare and local at both its known localities. At each site it is restricted to elevations between 2100 and 2500 m in very wet, airy cloud forest, where it grows

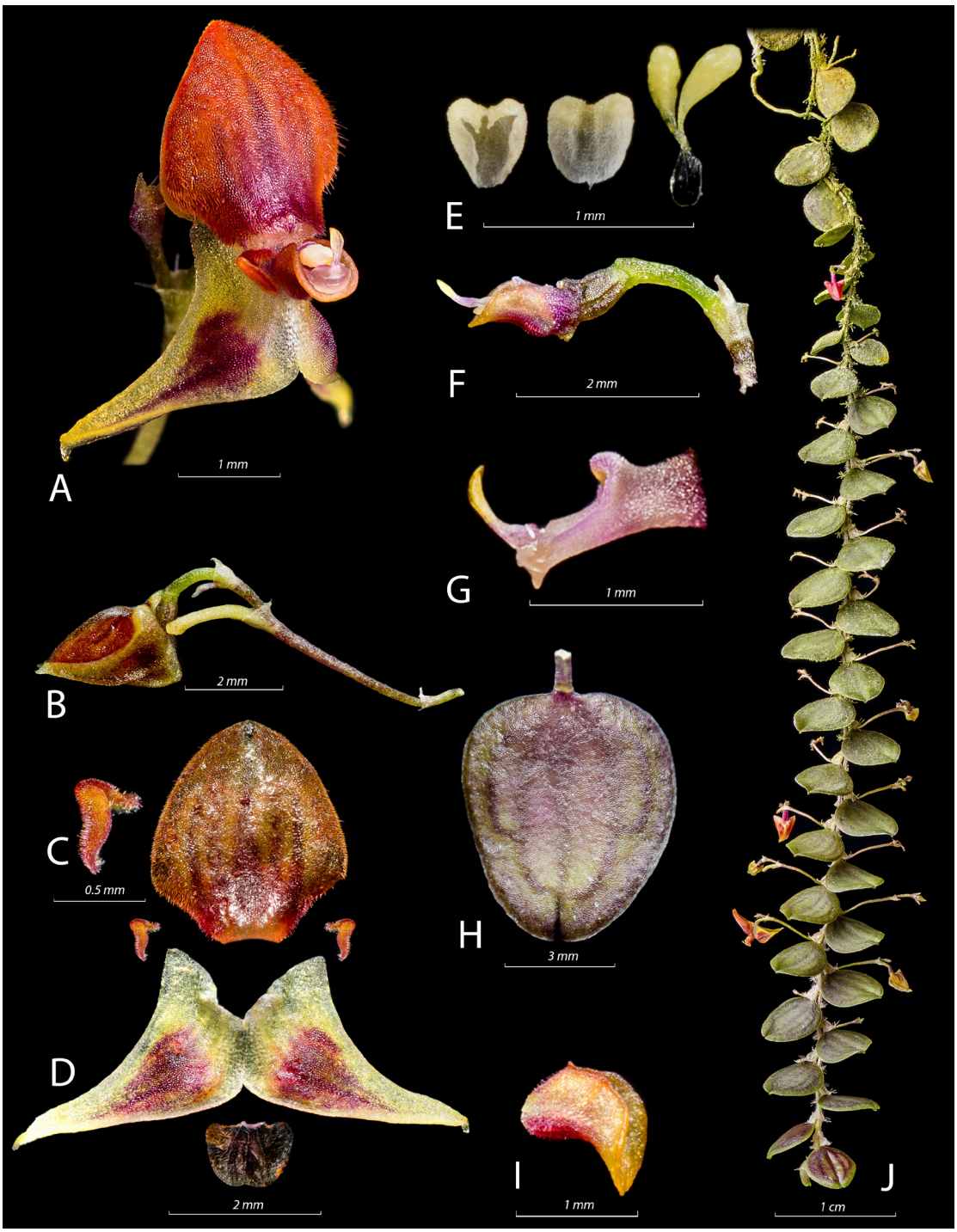

FIGURE 2. Lankester Composite Digital Plate (LCDP) of *Neooreophilus chaoae* S. Vieira-Uribe & L. Jost. **A.** Flower. **B.** Inflorescence. **C.** Petal. **D.** Dissected perianth. **E.** Anther cap and pollinia with drop-like viscidium. **F.** Ovary with column and lip, profile view (pollinia and anther cap absent). **G.** Column, profile view (pollinia and anther cap absent). **H.** Leaf. **I.** Lip, profile view. **J.** Habit. Photographed by S. Vieira-Uribe from *S. Vieira 0020* (holotype: JAUM).

Figure 3. **A.** Photograph of the flower of *Neooreophilus chelosepalus*. Photographed by Ron Parsons from a plant grown by Marni Turkel. **B.** Photograph of the flower of *Neooreophilus chaoae* from Ecuador. Photographed by L. Jost from Lou Jost 3408 (QCA). **C.** Photograph of the flower of *Neooreophilus werneri*. Photographed by Florian Werner from *F. Werner 333* (holotype: MO).

together with several other species of the same genus. However, the lack of morphological variation among the specimens from the two distant sites suggests that the known populations are linked by undiscovered populations at similar elevations in the poorly explored northeast Andes of Ecuador. The eastern Andes of southeast Colombia are also quite unexplored, so the distribution of the species may also extend well north of the single known site (Sibundoy valley) in that country. In light of the lack of exploration of suitable nearby habitat, and the cryptic nature of the plants, we suggest classifying this species under the IUCN category "Data Deficient". Both known sites are privately protected; the Ecuadorian site is inside the Fundación EcoMinga's Rio Zuñac Reserve and the Colombian site is inside the Yumartán reserve near Sibundoy valley.

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Wilson, M. & Jost, L. (2011). Phylogenetic analysis of the Andean genus *Brachycladium* Luer (syn. *Oreophilus* Higgins & Archila) and closely related genera based on nuclear ITS sequencing. *Lankesteriana*, 11(3), 370.

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A NEW CHECKLIST OF ORCHID SPECIES FROM CUBA*

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Abstract. In 2014, James D. Ackerman and collaborators published the last checklist of Cuban orchid species in the book, "*Orchid Flora of the Greater Antilles*". The aim of our study was to determine the current number of orchid species in Cuba and adjacent islands culminating in an updated checklist. We consulted numerous publications and reports, visited four herbaria, and refer to ongoing collaboration with leading specialists. A total of 91 genera and 312 species are documented. We provide comments on taxonomic status on noteworthy species.

Key words: taxonomy, checklist, orchids, Cuba

Introduction. Since the 18th century, the orchids of Cuba have been in the crosshairs of scholars given the island's unique geographic position and large size among the Antilles, and the fact that Cuba became a major regional trade and communications center. Already in 1799 Baltasar Boldo and José Estévez in their *Cubensis Prima Flora* had described 10 species of Cuban orchids. This *Flora* remained unpublished in Madrid until 1990. In 1835, another orchid species was described from Cuba, *Oncidium lemonianum* Lindl., [=*Tolumnia lemoniana* (Lindl.) Braem]. Following its description, the species was then exported by Captain Sutton and subsequently cultivated by Charles Lemon at Carclew, England. The work by other specialists ensued leading to Ramon de La Sagra's "*Historia Física, Política y Natural de la Isla de Cuba*" published in volume XI, between 1850 and 1852, recognized 51 Cuban orchid species. The chapter on orchids in this work was a contribution of Achille Richard. By the end of that century, a total of 188 orchid species had been described from Cuba.

Studies in the 20th century revealed additional orchid taxa in Cuba. In 1938, Julián Acuña Galé published "*Catálogo Descriptivo de las orquídeas cubanas*" reporting 278 species of Orchidaceae. Later, in 1946, the Frenchman Joseph Silvestre Sauget (Hermano León) published within "*Flora de Cuba*" (volume 1) a new expose with few changes compared to earlier catalogues. After an updated treatment in 1951 by Alex D. Hawkes, little new information was reported for the next 33 years. Finally in 1984, a new checklist was published based on the studies conducted by Dr. Helga Dietrich of the University of Jena in Germany, which recorded 88 genera and 300 species. During the final years of the 1980s and the decade of the 1990's, important reports and contributions were made regarding new species by Marta A. Díaz Dumas, James D. Ackerman, Robert Dressler, Carlyle Luer and Juan Llamacho Olmos. In late 1998, after intensive work, a list of documented orchid genera and species in Cuba was submitted by a group of authors from the Orquideario de Soroa, Cuba, which was published in early 2000 as part of the book "*Los Géneros de Orquídeas Cubanas"*. The work of Mark A. Nir, "*Orchidaceae Antillanae*", was also published in the same year.

In the current century, other specialists continued this line of work including the German Hagen Stenzel, the Italo-Costa Rican Franco Pupulin and the Cuban Juan Olmos Llamacho, the latter having authored "*The Orchids of Cuba*", wherein 305 species are reported within the island. Similarly, an excellent contribution to the knowledge of the orchid flora of

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Cuba and the Caribbean was advanced by James D. Ackerman and collaborators "*Orchid Flora of the Greater Antilles*", published in 2014, where 315 species are recorded for the island.

The objective of this study is to present a new checklist of Cuban orchids, taking into account the newest reports, trends and results of current taxonomic studies conducted by leading Cuban national and foreign specialists who for years have devoted their efforts to this task.

Materials and methods. For this study we followed the classification system of Chase *et al*. (2015). Each species is presented with its basionym and type. For taxa with multiple synonyms, only those whose types are derived from islands near Cuba or Florida are cited. The authors acknowledge that there was no opportunity to examine types in foreign herbaria, for which they trust in those cited by authors with vast experience in the study of the orchid flora within Cuba.

With regard to Cuban herbaria, the authors reviewed the specimens deposited in the Herbarium of the Botanical Garden of Pinar del Río (HUJB), Herbarium Johannes Bisse (HAJB) of the National Botanical Garden, Herbarium of the Universidad Central de Las Villas (HUCLV), and the Herbarium of the Institute of Ecology and Systematics (HAC) that contains the collections of the old Herbarium Sauvalle, Herbarium of the Agronomic Station of Santiago de las Vegas, and those of the Herbarium of the Colegio La Salle. We have also reviewed the specimens deposited in the Herbarium of the Botanical Garden Orquideario Soroa (HOS). When possible, all species consultations are cited in order to facilitate their location to those interested in further research and to obtain direct local consultations in Cuba if necessary.

For those species reported from the island of which the authors have seen no records in the reviewed herbaria, or for those analyzed which have yielded doubts about their true identity, we have relied on information gathered from authors and foreign herbaria which we have not been able to visit. The only exceptions made was regarding those species of which we have not been able to obtain information from national or foreign herbaria, but which have been or are currently being grown at the Botanical Garden Orquideario Soroa, each being duly verified by the authors after seeing the garden's specimens, photographs and drawings there of which are noted in the listing.

As will be noted, we have used data and reports that appear in both historic as well as recent bibliographies, with the aim of arriving at criteria that correspond as closely as possible to the trends observed today in the field of orchidology in the region. In all instances the authors have sought to designate species according to the most recent nomenclature (Chase *et. al*. 2015). Comments are also made in cases of nomenclatural changes, and for the additions or elimination of genera and species recorded for the country. Endemic species for Cuba are indicated with asterisk (*).

Results and discussion. In comparison to the most recent list published by Ackerman (2014) and following the system of classification proposed by Chase and collaborators (2015), 42 nomenclatural changes have been made, almost all of which have to do with segregations from *Pleurothallis* towards other genera. One species is synonymized (*Encyclia brevifolia* = *Encyclia pyriformis*), six are excluded from the Island of Cuba (see excluded species) and three new species and three natural hybrids have been added (*Bletia* × *ekmanii, Broughtonia* × *guanahacabibensis, Encyclia* × *camagueyensis, Encyclia sabanensis, Encyclia viñalensis* and *Lepanthes caluffii*). Only in one case we don't follow Chase *et al*. (2015) because we prefer to move *Pteroglossapis ecristata* to the genus *Orthochilus* and not to *Eulophia*.

This study has resulted in 91 genera and 312 species for the flora of Cuba. A total of 97 species are endemic, representing 31% of those registered. The best represented genera are *Lepanthes* with 28 especies, *Epidendrum* 26, *Encyclia* 24, *Specklinia* 15, *Tolumnia* and *Pleurothallis* 10, *Habenaria* and *Vanilla* with 9. Finally, the authors hope that the present work will serve as an up-to-date reference for those who engage in the daily struggle to study and conserve species of this family of plants in the country and the Caribbean region as a whole.

CHECKLIST

ACIANTHERA Scheidw.

Acianthera angustifolia (Lindl.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 112: 118. 2007.

BASIONYM: *Pleurothallis angustifolia* Lindl., Edward´s Bot. Reg. 21: sub. t. 1797. 1835.

Type: Mexico: Jalapa, *Deppe s.n.* (holotype K).

Pleurothallis confusa Fawc. & Rendle, J. Bot. 47: 129. 1909.

Type: Jamaica: Bethebara, *Wilson & Wullschlägel 1079* (lectotype, Fawcett & Rendle, 1909, p. 129, K-L).

Pleurothallis wilsonii Lindl., Ann. Mag. Nat. Hist., ser. 3, 1: 326. 1858; *Humboltia angustifolia* (Lindl.) Kuntze, Revis. Gen. Pl. 2: 667. 1891.

Humboltia wilsonii (Lindl.) Kuntze, Revis. Gen. Pl. 2: 667. 1891.

Acianthera wilsonii (Lindl.) Pridgeon & M.W.Chase, Lindleyana 16: 247. 2001.

Type: Cuba: Oriente, 1856-57, *C.Wright 668* (lectotype K-L).

SPECIMENS STUDIED: HAJB!: *Bisse et al. 45193*; HAC!: *Alain et al. 7466*; HOS! : *Pérez & Bocourt 101*; flowers in spirit: *Pérez & Bocourt 088.*

Acianthera bissei (Luer) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 253. 2004.*

BASIONYM: *Pleurothallis bissei* Luer, Lindleyana 14: 108. 1999.

Type: Cuba: Prov. Holguín, Mayarí Abajo, Sierra de Nipe, Loma de la Mensura, *J. Bisse et al. HFC 35789* (holotype HAJB!).

SPECIMEN STUDIED: HAJB!: *Berazaín et al. 63388.*

Acianthera murex (Rchb.f.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 115: 257. 2009.*

BASIONYM: *Pleurothallis murex* Rchb.f., Flora 48: 276. 1865.

Specklinia murex (Rchb.f.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 263. 2004.

Type: Cuba: Prov. Guantánamo, near Monte Verde, 1860-1864, *C. Wright 3348* (holotype K).

Pleurothallis trigonifolia Wright ex Lindl., according to Cogn., Fl. Cuba 288. 1866.

Type: Cuba: Guantánamo, near Monte Verde, *C. Wright s.n.* (holotype K).

Pleurothallis papulifolia Luer, Lindleyana 14: 116. 1999.

Acianthera papulifolia (Luer) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 254. 2004.

Type: Cuba: Holguín: Moa, between Alto de la Calinga y El Toldo, *C. Paufet & I. Silva s.n.* (holotype HAJB!).

SPECIMENS STUDIED: HAC!: *Alain 3811*; HUJB!: *Urquiola et al. 6310.*

Acianthera odontotepala (Rchb.f.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 254. 2004.

BASIONYM: *Pleurothallis odontotepala* Rchb.f., Flora 48: 275. 1865.

Acianthera odontotepala (Rchb.f.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 254. 2004.

Type: Cuba: Oriente: 1860-1864, *C. Wright 3349* (holotype K).

Pleurothallis brachypetala Griseb., Cat. Pl. Cub. 257. 1866.

Type: Cuba: "721. Cuba occ." 1863, *Wright 3349b* (holotype GOET).

SPECIMENS STUDIED: HAJB!: *Alvarez et al. 64894*; HAC!: *Acuña 22991.*

Acianthera stenzelii Luer, Mem. New York Bot. Gard. (Orchid Fl. Greater Antilles) 109: 575. 2014.*

Type: Cuba: prov. Sancti Spiritus, Municipio Yaguajay, *Martínez-Falcón s/n.* (Holotype HAC 41200).

Acianthera rubroviridis (Lindl.) Pridgeon & M.W.Chase, Lindleyana 16: 246. 2001.

BASIONYM: *Pleurothallis rubroviridis* Lindl., Ann. Mag. Nat. Hist., ser. 3, 1: 327. 1858.

Humboltia rubroviridis (Lindl.) Kuntze, Revis. Gen Pl. 2: 668. 1891.

Type: Cuba: Oriente, *C. Wright s.n.* (holotype K-L).

Pleurothallis cubensis Lindl., Ann. Mag. Nat. Hist., ser. 3, 1: 328. 1858.

Humboltia cubensis (Lindl.) Kuntze, Revis. Gen. Pl. 2: 667. 1891.

Acianthera cubensis (Lindl.) Pridgeon & M.W.Chase, Lindleyana 16: 243. 2001.

Type: Cuba: Guantánamo, near Monte Verde, *C. Wright 653* (holotype K-L).

Specimens studied: HAJB!: *Bisse et al. 14686*; HOS!: *Pérez & Bocourt 108*; flowers in spirit: *Pérez & Bocourt 018*.

Acianthera testifolia (Sw.) Solano, Acta Bot. Mex. 97: 50. 2011.

Basionym: *Epidendrum testifolium* Sw., Prodr. Veg. Ind. Occ. 122. 1788.

Cymbidium testifolium (Sw.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 71. 1799.

Pleurothallis testifolia (Sw.) Lindl., Ann. Mag. Nat. Hist., ser. 3(1): 328. 1858.

Humboltia testifolia (Sw.) Kuntze, Revis. Gen. Pl. 2: 668. 1891.

Apoda-prorepentia testifolia (Sw.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 255. 2004.

Type: Jamaica: *O. Swartz s.n.* (lectotype S, Stenzel, 2007, p. 80).

Specimens studied: HAJB!: *Bisse et al. 62259*; HOS!: *collector unknown 107*; flowers in spirit: *collector unknown 006.*

Anathallis Barbosa Rodrigues

Anathallis obovata (Lindl.) Pridgeon & M.W.Chase, Lindleyana 16: 250. 2001.

Basionym: *Pleurothallis obovata* (Lindl.) Lindl., Edward´s Bot. Reg. 28 (Misc.): 75. 1842.

Specklinia obovata Lindl., Edward´s Bot. Reg. 25 (Misc.): 137. 1839.

Humboltia obovata (Lindl.) Kuntze, Revis. Gen. Pl. 2: 668. 1891.

Type: Brazil: without collection data (lectotype [Luer, 1999, p. 115] K-L).

Pleurothallis albida Lindl., in Ann Mag. Nat. Hist., ser. 3,1: 327.1858.

Type: Cuba: Monteverde, *Wright 655* (K; NY).

Specimens studied: HAJB!: *Gutiérrez et al. 67987*; HAC!: *Casas 17432*; HOS!: *collector unknown 232*; flowers in spirit: *collector unknown 143.*

Anathallis sertularioides (Sw.) Pridgeon & M.W.Chase, Lindleyana 16: 250; 2001.

Basionym: *Epidendrum sertularioides* Sw., Prodr. Veg. Ind. Occ. 122. 1788.

Dendrobium sertularioides (Sw.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 83. 1799.

Pleurothallis sertularioides (Sw.) Spreng., Syst. Veg., ed. 16, 3: 721. 1826.

Specklinia sertularioides (Sw.) Lindl., Gen. Sp. Orchid. Pl. 8. 1830.

Humboltia sertularioides (Sw.) Kuntze, Revis. Gen. Pl. 2: 668. 1891.

Panmorphia sertularioides (Sw.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 105: 174. 2006.

Type: Jamaica: *O. Swartz* (lectotype BM 82293).

Specimens studied: HUJB!: *Luis et al. 1937*; HOS!: *Bocourt et al. 149*; flowers in spirit: *collector unknown 028.*

Anathallis cf. ***yucatanensis*** (Ames & C.Schweinf.) Solano & Soto Arenas, Icon. Orchid. 5-6: 10. 2002 (publ. 2003).

Basionym: *Pleurothallis yucatanensis* Ames & C.Schweinf., Bot. Mus. Leafl. 1(2): 4. 1932.

Specklinia yucatanensis (Ames & C.Schwienf.) ridgeon & M.W.Chase, Lindleyana 16: 260. 2001.

Type: Mexico: Yucatan, Campeche, Tuxpeña, 8 Nov 1931, *C. L. Lundell 912* (holotype AMES).

Specimens studied: We did not find any specimens in the revised Cuban herbaria. Reported by Ackerman (2014) for Peninsula de Guanahacabibes, Pinar del Río province. Epiphytic in dry sclerophyllous forests over limestone. These small, shortly repent plants may be related to *Anathallis yucatanensis*. The Cuban plants and *P. caymanensis* are unusual in that they occur in hot, relatively dry, lowland forests. Ackerman suspect (pers. comm. 2010) that the Cuban plants represent an undescribed species but we await better material for positive identification.

Barbosella Schlechter

Barbosella prorepens (Rchb.f.) Schltr., Repert. Spec. Nov. Regni Veg. 15: 263. 1918.

Basionym: *Restrepia prorepens* Rchb.f., Gard. Chron., new series 7: 810. 1877.

Pleurothallis prorepens (Rchb.f.) Ames, F.T.Hubb. & C.Schweinf., Bot. Mus. Leafl. 3: 39. 1934.

Type: Costa Rica, *Endres 2618* (holotype W).

Pleurothallis dussii Cogn., in Urban, Symb. Antill. 6: 413. 1909.

Barbosella dussii (Cogn.) Dod, Moscosoa 4: 192. 1986.

Type: Guadaloupe, Grande Decouverte d´chemin des Bains á la Savane a Mulet, 1893, *R. A. Duss 3339* (holotype, BR).

Specimens studied: The specimen at K: *Wright 7.2.11* is the only one record for Cuba (Loma del Gato), reported by Stenzel & Llamacho (2002).

Hagen Stenzel (2007) treats *Barbosella dussii* as a separate species. However, Luer and Ackerman both treat *B. dussii* as a synonym of *B. prorepens* and Pridgeon agrees too. It is widespread throughout the Antilles, Central America and South America (Pridgeon, pers. comm. 2015).

Basiphyllaea Schlechter

Basiphyllaea carabiaiana (L.O.Williams) Sosa & M.A.Díaz, Harvard Pap. Bot. 5: 488. 2001.*

Basionym: *Bletia carabiaiana* L.O.Williams, Caldasia 5: 14. 1942.

Type: Cuba: Holguín, Cerro del Fraile, *Ekman 3286* (holotype NY).

Specimen studied: HAC!: *León et al. 22472.*

Basiphyllaea corallicola (Small) Ames, Schedul. Orchid. 7: 1. 1924.

Basionym: *Carteria corallicola* Small, Torreya 10: 188. 1910.

Type: United States of America: Florida, Everglade Keys, *Smal et al.* (holotype NY).

Basiphyllaea angustifolia Schltr., Repert. Spec. Nov. Regni Veg. 21: 338. 1925.

Type: Cuba: *Ekman 17166* (holotype S).

Specimen studied: HAJB!: *Bisse et al. 35000.*

Basiphyllaea hoffmannii M.A.Díaz & Llamacho, Harvard Pap. Bot. 5: 487. 2001.*

Type: Cuba: Holguín, Moa, Monte La Breña, *J. A. Llamacho & A. Chaviano s.n.* (holotype HAC!: *Acuña 13035*).

Basiphyllaea sarcophylla (Rchb.f.) Schltr., Repert. Spec. Nov. Regni Veg. 17: 78. 1921.*

Basionym: *Bletia sarcophylla* Rchb.f., Flora 48: 278. 1865.

Tetramicra sarcophylla (Rchb.f.) Cogn., in I.Urban, Symb. Antill. 6: 552. 1910.

Type: Cuba: Pinar del Río, *C. Wright 3315* (holotype K).

Specimens studied: HAJB!: *Bisse 19824*; HAC!: *Alvarez 72258*; HAC!: *León y Roca 8023*; HOS!: *Bocourt et al. 222*; flowers in spirit: *collector unknown 115.*

Basiphyllaea volubilis (M.A.Díaz) Sosa & M.A.Díaz, Harvard Pap. Bot. 5: 488. 2001.*

Basionym: *Bletia volubilis* M.A.Díaz, Revista Jard. Bot. Nac. Univ. Habana 9(2): 32. 1988 [publ. 1989].

Type: Cuba: Prov. Holguín: Loma de la Mensura, *Bisse et al.* (holotype HAJB!).

Basiphyllaea wrightii (Acuña) Nir, Orchid. Antill. 35. 2000. *

Basionym: *Bletia wrightii* Acuña, Bol. Estación Exp. Agron. Santiago de las Vegas 60: 157. 1938 [1939].

Type: Cuba: Prov. Pinar del Río, Bahía Honda, *C. Wright 3316* (holotype GOET).

Specimens studied: HAJB!: *Padilla et al. 69301*; HOS!: *Bocourt & Mújica 116.*

Bletia Ruíz & Pavón

Bletia antillana M.A.Díaz & Sosa, Brittonia 49: 80. 1997.*

Type: Cuba: Prov. Holguín, Cerro Miraflores, *López Figueiras 1244* (holotype HAJB!).

Specimens studied: HUJB!: *Urquiola et al. 6353*; HOS!: flowers in spirit: *collector unknown 123.*

Bletia* × *ekmanii Serguera & Sánchez Los., Willdenovia 41: 107-111. 2011.

Type: Cuba: Guantánamo Province, Yateras, Loma "El Cilindro", *M. Serguera & M. Sánchez s.n.* (holotype BSC 6430; isotype: B).

Bletia florida (Salisb.) R.Br., in W.T.Aiton, Hortus Kew. ed. 2, 5: 206. 1813.

Basionym: *Limodorum floridum* Salisb., Prodr. Stirp. Chap. Allerton 9. 1796.

Type: Jamaica: without specific location, (holotype K).

Specimen studied: HUJB!: *Urquiola et al. 6449.*

Bletia patula Graham, Edinburgh New Philos. 21: 155. 1836.

Type: Haiti: collected by Dr. Fischer and cultivated at the Royal Botanic Garden Edinburgh (holotype FI-W photograph).

Bletia patula var. *alba* A.D.Hawkes, Phytologia 3: 260. 1950.

Type: United States of America: South Florida, between Black Creek and Gould, *Woodbury s.n*. (holotype FTG).

Specimens studied: HAJB!: *Genes et al. 58342*; HOS!: flowers in spirit: *Pérez & Bocourt 022.*

Bletia purpurea (Lam.) A.Dc., Rapp. (Not.) Pl. Rar. Géneve 8: 23. 1840.

Basionym: *Limodorum purpureum* Lam., Encycl. 3: 515. 1791.

Type: Antilles: cultivated at Jardin du Roi, Paris (holotype P).

Bletia verecunda (Salisb.) R.Br., in W.T.Aiton, Hortus Kew. ed. 2. 5: 206. 1813.

Type: Original illustration of Salisbury, based on a plant collected by Catesby from Jamaica (holotype K).

Bletia acutipetala Hook., Bot. Mag. 61: t. 3217. 1833.

Type: USA: South Carolina (holotype K).

Bletia havanensis Lindl., Edward´s Bot. Reg. 24 (Misc.): 28. 1838.

Type: Illustration by Mr. Booth based in a plant from Havana collected by Captain Sutton and cultivated by C. Lemon (holotype K).

Specimens studied: HUJB!: *Urquiola et al. 557*; HOS!: *Elaine et al. 248*; flowers in spirit: *Bocourt & Martínez 008.*

Brachionidium Lindley

Brachionidium parvum Cogn., Repert. Spec. Nov. Regni Veg. 6: 307. 1909.

Synonyms: *Brachionidium sherringii* var. *parvum* (Cogn.) Stehlé, Fl. Descr. Antilles 1: 219. 1939.

Type: Grenada: inter Soulier and Azimar, *W. E. Broadway 268* (lectotype K).

Brachionidium dussii Cogn., in I.Urban, Symb. Antill. 6: 451. 1910.

Type: Guadeloupe: Bains-Jaunes, pied de la Soufrière, *P. A. Duss 4149* (Holotype B, destroyed); Guadeloupe: La Soufrière chemin des Dames, *C. Sastre 7475* (neotype, Sastre, 1991, p. 207).

Specimen studied: HAC!: *Alain et al. 5610.*

Brassia R. Brown

Brassia cf. caudata (L.) Lindl., Bot. Reg. 10: t. 832. 1824.

Basionym**:** *Epidendrum caudatum* L., Syst. Nat., ed. 10, 1246. 1759.

Malaxis caudata (L.) Willd., Sp. Pl. 4: 93. 1805.

Oncidium caudatum (L.) Rchb.f., in W.G.Walpers, Ann. Bot. Syst. 6: 766. 1863.

Lectotype: Plumier, Plantarum Americanarum t. 177, (McLeish *et al.* 1995, p. 120).

Brassia caudata var. *hieroglyphica* Rchb.f., III Hort. 27: 20. 1881.

Type: Unknown.

Specimens studied: HUJB!: *Luis et al. 3490, 3490-A y 3490-B*; HOS!: *Pérez et al. 036,* flowers in spirit: *Mújica & Bocourt 011.*

Only one species of *Brassia* is reported for Cuba, *B. caudata*. Some authors have reported *B. lawrenceana* Lindl. (Acuña, 1938; Hno. León, 1946), but this is unlikely as the species is a native of northern South America and should therefore also be expected in the Lesser Antilles, Puerto Rico, Hispaniola and Jamaica, the most probable route the species would have followed to reach Cuba. Nir (2000) excludes this species from our area, adducing that A. Richard´s report has not been proven so far, since evidences in the reviewed herbaria have not been found. Also *B. maculata* has been reported for Cuba. Acuña (1938) and León (1946) are guided in their report by Fawcett & Rendle (1910), who cite this species for our country in "*Flora of Jamaica*". Gloudon & Tobisch (1995) also mention it for Cuba, apparently led by the same reference. On the other hand, Nir (2000) reports it for Jamaica and Central America. Manuel Caluff (pers. comm. 2008) mentions that he observed a "strange species of *Brassia*" in Salto de Caburní, Topes de Collantes, Sancti Spíritus province, with flowers having purple sport, very different to *B. caudata*. There may indeed be a second species of Brassia in Cuba.

