

MISCELLANEOUS NEW SPECIES
IN THE PLEUROTHALLIDINAE (ORCHIDACEAE)

C. A. Luer*

Acostaea bicornis Luer, sp. nov.

Species haec *A. costaricensis* Schltr. similis sed callo labelli bicorni differt.

Plant very small, epiphytic, densely caespitose, roots comparatively thick, flexuous. Secondary stem abbreviated, 1-3 mm long, enclosed by 2-3 loose, ribbed, tubular sheaths. Leaf erect, coriaceous, elliptical-obovate, margined, 5-10 mm long, 3-4 mm wide, the obtuse apex notched, apiculate, the base cuneate into a short petiole. Inflorescence a weak, successively flowered raceme up to 3 cm long including the filiform peduncle, from a node on the secondary stem; floral bract 0.5-1 mm long; pedicel 1-1.5 mm long; ovary 1 mm long; sepals translucent red, glabrous, the dorsal sepal transversely ovate, obtuse, deeply concave, 3 mm long, 5 mm wide expanded, the lateral sepals connate into an elliptical lamina 5 mm long, 3 mm wide; petals translucent yellow, elliptical to lightly falcate, acute, 2 mm long, 0.75 mm wide; lip yellow, more or less oblong, 2 mm long, 0.5 mm wide, the apex bifid with a deflexed apiculum in the sinus, the base membranous, concave, attached with tension to the column-foot, the disc with a broad, elongated callus, rounded below, the apical portion free, subquadrate, the lateral apical angles produced into short, antrorse horns; column yellow-white, membranous with broadly rounded wings, bidentate at the apex, 2 mm long, 3 mm wide expanded, with a broad, concave foot 1.5 mm long.

Etymology: From the Latin *bicornis*, "two-horned," referring to the apex of the callus of the lip.

TYPE: PANAMA: PANAMA: Epiphytic in cloud forest, Cerro Jefe, alt. 1000 m, 2 March 1976, C. Luer, J. Luer, P. Taylor & R. Dressler 744 (Holotype: SEL).

Distribution: Eastern Panama.

This species is similar to *A. costaricensis* but differs in the two-horned callus of the lip. See next species for discussion.

Acostaea unicornis Luer, sp. nov.

Species haec *A. costaricensis* Schltr. similis sed callo labelli unicorni differt.

Plant very small, epiphytic, densely caespitose; roots comparatively thick, flexuous. Secondary stem abbreviated, 2-4 mm long, enclosed by 2-3 loose, ribbed, tubular sheaths. Leaf erect, coriaceous, elliptical-obovate, margined, 7-15 mm long, 3-5 mm wide, the obtuse apex notched, apiculate, the base cuneate into a short petiole. Inflorescence a weak, successively flowered raceme up to 4 cm long including the filiform peduncle, from a node on the secondary stem; floral bract 0.5-1 mm long; pedicel 1-1.5 mm long; ovary 1 mm long; sepals translucent red-purple, glabrous, the dorsal sepal transversely ovate, obtuse, deeply concave, 3 mm long, 5 mm wide spread out, the lateral sepals connate into an elliptical lamina 5 mm long, 3 mm wide; petals translucent yellow, elliptical to lightly falcate, acute, 1.5 mm long, 0.4 mm wide;

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lip yellow, suffused with red, more or less oblong, 2 mm long, 0.5 mm wide, the apex bifid with a short, decurved apiculum in the sinus, the base membranous and concave, broadly attached under tension to the column-foot, the disc with a broad, elongated callus, rounded below, the apical portion free, ligulate and produced at the apex into an upcurved horn, pubescent beneath; column yellow-white, membranous with broadly rounded wings, bidentate at the apex, 2 mm long, 3 mm wide expanded, with a broad, concave foot 1.5 mm long.

Etymology: From the Latin *unicornis*, "one-horned," in reference to the apex of the callus of the lip.

TYPE: PANAMA: COCLE: Epiphytic in cloud forest above El Valle, alt. 1000 m, 6 March 1976, C. Luer, J. Luer, R. L. Dressler & P. Taylor 760 (Holotype: SEL); VERAGUAS: Epiphytic in cloud forest above Santa Fe, alt. ca. 700 m, 5 Sept. 1976, C. Luer & R. L. Dressler 1143 (SEL).