Broughtonia R. Brown

Broughtonia cubensis (Lindl.) Cogn., in I.Urban, Symb. Antill. 6: 542. 1910.*****

Basionym: *Epidendrum cubense* Lindl., Edward´s Bot. Reg. 29 (Misc.): 17. 1843.

Laeliopsis cubensis (Lindl.) Lindl., Paxton's Fl. Gard. 3: 156. 1853.

Cattleyopsis cubensis (Lindl.) Sauleda & Adams, Rhodora 86 (848): 455. 1984.

Type: Cuba: without specific location, *Loddiges 1210* (holotype K).

Specimens studied: HUJB!: *Ferro et al. 4310*; HOS!: *Pérez & Padilla 028.*

Broughtonia* × *guanahacabibensis Múj.Benítez, E.González & J.M.Díaz, Lankesteriana 15(3): 183-185. 2015.

Type: Cuba: Pinar del Río province: Guanahacabibes peninsula, *Mújica & Elaine 241* (holotype HOS!).

In 2004, while carrying out the annual studies on the spatial and temporal dynamics of *B. cubensis*, the authors found an individual of *B. ortgiesiana* in flower, the first report of this species for Cabo San Antonio, Guanahacabibes peninsula. Years later it continued flowering and in 2007 and 2010 fruits observed on that plant. This success confirms that both species are sympatrics and they can be in flower at the same time in the same site. The study area was visited in January 2015 and the authors observed both species in flower simultaneously. Several individuals with intermediate characters were found on site.

Other specimen studied: *Mújica et al. 179* (HOS!, flowers in spirit).

Broughtonia lindenii (Lindl.) Dressler, Taxon 15: 241. 1966.

Basionym: *Laelia lindenii* Lindl., Orchid. Linden. 10. 1846.

Laeliopsis lindenii (Lindl.) Lindl., Paxton's Fl. Gard. 3: 156. 1853.

Bletia lindenii (Lindl.) Rchb.f., in W.G.Walpers, Ann. Bot. Syst. 6: 431. 1861.

Cattleyopsis lindenii (Lindl.) Cogn., in I.Urban, Symb. Antill. 6: 544. 1910.

Type: Cuba: without specific location, *Linden 1805* (holotype K).

?*Cattleyopsis guanensis* Acuña, Bol. Est. Exper. Agron. Santiago de las Vegas 60, *nom. illeg*.

Original material: Cuba: Pinar del Río, Guane, *Fors 4837* (HAC).

Specimens studied: HUJB!: *Urquiola et al. 488*; HOS!: *Mújica & Elaine 208*; flowers in spirit: *Mújica 093.*

The authors have observed morphological differences between the plants and flowers of this species at different locations of the island. In the province of Pinar del Río, there are two populations, clearly different in their floral morphology, so Acuña, could have been right when describing *Cattleyopsis guanensis*.

Broughtonia ortgiesiana (Rchb.f.) Dressler, Taxon 15: 241. 1966.*

Basionym: *Bletia ortgiesiana* Rchb.f., Hamb. Gartenz. 420. 1860.

Cattleyopsis ortgiesiana (Rchb.f.) Cogn., in I.Urban, Symb. Antill. 6: 546. 1910.

Type: Locality unknown, cultivated in Botanical Garden in Zurich, *E. Ortges s.n.* (holotype W). Lectotype: Cuba: Guantánamo, *Wright 3313,* (BM).

Specimens studied: HUJB!: *Ferro et al. 4304 y 4304-A*; HUCLV!: *Castañeda 6069*; HOS!: *Bocourt 096*; flowers in spirit: *Mújica et al. 106.*

Bulbophyllum Thouars

Bulbophyllum aristatum (Rchb.f.) Hemsl., Biol. Cent.-Amer. Bot. 3: 213. 1884.

Basionym: *Bolbophyllaria aristata* Rchb.f., Beitr. Orch. Centr. Amer. 60. 1866.

Phyllorchis aristata (Rchb.f.) Kuntze, Revis. Gen. Pl. 2: 677. 1891.

Type: Cultivated in *Hort. Schiller s.n.* (holotype W).

Specimen studied: HAC!: *Alain 6722.*

Bulbophyllum pachyrachis (A.Rich.) Griseb., Fl. Brit. W. I. 613. 1864.

Basionym: *Pleurothallis pachyrachis* A.Rich., in R.de la Sagra, Hist. Fis. Cuba, Bot. 11: 234. 1850; 12: t. 74. 1855.

Bolbophyllaria pachyrachis (A.Rich.) Rchb.f., in W.G.Walpers, Ann. Bot. Syst. 6: 24. 1861.

Type: Cuba: 1836, *Sagra s.n.* (holotype P).

Specimens studied: HUJB!: *Ferro et al. 4318, 4318-A* y *4318-B*; HOS!: *collector unknown 228*; flowers in spirit: *collector unknown 161.*

Calanthe R. Brown

Calanthe calanthoides (A.Rich. & Galeotti) Hamer & Garay in F.Hamer, Orquid. El Salvador 1: 90. 1974.

Basionym: *Ghiesbreghtia calanthoides* A.Rich. & Galeotti, Ann. Sci. Nat. Bot. ser. 3, 3: 28. Jan 1845.

Type: Mexico: Prov. Oaxaca, 1842, *M. Ghiesbreght s.n.* (holotype P).

Calanthe mexicana Rchb.f., Linnaea 18: 406. 1845.

Type: Mexico: *Leibold s.n.* (holotype W).

Calanthe cubensis Linden & Rchb.f., Bonplandia 4: 322. 1856.

Type: Cuba: Santiago de Cuba, Sierra Maestra, Monte Libano, *Linden s.n.* (holotype W).

Calanthe granatensis Rchb.f., Bonplandia 4: 322. 1856.

Type: Colombia: New Grenada, *Purdie s.n.* (holotype K).

Specimen studied: HAC!: *Acuña & Roig 20009.*

Calopogon R. Brown

Calopogon tuberosus (L.) Britton, Sterns & Poggenb., var. ***simpsonii*** (Small) Magrath, Sida 13: 371. 1989.

Basionym: *Limodorum simpsonii* Small, Fl. S.E. U.S. 322. 1903.

Calopogon pulchellus var. *simpsonii* (Chapman ex Small) Ames, Contr. of the Ames Bot. Lab. 1: 18. 1904.

Type: United States of America: Florida, 1892, *J. H. Simpson s.n.* (holotype NY).

Specimen studied: HAC!: *León et al. 20646*; *Clemente 630.*

Campylocentrum Bentham

Campylocentrum fasciola (Lindl.) Cogn., in Martius, Fl. Bras. 3(6): 520, t. 106. 1906.

Basionym: *Angraecum fasciola* Lindl., Edward´s Bot. Reg. 26: t. 68. 1840.

Aeranthes fasciola (Lindl.) Rchb.f., in W.G.Walpers, Ann. Bot. Syst. 6: 902. 1864.

Type: Guyana: Demerara, *Schomburgk s.n.* (holotype K).

Aeranthes filiformis Griseb., Fl. Brit. W. I. 625. 1864.

Dendrophylax filiformis (Griseb.) Benth. ex Fawc., A Prov. List of Flow. Pl. of Jamaica 40. 1898.

Type: Jamaica: *McNab s.n* (lectotype K).

Campylocentrum sullivanii Fawc. & Rendle, J. Bot. 47: 128. 1909.

Type: Jamaica: Hanover, Belvedere, *W. Harris 7523* (lectotype BM).

Specimens studied: HAJB!: *Díaz et al. 58846*; HOS!: *Pérez et al. 082.*

Campylocentrum jamaicense (Rchb.f. & Wullsch.) Benth. ex Fawc., Prov. List Pl. Jamaica 40. 1893.

Basionym: *Aeranthes jamaicensis* Rchb.f. & Wullsch., Ann. Bot. Syst. 6: 901. 1864.

Angraecum jamaicense Rchb.f. & Wullsch., in W.G.Walpers, Ann. Bot. Syst. 6: 901. 1864.

Type: Jamaica: Fairfield, *Wullschaegel s.n.* (holotype W).

Campylocentrum barrettiae Fawc. & Rendle, J. Bot. 47: 127. 1909.

Type: Jamaica: Charlemont near Ewarton, *W. Harris 6580* (BM).

Specimens studied: HUJB!: *Urquiola et al. 6352*; HOS!: *Mújica 137*; flowers in spirit: *Félix & Callao 063.*

Previously this species was erroneously identified as *C. micranthum*. *Campylocentrum jamaicense* is quite distinct as it has bilobed leaves and smooth, fusiform fruits whereas *C. micranthum* has acute leaves and ribbed fruits (Ackerman, 2014).

Campylocentrum pachyrrhizum (Rchb.f.) Rolfe, Orchid Rev. 11: 246. 1903.

Basionym: *Aeranthes pachyrrhiza* Rchb.f., Flora 48: 279. 1865

Type: Cuba: *C. Wright 3207* (holotype W).

Aeranthes spathaceus Griseb., Cat. Pl. Cub. 264. 1866.

Type: Cuba: Guantánamo, "Retiro", 1860-1864, *C. Wright 3299* (holotype K).

The authors have not seen any specimens in the reviewed Cuban herbaria, but they know it was collected in flower by Pérez & Bocourt in November 2001, in the proximities of La Bajada, Guanahacabibes peninsula, Sandino municipality, in Pinar del Río province. The authors saw the plant in cultivation with flowers and also saw another sterile individual in the area mentioned.

Campylocentrum poeppigii (Rchb.f.) Rolfe, Orchid Rev. 11: 246. 1903.

Basionym: *Angraecum poeppigii* Rchb.f., Linnaea 22: 858. 1849.

Type: Cuba: Sabana de Macurijes, *Poeppig s.n.* (holotype W).

Specimens studied: HUJB!: *Urquiola et al. 1127 y 1127-A*; HOS!: *Pérez et al. 011.*

Catasetum Richard ex Kunth

Catasetum integerrimum Hook., Bot. Mag. 67: t. 3823. 1840.

Type: Guatemala, *Skinner ex Hort. Duke of Bedford* (Holotype K).

Specimen studied: HOS!: flowers in spirit: *Pérez et al. 025.*

Cochleanthes Rafinesque

Cochleanthes flabelliformis (Sw.) R.E.Schult. & Garay, Bot. Mus. Leafl.18: 324. 1959.

Basionym: *Epidendrum flabelliforme* Sw., Prodr. Veg. Ind. Occ. 123. 1788.

Cymbidium flabelliforme (Sw.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 73. 1799.

Zygopetalum flabelliforme (Sw.) Rchb.f., in W.G.Walpers, Ann. Bot. Syst. 4: 652. 1863.

Warcewiczella flabelliformis (Sw.) Cogn., in I.Urban, Symb. Antill. 4: 182. 1903.

Type: Jamaica: *Swartz s.n.* (holotype BM).

Specimens studied: HUJB!: *Urquiola et al. 6307, 6307-A* y *6307-B*; HOS!: *Bocourt et al. 155*; flowers in spirit: *Bocourt et al. 095.*

Coelia Lindley

Coelia triptera (Sm.) G.Don ex Steud., Nomencl. Bot. ed. 2, 1: 394. 1840.

Basionym: *Epidendrum tripterum* Sm., Icon. Pict. Pl. Rar. t. 14. 1793.

Cymbidium tripterum (Sm.) Sw., J. Bot (Schrader) 1799(2): 214. 1800.

Type: No locality, date or collector, Icones Pictae Plantarum Rariorum t. 14. 1793 (lectotype, Pridgeon 1978, p. 65).

Coelia baueriana Lindl., Gen. Sp. Orchid. Pl. 36. 1833.

Type: Jamaica: flowered in cultivation (holotype K-L).

Specimens studied: HUJB!: *Luis et al. 4062*; HOS!: flowers in spirit: *collector unknown 174.*

Comparettia Poeppig & Endlicher

Comparettia falcata Poepp. & Endl., Nov. Gen. Sp. Pl.1: 42, t. 73. 1836.

Type: Peru: near Cuchero, between Cassapi and Pampayacu, *Poeppig 1646* (holotype W).

Comparettia rosea Lindl., Edward´s Bot. Reg. 26 (Misc.): 78. 1840.

Type: Spanish Main, *Loddiges s.n.* (illustration at K-L).

Comparettia cryptocera Morren, La Belgique Horticole 2: 310, t. 53, f. 1. 1852.

Type: unknown.

Comparettia venezuelana Schltr., Repert. Spec. Nov. Regni Veg. 6: 44. 1919.

Type: Venezuela: Federal District: Caracas, *von K. W. John s.n.* (holotype B, destroyed).

Comparettia erecta Schltr., Repert. Spec. Nov. Regni Veg. 7: 185. 1920.

Type: Colombia: Cauca, *M. Madero s.n*. (holotype B, destroyed).

Comparettia pulchella Schltr., Repert. Spec. Nov. Regni Veg. 7: 185. 1920.

Type: Colombia: Antioquia, *M. Madero s.n.* (holotype B, destroyed).

Specimens studied: HAJB!: *Bisse et al. 46629*; HOS!: *Pérez et al. 141.*

Corymborkis Thouars

Corymborkis flava (Sw.) Kuntze, Revis. Gen. Pl. 2: 658. 1891.

Basionym: *Serapias flava* Sw., Prodr. Veg. Ind. Occ. 119. 1788.

Neottia flava (Sw.) Sw., Fl. Ind. Occid. 3: 1417. 1806.

Stenorrhynchos flavum (Sw.) Spreng., Syst. Veg. 3: 710. 1826.

Tomotris flava (Sw.) Raf., Fl. Tellur 2: 89. 1837.

Chloidia flava (Sw.) Rchb.f., in W.G.Walpers, Ann. Bot. Syst. 6: 644. 1863.

Corymbis flava (Sw.) Hemsl., Biol. Cent.-Amer., Bot. 3: 297. 1884.

Type: Jamaica, *O. Swartz s.n.* (UPS).

Specimens studied: We did not find any specimens in the revised Cuban herbaria.

This species has many times been reported for Cuba by different authors. Ackerman (2014) reported it for Granma (Sierra Maestra), Villa Clara (Alturas de Trinidad) and Pinar del Río (Guaniguanico), where we have not found it. The authors have not seen herbarium specimens from the localities above mentioned. However, in February 2015, the authors saw photos of the flowers and living plants collected by Omar Alomá at Pico San Juan, Cienfuegos province. The plants are in cultivation in the Macradenia Botanical Garden, municipality of Palmira, Cienfuegos province, and in Soroa Orchid Botanical Garden, Artemisa province.

Corymborkis forcipigera (Rchb.f. & Warsz.) L.O.Williams, Bot. Mus. Leafl. 12: 237. 1946.

Basionym: *Macrostylis forcipigera* Rchb.f. & Warsz., Bonplandia 2: 96. 1854; Type: Haiti: *W. J. Eyerdam 497* (W).

Corymborkis cubensis Acuña, Boletín Bol. Estación Exp. Agron. Santiago de las Vegas 60: 51. 1939.

Type: Cuba: Guantánamo, El Yunque, *J. A. Shafer 8001* (holotype NY).

Specimens studied: HUJB!: *Luis et al. 3551*; HOS!: *Pérez et al. 079.*

Cranichis Swartz

Cranichis diphylla Sw., Prodr. Veg. Ind. Occ. 120. 1788.

Type: Jamaica, Blue Mountains, *Swartz s.n.* (BM).

Cranichis monophylla Lindl., Orchid. Linden. 27. 1846.

Type: Venezuela, Mérida, *Linden s.n*. (holotype K-L).

Cranichis tenuiflora Griseb., Cat. Pl. Cub. 268. 1866.

Type: Cuba: *C. Wright 3292* (holotype BR).

Cranichis guatemalensis Schltr., Repert. Spec. Nov. Regni Veg. 2: 129. 1906.

Type: Guatemala, auf Felsen bei Chiacam, *H. von Türckheim 1379* (holotype B, destroyed).

Specimen studied: HAC!: *Alain et al. 6454.*

Cranichis muscosa Sw., Prodr. Veg. Ind. Occ. 120. 1788.

Type: Jamaica, *Swartz s.n.,* (lectotype BM, designated by Garay & Sweet, 1974, p. 61).

Specimens studied: HUJB!: *Luis et al. 3121*; HOS!: *Bocourt et al. 152*; flowers in spirit: *Bocourt et al. 084.*

Cranichis ovata Wickstr., Kongl. Vetensk. Acad. Handl. 48: 73. 1827.

Type: Guadeloupe, *Forsström s.n.* (holotype S).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria, but we include it here on the basis of report by Ackerman (2014): *Shafer 3235* (NY).

Cranichis ricartii Ackerman, Lindleyana 4: 43. 1989.

Type: Puerto Rico: Mun. Maricao, Maricao Forest Reserve, *Ackerman et al. 2418* (holotype SEL).

Specimens studied: Reported for Campamento San Benito (¿?), AMES: *Shafer 4040*, Cuba. We did not find any specimens in the revised Cuban herbaria.

Cranichis tenuis Rchb.f., Flora 48: 274. 1865.

Type: Cuba: Oriente, Jan-Jul 1859, *C. Wright 1478* (W).

Cranichis pulla Griseb., Cat. Pl. Cub. 268. 1866; *pro syn.*

Specimens studied: HAJB!: *Bisse et al. 30352*; HAC!: *Alain 6456.*

Cyclopogon Presley

Cyclopogon cranichoides (Griseb.) Schltr., Beih. Bot. Centralbl., 37(2): 387. 1920.

Basionym: *Pelexia cranichoides* Griseb., Cat. Pl. Cub. 269. 1866.

Sauroglossum cranichoides (Griseb.) Ames, Proc. Biol. Soc. Wash. 17: 117. 1904.

Spiranthes cranichoides (Griseb.) Cogn., in I.Urban, Symb. Antill. 4: 338. 1909.

Beadlea cranichoides (Griseb.) Small, Fl. S.E. U.S. ed. 2, 320. 1913.

Type. Cuba: *C. Wright 3293* (holotype GOET).

Specimen studied: HOS!: flowers in spirit: *Pérez et al. 104.*

Cyclopogon elatus (Sw.) Schltr., Repert. Spec. Nov. Regni Veg. 6: 53. 1919.

Basionym: *Satyrium elatum* Sw., Prodr. Veg. Ind. Occ. 119. 1788.

Neottia elata (Sw.) Sw., Kongl. Vetensk. Acad. Handl. 21: 226. 1800.

Ibidium elatum (Sw.) Salisb., Trans. Hort. Soc. London 1: 291. 1812.

Spiranthes elata (Sw.) Rich., De Orchid. Eur. 37. 1817.

Beadlea elata (Sw.) Small ex Britton, Brooklyn Bot. Gard. Mem. 1: 38. 1918.

Type: Jamaica, *Swartz s.n.* (lectotype BM).

Specimens studied: HAJB!: *Bisse et al. 41673*; HOS!: *Mújica et al. 183*; flowers in spirit: *Pérez et al. 101.*

Cyclopogon laxiflorus Ekman & Mansf., Ark. Bot. 22A (8): 11. 1929.

Basionym: *Spiranthes laxiflora* (Ekman & Mansf.,) Jiménez, Phytologia 8: 326. 1962.

Beadlea laxiflora (Ekman & Mansf.,) Garay, Bot. Mus. Leafl. 28: 300. 1982.

Type: Haiti: Massif de la Selle, near Marigot, Morne la Visite, *E. L. Ekman H7985* (holotype S).

Specimen studied: HAJB!: *Bisse et al. 41673.*

Cyclopogon miradorensis Schltr., Repert. Spec. Nov. Regni Veg. 21: 332. 1925.

Beadlea miradorensis (Schltr.) Garay & Dunst., Orchids Venezuela 26. 1979.

Type: Mexico: Veracruz, Mirador, *Purpus 92* (holotype B, destroyed).

Specimens studied: We did not find any specimens in the revised Cuban herbaria. Its presence is known from the report of Ackerman (2014): UPRRP: *Ackerman et al. 3231.*

Cyclopogon obliquus (J.J.Smith) Szlach., Fragm. Flor. et Geobot. 39: 417-438. 1994.

Basionym: *Spiranthes obliqua* J.J.Smith, Bull. Dep. de l´Agric. aux Indes Neerland. 43: 74. 1910.

Pelexia obliqua (J.J.Smith) Garay, Bot. Mus. Leafl. Harv. Univ. 28: 345. 1982.

Type: Java: Buitenzorg, *J. J. Smith s.n.* (holotype L).

Manniella hongkongensis S.Y.Hu & G.Barretto, Chung Chi J. 13(2): 6. 1976.

Type: China, Hong Kong, *S. Y. Hu 13266* (K).

Pelexia hameri Garay, Bot. Mus. Leafl. Harv. Univ. 26(1): 22. 1978.

Type: El Salvador, *F. Hamer 613* (AMES).

Specimen studied: HAJB: *Ackerman et al. 3033.*

This species has a complex nomenclatural history, which has been discussed by Garay (1982) and Blanco (2002). DNA sequence data corroborate the placement of this species in *Cyclopogon* (G. A. Salazar, unpubl. data). It is worthy of note that this species, which is a member of an exclusively Neotropical lineage, has naturalized itself in the Old World tropics (see Cribb and Ormerod 1999; Blanco 2002).

Cyrtopodium R. Brown

Cyrtopodium punctatum (L.) Lindl., Gen. Sp. Orchid. Pl. 188. 1833.

Basionym: *Epidendrum punctatum* L., Syst. Nat., ed. 10, 2: 1246. 1759; Type: *Plumier s.n.* (holotype original illustration at P).

Specimens studied: HUJB!: *Urquiola et al. 4341*; HOS!: flowers in spirit: *Pérez & Bocourt 001.*

Dendrophylax Reichenbach f.

Dendrophylax alcoa Dod, Moscosoa 2: 5. 1983.

Type: Dominican Republic: Prov. Pedernales, Cabo Rojo, Las Abejas, Sierra Baoruco, *D. Dod 871* (holotype JBSD).

Specimen studied: HOS!: flowers in spirit: *collector unknown 142.*

In November 2013, the authors observed individuals of this species in flower in the Soroa Orchid Botanical Garden, erroneously identified as *D. barrettiae,* collected in the north of Las Tunas province, which agrees with Ackerman´s report (2014).

Dendrophylax barrettiae Fawc. & Rendle, J. Bot. 47: 266. 1909.

Type: Jamaica: near Browns Town, *T. Moulton-Barrett s.n*. (K).

Campylocentrum arizajuliae Ames, Bot. Mus. Leafl. 6: 23. 1938.

Type: Dominican Republic: Prov. La Romana, *Ariza Julia s.n.* (holotype AMES).

Specimen studied: HOS!: *Padilla et al. 038.*

In November 2013, a joint expedition of the authors and specialists from Flora and Fauna reported a population of more than 200 individuals of this species in the protected area Los Pretiles, Mantua municipality, in Pinar del Río province. Many mature individuals were in flower, which facilitated the identification of this species. Ackerman (2014) reports it for Cuba on the basis of a picture published by Marta A. Díaz (1988) in her book "*The Native Orchids of Cuba*", and erroneously identified as *Polyradicion lindenii* (Lindl.) Garay. The specimen that we cite here is the first record of this species for Cuba.

Dendrophylax gracilis (Cogn.) Garay, J. Arnold Arbor. 50: 467. 1969.*

Basionym: *Polyrrhiza gracilis* Cogn., in I.Urban, Symb. Antill. 6: 679. 1910.

Polyradicion gracilis (Cogn.) H.Dietr., Wiss. Z. Friedrich-Schiller-Univ. Jena. Math-Naturwiss. Reihe 32: 61. 1983.

Type: Cuba: Los Hondones, Valparaiso, *C. Wright 3300* (holotype GOET).

Specimen studied: HAJB!: *Bisse et al. 49384.*

Dendrophylax lindenii (Lindl.) Benth. ex Rolfe, Gard. Chron., ser. 3, 4: 533. 1888.

Basionym: *Angraecum lindenii* Lindl., Gard. Chron. 1846: 135. 1846.

Type: Cuba: Santiago de Cuba, 1844, *J. Linden s.n.* (holotype K-L).

Aeranthus lindenii (Lindl.) Rchb.f., Ann. Bot. Syst. 6: 902. 1864.

Polyrrhiza lindenii (Lindl.) Cogn. in Urban, Symb. Antill. 6: 680. 1910.

Polyradicion lindenii (Lindl.) Garay, J. Arnold Arbor. 50: 467. 1969.

Specimens studied: HUJB!: *Ferro et al. 4305*; HOS!: *Pérez et al. 024*; flowers in spirit: *Bocourt et al. 062*.

The differences in the flowering season of this species among the Cuban populations (October-December) and those from Florida (July) deserve to be studied further.

Dendrophylax monteverdi (Rchb.f.) Ackerman & Nir, Lankesteriana 4: 53. 2004.

Basionym: *Aeranthes monteverdi* Rchb.f., Flora 48: 279. 1865.

Campylocentrum monteverdi (Rchb.f.) Rolfe, Orchid Rev. 11: 247. 1903.

Harrisella monteverdi (Rchb.f.) Cogn., in I.Urban, Symb. Antill. 6: 687. 1910.

Type: Cuba: *C. Wright 1497* (holotype K).

Epidendrum filiforme Sw., Prodr. Veg. Ind. Occ. 126. 1788.

Limodorum filiforme (Sw.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 80. 1799.

Campylocentrum filiforme (Sw.) Cogn. ex Kuntze, Revis. Gen. Pl. 3(2): 298. 1898.

Harrisella filiformis (Sw.) Cogn., in I.Urban, Symb. Antill. 6: 687. 1910.

Dendrophylax filiformis (Sw.) Carlsward & Whitten, Int. J. Plant. Sci. 164: 50. 2003, non *Dendrophylax filiformis* (Griseb.) Benth. ex Fawc.

Type: Hispaniola: *Swartz* s.n. (BM).

Specimens studied: HAJB!: *Alvarez et al. 4554-A*; HUJB!: *Urquiola 7884*.

Dendrophylax porrectus (Rchb.f.) Carlsward & Whitten, Int. J. Pl. Sci. 164: 51. 2003.

Basionym: *Aeranthes porrecta* Rchb.f., Flora 48: 279. 1865.

Campylocentrum porrectum (Rchb.f.) Rolfe, Orchid Rev. 11: 247. 1903.

Harrisella porrecta (Rchb.f.) Fawc. & Rendle, J. Bot. 47: 266. 1909.

Type: Cuba: *C. Wright 3302* (holotype K).

Harrisella uniflora H.Dietr., Orchidee 33: 18. 1982.

Type: Cuba: Prov. Granma, Bartolomé Masó, Sierra Maestra, Loma de la Sabina, *Bisse et al.* (holotype HAJB!).

Specimen studied: HOS!: *Mújica 166*.

Dendrophylax varius (J.F.Gmel.) Urb., Repert. Spec. Nov. Regni Veg. 15: 306. 1918.

Basionym: *Orchis varia* J.F.Gmel., Syst. Plant, ed. 13: 53. 1791.

Type: Original Plumier drawing (holotype P).

Limodorum flexuosum Willd., Sp. Pl. 4: 128. 1805.

Dendrophylax flexuosus (Willd.) Urban, Repert. Spec. Nov. Regni Veg. 15: 108. 1917.

Dendrophylax hymenanthus Rchb.f., in W.G.Walpers, Ann. Bot. Syst. 6: 903. 1864.

Aeranthes hymenantha (Rchb.f.) Griseb., Cat. Pl. Cub. 264. 1866.

Type: Cuba: Oriente, 1860, *C. Wright 1692* (holotype W).

Specimens studied: HAJB!: *Bisse et al. 30859*; HOS!: *Pérez & Bocourt 136*; flowers in spirit: *Pérez & Bocourt 058*.

Dichaea Lindley

Dichaea glauca (Sw.) Lindl., Gen. Sp. Orchid. Pl. 209. 1833.

Basionym: *Epidendrum glaucum* Sw., Prodr. Veg. Ind. Occ. 124. 1788.

Cymbidium glaucum (Sw.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 71. 1799.

Epithecia glauca (Sw.) Schltr., Orchis 9: 26. 1915.

Dichaeopsis glauca (Sw.) Schltr., Beih. Bot. Centralbl., 36(2): 519. 1918.

Type: Jamaica, *Swartz s.n.* (isolectotypes G, M, S, UPS, W).

Specimens studied: HAJB!: *Bisse et al. 40428*; HOS!: *Pérez et al. 066*.

Dichaea graminoides (Sw.) Lindl., Gen. Sp. Orchid. Pl. 209. 1833.

Basionym: *Epidendrum graminoides* Sw., Prodr. Veg. Ind. Occ. 125. 1788.

Cymbidium graminoides (Sw.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 71. 1799.

Dichaea graminea Griseb., Fl. Brit. W. I. 625. 1864.

Epithecia graminoides (Sw.) Schltr., Orchideen Beschreib. Kult. Zucht. 534. 1914.

Dichaeopsis graminoides (Sw.) Schltr., Beih. Bot. Centralbl., 36(2): 519. 1918.

Type: Jamaica: *Swartz s.n.* (BM).

Specimen studied: HAJB!: *Dietrich et al. 67110.*

Dichaea hystricina Rchb.f., Flora 48: 279. 1865.

Type: Cuba: Monteverde, *C. Wright 1487* (holotype K).

Specimens studied: HAJB!: *Bisse et al. 44579*; HOS!: *Pérez et al. 077.*

Dichaea latifolia Lindl., Gen. Sp. Orchid. Pl. 208. 1833.

Dichaea muricata var. *latifolia* (Lindl.) Griseb., Fl. Brit. W. I. 624. 1864

Type: St. Vincent: *Guilding s.n* (holotype K, reported by Garay & Sweet, 1974).

Specimens studied: HAJB!: *Bisse et al. 40310*; HOS!: *Pérez et al. 081.*

Dichaea morrisii Fawc. & Rendle, J. Bot. 48: 107. 1910.

Epithecia morrisii (Fawc. & Rendle) Schltr., Orchis 9: 26. 1915.

Dichaeopsis morrisii (Fawc. & Rendle) Schltr., in I.Urban, Symb. Antill. 8: 146. 1920.

Type: Jamaica: Mt. Moses, J.P. (Jamaica Plants) 2269, *Morris s.n.* (holotype BM).

Cymbidium muricatum Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 71. 1799.

Dichaea muricata (Sw.) Lindl., Gen. Sp. Orchid. Pl. 209. 1833.

Type: Jamaica: *Swartz s.n.* (lectotype W-R 2529).

Specimen studied: HAC!: *Hioram 4906.*

Dichaea pendula (Aubl.) Cogn., in I.Urban, Symb. Antill. 4: 182. 1903.

Basionym: *Limodorum pendulum* Aubl., Hist. Pl. Guiane 2: 819, 1775.

Type: French Guiana, "in sylvis Comitatus de Gene", *Aublet s.n.* (Histoire des Plantes de la Guiane Françoise 2: 819, t. 322. 1775).

Epidendrum echinocarpum Sw., Prodr. Veg. Ind. Occ. 124. 1788.

Cymbidium echinocarpon (Sw.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 71. 1799.

Pachyphyllum echinocarpon (Sw.) Spreng., Syst. Veg. 3: 731. 1826.

Dichaea echinocarpa (Sw.) Lindl., Gen. Sp. Orchid. Pl. 208. 1833.

Type: Jamaica: *Swartz s.n.* (lectotype designated by Pupulin 2007, p. 113).

Dichaea echinocarpa var. *lobata* Ames & Correll, Bot. Mus. Leafl.11: 71. 1955.

Specimen studied: HAJB!: *Bisse et al. 37581.*

Dichaea trichocarpa (Sw.) Lindl., Gen. Sp. Orchid. Pl. 209. 1833.

Basionym: *Epidendrum trichocarpum* Sw., Prodr. Veg. Ind. Occ. 124. 1788.

Cymbidium trichocarpon (Sw.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 71. 1799.

Type: Jamaica, *Swartz s.n.* (lectotype W-R-25293, designated by Pupulin, 2007, p. 133).

Specimen studied: HAJB!: *Bisse & Dietrich 46227.*

Dilomilis Rafinesque

Dilomilis bissei H.Dietr., Orchidee 35: 201. 1984.*

Type: Cuba: Prov. Guantánamo: Municipio Baracoa, Santa María, Altiplano de la Mina de Iberia, 700 m, *Areces et al.* (holotype HAJB 25769!).

Dilomilis elata (Benth.) Summerh., Taxon 10: 253. 1961.

Basionym: *Octadesmia elata* Benth., in G.Bentham & J.D.Hooker, Gen. Plant. 3: 525. 1883.

Type: Jamaica: Jamaica Plants 2382, *Syme s.n.* (holotype K).

Specimen studied: HUJB!: *Urquiola et al. 6348.*

Dilomilis montana (Sw.) Summerh., Taxon 10: 253. 1961.

Basionym: *Epidendrum montanum* Sw., Prodr. Veg. Ind. Occ. 121. 1788.

Cymbidium montanum (Sw.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 72. 1799.

Bletia montana (Sw.) Rchb.f., in W.G.Walpers, Ann. Bot. Syst. 6: 445. 1862.

Tetramicra montana (Sw.) Griseb., Fl. Brit. W. I. 622. 1864.

Octadesmia montana (Sw.) Benth. & Hook.f., Gen. Pl. 3: 525. 1883.

Type: Jamaica: *Swartz s.n.* (BM).

Specimen studied: HAJB!: *Bassler et al. 53408.*

Dilomilis oligophylla (Schltr.) Summerh., Taxon 10: 253. 1961.*

Basionym: *Octadesmia oligophylla* Schltr., Repert. Spec. Nov. Regni Veg. 21: 336.1925.

Type: Cuba: Sierra de Nipe, *Ekman 15275* (holotype S).

Specimen studied: HAJB!: *Bisse et al. 40295.*

Dinema Lindley

Dinema cubincola (Borhidi) H.Dietr., Wiss. Z. Friedrich-Schiller-Univ. Jena. Math-Naturwiss. Reihe 29(4): 524. 1980.*

Basionym: *Epidendrum cubincola* Borhidi, Acta Bot. Acad. Sci. Hung. 22(1): 295. 1976.

Type: Cuba: Santiago de Cuba, Sierra Maestra, Gran Piedra, *Acuña 21104* (holotype originally deposited at SV, now at HAC).

Specimens studied: HAJB!: *Bisse et al. 40293*; HOS!: *Agapito et al. 010*; flowers in spirit: *collector unknown 086.*

Domingoa Schlechter

Domingoa haematochila (Rchb.f.) Carabia, Mem. Soc. Cub. Hist. Nat. "Felipe Poey" 17: 143. 1943.

Basionym: *Epidendrum haematochilum* Rchb.f., Flora 48: 277. 1865.

Type: Cuba, *C. Wright 3338* (holotype K).

Epidendrum hymenodes Rchb.f., Flora 48: 277. 1865, *non* Lindl., Fol. Orchid. *Epidendrum* 58. 1853.

Domingoa hymenodes Schltr., in I.Urban, Symb. Antill. 7: 497. 1913.

Type: Cuba: *C. Wright 3321* (holotype K).

Epidendrum broughtonioides Griseb., Cat. Pl. Cub. 261. 1866.

Type: Cuba*: C. Wright 3321* (MO).

Specimens studied: HUJB!: *Luis et al. 3493*; HOS!: *Mújica & Elaine 207*; flowers in spirit: *Pérez et al. 020.*

Elleanthus Presley

Elleanthus cephalotus Garay & H.R.Sweet, J. Arnold Arbor. 53: 390. 1972, (avowed substitute for *Elleanthus capitatus* (R.Br.) Rchb. f., ex Cogn. in Urban, Symb. Antill. 6: 561. 1910; non *Elleanthus capitatus* (Poepp. & Endl.) Rchb.f., Walp. Ann. Bot. Syst. 6: 475. 1862).

Basionym: *Bletia capitata* R.Br., in W.T.Aiton, Hort. Kew., ed. 2, 5: 206. 1813.

Type: West Indies (holotype BM).

Specimens studied: HAJB!: *Bisse et al. 40555*; HOS!: *Pérez et al. 043.*

Elleanthus cordidactylus Ackerman, Lindleyana 2: 122. 1987.

Type: Puerto Rico: Municipality of Río Grande: Luquillo Mts., Quebrada Grande, S of El Verde, *Ackerman 1843* (holotype SEL).

Specimen studied: HAJB!: *Bisse et al. 52445.*

Eltroplectris Rafinesque

Eltroplectris calcarata (Sw.) Garay & H.R.Sweet, J. Arnold Arbor. 53: 390. 1972.

Basionym: *Neottia calcarata* Sw., Fl. Ind. Occid. 3: 1413, t. 28. 1806.

Stenorrhynchos calcaratum (Sw.) L.C.Rich., De Orchid. Eur. 37. 1817.

Pelexia calcarata (Sw.) Cogn., in I.Urban, Symb. Antill. 6: 328. 1909.

Centrogenium calcaratum (Sw.) Schltr., Beih. Bot. Centralbl. 37(2): 452. 1920.

Spiranthes calcarata (Sw.) J.Jiménez, Phytologia 8: 326. 1962.

Type: Haiti: *Swartz s.n.* (lectotype S).

Specimens studied: HAJB!: *Bassler et al. 60545*; HOS!: *Mújica 175.*

Encyclia Hooker

Encyclia acutifolia Schltr., in I.Urban, Symb. Antill. 9: 66. 1923.

Epidendrum acutifolium (Schltr.) Carabia, Mem. Soc. Cub. Hist. Nat. "Felipe Poey" 17: 146. 1943.

Type: Cuba: Prov. Holguín, Sierra de Nipe, Río Piloto, *Ekman 3374* (holotype S).

Specimens studied: HAC!: *Acuña 13485*; HAC!: *Álvarez et al. 38214*; HOS!: flowers in spirit: *Mújica & Bocourt 180.*

Encyclia altissima Schltr., Orchideen Beschreib. Kult. Zücht. 201. 1914.

Basionym: *Epidendrum altissimum* Bateman ex Lindl., Edward´s Bot. Reg. 24 (Misc.): 38. 1838, non Jacq., 1760, non Lehmann & F. Kränzl. 1899.

Epidendrum hodgeanum A.D.Hawkes, Orquídea

(Río de Janeiro) 18: 176. 1957.

Encyclia hodgeana (A.D.Hawkes) Beckner, Phytologia 20: 217. 1970.

Type: Bahamas, *Skinner* ex *Hort. Bateman s.n.* (holotype K).

Specimens studied: BSC: *Martínez & Fagilde 20631*; HOS!: flowers in spirit: *collector unknown 121*.

Encyclia bipapularis (Rchb.f.) Acuña, Bol. Estación Exp. Agron. Santiago de las Vegas 60: 80. 1939.*

Basionym: *Epidendrum bipapulare* Rchb.f., Flora 48: 277. 1865; Type: Cuba: 1860-1864, *C. Wright 3328* (holotype K).

Epidendrum tampense var. *amesianum* Correll, Lloydia 10: 211. 1947.

Type: Cuba: Villa Clara, near San Blas, *J. G. Jack s.n.* (holotype AMES).

Specimens studied: HAC!: *Clement 3613*; HOS!: *Mújica 180*; flowers in spirit: *collector unknown 112*.

Although Ackerman (2014) reports this species from the eastern provinces of the island, the authors agree with Llamacho and Larramendi (2005) that this species is restricted to the west of Cuba, specifically to Artemisa province and its limits with Pinar del Río province. The reports for the eastern Cuba are likely confused with another species.

Encyclia bocourtii Múj.Benítez & Pupulin, Harvard Pap. Bot. 10: 228. 2005.*

Type: Cuba: Pinar del Río, Sandino, Guanahacabibes Peninsula, Guanahacabibes National Park, Cabo San Antonio, road between Faro Federico Roncali and Las Tumbas, near El Francés beach, *Pupulin et al. 4127* (holotype HOS!, isotype USJ).

Other specimens studied: *Mújica et al. 111* (HOS!); *Mújica et al. 014* (HOS!, flowers in spirit); *collector unknown 177* (HOS!, flowers in spirit).

Encyclia cajalbanensis Múj.Benítez, Bocourt, & Pupulin, Lankesteriana 4: 211. 2004.*

Type: Cuba: Pinar del Río, Municipio La Palma, ladera sur de la meseta de Cajálbana, a 2.5 km después de El Burén, en Sendero Interpretativo, Mil Cumbres, *Bocourt et al. 117* (holotype HOS!).

Other specimen studied: *Mújica & Bocourt 035* (HOS!, flowers in spirit).

Encyclia × ***camagueyensis*** Rodríguez, González, Sauleda, Villalobos & Esperón. Orchids Digest April, May, June 110-113. 2009.

Type: Cuba: Camagüey: Municipality of Minas, Loc. "Los Orientales", HIPC 10462: *Rodríguez Seijó 036*.

Specimen studied: HOS!, flowers in spirit: *collector unknown 177*.

This is a natural hybrid between *E. altissima* and *E. phoenicea*, discovered in the north of Camagüey province.

Encyclia fucata (Lindl.) Schltr., Orchideen Beschreib. Kult. Zücht. 209. 1914.

Basionym: *Epidendrum fucatum* Lindl., Edward´s Bot. Reg. 24 (Misc.): 15. 1838.

Type: Cuba: Havannah, (holotype K-L).

Epidendrum sagreanum A.Rich., in R.de la Sagra, Hist. Fis. Cuba Bot. 11: 235, t. 75. 1850.

Type: Cuba: *Sagra s.n.* (holotype P).

Epidendrum hircinum A.Rich., in R.de la Sagra, Hist. Fis. Cuba Bot. 11: 236, pl. 77. 1850.

Encyclia hircina (A.Rich.) Acuña, Bol. Estación Exp. Agron. Santiago de las Vegas 60: 74. 1939.

Type: Cuba: *Sagra s.n.* (holotype P).

Epidendrum obcordatum Jenn., Annuaire Conserv. Jard. Bot. Genéve 11: 101. 1917.

Type: Cuba: near Nueva Gerona, 12 May 1910, *O. E. Jenn. 651* (holotype CM).

Specimens studied: HUJB!: *Luis et al. 3798*; HOS!: *Pérez et al. 008*; flowers in spirit: *Pérez & Bocourt 015*.

Encyclia gravida (Lindl.) Schltr., Beih. Bot. Centralbl. 36(2): 472. 1918.

Basionym: *Epidendrum gravidum* Lindl., J. Hort. Soc. London 4: 114. 1849.

Epidendrum oncidioides var. *gravidum* (Lindl.) Ames, F.T.Hubb. & C.Schweinf., Bot. Mus. Leafl. 3: 104. 1935.

Type: Mexico: near Xapatam (Jalapa), *Hartweg s.n.* (holotype K-L).

Epidendrum sintenisii Rchb.f., Ber. Deutsch. Bot. Ges. 3: 277. 1885.

Encyclia sintenisii (Rchb.f.) Britton, in Britton & Wilson, Bot. Porto Rico 5: 197. 1924.

Type: Puerto Rico, Indiera Fria, near Maricao, *Sintenis 506* (holotype W).

Epidendrum monticolum Fawc. & Rendle, J. Bot. 47: 124. 1909.

Encyclia monticola (Fawc. & Rendle) Acuña, Bol. Estación Exp. Agron. Santiago de las Vegas 60: 72. 1939.

Type: Jamaica: Holly Mount, Mt. Diabolo, *Harris 10467* (holotype BM).

Specimens studied: HAJB!: *Genes et al. 59344*; HOS!: *Pérez & Bocourt 125*; flowers in spirit: *Pérez & Bocourt 049.*

Encyclia grisebachiana (Cogn.) Acuña, Bol. Estación Exp. Agron. Santiago de las Vegas 60: 73. 1939.*

Basionym: *Epidendrum grisebachianum* Cogn., in I.Urban, Symb. Antill. 6: 495. 1910.

Prosthechea grisebachiana (Cogn.) W.E.Higgins, Phytologia 82: 378. 1997.

Type: Cuba: 1860-1864, *C. Wright 3326* (holotype GOET).

Specimens studied: HUJB!: *Novo et al. 1242*; HOS!: *Pérez et al. 030*; flowers in spirit: *collector unknown 156.*

Encyclia howardii (Ames & Correll) Hoehne, Arq. Bot. Estado Sao Paulo, nova série, 2: 152. 1952.*

Basionym: *Epidendrum howardii* Ames & Correll, Bot. Mus. Leafl. 11: 2. 1943.

Encyclia howardii (Ames & Correll) H.Dietr., Revista Jard. Bot. Nac. Univ. Habana 5(1): 49. 1984.

Type: Cuba: Oriente: Sierra de Moa, *R. A. Howard 5939* (holotype AMES).

Specimen studied: HAJB!: *Bisse et al. 9292.*

Encyclia isochila (Rchb.f.) Dod, Moscosoa 4: 193. 1986.

Basionym: *Epidendrum isochilum* Rchb.f., Bonplandia 4: 326. 1856.

Type: Dominican Republic, *Schiller s.n.,* (holotype W 44).

Epidendrum isochilum var. *tridens* Rchb.f., Ber. Deutsch. Bot. Ges. 3: 277. 1885.

Encyclia isochila var. *tridens* (Rchb.f.) Dod, Moscosoa 4: 193. 1986.

Type: Dominican Republic (holotype W 43).

Epidendrum bletioides Griseb., Fl. Brit. W. I. 615. 1864.

Type: Jamaica: Hanover, *Purdie s.n.* (holotype K).

Epidendrum belvederense Fawc. & Rendle, J. Bot. 47: 123. 1909.

Encyclia belvederense (Fawc. & Rendle) H.Dietr., Wiss. Z. Friedrich-Schiller-Univ. Jena. Math-Naturwiss. Reihe 33: 710. 1984.

Type: Jamaica: Hannover, Belvedere, *W. Harris 7620* (holotype BM).

Epidendrum belvederense var. *brevifolium* Cogn., Feddes Repert. Spec. Nov. Regni Veg. 7: 123. 1909.

Type: Jamaica, near Lancaster, *W. Harris 7541* (holotype UCWI).

Specimen studied: HAJB!: *Bisse et al. 44784.*

Encyclia moebusii H.Dietr., Feddes Repert. Spec. Nov. Regni Veg. 96: 563. 1985.*

Type: Cuba: Prov. Guantánamo, Küstenregion zwischen Imias und Maisi, *H. Dietrich s.n.* (holotype JE).

Specimens studied: HAC!: *Alain 3389*; HOS!: *Pérez et al. 074.*

Encyclia monteverdensis M.A.Díaz & Ackerman, Lankesteriana 4: 50. 2004.*

Type: Cuba: Prov. Guantánamo, Monte Verde, *C. Wright 1489* (holotype AMES 73736).

Specimens studied: We did not find any specimens in the revised Cuban herbaria.

Encyclia navarroi Vale & Rojas, Ann. Bot. Fennici 49: 83-86. 2012.*

Type: Cuba: Pinar del Río, Península de Guanahacabibes, María La Gorda, Holotype: HAC (SV 42604).

Specimen studied: HOS!, flowers in spirit: *Pepe 164.*

Recently this species has been described for Cabo Corrientes, Guanahacabibes Peninsula, Pinar del Río province. We failed to find other individuals ot this taxon when following the geo-coordinates given by the authors in the protologue. After many years of study on this peninsula, it is our opinion that in the area, a process of natural hybridization is taking place among *E. plicata-E. bocourtii* and *E. phoenicea-E. plicata,* species that flower simultaneously in the area and attract the same pollinator. This has given rise to a great number of morphs in the area that we have photographed and documented. Before the publication of *E. navarroi*, we knew about a population of a similar morph outside the limits of Guanahacabibes peninsula in Pinar del Río province. José L. Bocourt, botanical illustrator with vast experience in orchids, showed us a

picture with the dissection of flowers of *E. phoenicea* – "*E. navarroi*?"- *E. bocourtii,* which shows how this taxon could be a natural hybrid of those species.

Encyclia nematocaulon (A.Rich.) Acuña, Bol. Estación Exp. Agron. Santiago de las Vegas 60: 77. 1939.*

Basionym: *Epidendrum nematocaulon* A.Rich., in R.de la Sagra, Hist. Fis. Cuba Bot. 11: 238, pl. 79. 1850.

Type: Cuba: flowered in cultivation "Fac. Med. Paris" July 1844 (holotype P).

Specimen studied: HAC!: *Osment 20602.*

Encyclia ochrantha (A.Rich.) Withner, Cattleyas & Relatives 4: 64. 1996.*

Basionym: *Epidendrum ochranthum* A.Rich., in R. de la Sagra, Hist. Fis. Cuba Bot. 11: 237, t. 78. 1850.

Type: Cuba: *Sagra s.n.* (holotype P).

Specimens studied: We did not find any specimens in the revised Cuban herbaria. The locality of the type is ignored.

Encyclia oxypetala (Lindl.) Schltr., Notizbl. Bot. Gart. Berlin-Dahlem 7: 277.1918.*

Basionym: *Epidendrum oxypetalum* Lindl., Orch. Lindl. 8. 1846.

Type: Cuba: Guantánamo, *J. Linden s.n.* (holotype K-L).

Specimens studied: HAC!: *León et al. 6657*; HOS!: flowers in spirit: *Bocourt 130.*

Encyclia phoenicea (Lindl.) Neumann, Rev. Hort. sér. 2, 4: 137. 1845-1846. *

Basionym: *Epidendrum phoeniceum* Lindl., Edward´s Bot. Reg. 27: (Misc.) 57. 1841.

Type: Cuba: Monte Verde, K-L).

Epidendrum duboisianum (Neumann) Brongn. ex A.Rich., in R.de la Sagra, Hist. Fis. Cuba Bot. 11: 239. 1850.

Type: Cuba: *A. Brongniart s.n.* (holotype P).

Epidendrum oblongatum A.Rich., in R.de la Sagra, Hist. Fis. Cuba Bot. 11: 239, pl. 80. 1850.

Encyclia oblongata (A.Rich.) Acuña, Bol. Estación Exp. Agron. Santiago de las Vegas 60: 80. 1939.

Type: Cuba: *R. de la Sagra s.n.* (holotype P).

Encyclia havanense Bello, Esperón & Sauleda, New World Orchidaceae – Nomenclatural Notes – Issue No. 4, 2013.

Type: Cuba: Pinar del Río, municipality of La Palma, 4 miles from Cajalbanas, (Holotype: Cuba: Havana, *M. Quesnel s.n.*, P).

Encyclia hamiltonii Sauleda & Esperón, New World Orchidaceae – Nomenclatural Notes – Issue No. 5, 2013.

Type: Ex hort., *Sauleda, R. P. & E. Esperon s.n.* (holotype FTG).

Specimens studied: HPPR!: *Urquiola 242*; HOS!: flowers in spirit: from diferent localities, *Pérez & Bocourt 016, 017, 023* and *024.*

Some authors also cite it for Cayman Islands. The description was based on Cuban material, it is not clear from the literature whether the specimens were wild collected on the island (Ackerman, 2012). In Cuba it is reported for almost the whole island. However, we have seen differences in the morphology, color and fragrance of their flowers, so it would not be wrong to think that, under the epithet "*phoenicea*", several taxa are hiding. It would be premature and very risky to begin describing species considering the differences shown in this group. Only molecular studies could give really conclusive and accurate results.

Encyclia plicata (Lindl.) Schltr., Orchideen Beschreib. Kult. Zücht. 211. 1914.

Basionym: *Epidendrum plicatum* Lindl., Edward´s Bot. Reg. 33: t. 35. 1847.

Type: Cuba: *Loddiges s.n.* (holotype K-L).

Specimen studied: HOS!: flowers in spirit: *Mújica 031.*

Encyclia pyriformis (Lindl.) Schltr., Orchideen Beschreib. Kult. Zücht. 211. 1914. *

Basionym: *Epidendrum pyriforme* Lindl., Edward´s Bot. Reg. 33: t. 15. 1847.

Encyclia pyriformis (Lindl.) Schltr., Orchideen 208. 1927.

Type: Cuba: *Loddiges s.n.* (K-L).

Epidendrum brevifolium Jenn., Annuaire Conserv. Jard. Genéve 11: 103. 1917.

Encyclia brevifolia (Jenn.) Ackerman & Mújica, Smithsonian Contr. Bot. 98: 631. 2012.

Type: Cuba: Isle of Pines (Isla de la Juventud), near Los Indios, *Jenn. 314* (holotype CM).

Specimens studied: HUJB!: *Urquiola 242*; HOS!: *Pérez et al 007*; flowers in spirit: *Mújica & Bocourt 030.*

Encyclia rosariensis Múj.Benítez, R.Pérez, & Pupulin, Orchids (West Palm Beach) 75: 677. 2006. *

Type: Cuba: Prov. Pinar del Río, Mun. Candelaria, El Salón, Sierra del Rosario Biosphere Reserve, *R. Pérez 122* (holotype HOS!, isotype, HOS!).

Other specimens studied: HOS! flowers in spirit: *Pérez & Bocourt 040*.

Encyclia sabanensis Vale, Pérez-Obregón & Faife, Syst. Bot. 39. 2014. *

Type: Cuba: Caibarién: Cayo Santa María, holotype: UCLV: *Pérez-Obregón 10593.*

In the north of Villa Clara province, specifically in Cayo Santa María, there is a population of this orchid, very closely related to *E. felhingii*. One plant collected by the authors in November 2009 flowered in cultivation in the Soroa Orchid Botanical Garden. Later on, other individuals collected at the same location also flowered in cultivation. Vegetatively, it is indistinguishable from *E. bocourtii*, *E. plicata* and *E. phoenicea*. The flowers are morphologically very similar to those of *E. bocourtii*, but they differ in the green colored sepals and petals and the white labellum grooved in purple. Sauleda (pers. comm. 2011) suspects that it is not *E. felhingii*, but a natural hybrid between this species and *E. plicata,* which is to be studied.

Encyclia triangulifera (Rchb.f.) Acuña, Bol. Estación Exp. Agron. Santiago de las Vegas 60: 80. 1939. *

Basionym: *Epidendrum triangulifera* Rchb.f., Flora 48: 277. 1865; Type: Cuba: *C. Wright 3328* (holotype K).

Specimen studied: HAJB!: *Dietrich 57672.*

Encyclia vinalensis Múj.Benítez & Rivera, *ined*.*

Cuba: Pinar del Río province, Valle de Viñales, El Sitio, *Rivera 251* (HOS!).

Other specimens studied: Same locality as the type, *Rivera 181* (HOS!: flowers in spirit)

The only known populations of *E. vinalensis* inhabit a fragile ecosystem on the limestone slopes of the "mogotes" in the Viñales National Park. The shape of the flowers, reveals some affinities with *E. tampensis* var. *albolabia* (Whitner, 1996, Plate 37). Nevertheless, the morphology of the plants and the flowering season (February and March) are quite distinct. The authors cannot find any close relatives of this taxon in Cuban flora. This species is now in description.

Other notes on this genus:

Encyclia *sp.* 1

Very closely related to *E. oxypetala,* with which, apparently, it was confused. The colleagues of Soroa Orchid Botanical Garden are working on its description. This species, reported only for Ciénaga de Zapata, Matanzas province, is distinguished from *E. oxypetala* by the smaller size of its flowers, darker coloration of its sepals and petals and its strong and unmistakable scent of "cockroach". It flowers in July-August.

Encyclia sp. 2

Present in Cabo San Antonio, Guanahacabibes peninsula, vegetatively very similar to other species of the genus and very closely related to *E. fucata*, from which it differs in the larger flowers and unguiculate, completely white-colored labellum. As *E. fucata*, it shows great variation in the floral morphology and color of the flowers. Both are in an area cloistered between the two coasts of the peninsula (not more than eight kilometers wide). We think, given the size of *E. fucata*, that it is not very likely for it to have been able to cross with other species such as *E. bocourtii* or *E. plicata*, so we think we have a new species just as suggested by P. Esperón and J. M. Díaz (pers. comm. 2012).

If the last three taxa were indeed accepted as good species, the number of *Encyclia* species in Cuba would reach 28 taxa. Nevertheless, the taxonomy of this genus in the island is still debatable, and the segregation of new taxa with limited information on the natural variation beteween and among populations, as well as the possible role of hybridization in the group, could result in gross mistakes.

Epidendrum Linnaeus

Epidendrum acunae Dressler, Amer. Orchid Soc. Bull. 28: 358. 1959.

Type: Cuba: *Charles Wright 3333*. (holotype: MO; isotypes: AMES, BM, G, K, MA, P x2, S, W x3).

Spathiger roigii Acuña, Cat. Descr. Orq. Cub. 60: 93. 1939.

Type: Cuba: Prov. Pinar del Río, *P. Wilson 9329* (holotype NY).

Specimens studied: HUJB!: *Luis et al. 4054*/*4059*; HOS!: *Mújica et al. 191*; flowers in spirit: *Bocourt et al. 079.*

Epidendrum amphistomum A.Rich., in R.de la Sagra, Hist. Fis. Cuba Bot. 11: 240. 1850.

Type: Cuba: Ile de Cuba, 1836, *Ramón de la Sagra s.n.* (holotype: P).

Epidendrum secundum subsp. *briegeri* H.Dietr., Beitr. Phytotax. 15: 123. 1992.

Type: Cuba: Santiago de Cuba, Pico Cristal, cult. in Hort. Bot. Jenenese, *H. Dietrich s.n.* (holotype HAJB).

Specimens studied: HUJB!: *Ferro et al. 4307*; HOS!: *Mújica & Elaine 216*; flowers in spirit: *Pérez & Bocourt 019*.

Epidendrum anceps Jacq., Select. Stirp. Amer. Hist. 224, t. 138. 1763.

Type: Dominica, *Miller s.n.* (holotype illustration, Botanical Cabinet 19: t. 1867. 1832).

Epidendrum anceps var. *virescens* (Lodd.) Lindl., in Hemsl., Biol. Centr. Am., Botany 3: 255. 1883.

Amphyglottis anceps (Jacq.) Britton, in Britton & Wilson, Bot. Porto Rico 5: 200. 1924.

Epidendrum anceps var. *typicum* Stehlé (= var. *anceps*), Fl. Descr. Ant. Franc. 1: 135. 1939.

Type: Martinique, *Jacquin,* the illustration, plate 138 (BM).

Specimens studied: HUJB!: *Ferro et al. 4307*; HOS!: *Pérez & Bocourt 001*; flowers in spirit: *Pérez & Bocourt 021*.

Epidendrum angustilobum Fawc. & Rendle, J. Bot. 47: 124. 1909.

Type: Jamaica: Rose Hill, *Harris 10485* (holotype, cited by Nir, UCWI).

Epidendrum nocturnum var. *latifolium* Lindl., Bot. Reg. 23: t. 1961. 1837.

Amphyglottis nocturna var. *latifolia* (Lindl.) Acuña, Bol. Estación Exp. Agron. Santiago de las Vegas 60: 100. 1938.

Epidendrum latifolium (Lindl.) Garay & Sweet, J. Arnold Arbor. 53: 392. 1972.

Type: West Indies, introduced and cultivated by Chatsworth, *Paxton s.n.* (K-L).

Specimen studied: HAJB!: *Bisse et al. 22865.*

Epidendrum brachyrepens Hágsater, Icon. Orchid. 3: pl. 315. 1999.

Type: Costa Rica: San José; Desamparados, San Cristóbal Sur, *J. García-Cruz et al. 926* (holotype INB).

Specimen studied: HAC!: *Morton et al. 12312.*

Reported by Ackerman (2014) from the Sierra Maestra, Granma and Santiago de Cuba provinces. Eric Hágsater cites other herbaria specimens, including some of the HAC and HAJB, for Pico Turquino and one for Pico La Bayamesa in Santiago de Cuba province.

Epidendrum diffusum Sw., Prodr. Veg. Ind. Occ. 121. 1788.

Type: Jamaica: *O. Swartz s.n.* (W 26526).

Seraphyta diffusa (Sw.) Fischer & C.A.Meyer ex Pfitzer, in Engler & Prantl, Nat. Pflanzenfam. 2(6): 142. 1889.

Seraphyta multiflora Fischer & C.A.Meyer, Bul. Sc. Acad. Petersb. 7: 24. 1840.

Type: Mexico: Veracruz, *C. Schiede s.n.* (holotype LE).

Epidendrum tenuiflorum Hort. ex Lindl., Fol. Orchid. *Epidendrum* 88. 1853.

Type: México: Oaxaca, *Galeotti 5234* (holotype P).

Epidendrum paniculatum Sessé & Mociño, Flora Mexicana 204. 1894.

Type: Mexico: Veracruz, Montium Cordavae, *Sessé et al. 4302* (MA).

Specimen studied: HAJB!: *Alvarez et al. 55025*.

Epidendrum floridense Hágsater, Icon. Orchid. 2: pl. 133. 1993.

Type: United States of America: Florida: Collier Co., Fahkahatchee Swamp, *J. Corder sub E. Hágsater 1086* (holotype AMO).

Specimens studied: HAJB!: *Bisse et al. 26406*; HUJB!: *Urquiola et al. 6817*; HOS!: flowers in spirit: *Bocourt & Pérez 061.*

Epidendrum hioramii (Acuña & Roig) Acuña & Alain, Mem. Soc. Cub. Hist. Nat. "Felipe Poey" 24: 2. 110. 1960. *

Basionym: *Hormidium hiorami* Acuña & Roig, Mem. Soc. Cub. Hist. Nat. "Felipe Poey" 10: 51. 1936.

Lanium hiorami (Acuña & Alain) H.Dietr., Wiss. Z. Friedrich-Schiller-Univ. Jena. Math-Naturwiss. Reihe 29: 522. 1980.

Type: Cuba: Guantánamo, Baracoa, Finca "Iberia", en Nibujón, *J. Natenson s.n*. (holotype HAC; isotype in the herbarium of Dr. J. T. Roig, No.7156).

Specimen studied: HAC!: *Alain et al. 4541.*

Epidendrum jamaicense Lindl., Fol. Orchid. *Epidendrum* 82, no.256. 1853.

Type: Jamaica: Dunrobin Castle, *Purdie s.n.* (holotype K-L).

Specimen studied: HAJB!: *Bisse et al. 22685.*

Epidendrum lacerum Lindl., Edward´s Bot. Reg. 24 (Misc.): 18. 1838. *****

Amphyglottis lacera (Lindl.) Britton, Ann. New York Acad. Sci. 5: 201. 1924.

Type: Cuba. Havannah, collected by Capt. Sutton, flowered at Charles Lemon, Cerclew, England, (holotype K-L).

Specimens studied: We did not find any specimens in the revised Cuban herbaria.

Introduced in England from "Havannah" (apparently Havana), Cuba, in the spring of 1835 by Captain Sutton. It flowered later at Charles Lemon´s collection in November-December 1836. The species is either very rare or extinct.. In Cuba, *E. lacerum* is vegetative similar to *E. wrightii* Lindl., from which it differs by the pink flowers with the lateral lobes longer than apical (Hágsater, pers. comm. 2012).

Epidendrum miserrimum Rchb.f., Bonplandia 3: 220. 1855.

Type: Guadeloupe: Monte Fulsbunes, *Duchassaing s.n.* (holotype W 50153).

Jacquiniella miserrima (Rchb.f.) Stehlé, Bull. Soc. Bot. France 84: 425. 1937.

Microepidendrum miserrimum (Rchb.f.) Brieger, Rudolf Schltr.'s Orchideen, 3rd ed., 556. 1974.

Specimens studied: It is known from a single collection of Wright (s.n.) from La Guinea, in eastern Cuba. We did not find any specimens in the reviewed Cuban herbaria.

Epidendrum neoporpax Ames, Bot. Mus. Leafl. 2(9): 112. 1934.

Type: Cuba: *C. Wright 3343* (holotype W Isotypes: AMES G (x2)! K).

Basionym: *Epidendrum porpax* Rchb.f., Flora 48: 278. 1865, *non* Rchb.f. 1855.

Epidendrum vestitum Ames, Schedul. Orchid. 4: 51. 1923, *non* Sw., 1788.

Epidendrum porpax var. *domingensis* Cogn., in I.Urban, Symb. Antill. 7: 181. 1909.

Specimens studied: HAC!: *Morton 20179*; HOS!: *Collector unknown 120*; flowers in spirit: *collector unknown 037.*

Epidendrum nocturnum Jacq., Enum. Syst. Pl. 29. 1760.

Auliza nocturna (Jacq.) Small, Fl. Miami: 56. 1913.

Amphyglottis nocturna (Jacq.) Britton, Bot. Porto Rico & Virgin Islands 1: 200. 1924.

Phaedrosanthus nocturnus (Jacq.) Kuntze in T. Post & Kuntze, Lex. gen. phan. 429. 1904.

Type: Martinique, *Jacquin s.n.* (lectotype, Jacquin's illustration reproduced in Selectarum Stirpium Americanarum Historia 225, t. 139. 1763).

Epidendrum nocturnum var. *angustifolium* Stehlé, Fl. Descr. Antill. Fr. 1: 143. 1939.

Epidendrum carolinianum Lam., Encycl. 1: 182. 1783.

Lectotype: Gatesby, Nat. Hist. Carol. 2: t. 68 (1743).

Epidendrum discolor A. Rich. & Gal., Ann. Sci. Nat. ser. 3. 3: 22. 1845.

Type: Mexico: *Galeotti s.n.* t. 18.

Specimens studied: HUJB!: *Urquiola et al. 508*; HOS!: *Mújica & Elaine 198*; flowers in spirit: *Trabanco 060.*

Epidendrum orientale Hágsater & M.A.Díaz, Icon. Orchid. 2: pl. 167. 1993.

Type: Cuba: Guantánamo, Laguna del Galano, Sierra del Frijol, La Alegria, Toa, *Hno. Alain 3854* (holotype HAC!).

Specimens studied: HPPR!: *Ferro et al. s.n.*; HOS!: *Pérez et al. 085*; flowers in spirit: *Pérez & Bocourt 013.*

Epidendrum polygonatum Lindl., Ann. Mag. Nat. Hist. series 3, 1: 332. 1858.

Amphyglottis polygonata (Lindl.) Acuña, Cat. Descr. Orq. Cub. 60: 101. 1939.

Physinga polygonata (Lindl.) Dod. Moscosoa 3: 101-102. 1984.

Physinga polygonata (Lindl.) H. Dietrich. Wiss. Zeitschr. Friedrich-Schiller-Univ. Jena, Mat. Naturwiss. (Beitr. Phytotax.) 29 (4): 524, 1980.

Type: Cuba: Popre villam, Monteverde dictam, *C. Wright 643* P!.

Epidendrum polygonatum Lindl. var. *latifolium* Cogn., Symb. Antill. 6: 514. 1910.

Type: Cuba: Pinal de Sta. Anna, 800 m, *Eggers 5053*, (holotype: BR).

Specimens studied: HAJB!: *Bisse et al. 27680*; HPPR!: *Urquiola et al. 6318-A.*

Epidendrum portoricense Hágsater & Ackerman, Icon. Orchid. 3: 2, pl. 376. 1999.

Type: Puerto Rico: Mun. Río Grande, Luquillo Mts., El Verde, *Ackerman 2613* (holotype UPRRP).

Specimens studied: We did not find any specimens in the revised Cuban herbaria. Reported by Ackerman (2014) for Macizo Sagua-Baracoa, Guantánamo province.

Epidendrum radicans Pav. ex Lindl., Gen. Sp. Orchid. Pl. 104. 1831.

Type: Mexico, *Sessé & Mociño,* (holotype BM).

Epidendrum rhizophorum Batem. ex Lindl., Edward´s Bot. Reg. 24 (Misc.): 8. 1838.

Type: Guatemala, *Skinner s.n.* (holotype ?).

Epidendrum pratense Rchb.f., Beitr. Orch. Centr. Amer. 84. 1866.

Type: Guatemala, *Wendland 271* (holotype W).

Epidendrum radicans var. *chiriquense* Schltr., Repert. Spec. Nov. Regni Veg. 17: 39. 1922.

Type: Panama, *Powell 61* (holotype B, destroyed).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria.

This species was introduced and it is in naturalization process in Cuba. It has been collected by specialists of the Soroa Orchid Botanical Garden in several occasions in the proximities of La Gran Piedra, Santiago de Cuba province. We suppose that around there it may have escaped from cultivation.

Epidendrum ramosum Jacq., Enum. Syst. Pl. 29. 1760.

Spathiger ramosus (Jacq.) Britton & Wilson, Sci. Surv. Porto Rico and Virg. Isl. 5: 202. 1924.

Isochilus ramosum (Jacq.) Spreng., Syst. Veg. ed. 16, 3: 734. 1836, *non* H.Focke, 1851.

Type: Martinique, *Jacquin s.n.* (holotype LINN).

Epidendrum rigidum Lodd., Bot. Cab. 16: t. 1600. 1829.

Type: Dominica, *Miller;* non Jacq. 1760.

Specimens studied: HAJB!: *Alvarez et al. 64786*; HOS!: *Félix & Sandy 104*; flowers in spirit: *collector unknown 165*.

Epidendrum repens Cogn., Repert. Spec. Nov. Regni Veg. 7: 122. 1909.

Type: Jamaica, *H. Eggers 3679* (BR).

Epidendrum bourgeaui Schltr., Beih. Bot. Centralbl. 36: 401. 1918,

Epidendrum solisequum Kraenzl, Ark. Bot. 16: 17, 1920.

Type: Mexico, *E. Borgeau 3104*, (holotype B, destroyed;, isotypes BR, GH, LE, P, P, US).

Specimen studied: HAJB!: *Bisse et al. 40518*.

Epidendrum rigidum Jacq., Enum. Syst. Pl. 29. 1760.

Spathiger rigidus (Jacq.) Small, Fl. Miami 55. 1913.

Type: Martinique, *Jacquin s.n.* (holotype BM).

Specimens studied: HUJB!: *Bisse et al. s.n.*; HOS!: *Mújica & Elaine 209.*

Epidendrum rivulare Lindl., Ann. Mag. Nat. Hist., ser. 3, 1: 330. 1858.

Type: Cuba Orientali, Prope villam, Monte Verde, *C. Wright 644* (holotype K; istoypes AMES, BR, G, P, W).

Specimen studied: HAJB!: *Bisse et al. 19683.*

Epidendrum scalpelligerum Rchb.f., Flora 48: 278. 1865.

Pleuranthium scalpelligerum (Rchb.f.) Cogn., in I.Urban, Symb. Antill. 4: 470. 1920.

Type: Cuba: Without locality, *C. Wright 3339* (holotype K-illustration; isotypes AMES, G, P,W).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria. Reported by Ackerman (2014) from Macizo Sagua-Baracoa, Guantánamo province and by Hágsater (pers. comm. 2012) from La Perla, Santiago de Cuba province.

Epidendrum serrulatum Sw., Prodr. Veg. Ind. Occ. 121. 1788.

Cymbidium serrulatum (Sw.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 72. 1799.

Encyclia serrulata (Sw.) H.Dietr., Rev. Jard. Bot. Nac. La Habana 5(1): 49. 1984.

Prosthechea serrulata (Sw.) W.E.Higgins, Phytologia 82: 380. 1997.

Type: Jamaica: Summit Mont. Coral, *Swartz s.n.* (holotype BM).

Specimen studied: HAJB!: *Bisse et al. 19065.*

Epidendrum strobiliferum Rchb.f., Nederl. Kruidk. Arch. 4: 333. 1858.

Spathiger strobiliferus (Rchb.f.) Small, Man. SE. Fl. 390. 1933.

Type: Surinam, *Splitgerber 426* (holotype W).

Isochilus ramosus H.Focke, Tijdschr. Natuurk. Wetensch. Kunsten 4: 69. 1851.

Type: Surinam, *H.Focke s.n.* (holotype ?).

Specimen studied: HAJB!: *Bisse et al. 45376.*

Epidendrum umbelliferum J.F.Gmel, Syst. Nat., ed. 13, 2(1): 65. 1791.

Type: Jacquin, Stirp. Pl. Amer. pl. 136.

Epidendrum umbellatum Sw.**,** Nova Spec. Pl. Prodr. 121. 1788, *nom. illeg.*

Caularthron umbellatum (Sw.) Rafin., Fl. Tellur. 2: 41. 1837.

Epidendrum caribiorum Ackerman & Acev.-Rodr., Smithsonian Contr. Bot. 98: 633. 2012 (Based on *Epidendrum umbellatum* Sw., non G. Forster).

Type: Jamaica, without locality, *Swartz s.n.* (holotype BM).

Specimens studied: HAJB!: *Bisse et al. 48056*; HOS!: flowers in spirit: *Pérez & Bocourt 073.*

Epidendrum wrightii Lindl., Ann. Mag. Nat. Hist. series 3, 1: 331. 1858.

Type: Cuba: province unknown, Santa La Madelina, *C. Wright s.n.* (holotype K-L).

Specimen studied: HAJB!: *Dietrich et al. 66743*.

Eulophia R. Brown

Eulophia alta (L.) Fawc. & Rendle, Fl. Jamaica 1: 112, plate 22. 1910.

Basionym: *Limodorum altum* L., Syst. Nat., ed. 12, 594. 1767.

Platypus altus (L.) Small, Flora of the S.E. of U.S., 2nd ed., 329. 1913.

Type: Martinique, *Plumier s.n.* (original illustration at P).

Cyrtopodium woodfordii Sims, Bot. Mag. 43: t. 1814. 1816.

Cyrtopera woodfordii (Sims) Lindl., 189. 1833.

Eulophia woodfordii (Sims) Rolfe, Fl. of Trop. Africa 7: 68. 1897.

Type: Brazil, Sao Paulo, *J. Sims s.n.*, (K).

Dendrobium longifolium Kunth, in Humboldt, Bonpland, & Kunth, Prodr. Veg. Ind. Occ.1: 360. 1815.

Cyrtopera longifolia (Kunth) Rchb.f., in W.G.Walpers, Ann. Bot. Syst. 6: 669. 1863.

Eulophia longifolia (Kunth) Schltr., Orchideen 347. 1914.

Type: Colombia, Almaguer*, Humboldt & Bonpland 1067* (Holotype P).

Specimens studied: HAJB!: *Bisse 55150*; HOS!: flowers in spirit: *Eduard 059.*

Eurystyles Wawra

Eurystyles domingensis Dod, Moscosoa 1: 43. 1977.

Type: Dominican Republic: Prov. San Cristóbal, Villa Altagracia, confluencia Río Haina y Río Duey, *D. D. Dod 475* (holotype JBSD).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria.

According to Ackerman (2014) the species that is in Cuba is really *E. domingensis* and not *E. ananassocomus* (Rchb. f.) Schltr. The specimens revised by him, from Monte Verde and La Prenda demonstrated that with certainty. However, in the HAJB there is a specimen from another locality in Sierra del Purial (*Bisse et al. 47265*) identified as *E. ananassocomus* that deserves to be studied.

Fuertesiella Schlechter

Fuertesiella pterichoides Schltr., in I.Urban Symb. Antill. 7: 493. 1919.

Type: Dominican Republic: Prov. La Vega, between Rosilla and Picos del Yaque, *Fuertes 1718* (holotype B, destroyed; lectotype NY).

Specimen studied: HAC!: *Acuña 10013.*

Galeandra Lindley

Galeandra bicarinata G.A.Romero & P.M.Brown, North Amer. Nat. Orchid Jour. 6: 78. 2000.

Type: United States of America: Florida, Miami-Dade County, Castellow's Hammock, *R. Woodbury & K. Kramer s.n.* (holotype FTG).

Specimens studied: HAC!: *Alain 6530*; HOS!: *Mújica et al. 192.*

Govenia Lindley ex Loddiges

Govenia utriculata **(**Sw.) Lindl., Edward´s Bot. Reg. 25 (Misc.): 47. 1839.

Basionym: *Limodorum utriculatum* Sw., Prodr. Veg. Ind. Occ. 119. 1788.

Cymbidium utriculatum (Sw.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 75. 1799.

Type: Jamaica: *O. Swartz s.n.* (BM).

Specimens studied: HAJB!: *Meyer et al. 36264*; HUCLV!: *Noa et al. 2779.*

HABENARIA Willdenow

Habenaria alata Hook., Exot. Fl. 3: t. 169. 1825.

Habenella alata (Hook.) Szlach. & Kras-Lapinski, Richardiana 6: 34. 2006.

Type: St. Vincent, *Guilding s.n.* (holotype K).

Platantheroides alata (Hook.) Szlachetko, Richardiana 4: 104. 2004.

Habenaria bidentata Steud., Nomencl. Bot. ed. 2, 1: 716. 1840.

Type: Cuba, *E. Pöppig s.n.* (MO).

Habenaria stricta A.Rich. & Gal. Ann. Sci. Nat., Bot. ser. 3, 3: 23. 1845.

Type: Mexico: Veracruz, Mirador, *Linden s.n.* (P).

Habenaria triptera Rchb.f., Linnaea 22: 814. 1849.

Syntypes: Mexico: Mesochiza [Veracruz, Mirador, Mesa Chica], *Schiede s.n.* (BM); Mexico, [Veracruz], Zacuapan, *Leibold s.n.* (W).

Habenaria platantheroides Schltr., Beih. Bot. Centralbl., Abt. 2, 36(2): 372. 1918.

Type: Costa Rica: La Palma, 1913, *C. Wercklé s.n.* (holotype B, destroyed).

SPECIMENS STUDIED: HAC!: *Acuña 16443*; HUJB!: *Urquiola et al. 5795.*

Habenaria bicornis Lindl., Gen. Sp. Orchid. Pl. 309. 1835.*

Type: Cuba, *Pöppig s.n.* (holotype K).

SPECIMENS STUDIED: We did not find any specimens in the reviewed Cuban herbaria. Reported by Ackerman (2014) from Isla de la Juventud, Pinar del Río (Llanura Aluvial del Sur), Matanzas (Ciénaga de Zapata), Santiago de Cuba, and Villa Clara; Granma (Llanura del Cauto-Guacanayabo), and Artemisa (Sierra del Rosario).

Habenaria brittonae Ames, Torreya 12: 11. 1912.*

Type: Cuba: Prov. Pinar del Río, vicinity of Venales (Viñales), *N. L. & E. G. Britton 7540* (holotype AMES).

SPECIMENS STUDIED: HAC!: *Acuña et al. 18825.*

Habenaria distans Griseb., Cat. Pl. Cub. 270. 1866.

Type: Cuba: Monteverde, *Wright 1481* (holotype GOET).

Habenaria jamaicensis Fawc. & Rendle, J. Bot. 47: 126. 1909.

Habenaria distans var. *jamaicensis* (Fawc. & Rendle) Cogn., in I.Urban, Symb. Antill. 6: 300. 1909.

Type: Jamaica, Cinchona, *Harris 10449* (holotype BM).

SPECIMENS STUDIED: HAJB!: *Arias et al. 60086*; *Borhidi 32861.*

Habenaria eustachya Rchb.f., Ber. Deutsch. Bot. Ges. 3: 274. 1885.

Habenella eustachya (Rchb.f.) Szlach. & Kras-Lapinski, Richardiana 6: 35. 2006.

Type: Puerto Rico: near Maricao, *Sintenis 511b* (holotype W).

Habenaria sanbornii Ames, Proc. Biol. Soc. Wash. 16: 117. 1903.

Type: Cuba: Prov. Artemisa, Cayajabos, *Ames & Leavitt 519* (holotype AMES).

Habenaria troyana Fawc. & Rendle, J. Bot. 47: 264. 1909.

Type: Jamaica, near Troy, *Harris 10432* (holotype BM).

Habenaria socialis Fawc. & Rendle, J. Bot. 47: 263. 1909.

Type: Jamaica, near Mandeville, Manchester, *Purdie s.n.* (holotype K).

SPECIMENS STUDIED: HAC!: *Alain 6895*; HOS!: *Sandy 094.*

Habenaria floribunda Lindl., Gen. Sp. Orch. Pl. 316. 1835.

Habenella floribunda (Lindl.) Szlach. & Kras-Lapinski, Richardiana 6: 36. 2006.

Type: Peru: *Haenke s.n.* (holotype M).

Habenaria autumnalis Poepp. & Endl., Nov. Gen. Spec. Plant. 1: 44, t. 75. 1836.

Type: Peru: inter praedia Cassapi et Paampayaco (holotype W).

Habenaria odontopetala Rchb.f., Linnaea 18: 407. 1844

Habenella odontopetala (Rchb.f.) Small, Man. SE. Fl. 373. 1933.

Habenaria strictissima var. *odontopetala* (Rchb.f.) L.O.Williams, Bot. Mus. Leafl. 7: 184. 1939.

Lectotype (designated by Batista *et al*. 2011): Mexico, *F.E. Leibold s.n.* (W-R).

SPECIMENS STUDIED: HAC!: *López Figueiras 19845*; HOS!: *Bocourt 234*; flowers in spirit: *Bocourt et al. 081.*

Habenaria monorrhiza (Sw.) Rchb.f., Ber. Deutsch. Bot. Ges. 3: 274. 1885.

BASIONYM: *Orchis monorrhiza* Sw., Prodr. Veg. Ind. Occ. 118. 1788.

Type: Jamaica, *Swartz s.n.* (holotype BM).

Habenaria brachyceras Spreng., Syst. Veg. ed. 16, 3: 692. 1826.

Orchis setacea Jacq., Enum. Syst. Pl. 29. 1760.

Type: Martinique: *Jacquin s.n.* (BM?).

Specimen studied: HAJB!: *Arias et al. 62870.*

Habenaria quinqueseta (Michx.) Sw., Adnotat. Bot. 46. 1829.

Basionym: *Orchis quinqueseta* Michx., F. Bor. Amer. 2: 155. 1803.

Mesicera quinqueseta (Michx.) Raf., Neogenyton 4. 1825.

Type: United States of America: Carolina, *Michaux s.n.* (holotype P).

Habenaria michauxii Nutt., Gen. N. Amer. Pl. 2: 189. 1818.

Mesicera michauxii (Nutt.) Raf., Fl. Tellur. 2: 39. 1836.

Platanthera michauxii (Nutt.) Wood, Class-book 685. 1861.

Orchis michauxii (Nutt.) Wood, Amer. Bot. Fl. 328. 1871.

Specimens studied: HAJB!: *Bisse & Díaz 46697*; HAC!: *Acuña 9774*; HOS!: *Pérez et al. 037.*

Habenaria repens Nutt., Gen. N. Amer. Pl. 2: 190. 1818.

Orchis repens (Nutt.) Raf., Neogenyton 4. 1825.

Platanthera repens (Nutt.) Wood, Class-book 685. 1861.

Type: United States of America: Georgia, Savannah, *Nuttall s.n.* (PH).

Habenaria tricuspis A.Rich. in R.de la Sagra, Hist. Fis. Cuba Bot. 11: 249. 1850.

Type: Cuba: *Ramón de la Sagra s.n*. (holotype P).

Habenaria radicans Griseb., Cat. Pl. Cub. 271. 1866.

Habenaria nuttallii Small, Fl. S.E. U.S. 315. 1903.

Type: United States of America: Florida, Sumter Co., *A. H. Curtiss 2772* (holotype NY).

Habenaria palustris Acuña, Bol. Estación Exp. Agron. Santiago de las Vegas 60: 15. 1939.

Type: Cuba: Province Villa Clara??, Near Santo Tomás, Ciénaga de Zapata, *Roig & Cremata s.n.,* herb. J. T. Roig No. 2211 (holotype HAC!).

Specimen studied: HAJB!: *Arias et al. 51022*.

Hapalorchis Schlechter

Hapalorchis lineatus (Lindl.) Schltr., Beih. Bot. Centralbl., Abt. 2, 37(2): 363. 1920.

Basionym: *Spiranthes lineata* Lindl., Gen. Sp. Orchid. Pl. 471. 1840.

Gyrostachys lineata (Lindl.) Kuntze, Revis. Gen. Pl. 2: 664. 1891.

Cyclopogon lineatus (Lindl.) Pabst, Bradea 1(47): 466. 1974.

Type: Brazil: Sao Paulo, *Descourtilz 35* (holotype K-L).

Sauroglossum tenue Lindl., Ann. Mag. Nat. Hist., Ser. 3, 1: 334. 1858.

Spiranthes fawcetii Cogn., Feddes Repert. Spec. Nov. Regni Veg. 7: 123. 1909.

Type: Cuba, Monteverde, *C. Wright 622* (holotype K-L).

Spiranthes amabilis Ames, Schedul. Orchid. 2: 8. 1923.

Cyclopogon amabilis (Ames) Acuña, Bol. Estación Exp. Agron. Santiago de las Vegas 60: 35. 1939.

Type: Guatemala, Alta Verapaz, Cobán, *H. v. Tuerckheim II 1787* (holotype US).

Specimens studied: HAJB!: *Bisse et al. 52471*; HOS!: *Pérez et al. 093.*

Homalopetalum Rolfe

Homalopetalum leochilus (Rchb.f.) Soto Arenas, Neodiversity 2: 8. 2007.

Basionym: *Epidendrum leochilus* Rchb.f., Flora 48: 277. 1865.

Hormidium leochilus (Rchb.f.) B.D.Jacks., Index Kew. 1: 1174. 1893.

Pinelia leochilus (Rchb.f.) Garay & H.R.Sweet, J. Arnold Arbor. 53: 394. 1972.

Type: Cuba: Prov. Guantánamo, near Monte Verde, *C. Wright 3346* (holotype K).

Specimens studied: HAJB!: *Bisse et al. 52381.*

Homalopetalum vomeriforme **(**Sw.) Fawc. & Rendle, Fl. Jamaica 1: 106. 1910.

Basionym: *Epidendrum vomeriforme* Sw., Prodr. Veg. Ind. Occ. 124. 1788.

Brassavola vomeriformis (Sw.) Rchb.f. ex Griseb., Fl. Brit. W. I. 621. 1864.

Type: Jamaica: *Swartz s.n*. (BM).

Homalopetalum jamaicense Rolfe, Hooker´s Icon. Pl. t. 2461. 1896.

Type: Jamaica: Blue Mountains above Abbey Green coffee plantation, *W. Harris 6107* (K).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria. Reported for Sierra Maestra, Santiago de Cuba province (Ackerman, 2014).

Ionopsis Kunth

Ionopsis satyrioides (Sw.) Rchb.f., in W.G.Walpers, Ann. Bot. Syst. 6: 683. 1863.

Basionym: *Epidendrum satyrioides* Sw., Prodr. Veg. Ind. Occ. 123. 1788.

Type: Jamaica, *Swartz s.n.* (BM).

Specimens studied: HAJB!: *Alvarez et al. 57070*; HOS!: *Pérez et al. 083.*

Ionopsis utricularioides (Sw.) Lindl., Coll. Bot. t. 39A. 1826.

Basionym: *Epidendrum utricularioides* Sw., Prodr. Veg. Ind. Occ. 122. 1788.

Type: Jamaica, *Swartz s.n.* (BM).

Ionopsis utricularioides forma *latifolia* Urb., in I.Urban, Symb. Antill. 4: 180. 1903.

Type: Puerto Rico, Adjuntas, *P. Sintenis 4407* (isotype BM).

Specimens studied: HAJB!: *Bisse et al. 46320*; HOS!: *Mújica & Elaine 196*; flowers in spirit: *Martínez 005.*

Isochilus R. Brown

Isochilus linearis (Jacq.) R.Br., in W.T.Aiton, Hort. Kew. 5: 209. 1813.

Basionym: *Epidendrum lineare* Jacq., Enum. Syst. Pl. 29. 1760.

Cymbidium lineare (Jacq.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 72. 1799.

Type: Martinique: *Jacquin s.n.* (original illustration at P).

Specimens studied: HUJB!: *Urquiola et al. 5192*; HOS!: *Mújica & Bocourt 177.*

Jacquiniella Schlechter

Jacquiniella globosa (Jacq.) Schltr., Repert. Spec. Nov. Regni Veg. 7: 124. 1920.

Basionym: *Epidendrum globosum* Jacq., Enum. Syst. Pl. 29. 1760.

Isochilus globosus (Jacq.) Lindl., Gen. Sp. Orchid. Pl. 112. 1831.

Type: Martinique, *Jacquin s.n.* (holotype BM).

Specimens studied: HUJB!: *Urquiola et al. 6358*; HOS!: flowers in spirit: *Pérez 050.*

Jacquiniella teretifolia (Sw.) Britton & Wilson, Sci. Surv. Porto Rico & Virgin Islands 6: 340. 1926.

Basionym: *Epidendrum teretifolium* Sw., Prodr. Veg. Ind. Occ. 121. 1788.

Cymbidium teretifolium (Sw.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 72. 1799.

Isochilus teretifolius (Sw.) Lindl., Gen. Sp. Orchid. Pl. 112. 1831.

Epidendrum teretifolium var. *powellianum* Schltr., Repert. Spec. Nov. Regni Veg. 17: 41. 1922.

Briegeria teretifolia (Sw.) Senghas, Orchidee 31: 30. 1980.

Type: Jamaica: *Swartz s.n.* (BM).

Specimens studied: HAJB!: *Bisse et al. 49147;* HUCLV: *Noa & Castañeda 2856*; HOS!: *Pérez et al. 092.*

Kreodanthus Garay

Kreodanthus corniculata (Rchb.f.) Garay, Bradea 2: 198. 1977.*

Basionym: *Physurus corniculatus* Rchb.f., Flora 48: 274. 1865.

Erythrodes corniculatus (Rchb.f.) Carabia, Mem. Soc. Cub. Hist. Nat. 17: 146. 1943.

Goodyera corniculata (Rchb.f.) Ackerman, in Acevedo-Rodríguez & Strong, Catalogue of Seed Plants of the West Indies 638. 2012.

Type: Cuba: Prov. Guantánamo, Monteverde, Potosí, Mt. Toro, *C. Wright 3295* (holotype K).

Specimen studied: HAC!: *Roig et al. 13897.*

Ackerman (2014) made a new combination and placed this species in *Goodyera*. However, Gerardo Salazar (pers. comm. 2014) considers that the South American and Caribbean species of *Kreodanthus* are part of another group and it does not justify their transference to *Goodyera*.

Laelia Lindley

Laelia lyonsii (Lindl.) L.O.Williams, Darwiniana 5: 76. 1941.

Basionym: *Schomburgkia lyonsii* Lindl., Gard.

Chron. 1: 615. 1853.

Bletia lyonsii (Lindl.) Rchb.f., in W.G.Walpers, Ann. Bot. Syst. 6: 418. 1861.

Type: country of origin unknown, cultivated by J. C. Lyons of Ireland who had obtained it from Mr. Clowes (holotype K).

Schomburgkia carinata Griseb., Fl. Brit. W. I. 621. 1864.

Type: Jamaica: St. Ann, *Purdie s.n.* (holotype K-L).

Specimen studied: HAC!: *Casas de Almeida 14621.*

Lankesterella Ames

Lankesterella alainii Nir, Orchid. Antill. 170. 2000.

Type: Dominican Republic: Prov. La Vega, Loma del Campanario, La Cuolata, Constanza, *Liogier 17114* (holotype NY).

Specimen studied: HAC!: *Acuña 10010.*

Leochilus Knowles & Westcott

Leochilus labiatus (Sw.) Kuntze, Revis. Gen. Pl. 2: 656. 1891.

Basionym: *Epidendrum labiatum* Sw., Prodr. Veg. Ind. Occ. 124. 1788.

Liparis labiata (Sw.) Spreng., Syst. Veg. 3: 71. 1826.

Oncidium labiatum (Sw.) Rchb.f., in W.G.Walpers, Edward´s Bot. Reg. 28 (Misc.): 22. 1842.

Type: Haiti: *O. Swartz s.n.* (lectotype S).

Rodriguezia cochlearis Lindl., Ann. Nat. Hist. 5: 116. 1840.

Leochilus cochlearis (Lindl.) Lindl., Edward´s Bot. Reg. 28 (Misc.): 23. 1842.

Type: Dominica: *Henslow s.n.* (holotype K-L).

Oncidium salvum Rchb.f., Flora 48: 278. 1865.

Leochilus salvus (Rchb.f.) Griseb., Cat. Pl. Cub. 267. 1866.

Type: Cuba: 1860-1864, *Wright 3311* (holotype K).

Specimens studied: HAJB!: *Bisse et al. 49093*; HUCLV: *Hernández 5764*; HOS!: *Mújica et al. 186*; flowers in spirit: *Martínez 004.*

Lepanthes Swartz

Lepanthes acunae Hespenh., Brittonia 25: 263. 1973.*

Type: Cuba: Prov. Santiago de Cuba: Sierra Maestra, between Pico de Turquino and La Bayamesa, *Morton & Acuña 3675* (holotype US).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria.

Lepanthes aubryi Luer & H.P.Jesup, Selbyana 23: 4. 2002.*

Type: Cuba: Santiago de Cuba: Sierra Maestra, Pico Turquino, collected by Yves Aubry, Connecticut, *Jesup 8* (holotype MO).

Specimen studied: HAJB: *Aubry s.n.*

Lepanthes blepharantha Schltr., in I.Urban, Symb. Antill. 9: 61. 1923.*

Type: Cuba: Santiago de Cuba: Sierra Maestra, north slopes of Pico Turquino, *E. L. Ekman 5491* (holotype S).

Specimen studied: HAC!: *Acuña s/n.*

Lepanthes blepharophylla (Griseb.) Hespenh., Brittonia 25: 260. 1973.*

Basionym: *Pleurothallis blepharophylla* Griseb., Cat. Pl. Cub. 260. 1866.

Lepanthopsis blepharophylla (Griseb.) Garay, J. Arnold Arbor. 50: 464. 1969.

Type: Cuba: Guantánamo: Sierra de Toa (?), near Monte Verde, 1859, *C. Wright 1508* (holotype GOET).

Lepanthes ciliata Lindl. ex Griseb., Cat. Pl. Cub., 260. 1866, *nomen nudum*.

Specimen studied: HAC!: *Wright 1508.*

Lepanthes caluffii González & Luer, Orchids (West Palm Beach). 78: 11. 674-675. 2009.*

Type: Cuba. Prov. Santiago de Cuba, between La Mercedita and La Isabelita, La Gran Piedra, Sierra Maestra, (holotype, HOS!: *R. Pérez No.172*).

Lepanthes chrysostigma Lindl., Ann. Mag. Nat. Hist., series 3, 1: 329. 1858.*

Type: Cuba: Oriente: Sierra de Toa (?), near Monte Verde, 1859, *C. Wright s.n.* (holotype K).

Lepanthes mandibularis Rchb.f., Flora 48: 275. 1865.

Type: Cuba: Oriente: *C. Wright 1342* (holotype K).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria.

Lepanthes comadresina Luer, Lindleyana 13: 138. 1998.*

Type: Cuba: Holguín: Moa, camino a La Melba, Arroyo Las Comadres, *Luer et al. 18650* (holotype HAJB!).

Lepanthes cubensis Hespenh., Brittonia 25: 269. 1973.*

Type: Cuba: Prov. Guantánamo: Sierra de Toa (?), near Monte Verde, 1859-1860, *C. Wright 1512* (holotype PH).

Specimen studied: HAC!: *Wright 1512.*

Lepanthes cyrillicola Luer & Llamacho, Selbyana 22: 104. 2001.*

Type: Cuba: Prov. Santiago de Cuba: Sierra Maestra, Pico Turquino, *J. Llamacho 0014* (holotype HAC!).

Lepanthes decoris Luer & Llamacho, Selbyana 22: 106. 2001.*

Type: Cuba: Santiago de Cuba: Sierra Maestra, Pico de Turquino, paso de Mono, *J. Llamacho 0010A* (holotype HAC!).

Lepanthes diaziae Luer, Lindleyana 13: 138. 1998.*

Type: Cuba: Holguín: Mayarí, Sierra de Nipe, Cayo Las Mujeres, *Luer et al. 18622* (holotype HAJB!).

Lepanthes dorsalis Lindl., Ann. Mag. Nat. Hist., series 3, 1: 329. 1858.*

Type: Cuba: Santiago de Cuba: Oriente, Sierra Maestra, summit of Nemanima, 1856-57, *C. Wright 662* (holotype K).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria.

Lepanthes dressleri Hespenh., Brittonia 25: 268. 1973.*

Type: Cuba: Prov. Cienfuegos: Pico Sombrero, northeast of El Naranjo, Sierra Trinidad, *R. L. Dressler 1341* (holotype US).

Specimens studied: HOS!: *Bocourt et al. 145*; flowers in spirit: *Bocourt et al.080.*

Lepanthes ekmanii Schltr., in I.Urban, Symb. Antill. 9: 62. 1923.*

Type: Cuba: Santiago de Cuba: Sierra Maestra, Pico Turquino, *E. L. Ekman 5409* (holotype S).

Lepanthes ovata Ames & C.Schweinf., Schedul. Orchid. 8: 37. 1925.

Type: Cuba: Santiago de Cuba, Sierra Maestra, *León 10709* (NY).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria.

Lepanthes fractiflexa Ames & C.Schweinf., Schedul. Orchid. 10: 42. 1930. *

Type: Cuba: Prov. Santiago de Cuba: Sierra Maestra, Cueva del Aura, Loma Cardero, Pico Turquino, *G. C. Rucker 30* (holotype NY).

Specimen studied: HAC!: *Roig & Acuña s/n.*

Lepanthes fulva Lindl., Ann. Mag. Nat. Hist., series 3, 1: 329. 1858.*

Type: Cuba: Prov. Guantánamo: Sierra de Toa (¿), near Monte Verde, *C. Wright s.n.* (holotype K).

Lepanthes lindmaniana Schltr., in I.Urban, Symb. Antill. 9: 63. 1923.

Type: Cuba: Prov. Santiago de Cuba: Sierra Maestra, Loma del Gato, *E. L. Ekman 6965* (holotype S).

Lepanthes occidentalis Hespenh., Brittonia 25: 276. 1973.

Type: Cuba: Prov. Villa Clara, Manicaragua, *Dressler 1294* (holotype US).

Specimens studied: HAC!: *Alain 4586*; HAC!: *Alain & Figueiras 4586*.

Lepanthes grisebachiana Hespenh., Brittonia 25: 272. 1973.*

Type: Cuba: Prov. Guantánamo: Cuchillas del Toa, near Monte Verde, *C. Wright 1510* (holotype PH).

Specimens studied: We did not find any specimens in the revised Cuban herbaria.

Lepanthes llamachoi Luer, Lindleyana 13: 141. 1998.*

Type: Cuba: Holguín: camino a La Melba, Arroyo Las Comadres, *Luer et al. 18651* (holotype HAJB!).

Lepanthes melanocaulon Schltr., in I.Urban, Symb. Antill. 9: 64. 1923.

Type: Cuba: Prov. Holguín: Sierra de Nipe, Río Piloto, *E. L. Ekman 3361* (holotype S).

Specimens studied: HAC!: *Alain 1514*; *Alain 6981.*

Lepanthes nana Luer & H.P.Jesup, Selbyana 23: 17. 2002.*

Type: Cuba: Santiago de Cuba: Sierra Maestra, Pico de Santiago, *P. Jesup s.n.* (holotype MO).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria.

Lepanthes obliquiloba Hespenh., Brittonia 25: 273. 1973. *

Type: Cuba: Prov. Cienfuegos: Sierra de Trinidad, *Dressler 1333* (holotype US).

Specimens studied: We did not find any specimens in the revised Cuban herbaria.

Lepanthes palpebralis Luer, Lindleyana 13: 143. 1998.*

Type: Cuba: Holguín: Moa, camino al Toldo, La Calinga, *Luer et al. 18658* (holotype HAJB!).

Lepanthes martae Luer, Selbyana 22(2): 109. 2001.

Type: Cuba: no other collection data available, *M. A. Díaz 10* (holotype HAC).

Lepanthes pergracilis Schltr., in I.Urban, Symb. Antill. 9: 64. 1923. *****

Type: Cuba: Prov. Santiago de Cuba: Sierra Maestra, Pico Turquino, *E. L. Ekman 5490* (holotype S).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria.

Lepanthes silvae H.Dietr., Wiss. Z. Friedrich-Schiller-Univ. Jena. Math-Naturwiss. Reihe 37(1): 157. 1988.*****

Type: Cuba: Prov. Holguín, Mun. Moa; entre Revuelta de los Chinos y la base del Toldo, *Alvarez et al.* (holotype HAJB!: *56426*).

Lepanthes minima-mundana Luer, Lindleyana 13: 142. 1998.

Type: Cuba: Holguín: Moa, camino al Toldo, Alto de La Calinga, *Luer et al. 18661* (holotype HAJB!).

Lepanthes trichodactyla Lindl., Ann. Mag. Nat. Hist., series 3, 1: 329. 1858. *****

Type: Cuba: Prov. Santiago de Cuba: Sierra Maestra, summit of Nemanima, *C. Wright 661* (holotype K).

Lepanthes longicruris Schltr., in I.Urban, Symb. Antill. 9: 63. 1923.

Type: Cuba: Prov. Santiago de Cuba: Sierra Maestra, Loma del Gato, *E. L. Ekman 6964* (holotype S).

Specimen studied: HAC!: *Wright 661.*

Lepanthes turquinoensis Schltr., in I.Urban, Symb. Antill. 9: 65. 1923. *****

Type: Cuba: Prov. Santiago de Cuba: Sierra Maestra, Pico Turquino, *E. L. Ekman 5438* (holotype S).

Specimen studied: HAC!: *Acuña 15076.*

Lepanthes woodfredensis Luer, Lindleyana 13: 145. 1998.*****

Type: Cuba: Holguín: Mayarí, Sierra de Nipe, Cayo Las Mujeres, *Luer et al. 18623* (holotype HAJB!).

Lepanthes wrightii Rchb.f., Flora 48: 275. 1865.*****

Type: Cuba: 1860-1864, *C. Wright 3340* (holotype K).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria.

Lepanthopsis (Cogniaux) Ames

Lepanthopsis anthoctenium (Rchb.f.) Ames, Bot. Mus. Leafl. 1(9): 7. 1933.

Basionym: *Pleurothallis anthoctenium* Rchb.f., Linnaea 41: 94. 1876.

Type: Haiti: *Poiteau s.n.* (holotype W).

Lepanthopsis domingensis Dod, Moscosoa 1: 44. 1977.

Type: Dominican Republic: Prov. La Vega, Jarabacoa, Río Baiguate, *Dod 578* (holotype NY).

Specimens studied: HAC!: *Alain 2749* ; *Alain 7008.*

Lepanthopsis melanantha (Rchb.f.) Ames, Bot. Mus. Leafl. 1(9): 19. 1933.

Basionym: *Pleurothallis melanantha* Rchb.f., Flora 48: 275. 1865.

Type: Cuba: 1860-64, *Wright 3342* (holotype K).

Pleurothallis floripicta Lindl. ex Griseb., Pl. Wright. 1: 219. 1860, nomen nudum.

Lepanthes harrisii Fawc. & Rendle, J. Bot. 48: 5. 1909.

Type: Jamaica: Parish St. Catherine, Holly Mount, Mt. Diablo, *Harris s.n.* (holotype BM).

Lepanthes brevipetala Fawc. & Rendle, J. Bot. 48: 5. 1909.

Type: Jamaica: Parish Portland, Silver Hill Woodland, *Harris 7539* (BM).

Lepanthopsis quisqueyana Dod, Moscosoa 4: 155. 1986.

Type: Dominican Republic: Prov. Valverde, Cordillera Septentrional, Navarrete, Loma del Murazo, *Dod 1186* (holotype JBSD).

Specimens studied: HAJB!: *Ruperto 59621*; HAC!: *Alain et al. 7430*; HUJB!: *Urquiola et al. 5193*; HOS!: *Mújica 181.*

Lepanthopsis microlepanthes (Griseb.) Ames, Bot. Mus. Leafl. 1(9): 24. 1933.

Basionym: *Pleurothallis microlepanthes* Griseb., Fl. Brit. W. I. 610. 1864.

Trichosalpinx microlepanthes (Griseb.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 15: 68. 1986.

Type: Jamaica: Parish Portland, *Macfadyen et al. s.n.* (holotype K).

Lepanthes leonii C.Schweinf., in Leon, Fl. Cub. 1: 362. 1946.

Type: Cuba: Prov. Santiago de Cuba: Sierra Maestra, Loma del Gato, *León, Clement & Roca 10548* (holotype AMES).

Specimens studied: HAC!: Seen slide without data. Seen plants in flower in the Soroa Orchid Botanical Garden collected by *Pérez et al*., in March 11, 1998, in La Gran Piedra, Santiago de Cuba province.

Lepanthopsis pygmaea C.Schweinf., Amer. Orchid Soc. Bull. 14: 518. 1946.

Type: Haiti: Dept. Grand'Anse, Riviére Glace, *Curtis 52* (holotype AMES).

Specimens studied: HAJB: *Stenzel 632*; HOS!: flowers in spirit: *Mújica 126.*

Liparis L. C. Richard

Liparis elata Lindl., Bot. Reg. 14: pl. 1175. 1828.

Type: Brazil: Rio de Janiero, *Chamberlain s.n.* (holotype K-L).

Liparis elata var. *latifolia* Ridley, J. Linn. Soc., Botany 22: 260. 1886.

Type: Cuba: Prov. Guantánamo, near Monte Verde, *C. Wright 1495* (holotype K).

Liparis eggersii Rchb.f., Ber. Deutsch. Bot. Ges. 3: 278. 1885.

Type; United States Virgin Islands: St. Thomas, near Bonne Resolution, *Eggers s.n.* (holotype W).

Specimens studied: HAC!: *López* 7012; HUJB!: *Luis et al. 4158*; HOS!: *Padilla & Alejandro 031*; flowers in spirit: *Bocourt et al. 094.*

Liparis lindeniana (A. Rich. & Galeotti) Hemsl., Gard. Chron. n.s. 11: 559. 1879.

Basionym: *Malaxis lindeniana* A.Rich. & Galeotti, Ann. Sci. Nat. ser. 3,3*:* 18. 1845.

Type: "tab. 4, f. 1", probably based on Mexico, Terr. fl. blanches en fev., 1840, champs de terre chaude, Cordillera, Veracruz, *Galeotti 5138* (P).

Liparis vexillifera (Lex.) Cogn. var. *latifolia* Cogn., Fl. Bras. 3(4): 289. 1895.

Type: Argentina: Sierra de Tucumán, Cuesta del Gararatal, *P. G. Lorentz & G. Hieronymus 876* (syntype NY 290. 1895).

Liparis jamaicensis Lindl. ex Griseb., Cat. Pl. Cub. 261. 1866.

Sturmia elliptica Rchb.f., Linnaea 22: 833. 1849.

Liparis elliptica (Rchb.f.) Rchb.f., in W.G.Walpers, Ann. Bot. Syst. 6: 218. 1861, non Wight 1851.

Type: Guyana: Savanna Watu Ticaba, *Schomburgk s.n.* (lectotype K).

Liparis campestris Barb. Rodr., Gen. Sp. Orchid. 1: 36. 1877.

Type: Brazil, *Regnell s.n.* (illustration by J. Barbosa Rodrigues, Inconografie des Orchidées du Brésil 2: t. 95B, RB).

Specimen studied: HAC!: *Grupo Humboldt 945.*

This widespread species from tropical grasslands has been long confused with *L. vexillifera* (Lex.) Cogn., an entity restricted to seasonally cool and dry oak-coniferous forests in high mountains of Mexico, Guatemala, and El Salvador. Morphologically, *L. lindeniana* differs from *L. vexillifera* in the arcuate labellum, which is distinctly constricted above the middle and concave near the base (vs. an elliptic, straight labellum without a proximal concavity) (Salazar, pers. comm., 2015).

Liparis saundersiana Rchb.f., Gard. Chron. 1872: 1003. 1872.

Type: Jamaica: Collector unknown *2597* (holotype W).

Specimens studied: Reported by Ackerman (2014) for Sierra de Nipe, province of Holguín and Sierra Maestra in Santiago de Cuba province. We did not find any specimens in the revised Cuban herbaria.

Liparis viridipurpurea Griseb., Cat. Pl. Cub., 261. 1866.

Type: Cuba: Prov. Guantánamo, Mt. Toro, near Potosí, *C. Wright 1691* (holotype GOET).

Liparis harrisii Fawc. & Rendle, J. Bot. 46: 7. 1909.

Type: Jamaica: John Crow Peak, *W. Harris 9786* (NY).

Liparis adamsii Proctor, J. Arnold Arbor. 63: 212. 1982.

Type: Jamaica: Trelawny: near Crown Lands, *Proctor 34165* (holotype IJ).

Specimen studied: HAC!: *Alain 7028.*

Macradenia R. Brown

Macradenia lutescens R.Br., Bot. Reg. 8: t. 612. 1822.

Type: Trinidad: hort. *Griffith s.n*. (lectotype [Nir, 2000, p. 231], illustration, Botanical Register 8: t. 612. 1822).

Macradenia triandra Lindl., Edward´s Bot. Reg. 21: t. 1815. 1836.

Type: Surinam: *Lance s.n*. (Illustration K-L).

Rhynchadenia cubensis A.Rich., in R.de la Sagra, Hist. Fis. Cuba Bot. 11: 248, t. 85. 1850.

Type: Cuba (holotype P).

Specimens studied: HAJB!: *Bisse et al. 40258*; HOS!: *Bocourt et al. 153*; flowers in spirit: *Bocourt et al. 096.*

Malaxis Solander ex Swartz

Malaxis apiculata Dod, Moscosoa 4: 174. 1986.

Type: Dominican Republic: Río Limpio, Loma Nalga de Maco, *Dod 1053* (holotype JBSD).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria.

Reported by Ackerman (2014) for the southern side of Pico Turquino (*Seifriz 1031,* US).

Malaxis hispaniolae (Schltr.) L.O.Williams, Caldasia 5: 14. 1942.

Basionym: *Microstylis hispaniolae* Schltr., Ark. Bot. 17 (7): 19. 1921.

Type: Haiti, Morne de la Hotte, *Ekman 104* (holotype B, destroyed).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria. The Cuban record is based on *Wright 1696* specimens at MO and BR which were previously determined as *Malaxis spicata* and *M. umbelliflora*, respectively (Ackerman, 2014).

Malaxis insularis (H.Dietr. & M.Díaz) Nir, Orchid. Antill. 234. 2000.*

Basionym: *Malaxis domingensis* subsp. *insularis* H.Dietr. & M.Díaz, Feddes Repert. Spec. Nov. Regni Veg. 96: 560. 1985.

Type: Cuba: Isla de la Juventud, camino de Cayo Piedra a Punta del Este (holotype HAJB!: *Alvarez et al. 45550*).

Specimens studied: HAC!: *Acuña 19633.*

Malaxis labrosa (Rchb.f.) Acuña, Bol. Estación Exp. Agron. Santiago de las Vegas 56. 1939.*

Basionym: *Microstylis labrosa* Rchb.f., Flora 71: 151. 1888.

Type: Cuba: Potosi, *C. Wright s.n.* (holotype W).

Microstylis confusa Cogn., in I.Urban, Symb. Antill. 6: 370. 1909.

Malaxis confusa (Cogn.) C.Schweinf., Bot. Mus. Leafl. 5: 104. 1938.

Type: Cuba: Orientali, 1856-1857, *C. Wright 614* (holotype BR).

Specimens studied: HAC!: *León et al. 7036* and *Pérez et al. 35528.*

Malaxis spicata Sw., Prodr. Veg. Ind. Occ. 119. 1788.

Microstylis spicata (Sw.) Lind., Gen. Sp. Orchid. Pl. 19. 1830.

Type: Jamaica: *Swartz s.n.* (lectotype BM).

Microstylis floridana Chapm., Fl. S. U. S., ed. 1, 454. 1860.

Malaxis floridana (Chapm.) Kuntze, Revis. Gen. Pl., pt. 2, 673. 1891.

Achroanthes floridana (Chapm.) Greene, Pittonia 2: 183. 1891.

Type: Florida, *Chapman s.n.* (NY?).

Malaxis pusilla Ames & C.Schweinf., Sched. Orchid. 8: 10. 1925.

Type: Cuba: southern Oriente and Pico Turquino, Sierra Maestra, *Leon 10762* (holotype NY).

Malaxis brittonii Acuña, Bol. Estación Exp. Agron. Santiago de las Vegas 57. 1939.

Type: Cuba: Camagüey, Caobilla, Finca La Ciega, *Roig 4026* (holotype HAC?, HAJB?).

Specimens studied: HAC!: *León et al. 60438*; HUJB!: *Luis et al. 4046*; HOS!: *Mújica et al. 190*; flowers in spirit: *Mújica et al. 057.*

Malaxis umbelliflora Sw., Prodr. Veg. Ind. Occ. 119. 1788.

Basionym: *Malaxis umbellulata* Sw., Fl. Ind. Occid. 3: 1444. 1806.

Microstylis umbellulata (Sw.) Lindl., Gen. Sp. Orchid. Pl. 19. 1830.

Microstylis umbelliflora (Sw.) Hitch., Ann. Missouri Bot. Gard. 4: 132. 1893.

Type: Jamaica, *O. Swartz s.n.* (BM).

Specimens studied: HAJB!: *Bisse et al. 40599.*

Malaxis unifolia Michx., Fl. Bor. Amer. 157. 1803.

Microstylis unifolia (Michx.) Britton, Sterns & Poggenb., Prelim. Cat. 51.1888.

Type: Carolina, Swamps de la Balle, *Michxaux s.n.* (lectotype P).

Malaxis ophioglossoides Muhl. ex Willd., Sp. Pl., ed. 4, 4: 90. 1805.

Achroanthes ophioglossoides (Muhl. ex Willd.) Raf., Med. Repos., ed. 2, 5: 352. 1808.

Type: *Muller 173* (lectotype PH).

Specimens studied: HAJB!: *Dietrich et al. 50836*; HAC!: *Alain 4696.*

Maxillaria Ruiz & Pavón

Maxillaria adendrobium (Rchb.f.) Dressler, Taxon 13: 248. 1964.

Basionym: *Ponera adendrobium* Rchb.f., Flora 48: 278. 1865.

Pleuranthium adendrobium (Rchb.f.) Benth. & Hook., J. Linn. Soc., Botany 18: 312. 1881.

Neourbania adendrobium (Rchb.f.) Fawc. & Rendle, J. Bot. 47: 125. 1909.

Ornithidium adendrobium (Rchb.f.) Blanco & Ojeda, Lankesteriana 10: 532. 2007.

Type: Cuba: *Wright 1697* (holotype K).

Specimen studied: HAJB!: *Bisse et al. 52937.*

Maxillaria alba (Hook.) Lindl., Gen. Sp. Orchid. Pl. 143. 1832.

Basionym: *Dendrobium album* Hook., Exot. Fl. 2: t. 142. 1825.

Broughtonia alba (Hook.) Spreng., Syst. Veg. 3: 735. 1826.

Camaridium album (Hook.) Hoehne, Arq. Bot. Estado Sao Paulo, n. s., 2: 72. 1947.

Maxillariella alba (Hook.) M.A.Blanco & Carnevali, Lankesteriana 7: 528. 2007.

Type: Jamaica: *Wiles ex Shepherd s.n.* (holotype K).

Specimen studied: HAJB!: *Bisse et al. 49670.*

Maxillaria conferta (Griseb.) C.Schweinf. ex León, Contr. Ocas. Mus. Hist. Nat. Colegio "De La Salle" 8: 395. 1946.

Ornithidium confertum Griseb., Fl. Britt. W. I. 626. 1864, nomem illegitimum, cited by the earlier name.

Camaridium vestitum (Sw.) Lindl., Fl. Brit. W. I. 626. 1864.

Type: Cuba, *Wright 650* (lectotype USF).

Scaphyglottis parviflora Poepp. & Endl., Nov. Gen. Sp. Pl. 1: 58, t. 1836.

Maxillaria purpurea (Spreng.) Ames & Correll, Bot. Mus. Leafl. 11: 16. 1943.

Maxillaria parviflora (Poepp. & Endl.) Garay, Bot. Mus. Leafl. 21: 258. 1967.

Type: Peru: Cuchero: *Poeppig s.n.* (holotype W!), non *Camaridium parviflorum* Fawcett.

Camaridium micranthum M.A.Blanco, Lankesteriana 7: 520. 2007.

Type: Brazil: Forests of the Serra do Mar near Palmeiras (holotype Iconografia des orchidées du Bresil 6: pl. 298A).

Specimens studied: HAC!: *León 7138*; HUJB!: *Luis et al. 4060*.

Maxillaria crassifolia (Lindl.) Rchb.f., Bonplandia 2: 16. 1854.

Basionym: *Heterotaxis crassifolia* Lindl., Bot. Reg. 12: t. 1028. 1826.

Dicrypta crassifolia (Lindl.) Loudon, Suppl. Hort. Brit. Suppl. 3: 536. 1839.

Type: Jamaica, *J. Lee s.n.* (holotype K).

Epidendrum sessile Sw., Prodr. Veg. Ind. Occ. 122. 1788.

Maxillaria sessilis (Sw.) Fawc. & Rendle, Fl. Jamaica 1: 120. 1910, not *Maxillaria sessilis* Lindl., 1845.

Heterotaxis sessilis (Sw.) F.Barros, Hoehnea 29: 112. 2002.

Type: Jamaica (lectotype BM).

Specimens studied: HUJB!: *Luis et al. 4298*; HOS!: *Mújica & Elaine 212*; flowers in spirit: *Mújica & Elaine 070.*

Maxillaria grisebachiana Nir & Dod, Orchid. Antill. 243. 2000.

Camaridium grisebachianum (Nir & Dod) M.A.Blanco, Lankesteriana 7(3): 520. 2007.

Type: Haiti: Dept. Nord-Ouest, Massif du Nord, Port-de-Paix, Haut Piton, *Ekman H4609,* (holotype NY).

Specimen studied: HAJB!: *Bisse & Díaz 37130.*

Maxillaria pudica Carnevali & J.L.Tapia, Brittonia 54: 463. 2001.

Mormolyca pudica (Carnevali & J.L.Tapia) M.A.Blanco, Lankesteriana 7: 531. 2007.

Type: Jamaica: Parish Portland, Mabess River, *Harris 7615* (holotype BM).

Maxillaria rufescens var. *minor* Fawc. & Rendle, J. Bot. 48: 108. 1910.

Type: Jamaica: Parish Clarendon, Mt. Moses, J. P. (Jamaica Plants) 2009; *Syme s.n.;* Parish Portland, Mabess River, *Harris s.n.*).

Specimens studied: HAJB!: *Bisse & Dietrich 46234*; HAC!: *López Figueiras 7072*; HOS!: flowers in spirit: *Pérez & Bocourt 075.*

Maxillaria valenzuelana (A.Rich.) Nash, Bull. Torrey Bot. Club 34: 121. 1907.

Basionym: *Pleurothallis valenzuelana* A.Rich., in R.de la Sagra, Hist. Fis. Cuba Bot. 11: 234. 1850.

Marsupiaria valenzuelana (A.Rich.) Garay, Arq. Jard. Bot. Río de Janeiro 12: 183. 1952.

Heterotaxis valenzuelana (A.Rich.) Ojeda & Carnevali, Novon 15: 581. 2005.

Type: Cuba, *J. M. Valenzuela s.n.* (holotype P).

Maxillaria valenzuelana subsp. *angustata* J.T.Atwood, Ic. Plant. Trop. 1373. 1989.

Maxillaria valenzuelana var. *angustata* (J.T.Atwood) Senghas, Schltr., Orchideen ed. 3, 1/B (29): 1779. 1994.

Type: Nicaragua: Zelaya, Siuna, *F. Ortiz 612* (holotype SEL).

Specimens studied: HUJB!: *Luis et al. 4068 & 4068-A*; HOS!: *Martínez 138*; flowers in spirit: *Martínez 069.*

Mesadenus Schlechter

Mesadenus lucayanus (Britton) Schltr., Beih. Bot. Centralbl., Abt. 2, 37: 368. 1920.

Basionym: *Ibidium lucayanum* Britton, Bull. New York Bot. Gard. 5: 312. 1907.

Spiranthes lucayana (Britton) Cogn., in I.Urban, Symb. Antill. 6: 238. 1909.

Type: Bahamas: Great Exuma, near Rollstown, *Britton & Millspaugh 3077* (holotype NY).

Spiranthes stahlii Cogn., in I.Urban, Symb. Antill. 6: 341. 1910.

Mesadenus stahlii (Cogn.) Garay, Bot. Mus. Leafl. 28: 336. 1982.

Type: Puerto Rico: near Cangrejos, Santurce, *Stahl 1010* (holotype BR).

Specimens studied: HAJB!: *Leiva 55425*; HUCLV!: *Castañeda et al. 3097.*

Microchilus Presley

Microchilus familiaris Ormerod, Harvard Pap. Bot. 14: 121. 2009.

Type: Cuba, Oriente, Sierra Maestra, Río Oro, *E. L. Ekman 5103* (holotype, S).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria. Until recently this species has languished in folders of *Microchillus hirtellus*. Both species occurs in the same habitats and at times may be sympatric. Reported for Sierra Maestra, Santiago de Cuba y Macizo Sagua-Baracoa in Guantánamo province (Ackerman, 2014).

Microchilus hirtellus (Sw.) D.Dietr., Syn. Pl. 5: 166. 1852.

Basionym: *Satyrium hirtellum* Sw., Prodr. Veg. Ind. Occ. 118. 1788.

Orchis hirtella Sw., Vet. Handl. Stockh. 21: 207. 1800.

Habenaria hirtella (Sw.) Spreng., Syst. Veg. 3: 690. 1826.

Physurus hirtellus (Sw.) Lindl., Gen. Sp. Orchid. Pl. 501. 1840.

Erythrodes hirtella (Sw.) Fawc. & Rendle, Fl. Jamaica 1: 29. 1910.

Type: Jamaica, *O. Swartz s.n.* (lectotype BM).

Specimens studied: HAJB!: *Bisse et al. 52482*; HOS!: *Mújica et al. 218*; flowers in spirit: *Mújica et al. 103.*

Microchilus plantagineus (L.) D.Dietr., Syn. Pl. 5: 166. 1852.

Basionym: *Satyrium plantagineum* L., Syst. Nat., ed. 10, 2: 1244. Oct. 1759.

Orchis plantaginea (L.) Sw., Kongl. Vetensk. Acad. Handl. 21: 207. 1800.

Physurus plantagineus (L.) Lindl., Gen. Sp. Orchid. Pl. 503. 1840.

Erythrodes plantaginea (L.) Fawc. & Rendle, Fl. Jamaica 1: 28. 1910.

Type: "Orchis elatior latifolia, asphodeli radice, spica strigosa" in Sloane, *A voyage to the islands Madera, Barbados, Nieves, S. Christophers and Jamaica* 1: t. 147, f. 2. 1707 (lectotype, Cribb in Cafferty and Jarvis, 1999, p. 49).

Specimens studied: HUJB!: *Urquiola et al. 5189 & 5189-A*; HOS!: *Urquiola et al. 016*; flowers in spirit: *Pérez et al. 102.*

Nidema Britton & Millspaugh

Nidema ottonis (Rchb.f.) Britton & Millsp., Bahama Fl. 94. 1920.

Basionym: *Epidendrum ottonis* Rchb.f., Hamb. Gartenz. 14: 213. 1858.

Type: Venezuela: Caracas, *Otto 1011* (holotype W).

Nidema boothii var. *triandra* Schltr., Repert. Spec. Nov. Regni Veg. 19: 211. 1923.

Type: Panama: foothills east of city, *C. W. Powell 131* (lectotype AMES).

Nidema boothii var. *australis* Schltr., Repert. Spec. Nov. Regni Veg. 19: 221. 1923.

Type: Costa Rica: San Pedro de San Ramón, *Brenes 158* (holotype B, destroyed).

Specimens studied: HAJB!: *Bisse et al. 28822*; HUCLV!: *Sotomayor 4669*; HOS!: (not registered): *collector unknown 226*; flowers in spirit: *collector unknown 159.*

Octomeria R. Brown

Octomeria ventii H.Dietr., Fl. Rep. Cuba. Ser. A., 12(2): 17. 2007. *

Type: Cuba: Prov. Guantánamo, Monteverde, *López Figueiras 2559* (holotype HAJB!).

Oeceoclades Lindley

Oeceoclades maculata (Lindl.) Lindl., Gen. Sp. Orch. Pl. 237. 1833.

Basionym: *Angraecum maculatum* Lindl., Coll. Bot. t. 15. 1821.

Aerobium maculatum (Lindl.) Spreng., Syst. Veg. 3: 718. 1826.

Eulophidium maculatum (Lindl.) Pfitzer, Entwurf. Anordn. Orch. 88. 1887.

Type: Brazil: ex Hort. Loddiges (holotype destroyed; lectotype K).

Specimen studied: HOS!: *Mújica 165.*

Oncidium Swartz

Oncidium ensatum Lindl., Edward´s Bot. Reg. 28 (Misc.) 17. 1842.

Type: Guatemala, hort. *Loddiges s.n.* (holotype K-L).

Cyrtopodium verrucosum Griseb., Cat. Pl. Cub. 265. 1866.

Type: Cuba: 1860-1864, *Wright 3324* (holotype GOET).

Oncidium floridanum Ames, Schedul. Orchid. 7: 13. 1924.

Type: United States of America: Florida, Dade County, Black Point Creek, *A. A. Eaton 957* (holotype AMES).

Specimens studied: HAJB!: *Bisse et al. 32780-A*; HOS!: flowers in spirit: *collector unknown 012.*

Orthochilus Hochst. ex A.Richard

Orthochilus ecristatus (Fernald) Bytebier, Taxon 63: 18. 2014.

Basionym: *Cyrtopodium ecristatum* Fernald, Bot. Gaz. (Crawfordsville) 24: 433. 1887.

Cyrtopodium strictum Griseb., Cat. Pl. Cub. 266. 1866.

Triorchos ecristatus (Fernald) Small, Fl. S.E. U.S. 329. 1903.

Eulophia ecristata (Fernald) Ames, Contr. Knowl. Orch. S. Fl. 19. 1904.

Pteroglossaspis ecristata (Fernald) Rolfe, Orch. Rev.12: 136. 1904.

Type: United States of America: Florida: Duval, near Jacksonville and borders of Indian River, *A. H. Curtis 2808* (syntypes AMES).

Specimens studied: HUJB!: *Urquiola et al. 5509.*

The recent molecular phylogenetic analysis of plastid and nuclear DNA sequences by Martos *et al*. (2014), showed that, as traditionally circumscribed, *Eulophia* is paraphyletic and consists of two groups of species. One of such groups consists of *Eulophia* s.s., which includes the type species of the genus (*E. guineensis* Lindl.) and is sister to *Acrolophia* Pfitzer, with *Oeceoclades* Lindl. in turn being sister to them. The other group is sister to the whole above clade, to which the name *Orthochilus* Hochst. ex A.Rich. was applied by Martos *et al.* (2014), includes the species formerly known as *Eulophia ecristata*. Chase *et al.* (2015) considered the results of the study of Martos *et al.* (2014) inconclusive because of insufficient taxonomic sampling, and did not recognize *Orthochilus*. Nevertheless, accepting both *Acrolophia* and *Oeceoclades* as distinct genera while including the *Orthochilus* clade in *Eulophia* is inconsistent, since these two groups are not sisters of each other. Hence, we prefer to accept Martos *et al.* (2014) view, accepting *Orthochilus* and including in it the former *E. ecristata*.

Pelexia Poiteau ex Lindley

Pelexia adnata (Sw.) Spreng., Syst. Veg. 3: 704. 1826.

Basionym: *Satyrium adnatum* Sw., Prodr. Veg. Ind. Occ. 118. 1788.

Neottia adnata (Sw.) Sw., Fl. Ind. Occid. 3: 1409. 1805.

Spiranthes adnata (Sw.) León, Contr. Ocas. Mus. Hist. Nat. Colegio "La Salle" No.8, 358. 1946.

Type: Jamaica: Parish Clarendon, May Pen, *O.Swartz s.n.* (lectotype UPS).

Pelexia spiranthoides Lindl., Bot. Reg. 12: t. 985. 1826.

Type: St. Vincent 1825, *McRae s.n.* (holotype K-L).

Pelexia stenorrhynchoides Griseb., Cat. Pl. Cub. 269. 1886.

Spiranthes stenorrhynchoides (Griseb.) León, Fl. Cub. 357. 1946.

Type: Cuba: Occidentale (?), *C. Wright s.n.* (holotype unknown).

Specimens studied: HAC!: *Acuña 11159*; HOS!: *Bocourt et al. 160*; flowers in spirit: *Bocourt et al. 091.*

Pelexia maxonii Ames, Proc. Biol. Soc. Wash. 35: 85. 1922. *

Type: Cuba: Prov. Guantánamo, Yateras, southeast of Jaguey, *Maxon 4437* (holotype US).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria.

Phaius Loureiro

Phaius tancarvilleae (Banks ex L'Héritier) Blume, Mus. Bot. Lugduno-Batar., 2:177. 1852.

Basionym: *Limodorum tancarvilleae* Banks ex L'Héritier, Sert. Angl. 28. 1788.

Bletia tancarvilleae (Banks ex L'Héritier) R.Br., in W.T.Aiton, Hort. Kew., ed. 2, 5: 207. 1813.

Type: China: hort. *Tankerville s.n.* (holotype BM).

Specimens studied: HAJB!: *Bisse et al. 13560*; HOS!: *Elaine et al. 242*; flowers in spirit: *Martínez 010.*

This is an introduced species from the Pacific islands that has escaped from cultivation and has become a weed in some places in Cuba.

Phloeophila Hoehne & Schlechter

Phloeophila nummularia (Rchb.f.) Garay, Orquideología 9: 118. 1974.

Basionym: *Pleurothallis nummularia* Rchb.f., Flora 48: 276. 1866.

Specklinia nummularia (Rchb.f.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 262. 2004.

Type: Cuba: Prov. Guantánamo, near Monte Verde, *C. Wright 1513* (holotype K).

Specimen studied: HAC!: *Alain 7201.*

Phloeophila oricola (H.Stenzel) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 105: 193. 2006. *

Basionym: *Pleurothallis oricola* Stenzel, Willdenowia 32: 99. 2002.

Type: Cuba: Pinar del Río: Guanahacabibes Peninsula, near María La Gorda, *Urquiola et al. s.n.* (holotype HAJB).

Specimen studied: HOS!: *Mújica et al 162.*

Platanthera L. C. Richard

Platanthera replicata (A.Rich.) Ackerman, Lindleyana 12: 151. 1997. *

Basionym: *Habenaria replicata* A.Rich., in R.de la Sagra, Hist. Fis. Cuba, Bot. 11: 250, t. 86. 1850.

Type: Cuba: *Sagra s.n*. (holotype P).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria. A population of this species has been seen in flower by the authors in San Ubaldo, near Cortés, municipality of Guane, Pinar del Río province.

Platystele Schlechter

Platystele hyalina H.Stenzel, Willdenovia 32: 103. 2002. *

Type: Cuba: Prov. Holguín, Sierra de Moa, El Toldo, *H. Stenzel 569* (holotype HAJB!).

Platystele ovalifolia (H.Focke) Garay & Dunst., Venez. Orchids III. 2: 268. 1961.

Basionym: *Stelis ovalifolia* H.Focke, Tijdschr. Natuurk. Wetensch. Kunsten 2: 202, 1849.

Pleurothallis ovalifolia (H.Focke) Rchb.f., in W.G.Walpers, Ann. Bot. Syst. 6: 188. 1861.

Type: Guyana: Aruka, *E. F. Im Thurn 36* (K).

Pleurothallis rhomboglossa Rchb.f., Flora 48: 276. 1865.

Type: Cuba: Prov. Guantánamo, near Monte Verde, *Wright 1506* (holotype K).

Specimen studied: HAJB!: *Alain & Figueiras 7316.*

Platythelys Garay

Platythelys querceticola (Lindl.) Garay, Bradea 2: 197. 1977.

Basionym: *Physurus querceticola* Lindl., Gen. Sp. Orchid. Pl. 505. 1840.

Goodyera querceticola Chapm., Fl. S.E. U.S. 463. 1860.

Erythrodes querceticola (Lindl.) Ames, Orchidaceae 5: 29. 1915.

Type: United States of America: Louisiana, near New Orleans, *Ingalls s.n.* (holotype K-L).

Physurus sagraeanus A.Rich., in R.de la Sagra, Hist. Fis. Cuba, Bot. 11: 253, pl. 88. 1850.

Erythrodes sagraeana (A.Rich.) Ames, Orchidaceae fasc. 5: 29. 1915.

Platythelys sagraeana (A.Rich.) Garay, Bradea 2: 197. 1977.

Type: Cuba: *Sagra s.n.* (holotype P).

Specimens studied: HUJB!: *Luis et al. 3050 & 3050-A*; HOS!: *Mújica et al. 184*; flowers in spirit: *Pérez et al. 098.*

The genus *Platythelys* Garay was synonymized with *Aspidogyne* Garay by Meneguzzo (2012), who argued that the distinguishing characters used by Garay (1978) to separate the genera are inconsistent, and such approach was followed also by Ormerod (2013) and Chase *et al*. (2015). Nevertheless, ongoing molecular phylogenetic studies of New World Goodyerinae (G. A. Salazar *et al*., unpubl. manuscript) indicates that relationships in this group are more complex than casual floral comparisons suggests and taxonomic changes should wait until a clear phylogenetic context is available. Hence, we prefer to be conservative and maintain *Platythelys*.

Pleurothallis R. Brown

Pleurothallis appendiculata Cogn., in I.Urban, Symb. Antill. 7: 174. 1912.

Antilla appendiculata (Cogn.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 255. 2004.

Type: Dominican Republic: Prov. La Vega: shady forest near Constanza, *H. von Türckheim 3233* (holotype BR).

Specimen studied: HAJB!: *Alvarez et al. 63698.*

Pleurothallis caymanensis C.D.Adams, Orquideología 6: 146. 1971.

Proctoria caymanensis (C.D.Adams) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 258. 2004.

Type: Cayman Islands: Grand Cayman, southeast of Old Man Village, *G .R. Proctor 27983* (holotype IJ).

Specimens studied: HUJB!: *Urquiola et al. s.n.*; HOS!: *Pérez et al. 017*; flowers in spirit: *Pérez et al. 066.*

Pleurothallis denticulata Cogn., in I.Urban, Symb. Antill. 6: 425. 1909.

Specklinia denticulata (Cogn.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 260. 2004.

Type: Cuba: Prov. Guantánamo, near Monte Verde, peak of Loma del Gato, *C. Wright 657* (holotype BR 843468).

Pleurothallis parvula Ames & C.Schweinf., Schedul. Orchid. 8: 30. 1925.

Antilla parvula (Ames & C.Schweinf.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 255. 2004.

Type: Cuba: Santiago de Cuba: Sierra Maestra, Pico Turquino, Alta Maestra, *Bro. Leon 10790* (holotype NY 59805).

Specimens studied: HAJB!: *Dietrich et al. 63434*; HAC!: *Acuña 21107*; HOS!: flowers in spirit: *Pérez & Bocourt 039.*

Pleurothallis ekmanii Schltr., in I.Urban, Symb. Antill. 9: 61. 1923. *****

Atopoglossum ekmanii (Schltr.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 255. 2004.

Type: Holguín: Sierra de Cristal, *E. L. Ekman 6831* (holotype S).

Pleurothallis bovilabia C.Schweinf., Amer. Orchid Soc. Bull. 15: 235. 1946.

Type: Cuba: Holguín, Moa, Monte de la Breña, *Léon et al. 22586* (holotype AMES).

Specimens studied: HAJB!: *Alvarez et al. 56273*; HAC!: *Clement 7183.*

Pleurothallis excentrica (Luer) Luer, Revista Soc. Boliv. Bot. 3: 50. 2001. *****

Basionym: *Octomeria excentrica* Luer, Lindleyana 14: 106. 1999.

Atopoglossum excentricum (Luer) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 255. 2004.

Type: Cuba: Holguín**,** Moa, Río Cayoguan, *Alain et al. 896* (holotype AMES).

Specimen studied: HAJB!: *Genes et al. 58495.*

Pleurothallis prostrata Lindl., Ann. Mag. Nat. Hist., ser. 3, 1: 327. 1858. *****

Humboltia prostrata (Lindl.) Kuntze, Revis. Gen. Pl. 2: 668. 1891.

Octomeria prostrata H.Stenzel, Lindleyana 16: 26. 2001.

Antilla prostrata (Lindl.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 255. 2004.

Atopoglossum prostratum (H.Stenzel) Luer**,** Monogr. Syst. Bot. Missouri Bot. Gard. 95: 255. 2004.

Type: Cuba: Holguín, Sierra de Cristal, Pico Cristal, Río Levisa, *Stenzel 516* (holotype HAJB!).

Pleurothallis pruinosa Lindl., Edward´s Bot. Reg. 28 (Misc.): 75. 1842.

Humboltia pruinosa (Lindl.) Kuntze, Revis. Gen. Pl. 668. 1891.

Type: Surinam: *F. L. Splitgerber 527* (holotype K-L),

Stelis flavida H.Focke, Tijdschr. Natuurk. Wetensch. Kunsten 2: 202. 1849.

Pleurothallis flavida (H.Focke) Lindl., Fol. Orchid., 9: 44. 1859.

Type: Surinam, *H. C. Focke 55* (holotype W).

Pleurothallis brachyglottis Rchb.f., Flora 48: 275. 1865.

Type: Cuba: Oriente, *C. Wright 3344* (holotype K).

Specimens studied: HAJB!: *Bisse et al. 37122*; HAC!: *Alain et al. 5470*; HOS!: *collector unknown 060*; flowers in spirit: *collector unknown 078.*

Pleurothallis quadrifida (Lex.) Lindl., Edward´s Bot. Reg. 28 (Misc.): 70. 1842.

Basionym: *Dendrobium quadrifidum* Lex., in P.de la Llave & J.M. de Lexarza, Nov. Veg. Descr. 2 (Orchid. Opusc.) 40. 1825.

Humboltia quadrifida (Lex.) Kuntze, Revis. Gen. Pl. 2: 668. 1891.

Stelis quadrifida (Lex.) Solano & Soto Arenas, Icon. Orchid. 5-6: 11. 2003.

Specklinia quadrifida (Lex.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 263. 2004.

Loddigesia quadrifida (Lex.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 105: 251. 2006.

Type: Mexico, *La Llave & Lexarza s.n.* (holotype G).

Pleurothallis racemiflora Lindl. ex Lodd., Bot. Cab. 10: t. 949. 1825, non *P. racemiflora* (Sw.) Lindl. ex Hook., 1824.

Stelis racemiflora Lodd. ex W.H.Baxter, in J.C.Loudon, Hort. Britton, Suppl. 3: 643. 1850.

Type: Jamaica: *Loddiges s.n.* (holotype K).

Specimen studied: HAC!: *Morton & Acuña 12328.*

Pleurothallis ruscifolia (Jacq.) R.Br., in W.T.Aiton, Hortus Kew. 5: 211. 1813.

Basionym: *Epidendrum ruscifolium* Jacq., Enum. Syst. Pl. 29. 1760.

Dendrobium ruscifolium (Jacq.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 84. 1799.

Humboltia ruscifolia (Jacq.) Kuntze, Revis. Gen. Pl. 668. 1891.

Type: Martinique: *Plumier s.n.* (lectotype Plumier, Plantarum Americanarum pl. 176, f. 2. 1758).

Specimens studied: HAJB!: *Bisse et al. 52185*; HAC!: *Morton & Acuña 12327.*

Pleurothallis trichophora Lindl., Ann. Mag. Nat. Hist., ser. 3, 1: 326. 1858. *****

Antilla trichophora (Lindl.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 255. 2004.

Type: Cuba: Oriente, 1856-57, Loma del Gato, *C. Wright 659* (holotype K-L).

Specimens studied: HAJB!: *Arias et al. 63208*; HAC!: *Clemente 7251.*

Polystachya Hooker

Polystachya concreta (Jacq.) Garay & H.R.Sweet, Orquideologia 9. 206. 1974.

Basionym: *Epidendrum concretum* Jacq., Enum. Syst. Pl. 30. 1760.

Type: Martinique, *Jacquin s.n.* (holotype W).

Epidendrum minutum Aubl., Hist. Pl. Guiane 2: 824. 1775.

Polystachya minuta (Aubl.) Britton, in J.Small, Fl. S.E. U.S. 328. 1903.

Type: Martinique, *Plumier s.n.* (holotype original illustration at P).

Polystachya cubensis Schltr., in I.Urban, Symb. Antill. 9: 59. 1923.

Type: Cuba: Prov. Holguín, Sierra de Nipe, Camino Real, *Ekman 9987* (holotype B, destroyed).

Specimens studied: HUJB!: *Urquiola et al. 1149*; HUCLV!: *Noa & Sotomayor 2458*; HOS!: *Félix 131*; flowers in spirit: *Félix 056.*

Polystachya foliosa (Hook.) Rchb.f., in W.G.Walpers, Ann. Bot. Syst. 6: 640. 1863.

Basionym: *Stelis foliosa* Hook., Ann. Mag. Nat. Hist. 2: 330. 1839.

Dendrorchis foliosa (Hook.) Kuntze, Revis. Gen. Pl. 2: 658. 1891.

Type: Guyana, *C. S. Parker s.n.* (holotype cited for K, by Garay & H.R.Sweet (1974)).

Polystachya cerea Lindl., Edward´s Bot. Reg. 26 (Misc.): 86, no. 208. 1840.

Type: Mexico: Oaxaca, flowered in cultivation, *Loddiges s.n.* (holotype K-L).

Polystachya minor Fawc. & Rendle, J. Bot. 48: 106. 1910.

Type: Jamaica: Parish Manchester, Lancaster, *Harris 7777* (holotype BM).

Polystachya foliosa var. *triandra* Sauleda & R.M.Adams, Brittonia 31: 294. 1979.

Type: Bahama Islands: Andros, Owens Town, *Sauleda et al. 2105* (holotype NY).

Specimen studied: HAJB!: *Alvarez et al. 54974.*

A plant initially discovered by R. Pérez in 2002 in Topes de Collantes, Scanti Spíritus province, might represent an undescribed species of *Polystachya*. Flowers in spirit are conserved in the Soroa Orchid Botanical Garden Herbarium. It is vegatively similar to *P. concreta* but the flowers are easily distinguished by the yellowish-red color and the smaller size.

Ponthieva R. Brown

Ponthieva brittoniae Ames, Torreya 10: 90. 1910.

Type: Bahamas: New Providence, Maidenhead Coppice, *E. G. Britton 3297* (holotype NY).

Ponthieva ekmanii Mansf., Ark. Bot. 22A (17): 10. 1929.

Ponthieva racemosa var. *brittoniae* (Ames) Luer, Native Orchids Florida 82. 1972.

Type: Haiti: Tortue Island, above Source Dupuy, *Ekman H 9730* (holotype B, destroyed).

Ponthieva parvula Ames & C.Schweinf., Bot. Mus. Lafl. 4: 39-40. 1936.

Type: Mexico, Yucatán, Tuxpeña, *C.L. Lundell 1213* (MICH).

Ponthieva poitaei Rchb.f. ex Nir, Orchid. Antill. 312. 2000.

Type: "Santo Domingo" (Haiti): *Poiteau s.n.* (holotype W).

Specimen studied: HAC!: *Acuña 15080.*

Ponthieva diptera Lindl. & Rchb.f., Bonplandia 2: 278. 1854.

Type: Colombia: Santa María, *Schlim 987* (holotype W).

Ponthieva dicliptera Rchb.f., Flora 69: 548. 1886.

Type: Colombia: *Lehmann 1860* (holotype W).

Ponthieva harrisii Cogn., Repert. Spec. Nov. Regni Veg. 6: 304. 1909.

Type: Jamaica: Parish Portland, Mabess, *Harris 7883* (holotype BR).

Ponthieva elata Schltr., Spec. Nov. Regni Veg. Beih. 7: 63. 1920.

Type: Colombia: Cauca, *Madero 169* (holotype B).

Specimens studied: HAC!: *León 11002.*

Ponthieva pauciflora (Sw.) Fawc. & Rendle, Fl. Jamaica 1: 38. 1910.

Basionym: *Cranichis pauciflora* Sw., Fl. Ind. Occid. 3: 1434. 1806.

Type: Jamaica: *O. Swartz s.n.* (type ?).

Ponthieva haitiensis Mansf., Ark. Bot. 20A (15): 14. 1926.

Type: Haiti: Dept. Ouest, Morne Tranchant, *Ekman H1181* (holotype S).

Specimen studied: HAC!: *Acuña 20017.*

Ponthieva racemosa (Walter) C.Mohr, Contr. U.S. Natl. Herb. 6: 460. 1901.

Basionym: *Arethusa racemosa* Walter, Fl. Carol. 222. 1788.

Type: *T. Walter s.n.,* United States of America: Carolina (photo at BM).

Neottia glandulosa Sims, Bot. Mag. 22: t. 842. 1804.

Ponthieva glandulosa (Sims) R.Br., in W.T.Aiton, Hortus Kew., ed. 2, 5: 200. 1813.

Type: United States of America: Virginia, *Clayton 318* (holotype BM).

Ponthieva lancifolia A.Rich., in R.de la Sagra, Hist. Fis. Cuba, Bot. 11: 251. 1850.

Type: Cuba: *Sagra s.n.* (holotype P).

Specimens studied: HUJB!: *Ferro et al. 4324*; HUCLV!: *Noa et al. 782.*

Ponthieva ventricosa (Griseb.) Fawc. & Rendle, Fl. Jamaica 1: 39. 1910.

Basionym: *Cranichis ventricosa* Griseb., Fl. Brit. W. I. 639. 1864.

Type: Jamaica: *Wilson s.n.* (holotype K).

Specimens studied: HAC!: *León 7321*; HOS!: *Pérez et al. 168*; flowers in spirit: *Pérez et al. 097.*

Prescottia Lindley ex Hooker

Prescottia oligantha (Sw.) Lindl., Gen. Sp. Orchid. Pl. 454. 1840.

Basionym: *Cranichis oligantha* Sw., Prodr. Veg. Ind. Occ. 120. 1788.

Cranichis micrantha Spreng., Syst. Veg., ed. 16, 3: 700. 1826.

Type: Jamaica: Mont. Caerul. Blue Mountains, *O. Swartz s.n.* (lectotype BM).

Specimens studied: HAC!: *Acuña 27138*; HOS!: *Pérez et al. 090*.

Prescottia stachyodes (Sw.) Lindl., Edward´s Bot. Reg. 22: sub t. 1915.

Basionym: *Cranichis stachyodes* Sw., Prodr. Veg. Ind. Occ. 120. 1788.

Type: Jamaica: Blue Mountains, *O. Swartz s.n.* (lectotype BM).

Prescottia pellucida Lindl., Ann. Mag. Nat. Hist., ser. III, 1: 335. 1858.

Type: Cuba: Prov. Santiago de Cuba, Loma del Gato, *C. Wright s.n.* (holotype K-L).

Specimens studied: HAJB!: *Bisse 1562*; HUCLV!: *Noa et al. 1443*; HOS!: *Elaine et al. 244*; flowers in spirit: *Pérez et al. 100.*

Prosthechea Knowles & Westcott

Prosthechea boothiana (Lindl.) W.E.Higgins, Phytologia 82: 376. 1997 [1998].

Basionym: *Epidendrum boothianum* Lindl., Edward´s Bot. Reg. 24: (Misc.) 5. 1838.

Epicladium boothianum (Lindl.) Small, Fl. Miami 56. 1913.

Hormidium boothianum (Lindl.) Brieger, Publ. Ci. Inst. Genét. Esc. Super. Agric. Luis de Queiroz 1: 21. 1960.

Encyclia boothiana (Lindl.) Dressler, Brittonia 13: 264. 1961.

Type: Cuba: "Havannah," 1835, *Sutton s.n.* (holotype K-L).

Encyclia bidentata (Lindl.) Hágsater & Soto Arenas, Orquídea (México) 13: 215. 1993.

Type: Mexico: *Pav. s.n.,* México Herb. Pav., but likely collected in Cuba by Sessé & Mociño (Hágsater, 1993; holotype BM).

Epicladium boothianum var. *erythronioides* (Small) Acuña, Bol. Estación Exp. Agron. Santiago de las Vegas 60: 89. 1939.

Prosthechea boothiana var. *erythronioides* (Small) W.E.Higgins, North Amer. Nat. Orchid Jour. 5: 18. 1999.

Type: United States of America: Florida, Key Largo, *A. H. Curtiss s.n.* (holotype NY).

Specimens studied: HUJB!: *Ferro et al. 4306*; HOS!: *Bocourt et al. 127*; flowers in spirit: *Bocourt et al. 051.*

Prosthechea cochleata (L.) W.E.Higgins, Phytologia 82: 377. 1997 [1998].

Basionym: *Epidendrum cochleatum* L., Sp. Pl. ed. 2: 1351. 1763.

Anacheilium cochleatum (L.) Hoffmans, Linnaea 16(Litt.): 229. 1842.

Encyclia cochleata (L.) Dressler, Brittonia 13: 264. 1961.

Type: Haiti: *Plumier s.n.* (Lectotype, Garay & Sweet, 1974, p. 130, original illustration at P).

Epidendrum triandrum (Ames) House, Muhlenbergia 1: 129. 1906.

Prosthechea cochleata var. *triandra* (Ames) W.E.Higgins, North Amer. Nat. Orchid Jour. 4: 52. 1998.

Type: United States of America: Florida, Ft. Lauderdale (lectotype Nir, 2000, p. 407).

Specimens studied: HAC!: *Baker* 4638; HUJB!: *Ferro et al. 1742*; HOS!: *Agapito et al. 006*; flowers in spirit: *Pérez 068.*

Prosthechea fragrans (Sw.) W.E.Higgins, Phytologia 82: 377. 1997 [1998].

Basionym: *Epidendrum fragrans* Sw., Prodr. Veg. Ind. Occ. 123. 1788.

Anacheilium fragrans (Sw.) Acuña, Bol. Estación Exp. Agron. Santiago de las Vegas 60: 86. 1939.

Encyclia fragrans (Sw.) Dressler, Brittonia 13: 264. 1961.

Hormidium fragrans (Sw.) Brieger, Publ. Ci. Inst. Genét. Esc. Super. Agric. Luis de Queiroz 2: 69. 1961.

Type: Jamaica: *O. Swartz s.n.* (BM).

Specimens studied: HAJB!: *Bisse et al. 22448*; HOS!: flowers in spirit: *Pérez & Bocourt 046.*

Prosthechea fuertesii (Cogn.) E.A.Christenson, Richardiana 8: 29. 2007.

Basionym: *Epidendrum fuertesii* Cogn., in I.Urban, Symb. Antill. 7: 180. 1912.

Type: Dominican Republic: Prov. Barahona, *M. Fuertes 675* (holotype BR).

Specimens studied: HAC!: *Acuña et al. 19627*; HOS!: *Pérez & Bocourt 161*; flowers in spirit: *Pérez & Bocourt 092*.

Prosthechea fuertesii is the Caribbean representative of the broadly distributed *P. vespa* complex. The Caribbean populations differ consistently from those of the continent primarily by the color of their flowers. The sepals and petals in the Caribbean plants lack the numerous reddish brown spots that are typical of the complex elsewhere and they may also differ vegetatively (Ackerman, 2014).

Prosthechea pygmaea (Hook.) W.E.Higgins, Phytologia 82: 380. 1997 [1998].

Basionym: *Epidendrum pygmaeum* Hook., J. Bot. 1: 49, t. 118. 1833.

Hormidium pygmaeum (Hook.) Benth. & Hook.f. ex Hemsl., Biol. Cent.-Amer. Bot. 3: 218. 1883.

Encyclia pygmaea (Hook.) Dressler, Brittonia 13: 265. 1961.

Type: Brazil: Hort. *Harrison*, (holotype K-L).

Coelogyne triptera Brongn., in L.I.Duperrey, Voy. Monde 201. 1834.

Hormidium tripterum (Brongn.) Cogn., in Martius, Fl. Bras. 3(5): 29. 1898.

Encyclia triptera (Brongn.) Dressler & G.E. Pollard, Phytologia 21: 438. 1971.

Type: Brazil: Île Sainte-Catherine, *J. S. C. Dumont D'urville s.n*. (holotype P).

Specimens studied: HUJB!: *Urquiola et al. 5912*; HOS!: *Mújica 148*; flowers in spirit: *collector unknown 160.*

Pseudogoodyera Schlechter

Pseudogoodyera wrightii (Rchb.f.) Schltr., Beih. Bot. Centralbl., Abt. 2, 37(2): 370. 1920. *****

Basionym: *Goodyera wrightii* Rchb.f., Flora 27: 274. 1865.

Goodyera erythrosticta Griseb., Cat. Pl. Cub. 268. 1866.

Spiranthes wrightii (Rchb.f.) Schltr., in I.Urban, Symb. Antill. 7: 492. 1912.

Type: Cuba: 1860-1864, *Wright 3297* (holotype W).

Specimen studied: HAC!: *Alain et al. 4720.*

Recently the authors were able to make perhaps the first color picture of this species with clearly open flowers, the opposite to what happens with the species in Mexico and Belize. It may be that Cuban and Central American populations belong to different species (G. Salazar, pers. comm. 2013).

Psilochilus Barbosa Rodrigues

Psilochilus macrophyllus (Lindl.) Ames, Orchidaceae 7: 45. 1922.

Basionym: *Pogonia macrophylla* Lindl., Ann. Mag. Nat. Hist., ser. 3, 1: 335. 1858.

Type: Cuba: *C. Wright 615* (holotype K-L).

Specimen studied: HAJB!: *Alvarez et al. 57189.*

Sacoila Rafinesque

Sacoila lanceolata (Aubl.) Garay, Bot. Mus. Leafl. 28: 352. 1982.

Basionym: *Limodorum lanceolatum* Aubl., Hist. Plant. Guian. Franc. 2: 821. 1775.

Stenorrhynchos lanceolatum (Aubl.) Richard ex Spreng., Syst. Veg. 3: 710. 1826.

Spiranthes lanceolata (Aubl.) León, Fl. Cub. 1: 358. 1946.

Type: *Plumier s.n.* (holotype, the original illustration P).

Satyrium orchioides Sw., Prodr. Veg. Ind. Occ. 118. 1788.

Neottia orchidoides (Sw.) Willd., Spec. Pl. 4: 73. 1805.

Stenorrhynchos orchioides (Sw.) Lindl., Gen. Sp. Orchid. Pl. 477. 1840.

Spiranthes orchioides (Sw.) A.Rich., in R.de la Sagra, Hist. Fis. Cuba Bot. 11: 252. 1850.

Gyrostachys orchioides (Sw.) Kuntze, Revis. Gen. Pl.2: 664. 1891.

Type: Jamaica: *Swartz s.n.* (lectotype UPS, as "Type", Garay & Sweet, 1974, p.75).

Specimens studied: HAJB!: *Bisse et al. 53677*; HOS!: *Elaine et al. 245.*

Scaphyglottis Poeppig & Endlicher

Scaphyglottis modesta (Rchb.f.) Schltr., Repert. Spec. Nov. Regni Veg. 23: 46. 1926.

Basionym: *Tetragamestus modestus* Rchb.f., Bonplandia 2: 21. 1854.

Ponera modesta (Rchb.f.) Rchb.f., Linnaea 41: 85. 1876.

Type: Tropical America, *Joss s.n.* (holotype W).

Ponera striolata Rchb.f., Linnaea 41: 39. 1876.

Scaphyglottis striolata (Rchb.f.) Correll, Bot. Mus. Leafl. 9: 148. 1941.

Type: Tropical America, *von Hüttner* (holotype W).

Specimen studied: HAJB!: *Bassler et al. 60741.*

Scaphyglottis reflexa Lindl., Edward´s Bot. Reg. 25 (Misc.): 20. 1839.

Reichenbachanthus reflexus (Lindl.) Porto & Brade, Rodriguesia 1(2): 55. 1935.

Hexisea reflexa Rchb.f. ex Griseb., Fl. Brit. W. I. 623.1864.

Type: Guyana: "Obtained by Messrs. Loddiges from Demerara" *Loddiges s.n.* (K-L).

Reichenbachanthus emarginatus Garay, Bot. Mus. Leafl. 21: 255. 1967.

Type: Surinam: Mariepaston, *Kegel 1422* (W).

Specimen studied: HAC!: *Alain 7345.*

Schiedeella Schlechter

Schiedeella amesiana Garay, Bot. Mus. Leafl. 28: 357. 1982; (avowed substitute for *Spiranthes wrightii* Ames, Orchidaceae 7: 131. 1922, non *Spiranthes wrightii* (Rchb.f.) Schltr., 1913).

Type: Cuba: Prov. Guantánamo, Monte Verde, *Wright 1480* (holotype AMES).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria.

Spathoglottis Blume

Spathoglottis plicata Blume, Bijdr. Fl. Ned. Ind. 401. 1825.

Type: Java: *Blume s.n.* (holotype L).

Bletia angustifolia Gaudich., Voy. Uranie 421. 1829.

Spathoglottis angustifolia (Gaudich.) Benth. & Hook.f., Gen. Pl. 3: 512. 1883.

Type: Moluccas: *Freycinet s.n.* (holotype P).

Specimen studied: HOS!: flowers in spirit: *Padilla 002*.

Introduced in Cuba from Asia as an ornamental plant and naturalized in the island.

Specklinia Lindley

Specklinia aristata (Hook.) Pridgeon & M.W.Chase, Lindleyana 16: 256. 2001.

Basionym: *Pleurothallis aristata* Hook., Ann. Mag. Nat. Hist., ser. 1(2): 329. 1839.

Humboltia aristata (Hook.) Kuntze, Revis. Gen. Pl. 2: 667. 1891.

Muscarella aristata (Hook.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 105: 96. 2006.

Type: Guyana: near Demarara, introduced and flowered by *Parker s.n.* (lectotype [Stenzel, 2007, p.111], Annals and Magazine of Naural History, ser. 2, 11: t. 15. 1839).

Pleurothallis barberiana Rchb.f., Gard. Chron. 2: 6. 1881.

Humboltia barberiana (Rchb.f.) Kuntze, Revis. Gen. Pl. 2: 667, 1891.

Type: *J. Barber s.n.* (holotype W).

Pleurothallis urbaniana Rchb.f., Ber. Deutsch. Bot. Ges. 3: 297. 1885.

Type: Puerto Rico: near Maricao, Indiera Fria, 3 Dec 1884, *P. Sintenis 503* (holotype W).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria. Reported by Ackerman (2014) from Sierra Maestra, Santiago de Cuba province.

Specklinia brighamii (S.Watson) Pridgeon & M.W.Chase, Lindleyana 16: 256. 2001.

Basionym: *Pleurothallis brighamii* S.Watson, Proc. Amer. Acad. Arts 23: 285. 1888.

Sarcinula brighamii (S.Watson) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 105: 206. 2006.

Type: Guatemala: Alta Verapaz, forests of Chocón, *S. Watson s.n.* (holotype AMES #72461).

Specimen studied: HAJB!: *Arias et al. 58740.*

Specklinia corniculata (Sw.) Steud., Nomencl. Bot., ed. 2, 2: 431. 1841.

Basionym: *Epidendrum corniculatum* Sw., Prodr. Veg. Ind. Occ. 123. 1788.

Dendrobium corniculatum (Sw.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 83. 1799.

Cymbidium corniculatum (Sw.) Spreng., Syst. Veg. 3: 722. 1826.

Pleurothallis corniculata (Sw.) Lindl., Edward´s Bot. Reg. 28 (Misc.): 83. 1842.

Humboltia corniculata (Sw.) Kuntze, Revis. Gen. Pl. 2: 667. 1891.

Sarcinula corniculata (Sw.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 105: 209. 2006.

Type: Jamaica: *O. Swartz s.n.* (lectotype BM).

Pleurothallis nubigena Lindl., Ann. Mag. Nat. Hist. ser. 3, 1: 326. 1858, as *rubigena.*

Type: Cuba orientali, *C. Wright 657* (holotype K-L).

Specklinia pyrsodes (Rchb.f.) Pridgeon & M.W.Chase, Lindleyana 16: 259. 2001.

Type: *Mr. William Saunders s.n.* (holotype W).

SPECIMENS STUDIED: HUJB!: *Luis et al. 3564*; HOS!: *Bocourt et al. 154.*

Specklinia grisebachiana (Cogn.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 260. 2004.

BASIONYM: *Pleurothallis grisebachiana* Cogn., in I.Urban, Symb. Antill. 6: 409. 1909.

Type: Cuba: Prov. Guantánamo, San André near Monte Verde, *C. Wright 1503* (holotype GOET).

Pleurothallis blepharoglossa Luer, Lindleyana 14: 111. 1999.

Specklinia blepharoglossa (Luer) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 259. 2004.

Type: Cuba: Prov. Holguín, Moa, camino a La Melba, Arroyo Las Comadres, *C. Luer et al. 18654* (holotype HAJB).

SPECIMENS STUDIED: HAJB!: *Bisse et al. 53193*; HAC!: *Alain et al. 4674A*; HUJB!: *Urquiola et al. 5469.*

Specklinia helenae (Fawc. & Rendle) Pridgeon & M.W.Chase, Lindleyana 16: 258. 2001.

BASIONYM: *Pleurothallis helenae* Fawc. & Rendle, J. Bot. 47: 4. 1909.

Muscarella helenae (Fawc. & Rendle) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 105: 105. 2006.

Type: Jamaica: Parish Portland, Mabess River, *W. Harris s.n.* (holotype BM).

SPECIMENS STUDIED: HAJB!: *Dietrich 63418*; HAC!: *León et al. 7186.*

Specklinia lichenicola (Griseb.) Pridgeon & M.W.Chase, Lindleyana 16: 258. 2001. *

BASIONYM: *Pleurothallis lichenicola* Griseb., Cat. Pl. Cub. 259. 1866.

Type: Cuba: Prov. Guantánamo, near Monte Verde, *C. Wright 1507* (holotype W).

Pleurothallis gemina H.Stenzel, Lindleyana 16: 28.2001.

Type: Cuba: Holguín, Sierra de Nipe, Loma Mensura, *Stenzel & Matos 452* (HAJB!).

SPECIMENS STUDIED: HAJB!: *Bisse et al. 18631*; HAC!: *Alain et al. 7189.*

Specklinia llamachoi (Luer) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 261. 2004. *

BASIONYM: *Pleurothallis llamachoi* Luer, Lindleyana 13: 146. 1998.

Muscarella llamachoi (Luer) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 105: 109. 2006.

Type: Cuba: Holguín, Mayarí, Sierra de Nipe, *C. Luer et al. 18631* (holotype HAJB!).

SPECIMENS STUDIED: HAJB!: *Bisse et al. 52964*; HAC!: *Alain et al. 7867.*

Specklinia longilabris (Lindl.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 261. 2004. *

BASIONYM: *Pleurothallis longilabris* Lindl., Ann. Mag. Nat. Hist., ser. 3, 1: 328. 1858.

Muscarella longilabris (Lindl.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 105: 110. 2006.

Type: Cuba: Oriente, *C. Wright 651 in part* (K-L).

SPECIMENS STUDIED: HAJB!: *Bisse et al. 53396*; HAC!: *Alain et al. 5463.*

Specklinia mucronata (Lindl. ex Cogn.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 262. 2004.*

BASIONYM: *Pleurothallis mucronata* Lindl. ex Griseb., in I.Urban, Symb. Antill. 6: 424.1909.

Type: Cuba: Prov. Guantánamo, near Monte Verde, *C. Wright 1504* (BR).

SPECIMENS STUDIED: HAJB!: *Alvarez et al. 57350-A*; HAC!: *Alain et al. 7195.*

Specklinia obliquipetala (Acuña & C.Schweinf.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 262. 2004. *

BASIONYM: *Pleurothallis obliquipetala* Acuña & C.Schweinf., Bot. Mus. Leafl. 6: 3 1938.

Trichosalpinx acunae (Acuña & C.Schweinf.) Luer, Phytologia 54: 394. 1983.

Type: Cuba: Prov. Santiago de Cuba, Pico Turquino, *Acuña 9540* (holotype AMES).

SPECIMEN STUDIED: HAC!: *Acuña 10567.*

Specklinia schaferi (Ames) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 263. 2004.

BASIONYM: *Pleurothallis schaferi* Ames, Orchidaceae 7: 119. 1922.

Type: Cuba: Prov. Holguín, Sierra de Nipe, near Woodfred, *J. A. Schafer 3441* (lectotype AMES).

Pleurothallis bipapularis Dod, Moscosoa 1: 52. 1976.

Specklinia bipapularis (Dod) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 259. 2004.

Type: Bayaguana, República Dominicana, Prov. Monte Plata, La Lechuza, Pilancón, Bayaguana, *Dod 504* (Holotype JSD; isotypes AMES, SEL, NY).

Pleurothallis haitiensis Dod, Moscosa 3: 113. 1984.

Specklinia haitiensis (Dod) Pridgeon & M.W.Chase, Lindleyana 16: 258. 2001.

Type: Haiti: Massif de la Hotte, Les Cayes, *Dod 890* (holotype JBSD; isotypes AMES, MO, NY, US).

Specimen studied: HAJB!: *Bisse et al. 49283.*

Specklinia tribuloides (Sw.) Pridgeon & M.W.Chase, Lindleyana 16: 259. 2001.

Basionym: *Epidendrum tribuloides* Sw., Prodr. Veg. Ind. Occ. 123. 1788.

Dendrobium tribuloides (Sw.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 83. 1799.

Cymbidium tribuloides (Sw.) Spreng., Syst. Veg., ed. 16, 3: 721. 1826.

Pleurothallis tribuloides (Sw.) Lindl., Gen. Sp. Orchid. Pl. 6. 1830.

Criptophoranthus tribuloides (Sw.) H.Dietr., Revista Jard. Bot. Nac. Univ. Habana 5: 48. 1984.

Tribulago tribuloides (Sw.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 265. 2004.

Type: Jamaica: *O. Swartz s.n.* (lectotype BM).

Specimens studied: HUJB!: *Luis et al. 3111*; HOS!: *collector unknown 129*; flowers in spirit: *collector unknown 053.*

Specklinia trichyphis (Rchb.f.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 264. 2004. *

Basionym: *Pleurothallis trichyphis* Rchb.f., Flora 48: 276. 1866.

Type: Cuba: 1860-1864, *C. Wright 3345* (holotype K).

Specimen studied: HAJB!: *Bisse et al. 52961.*

Specklinia wrightii (Rchb.f.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 265. 2004.*

Basionym: *Pleurothallis wrightii* Rchb.f., Flora 48: 276. 1865.

Type: Cuba: Prov. Guantánamo, near Monte Verde, *C. Wright 1509* (W).

Pleurothallis richteri H.Dietr., Orchidee 35: 223. 1984.

Type: Cuba: Prov. Guantánamo: Baracoa, Vega de la Palma, around Río Duaba, *Bisse et al. s.n.* (holotype HAJB!).

Specimen studied: HAJB!: *Alvarez et al. 56347.*

Spiranthes L. C. Richard

Spiranthes torta (Thunb.) Garay & H.R.Sweet, in R.A.Howard, Fl. Lesser Antilles, Orchid. (1): 77. 1974.

Basionym: *Ophrys torta* Thunb., Mus. Nat. Acad. Ups. 9: 136. 1791.

Type: Jamaica: *Swartz s.n.* (holotype UPS).

Neottia tortilis Sw., Kongl. Vetensk. Acad. Handl. 21: 226. 1800.

Spiranthes tortilis (Sw.) L.C.Rich., Orch. Europ. Ann. 37. 1817

Type: Jamaica, *Swartz s.n.* (BM).

Satyrium spirale Sw., Prodr. Veg. Ind. Occ. 118. 1788.

Triorchis spiralis (Sw.) House, Amer. Midl. Naturalist 6: 206. 1920.

Type: Jamaica: *Swartz s.n.* (BM).

Specimens studied: HUJB!: *Urquiola et al. 3377*; HUCLV!: *Expedición Botánica "J. Bisse" 2186*; HOS!: *Pérez et al. 089.*

Stelis Swartz

Stelis antillensis Pridgeon & M.W.Chase, Lindleyana 17: 98. 2002.

Pleurothallis domingensis Cogn., in I.Urban, Symb. Antill. 6: 402. 1909.

Stelis domingensis (Cogn.) Pridgeon & M.W.Chase, Lindleyana 16: 262. 2001.

Crocodeilanthe domingensis (Cogn.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 256. 2004.

Type: Dominican Republic: Prov. La Vega, Valle Nuevo, *Eggers 2176* (holotype BR).

Specimen studied: HAJB!: *Lippold 16133.*

Stelis cubensis Schltr., in I.Urban, Symb. Antill. 9: 60. 1923.*

Type: Cuba: Prov. Santiago de Cuba, Sierra Maestra, Loma de Regino, near Pico Turquino, *E. L. Ekman 5407* (holotype S).

Specimen studied: HAC!: *Acuña 15082.*

Stelis ekmanii Schltr., in I.Urban, Symb. Antill. 9: 60. 1923.*

Type: Cuba: Prov. Holguín, Sierra de Nipe, Loma Mensura, *E. L. Ekman 3187* (holotype S).

SPECIMEN STUDIED: HAJB!: *Bisse et al. 40293.*

Stelis gelida (Lindl.) Pridgeon & M.W.Chase, Lindleyana 16: 263. 2001.

BASIONYM: *Pleurothallis gelida* Lindl., Edward´s Bot. Reg. 27 (Misc.): 91. 1841.

Humboltia gelida (Lindl.) Kuntze, Revis. Gen. Pl. 2: 667. 1891.

Specklinia gelida (Lindl.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 260. 2004.

Type: Jamaica: *Loddiges s.n.* (holotype K-L).

Pleurothallis univaginata Lindl., Ann. Mag. Nat. Hist., ser. 3, 1: 326. 1858.

Humboltia univaginata (Lindl.) Kuntze, Revis. Gen. Pl. 2: 668. 1891.

Type: Cuba: Prov. Guantánamo: near Monte Verde, 1856-57, *C. Wright 656* (holotype K-L).

SPECIMENS STUDIED: HAJB!: *Arias et al. 60050*; HAC!: *Alain 7172*; HOS!: *Bocourt et al. 151*; flowers in spirit: *Bocourt et al. 083.*

Stelis multirostris Pridgeon & M.W.Chase, Lindleyana 17: 100. 2002.

BASIONYM: *Pleurothallis multirostris* Rchb.f., Linnaea 41: 49. 1876.

Type: Jamaica: no collector indicated (holotype K).

Pleurothallis oblongifolia Lindl., Bot. Mag. 2: 355. (1836) 1837.

Stelis oblongifolia (Lindl.) Pridgeon & M.W.Chase, Lindleyana 16: 265. 2001, non *Stelis oblongifolia* Lindl. 1858.

Dracontia oblongifolia (Lindl.) Luer, Monogr. Syst. Bot. Missouri Bot. Gard. 95: 257. 2004.

Type: Jamaica: *Loddiges s.n.* (holotype K-L).

Epidendrum racemiflorum Sw., Prodr. Veg. Ind. Occ. 125. 1788.

Dendrobium racemiflorum (Sw.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 83. 1799.

Pleurothallis racemiflora Lindl. ex Hook., Exot. Fl. 2: t. 123. 1825 (1824).

Type: Jamaica, *Swartz s.n*. (lectotype BM).

Pleurothallis tricostata Cogn., in I.Urban, Symb. Antill. 7: 175. 1912.

Type: Dominican Republic: Prov. La Vega, Constanza: epiphytic in forest near Constanza, *H. von Türckheim 3481* (holotype B, destroyed).

SPECIMENS STUDIED: HAJB!: *Bisse 42262*; HOS!: *Pérez & Bocourt 130*; flowers in spirit: *Pérez & Bocourt 055.*

STENORRHYNCHOS L. C. Richard ex Sprengel

Stenorrhynchos speciosum (Jacq.) L.C.Rich. ex Spreng., Mem. Mus. Hist. Nat. 4: 59. 1818.

BASIONYM: *Neottia speciosa* Jacq., Collectanea 3: 174. 1791.

Serapias speciosa (Jacq.) Gmel., Syst. Nat., ed. 13, 59. 1791.

Ibidium speciosum (Jacq.) Salisb., Trans. Hort. Soc. London 1: 291. 1812.

Spiranthes speciosa (Jacq.) A.Rich., in R.de la Sagra, Hist. Fis. Cuba Bot. 11: 252. 1850.

Gyrostachys speciosa (Jacq.) Kuntze, Revis. Gen. Pl. 664. 1891.

Type: *Jacquin s.n.* (holotype W).

SPECIMEN STUDIED: HUJB!: *Urquiola et al. 1045.*

SUDAMERLYCASTE Archila

Sudamerlycaste pegueroi Archila, Moscosoa 17: 23. 2011.

Type: Rep. Dominicana: Cordillera septentrional, Prov. Hermanas Mirabal, Municipio de Salcedo, La Jíbara, Holotype JBSD: *Rodríguez et al. 463.*

SPECIMEN STUDIED: HAC!: *Alain 18640.*

Previously assumed to be *S. barringtoniae* (a species which Ackerman consider to be endemic to Jamaica), the most obvious characteristic that distinguishes the two species is the length of the scape (Ackerman, 2014).

TETRAMICRA Lindley

Tetramicra ekmanii Mansf., Ark. Bot. 20A (15): 17. 1926.

Type: Haiti: Dept. d'Artibonite, Ennery, *E. L. Ekman H 2474* (holotype S?; K?).

Tetramicra montecristensis H.Dietr., Orchidee 35: 192. 1984.

Type: Cuba: Prov. Guantánamo, Mun. Yateras, Pinar de Monte Cristi, *J. Bisse et al.* (holotype HAJB!).

Tetramicra malpighiarum J.A.Hern. & M.A.Díaz, Harvard Pap. Bot. 5: 189. 2000.*

Type: Cuba: Prov. Granma, El Guafe, Cabo Cruz, Jun 1996, *J. A. Hernández 41199* (holotype HAC!).

Tetramicra parviflora Lindl. ex Griseb., Fl. Brit. W. I. 622. 1864.

Type: Jamaica: *MacFayden s.n.* (holotype K).

Basionym: *Bletia parviflora* Rchb.f., Ann. Bot. Syst. 6: 439. 1862.

Type: Jamaica, *D. Morris s.n.* (holotype K).

Bletia schoeniana Rchb.f., Ann. Bot. Syst. 6: 439. 1862.

Tetramicra schoeniana (Rchb.f.) Rolfe, Gard. Chron., ser. 3, 6: 623. 1889.

Type: Dominican Republic, *Schomburgk 36* (holotype K-L).

Tetramicra urbaniana Cogn., in I.Urban, Symb. Antill. 6: 551. 1910.

Type: Bahamas: New Providence, *Curtiss 145* (holotype BM).

Specimens studied: HAJB!: *Bisse 21562*; HUJB!: *Urquiola et al. 6152.*

Tetramicra riparia Á.Vale, Sánchez-Abad & L.Navarro, Syst. Bot. 37(4): 883-892. 2012.*

Type: Cuba: Guantánamo: Baracoa, orillas del río Báez, Mina Amores. Febrero/2010. Á. Vale, N.L. Sánchez-Abad & J.A. Rodríguez, *AVG 2010-04* (Holotype: HAC, Isotypes: BSC, M, SANT).

Tetramicra simplex Ames, Schedul. Orchid. 6: 77. 1923.*

Type: Cuba: Mun. Isla de la Juventud, near Los Indios, *O. E. Jennings 644* (NY).

Specimen studied: HAC!: *Killip 7459.*

Tetramicra tenera Griseb. ex Benth., J. Linn. Soc., Botany 18: 314. 1881.*

Basionym: *Bletia tenera* A.Rich., in R.de la Sagra, Hist. Fis. Cuba Bot. 11: 242, t. 83. 1850.

Tetramicra eulophiae (Rchb.f.) Rchb.f. ex Griseb., Cat. Pl. Cub. 264. 1866.

Type: Cuba, *C. Wright 3334* (holotype W).

Tetramicra erosa Carabia, Mem. Soc. Cub. Hist. Nat. "Felipe Poey" 7: 143. 1943.

Type: Cuba: Prov. Santiago de Cuba, *Sagra s.n.* (holotype P).

Specimens studied: HAJB!: *Moreno 68455*; HAC!: *León 7454*; HUJB!: *Urquiola et al. 524*; HOS!: *Mújica & Elaine 204*; flowers in spirit: *collector unknown 109.*

Tolumnia Rafinesque

Tolumnia acunae (M.A.Díaz) Nir, Orchid. Antill. 373. 2000.*

Tolumnia tuerckheimii subsp. *acunae* M.A.Díaz, Revista Jard. Bot. Nac. Univ. Habana 8(2): 18. 1987.

Type: Cuba: Prov. Guantánamo, Imías, Sierra de Imías, camino entre Tres Piedras y la María, *J. Bisse et al.* (holotype HAJB!).

Tolumnia calochila (Cogn.) Braem, Orchidee 37: 58. 1986.

Basionym: *Oncidium calochilum* Cogn., in I.Urban, Symb. Antill. 6: 660. 1910.

Type: Dominican Republic: Prov. Santiago, Llano Rafael, *Eggers 1927* (holotype BR).

Specimens studied: HAJB!: *Gutiérrez et al. 68166*; HUCLV!: *Sotomayor 3868.*

Tolumnia guibertiana (A.Rich.) Braem, Orchidee 37: 58. 1986.*

Basionym: *Oncidium guibertianum* A.Rich., in R.de la Sagra, Hist. Fis. Cuba Bot. 11: 244. 1850.

Tolumnia lemoniana subsp. *guibertiana* (A.Rich.) Braem, Schlechteriana 1: 40. 1990.

Type: Cuba, *Guibert s.n.* (holotype P).

Specimens studied: HAJB!: *Bisse et al. 46435*; HOS!: *Pérez et al 099*; flowers in spirit: *Pérez & Bocourt 003.*

Tolumnia gundlachii (C.Wright ex Griseb.) N.H.Williams & Ackerman, Orchids (West Palm Beach) 76: 857. 2007.

Basionym: *Oncidium gundlachii* C.Wright ex Griseb., Cat. Pl. Cub. 266. 1866.

Antillanorchis gundlachii (C.Wright ex Griseb.) Garay, Bradea 1: 423. 1974.

Type: Cuba: near Hanábana, *Gundlach s.n.* (holotype GOET).

Rodrigueziopsis antillensis Withner, Amer. Orchid Soc. Bull. 40: 876. 1971.

Type: Dominican Republic: Prov. Pedernales, Baoruco Mountains, Hoya de Pelempito, E of Aceitillar, *A. H. Liogier 16724* (holotype NY).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria.

The type comes from Hanábana, locality that Sauget & Barbier (1946) attribute to Matanzas province. In that province we can find with that name only a river

that is in lowlands. Ackerman (pers. comm. 2010) suspects that this is an erroneous record because in the Domincan Republic this is a high elevation species, unlike Matanzas.

Tolumnia hawkesiana (Moir) Braem, Orchidee 37: 59. 1986. *

BASIONYM: *Oncidium hawkesianum* Moir, Phytologia 15: 7. 1967.

Type: Cuba: Prov. Holguín, northern coast, *Moir s.n.* (holotype AMES).

SPECIMENS STUDIED: We did not find any specimens in the reviewed Cuban herbaria. This species is based on a plant collected from somewhere along the north coast of the old Oriente Province, presumably the current Province of Holguín (Ackerman, 2014).

Tolumnia lemoniana (Lindl.) Braem, Orchidee 37: 58. 1986. *

BASIONYM: *Oncidium lemonianum* Lindl., Bot. Reg. 21: t. 1789. 1835.

Type: Cuba, imported by Capt. Sutton and grown by Sir Charles Lemon (holotype original painting of t. 1789, K-L).

SPECIMENS STUDIED: HOS!: *Pérez et al. 123*; flowers in spirit: *Pérez et al. 043*.

Tolumnia lucayana (Nash) Braem, Orchidee 37: 58. 1986.

BASIONYM: *Oncidium lucayanum* Nash, in N.L.Britton & C.F.Millspaugh, Bahama Fl. 98. 1920.

Type: Bahamas: Andros, Fresh Creek, *J. I.* and *A. R. Northrop 647* (holotype NY).

Oncidium lyratum Withner, Amer. Orchid Soc. Bull.36: 400. 1967.

Tolumnia lyrata (Withner) Braem, Orchidee 37: 58. 1986.

Type: Cuba: Isle of Pines, *W. Stimson s.n.* (holotype AMES).

Oncidium moirianum Osment, Flor. Orch. 15: 147. 1972.

Tolumnia moiriana (Osment) Braem, Orchidee 37: 58. 1986.

Type: Cuba: Prov. Guantánamo, US Navy Base, *W. W. G. Moir s.n.* (holotype AMES).

SPECIMENS STUDIED: We did not find any specimens in the reviewed Cuban herbaria.

Tolumnia sylvestris (Lindl.) Braem, Orchidee 37: 59. 1986.*

BASIONYM: *Oncidium sylvestre* Lindl., Ann. Mag. Nat. Hist., ser. 3, 1: 332. 1858.

Oncidium variegatum subsp. *sylvestre* (Lindl.) Withner, Orchid Digest 44: 93. 1980.

Type: Cuba: "Oriente", 1856-1857, *C. Wright 670* (holotype K-L).

SPECIMEN STUDIED: HOS!: *Cabrera 013*.

Tolumnia usneoides (Lindl.) Braem, Orchidee 37: 59. 1986.*

BASIONYM: *Oncidium usneoides* Lindl., Ann. Mag. Nat. Hist., ser. 3, 1: 33. 1858.

Type: Cuba: Prov. Guantánamo, Monte Verde, *C. Wright 669* (holotype K-L).

SPECIMENS STUDIED: We did not find any specimens in the revised Cuban herbaria.

Tolumnia variegata (Sw.) Braem, Orchidee 37: 59. 1986.

BASIONYM: *Epidendrum variegatum* Sw., Prodr. Veg. Ind. Occ. 122. 1788.

Cymbidium variegatum (Sw.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 74. 1799.

Oncidium variegatum (Sw.) Sw., Kongl. Vetensk. Acad. Handl. 21: 240. 1800.

Type: Haiti, "Santo Domingo": *Swartz s.n.* (BM).

Epidendrum carinatum Vahl, in H.West, Bidr. Beskr. Ste Croix 303. 1793.

Type: United States Virgin Islands: St. Croix (holotype ?).

Oncidium velutinum Lindl. & Paxton, in Paxton's Flower Garden 1: 166. 1851.

Tolumnia velutina (Lindl. & Paxton) Braem, Orchidee 37: 58. 1986.

Type: Cuba: Santiago de Cuba, 1844, *J. Linden 1759* (holotype K-L).

Oncidium leiboldii Rchb.f., in W.G.Walpers, Ann. Bot. Syst. 6: 718. 1863.

Tolumnia leiboldii (Rchb.f.) Braem, Orchidee 37: 58. 1986.

Type: Cuba: *Wright 668* (W).

Oncidium caymanense Moir, Phytologia 17: 427. 1968.

Tolumnia caymanensis (Moir) Braem, Orchidee 37: 58. 1986.

Type: Cayman Islands: Grand Cayman, *Moir s.n.* (holotype AMES).

Tolumnia borinquinensis Sauleda & Ragan, Orchid Digest 60: 183. 1996.

Type: Puerto Rico, Lago Tortuguero, 2.3 km NE of Manatí , *Sauleda et al. 6835* (holotype NY).

Specimens studied: HUJB!: *Urquiola 538*; HOS!: *Martinez et al. 121*.

Trichocentrum Poeppig & Endlicher

Trichocentrum undulatum (Sw.) Ackerman & M.W.Chase, Lindleyana 16: 225. 2001.

Basionym: *Epidendrum undulatum* Sw., Prodr. Veg. Ind. Occ. 122. 1788.

Cymbidium undulatum (Sw.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 74. 1799.

Oncidium undulatum (Sw.) Salisb., Trans. Hort. Soc. London 1: 295. 1812.

Type: Jamaica, *Swartz s.n.* (S).

Epidendrum maculatum Aubl., Hist. Plant. Guian. Franc. 2: 825. 1775.

Oncidium maculatum (Aubl.) Urb., Repert. Spec. Nov. Regni Veg. 15: 306. 1918.

Lophiaris maculata (Aubl.) Ackerman, Lindleyana 15: 89-95. 2000.

Trichocentrum maculatum (Aubl.) M.W.Chase & N.H.Wms., Lindleyana 16: 218-219. 2001.

Type: Plumier, Plantarum Americanarum t. 178, fig. 2. 1758 (holotype. the original Burmann plate, reproduction).

Specimens studied: HAJB!: *Bisse et al. 15060*; HOS!: *Mújica & Elaine 194*; flowers in spirit: *Martínez 002.*

Trichopilia Lindley

Trichopilia fragrans (Lindl.) Rchb.f., Hamburger Garten-Blumenzeitung 14: 229. 1858.

Basionym: *Pilumna fragrans* Lindl., Edward´s Bot. Reg. 30 (Misc.): 74. 1844.

Type: Colombia: near Popayan, *Hartweg s.n.* (holotype K-L).

Trichopilia backhousiana Rchb.f., Gard. Chron. 1: 816. 1876.

Type: New Grenada, *Backhouse s.n.* (holotype W).

Specimens studied: HAJB!: *Alvarez 64023*; HAC!: *Acuña 10066.*

Trichopilia subulata (Sw.) Rchb.f., Flora 48: 278. 1865.

Basionym: *Epidendrum subulatum* Sw., Prodr. Veg. Ind. Occ. 123. 1788.

Cymbidium subulatum (Sw.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 4: 73. 1799.

Leucohyle subulata (Sw.) Schltr., Orchideen Beschreib. Kult. Zucht. 469. 1914.

Type: Jamaica: *Swartz s.n.* (S).

Trichopilia jamaicensis Fawc. & Rendle, J. Bot. 48: 107. 1910.

Leucohyle jamaicensis (Fawc. & Rendle) Schltr., Orchideen Beschreib. Kult. Zucht. 469. 1914.

Type: Jamaica: Parish St. Thomas, Mansfield, near Bath, *Harris 7697* (holotype BM).

Specimen studied: HAC!: *Acuña 9795.*

Trichosalpinx Luer

Trichosalpinx dura (Lindl.) Luer, Phytologia 54: 395. 1983.

Basionym: *Pleurothallis dura* Lindl., Fol. Orchid. 9: 32. 1859.

Humboltia dura (Lindl.) Kuntze, Revis. Gen. Pl. 2: 667. 1891.

Type: Ecuador: forests of the Andes, *W. Jameson s.n.* (holotype K).

Pleurothallis foliata Griseb., Fl. Brit. W. I. 610. 1864.

Humboltia foliata (Griseb.) Kuntze, Revis. Gen. Pl. 2: 667. 1891.

Trichosalpinx foliata (Griseb.) Luer, Phytologia 54: 395. 1983.

Type: Jamaica: 1857, *Mr. Wilson 160* (lectotype K).

Specimens studied: HAJB!: *Alain et al. 5452*; HOS!: *Bocourt et al. 163.*

Trichosalpinx memor (Rchb.f.) Luer, Phytologia 54: 396. 1983.

Basionym: *Pleurothallis memor* Rchb.f., Bonplandia 4: 330. 1856.

Humboltia memor (Rchb.f.) Kuntze, Revis. Gen. Pl. 2: 668. 1891.

Type: Colombia?, without collection data, *Forkel s.n.* (holotype W).

Specimens studied: We did not find any specimens in the reviewed Cuban herbaria. Reported for Guantánamo (Macizo de Sagua-Baracoa), Sancti Spíritus (Alturas de Trinidad), and Santiago de Cuba (Sierra Maestra) provinces (Ackerman, 2014).

Triphora Nuttall

Triphora gentianoides (Sw.) Nutt. ex Ames & Schltr., in O.Ames, Orchidaceae 7: 5. 1922.

Basionym: *Limodorum gentianoides* Sw., Prodr. Veg. Ind. Occ. 119. 1788.

Arethusa gentianoides (Sw.) Sw., Fl. Ind. Occid. 3: 1436. 1806.

Pogonia gentianoides (Sw.) Spreng., Syst. Veg. 3: 706. 1826.

Type: Jamaica: *Swartz s.n.* (lectotype BM).

Pogonia cubensis Rchb.f., Ned. Kruidk. Arch. 4: 322. 1859.

Triphora cubensis (Rchb.f.) Ames, Schedul. Orchid. 7: 35. 1924.

Type: Cuba: *Poeppig s.n.* (holotype W).

Specimen studied: HAC!: *Casas de Almeida 15561.*

Triphora miserrima (Cogn.) Acuña, Bol. Estación Exp. Agron. Santiago de las Vegas 60: 18. 1938 [1939].

Basionym: *Pogonia miserrima* Cogn., in I.Urban, Symb. Antill. 6: 316. 1909.

Type: Cuba: Prov. Villa Clara, between La Magdalena and Cayamas, *Baker 4943* (holotype ?).

Specimens studied: We did not find any specimens in the revised Cuban herbaria.

Triphora surinamensis (Lindl. ex Benth.) Britton, in N.L.Britton & P.Wilson, Sci. Surv. Porto Rico & Virg. Isl. 5(2): 184. 1924.

Basionym: *Pogonia surinamensis* Lindl. ex Benth., London J. Bot. 2: 674. 1843.

Type: Guyana: Berbice River, Christmas Catarats, *Schomburgk s.n.* (holotype K).

Triphora duckei Schltr., Beih. Bot. Centralbl., Abt. 2, 42(2): 75. 1925.

Type: Brazil: Amazonas, Lake Salgado, Río Trombetes, Feb 1918, *A. Ducke 16987* (holotype B, destroyed).

Specimen studied: HAC: *Llamacho 42100.*

Tropidia Lindley

Tropidia polystachya (Sw.) Ames, Orchidaceae 2: 262. 1908.

Basionym: *Serapias polystachya* Sw., Prodr. Veg. Ind. Occ. 119. 1788.

Neottia polystachya (Sw.) Sw., Fl. Ind. Occid. 3: 1415. 1806.

Stenorrhynchos polystachyon (Sw.) Spreng., Syst. Veg. 3: 710. 1826.

Tomotris polystachya (Sw.) Raf., Fl. Tellur. 2: 89. 1837.

Chloidia polystachya (Sw.) Rchb.f., in W.G.Walpers, Ann. Bot. Syst. 6: 644. 1863.

Corymborkis polystachya (Sw.) Kuntze, Revis. Gen. Pl. 658. 1891.

Corymbis polystachya (Sw.) Benth. ex Fawc., Prov. List Ind. Nat. Flow. Pl. Jam. 40. 1893.

Type: Jamaica, mountains of Clarendon, *Swartz s.n.* (lectotype BM).

Specimens studied: HUJB!: *Luis et al. 4053*; HOS!: *Mújica & Elaine 211.*

Vanilla Plumier ex Miller

Vanilla bakeri Schltr., Repert. Spec. Nov. Regni Veg. 8: 561 (1910). *****

Type: Cuba: Cojimar, Havana province, *Baker 5127* (holotype B, destroyed; isotypes HAC, NY).

The holotype of *V. bakeri* was destroyed at B; a duplicate is housed at HAC, but it has only fruits. *Vanilla bakeri* appears to be closely related to *V. barbellata*, from which it differs by the smaller flowers and a cluster of 1mm long fleshy hairs on the midlobe of the labellum. Nir (2000) recorded the existence of an isotype at NY (flowers in spirit), from wich he made a drawing of the flower. Soto Arenas & Cribb (2010) were unable to see flowering material of *V. bakeri*, and the lectotype they designated was a plant in fruit. They speculated that the original description was based on immature flowers so they regarded *V. bakeri* to be a synonym of *V. barbellata*. They were apparently unaware of the alcohol-preserved specimen at NY (Ackerman, 2014).

Vanilla barbellata Rchb.f., Flora 48: 274 (1865).

Type: Cuba: *C. Wright 3352*, (holotype K).

Vanilla articulata Northr., Mem. Torrey Bot. Club 12: 31 (1902).

Type: Bahamas: Andros, Deep Creek, Jun 1890, *J. I. Northrop & A. R. Northrop 545* (not located).

Specimens studied: HAJB!: *Bisse et al. 53822*; HAC!: *Acuña et al. 16205.*

Vanilla bicolor Lindl., Edward´s Bot. Reg. 24 (Misc.): 37 (1838).

Type: Guyana, Demerara, watercolor painting of *Schomburgk ex Hort. Loddiges s.n.* (lectotype K-L).

Vanilla wrightii Rchb.f., Flora 48: 273 (1865).
Vanilla gratiosa Griseb., Cat. Pl. Cub. 267. 1866.
Type: Cuba: *C. Wright 672* (holotype K).
Specimens studied: HUJB!: *Urquiola et al. 6316, 6310-A & 6310-B.*

Vanilla claviculata (W.Wright) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 66 (1799).
Basionym: *Epidendrum claviculatum* W.Wright, in London Med. J. 8(3): 254 (1787).
Type: Jamaica: *Swartz s.n.* (holotype BM).
Specimen studied: HAC!: *León 19346.*

Vanilla dilloniana Correll, Amer. Orchid Soc. Bull.15(7): 331 (1946).
Type: United States of America: Florida, Dade County, Brickell Hammock, *Humes s.n*. (holotype AMES).
Specimens studied: HAJB!: *Berazaín 66142*; HAC!: *Cano & Herrera 34798.*

Vanilla mexicana Mill., Gard. Dict., ed. 8, No.1 (1768).
Type: Haiti, *Plumier s. n.* (holotype Plumier´s original drawing at P; reproduced in Plumier, Nov. Pl. Amer. Genera 25, pl. 28, 1703).
Epidendrum vanilla L., Sp. Pl., ed. 1, 2: 952 (1753).
Vanilla aromatica Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 66 (1799).
Vanilla vanilla (L.) Huth, in Helios 11(9): 136 (1893).
Vanilla vanilla (L.) Britton, in Britton & Wilson, Sci. Surv. Porto Rico and Virg. Isl. 5: 185 (1924).
Type: "*Volubilis siliquosa plantaginis folio*" (lectotype [Cribb in Cafferty & Jarvis, 1999], p. 47, Catesby, Natural History of Carolina, Florida and the Bahama Islands 2: app. t. 7. 1747).
Vanilla inodora Schiede, Linnaea 4: 574 (1829).
Type: Mexico, *Schiede & Deppe s.n.* (holotype BM).
Vanilla anaromatica Griseb., Fl. Brit. W. I. 638 (1864).
Type: Jamaica, Based upon Plumier, Ed. Burm., t. 188.
Specimens studied: HUJB!: *Urquiola et al. 5275*; HOS!: *Bocourt et al. 080.*

Vanilla palmarum Salzmann ex Lindl., Gen. Spec. Orch. Pl. 436. 1840. *
Type: Brazil: Bahia, *Salzmann s.n.* (holotype K).
Vanilla savannarum Britt., Mem. Torr. Club. 6: 61. 1920.
Type: Cuba: near Camagüey, *N. L. Britton et al. 13120* (holotype NY).
Specimens studied: HAJB!: *Dietrich et al. 66652*; HAC!: *Acuña 13492.*

Vanilla phaeantha Rchb.f., Flora 48: 274 (1865).
Type: Cuba: San Cristóbal, *C. Wright 3351*(holotype K).
Vanilla planifolia var. *macrantha* Griseb., Cat. Pl. Cub. 267 (1866).
Specimen studied: HAC!: *Alain 7501.*

Vanilla poitaei Rchb.f., Linnaea 41: 66 (1876).
Type: Haiti: "Santo Domingo" *Poiteau s.n*. (holotype W).
Vanilla eggersii Rolfe, J. Linn. Soc. Bot. 32: 472 (1896).
Type: Dominican Republic: "Llanos de Rafael, Santo Domingo", *Eggers 1958* (holotype K).
Vanilla correllii Sauleda & R.M.Adams, Brittonia 33(2): 192 (1981).
Type: Bahamas: Grand Bahama, Freeport Hammock off Coral Road, *Correll et al.* (holotype NY).
Specimen studied: HAC!: *Borhidi et al. 35473.*

Wullschlaegelia Reichenbach f.

Wullschlaegelia aphylla (Sw.) Rchb.f., Bot. Zeitung 21: 131. 1863.
Basionym: *Cranichis aphylla* Sw., Prodr. Veg. Ind. Occ. 120. 1788.
Type: Jamaica: Mountains near Clarendon, *Swartz s.n*. (lectotype BM).
Specimen studied: HAC!: *Acuña 13052.*

Xylobium Lindley

Xylobium palmifolium (Sw.) Fawc., Prov. List. Pl. Jamaica 39. 1893.
Basionym: *Epidendrum palmifolium* Sw., Prodr. Veg. Ind. Occ. 123. 1788.
Dendrobium palmifolium (Sw.) Sw., Nova Acta Regiae Soc. Sci. Upsal. 6: 82. 1799.
Colax palmifolius (Sw.) Lindl. ex Spreng., Syst. Veg. 3: 727. 1826.
Maxillaria palmifolia (Sw.) Lindl., Gen. Sp.

Orchid. Pl. 148. 1832.

Type: Jamaica: *Swartz s.n.* (lectotype BM).

Maxillaria decolor Lindl., Edward´s Bot. Reg. 18: t. 1549. 1832.

Xylobium decolor (Lindl.) G.Nicholson, Illust. Dict. Gard. 4: 225. 1887.

Type: (holotype K-L, without data).

Specimen studied: HAC!: *Alain 15165.*

According to Ackerman (2014) the Cuban specimens he observed annotated as *X. pallidiflorum* actually correspond to *X. palmifolium*.

Zeuxine Lindley

Zeuxine strateumatica (L.) Schltr., Bot. Jharb. Syst. 45: 394. 1911.

Basionym: *Orchis strateumatica* L., Sp. Pl. 943. 1753.

Neottia strateumatica (L.) R.Br., Prodr. Fl. Nov. Holl. 319. 1810.

Spiranthes strateumatica (L.) Lindl., Bot. Reg. 10: 823. 1824.

Adenostylis strateumatica (L.) Ames, Orchidaceae 2: 58. 1908.

Type: Herb. P. Hermann 2: 35, No. 319 (lectotype BM).

Specimens studied: HAJB!: *Alvarez et al. 43502*; HOS!: *Bocourt 235*; flowers in spirit: *collector unknown 162.*

Zootrophion Luer

Zootrophion atropurpureum (Lindl.) Luer, Selbyana 7: 80. 1982.

Basionym: *Specklinia atropurpurea* Lindl., Edward´s Bot. Reg. 21, t. 1797. 1835.

Pleurothallis atropurpurea (Lindl.) Lindl., Edward´s Bot. Reg. 28 (Misc.): 81. 1842.

Cryptophoranthus atropurpureus (Lindl.) Rolfe, Gard. Chron., ser. 3, 2: 693. 1887.

Type: Jamaica: cultivated at the Liverpool Botanical Garden (holotype K).

Masdevallia fenestrata Lindl. ex Hook., Bot. Mag. 71: t. 4164. 1845.

Type: Jamaica: *Purdie s.n.* (lectotype, Stenzel, 2007, p. 48, K).

Specimens studied: HAJB!: *Bisse et al. 39455*; HAC!: *Alain & Acuña 7556.*

EXCLUDED SPECIES

Cranichis wageneri Rchb.f., Linnaea 41: 19. 1876.

Recorded by Nir (2000) without specific location. The origin of this specimen is unknown, and its presence in Cuba cannot be confirmed (Ackerman, 2014).

Encyclia guanahacabibensis Sauleda & Esperon, New World Orchid. Nomencl. Notes 7: 2. 2013 [30 Jun 2013].

Sauleda and Esperón (2013) describe *Encyclia guanahacabibensis* based on a plant cultivated by William Osment allegedly collected in the Guanahacabibes Peninsula, Cuba, in the 1950s. Although we do not definitively deny the presence of this species in Guanahacabibes, it seems improbable that it had escaped collection until Osment came along, and continues to do so after, especially considering that this is a well-documented area. We prefer to be conservative and exclude the species from the list.

Epidendrum vincentinum Lindl., J. Bot. (Hooker) 3: 88. 1840.

Cuba: Prov. Santiago de Cuba; Cordillera de la Gran Piedra. Known from Cuba by only a single collection of C. Wright at K (!). We don´t know about the presence of this species in Cuba.

Epidendrum verrucosum Sw., Nova Acta Regiae Soc. Sci. Upsal 6: 68. 1799.

Acuña's (1939) report of *E. verrucosum* in Cuba is not yet substantiated.

Leochilus scriptus (Scheidweiler) Rchb.f., Xenia Orch.1(1): 15. 1854.

The presence of this species on the island is questionable; however, a Cuban herbarium specimen (*Bohmhoff s.n.*, AMES*)* has been recorded for La Soledad, near Santa Clara in 1903. Mark Chase (1986) quoted the observation of two sterile specimens of this species that differ vegetatively from *L. labiatus.* In 1946, León recorded it for Cuba based solely on a specimen deposited in AMES, possibly the same mentioned before. The authors have been unable to locate any specimen of this species in the reviewed

Cuban herbaria. Ackerman (2014) mentions that the specimens he observed were sterile and Chase´s description was based on material collected outside of the Greater Antilles.

Myrmecophila thomsoniana var. ***minor*** (Strachan ex Fawc.) Dressler, Orquideología 22: 230. 2003.

Different authors recorded this species in Cuba, including Ackerman (2014). We suspect that the specimens observed may be plants that escaped cultivation and later naturalized, although this has yet to be confirmed.

Vanilla planifolia Andrews, Botanist's Repository 8: t. 538. 1808.

Ackerman cites this species for Cuba guided by the report of E. Mújica, (pers. comm. 2005). This report was an erroneous identification of *V. phaeantha*.

Final considerations. It is conceivable that new species and natural hybrids will eventually be collected and described, especially within the highly diverse genera *Broughtonia*, *Encyclia*, *Lepanthes,* and *Pleurothallis*.

Recently, colonization by *Acampe rigida* (Buch.-Ham. ex Sm.) P.F.Hunt, *Cymbidium* sp., *Dendrobium crumenatum* Sw., and *Papilionanthe teres* (Roxb.) Schltr., was observed in close proximity to the Soroa Orchid Botanical Garden, suggesting that these species are capable of escaping cultivation without human assistance (Bocourt, pers. comm. 2015). Thus, it is plausible that these orchids will eventually become naturalized, adding to the total number.

According to Nir (2000), five additional orchid species are present on the neighboring islands of Jamaica and the Hispaniola that have yet to be reported in Cuba: *Cyclopogon bicolor* (Ker-Gawl.) Schltr., *Liparis cardiophylla* Ames, *Pseudocentrum minus* (Benth.) Hook., *Tetramicra pratensis* (Rchb.f.) Rolfe and *Vanilla pompona* Schiede. Due to the close proximity of these islands to Cuban archipelago, it would not be surprising to eventually encounter these species in Cuba

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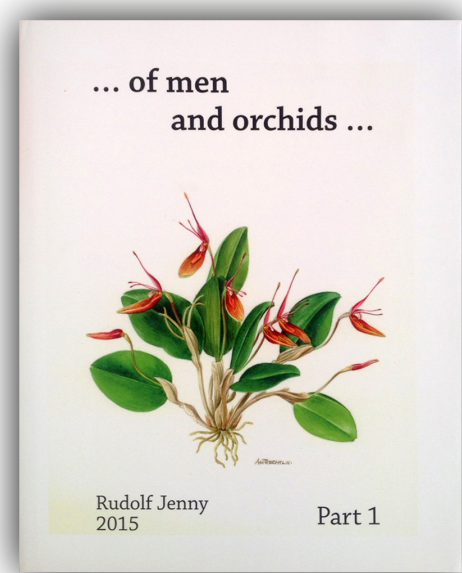
BOOKS

Jenny, R. 2015. **...of men and orchids... Part 1**. 302 pages, with hundreds of photographs, historical illustrations, and portraits. Hardbound with dust jacket, 27 x 22 cm. Quito, Imprenta Mariscal, privately printed by the author. 140 US$ plus shipping at RJOrchid@gmx.ch.



The human history of orchids has long been a neglected topic when compared with the information available on the natutral history of this fascinating group of plants. Nonetheless, orchidology, both on the scientific and the horticultural sides, has expressed a number of preeminent figures, whose contributions are often appreciated and broadly used with no cues about their creators.

Rudolf Jenny's "...of men and orchids...", is neither a book on how humans grow orchids nor a treatise of how they classsify plants, but an extraordinary look at the bond that unites men – botanists, gardeners, plant hunters, explorers – to the names of orchids and the histories behind their discovery and scientific apprehension. The work is a great step into the realm of history, and orchids are the perfect excuse to expose the efforts, the courage and bravery, the ambition and jealousies, and the indomitable will of those men in the flesh who have made it possible to discover and name the amazing diversity of plants.

Each of the 41 chapters that compose the volume tell the story of an orchid (or a few orchids) and a man, beginning with *Acineta beyrodtiana* and Otto Beyrodt, going through complete biographical sketches of the protagonists and discussing the sometimes complex taxonomy of the concerned orchid species. You will find very acknowledged names in plant history, like the Loddiges and Wendland dynasties, or botanists of the eminence of Eduard Friedrich Poeppig and Achille Richard, or famous explorers like Kegel and Jenman, but you will be also surprised at finding several less known names who compose the extraordinary story of orchidology. Vriese, Comparetti, Haller, Raddi, Loefgren, Lauche and Brade, Moquette and Hasskarl, are just a few of the many characters that are presented in the book, together with the orchids that immortalize their names. The sound of these names is often somewhat familiar to the passionate of orchids, because it echoes in the name of the plants that we study and cultivate, and Jenny's book has the merit of giving them – often for the first time – a face, a place and a story. They are botanists, taxonomists, plant-collectors, growers and voyagers who, over more than a century, contributed to our knowledge

and appreciation of orchids.

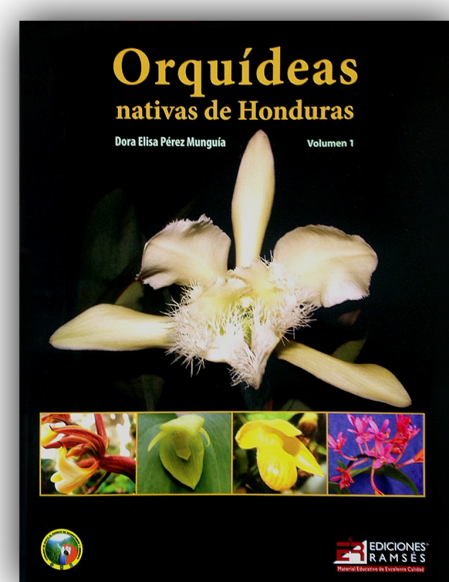
The texts, synthetic without being dry, and extraordinarily informative, are accompanied by an excellent and generous selection of illustrations, shown in full color, including portraits of historical characters, ancient drawings, paintings, type specimens and engravings, watercolors or simple sketches of the concerned plants, as well as sharp photographs of their modern counterparts, mostly taken by the author himself. The whole is superbly packed into a beautifully designed and printed volume.

"...of men and orchids..." is an entertaining and instructive lecture, which benefits of the vast experience of the author in both the areas of orchid taxonony and botanical history. The only criticism I would express to this superb book is the lack of a real frontispiece, which will probably cause some headaches to the responsible for cataloging in the large libraries where this work will surely find a place.

Because the edition is quite limited, I warmly suggest the interested readers trying to secure a copy soon. According to the author, this first volume will be followed in the coming years by two, or maybe three more. I, for one, am already hungrily waiting for the next volume.

Franco Pupulin

Pérez Munguía, D. E. 2015. **Orquídeas nativas de Honduras. Volumen 1**. Texts in Spanish. 224 pages, 219 color photographs, 5 illustrations, 1 map. Paperback with dust jacket, 28 x 22 cm. Tegucigalpa. Ediciones Ramses. Price not indicated. Available with the author at doraelisa.perez53@gmail.com.



The comparative and phylogeographic study of the Central American orchids has been historically hampered by the lack of a detailed treatment of the orchids from Honduras. If one checks the literature cited by Ossenbach and collaborators in their "*Orchids of the Central American isthmus: checklist and conservation status*" (Ossenbach *et al.* 2007), it is easy to note how Honduras represents a "black hole" in our knowledge of the orchid flora native to the isthmus: only 2 out of the 103 works cited in the bibliography are expressely devoted to the Honduran orchids, a figure that boldly contrasts with the high number of studies, both on the small and large scales, carried out in neighboring countries. Apart from the fundamental contributions by Cyril H. Nelson (2007, 2008, 2010), a few other papers on the rich orchid flora of Honduras have been published even in recent years (Vega *et al.* 2014, Wiese 2015, in this same fascicle of *Lankesteriana*). Nelson himself notes, in his introduction to the book, that only 8 orchid

species are known to be endemic to Honduras, a figure that certainly does not reflect the real diversity of this family of plants in the country.

It is therefore with a particular pleasure that I received from Dora Elisa Pérez Munguía her recently published book on the native orchids of Honduras, the first of a series of six volumes (according to an interview that the author gave to the Honduran television), which culminate twenty years of Pérez Munguía' s personal research on this topic.

The book begins with two short introductions, and two synthetic chapters on orchid morphology and the main natural habitats where orchids can be observed on Honduras. Then it follows with the taxonomic treatment, which presents a total of 123 species in 54 genera. This first volume of the series opens with the taxonomically disputed *Anacheilium* (that most authors include into a broader concept of *Prosthechea*), with 4 species, and ends with a single species of *Vanilla*. As only 23 species of *Epidendrum*, 3 species of *Pleurothallis*, and a single species of *Dichaea* are treated in the present tome, I presume that the following volumes will continue presenting new genera together with more species in those groups that offer the greatest diversity.

Each genus is introduced by a short chapter with its taxonomic history, generalities, a few ecological notes, and the photograph of a representative species. Species treatments include a reduced synonymy (mostly limited to homotypic names), etimology, a quite accurate description, phenology, general and local distribution (and ecology), conservation status, and selected bibliography. All the species are illustrated by at least one color photograph; photographs are quite variable in quality, but mostly amply useful for identification purposes. A short glossary and an index of scientific names conclude the book.

For the serious reader, it is of paramount value that all the portrayed orchids were photographed in Honduras, so that – independently of the name used by the author in its treatment – they represent real taxa of the Honduran orchid flora. So, for example, *Campylocentrum fasciola* on page 49 seems to be a diffrent species, and the *Encyclia amanda* of p. 83 is more similar to *E. chloroleuca*, but both of these records are interesting for the flora of Honduras. Interestingly, both *Sobralia decora* and *S. fenzliana* are recorded in Honduras (moving toward the North the distribution limit of the latter species), while the *Sobralia macra* photohraphed for the book could be different from its Costa Rican (and typic) counterpart.

Nomenclaturally, the author usually follows the most accepted generic circumscriptions, with the exception of the "Epidendrum" groups, where *Anacheilium, Coilostylis, Hormidium*, and *Oerstedella* are treated independently. It is a disputable but legitimate decision, while it is questionable that both *Epidendrum* and *Oerstedella* were maintained as distinct, but with some of the species of the former genus combined into *Epidendrum* (i.e., *E. centropetalum*). Also, it is somewhat questionable that *Maxillaria* is treated according to its smaller units (i.e., *Camaridium, Maxillariella, Mormolyca*), but species of *Rhetinantha* are sunked within *Maxillaria* without any rationale.

The work of Pérez Munguía (who acknowledges Cyril H. Nelson and Diego Antonio Pavón as collaborators) represents a great step towards a better understanding of the orchid diversity in Honduras. It is the result of a first-hand experience with the orchids of the country, and a great labor to present it in uniform and usable way. I warmly recommend it to anyone interested in the flora of Honduras and, more generaly, to those interested in the orchid flora of Central America.

Franco Pupulin

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LANKESTERIANA
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