Distribution. Central Panama.

The above two species apparently differ from *A. costaricensis* only in the morphology of the callus of the lip. The anterior margin of the protruding callus is rounded in *A. costaricensis*, and the large cells are visible microscopically. These cells are produced into cilia or fimbria in *A. pleurothalloides* Schltr. A hornlike process extends forward from the anterior margin of the callus in *A. unicornis*. Some cilia or cellular processes are present on the under surface. Two hornlike processes protrude forward from the sides of the apex of the callus in *A. bicornis*.

Numerous populations of four species of *Acostaea* from seven Panamanian localities (Cerro Colorado and Cerro Hornito in Chiriqui, the continental divide above Santa Fe in Veraguas, the mesa above El Valle in Coclé, and in the province of Panama, Cerro Jefe, the Altos de Pacora, and the Llano-Carti area) have been examined. The size of the plants varies somewhat, but the flowers vary in size and color within each population. Red or purple to yellow or orange, or combinations of any two colors seem to occur at random. The shapes of the sepals and petals, however, are rather constant, but the lips are variable. The Costa Rican *A. costaricensis* and *A. pleurothalloides* are found to be widespread, but *A. bicornis* is found only in the region of Cerro Jefe (eastern Panama) and *A. unicornis* is found only in Veraguas and Coclé (central Panamá).

Masdevallia datura Luer & Vásquez, sp. nov.

Planta mediocris caespitosa, foliis angustissime ellipticis pedunculo unifloro ter longioribus, flore grandi spectabili niveo, sepalis glabris in tubum longissimum connatis, petalis anguste oblongis apice apiculatis erosis base unguiculatis cum dente crasso, labello ovato acuto.

Plant medium in size, epiphytic, caespitose; roots slender. Secondary stems slender, erect, 2-4.5 cm long, enclosed by 2 loose, ribbed, tubular sheaths. Leaf erect, coriaceous, very narrowly elliptical to linear-elliptical, narrowly long-petiolate, 11-16 cm long including the 3-5 cm long petiole, 1-1.5 cm wide, the apex acute, gradually narrowed below into the petiole. Inflorescence a large, solitary, showy, snow-white flower borne by a peduncle 6-9 cm long, with a bract near the base, from a node low on the secondary stem; floral bract 13 mm long; pedicel 13-15 mm long; ovary 8-9 mm long; sepals white, slightly suffused with yellow and veined in light yellow toward the base with a small brown spot on either side, glabrous, the blade of the dorsal sepal narrowly obovate, 37 mm long, 13 mm wide, connate 34 mm to the lateral sepals to form a long, horizontal, trumpet-shaped, sepaline tube, the free portion transversely triangular, the obtuse apex contracted into a slender, erect, yellow tail 55-65 mm long, the lateral sepals narrowly obovate, oblique, 47 mm long, connate 43 mm, 35 mm wide together, the obtuse apices contracted into slender tails 43-55 mm long; petals white, narrowly oblong, 7.75 mm long, 1.5 mm wide, the

apex acute, apiculate, erose and with a low, rounded callus externally, the lower margin with a longitudinal callus ending in a thick, retrorse tooth, the base slender-clawed, lip white, ovate, 5.5 mm long, 2.75 mm wide, the apex acute, undulate, the base rounded, the disc with a low pair of longitudinal calli above the middle; column white, semiterete, 5 mm long, the foot 4 mm long including the slender extension.

Etymology: Named for the similarity of the flower to a flower of the genus *Datura* of the nightshade family. *Datura* from the Hindu *dhatara*, "a plant."

Type: BOLIVIA: LA PAZ: Prov. of Inquisivi: epiphytic in cloud forest between Inquisivi and Circuata, alt. 2500 m, 29 Jan. 1981, C. Luer, J. Luer, E. Besse & R. Vásquez, cultivated in Munich, West Germany by W. Koeniger, flowered in cult. April 1982, C. Luer 8136 (Holotype: SEL).

This species was discovered without flowers in a remote cloud forest in central Bolivia in January 1981. The plants were sent to Germany where they were cultivated in the greenhouses of W. Koeniger and B. Wuerstle. About a year later the plants produced a profusion of the huge, spectacular, snow-white flowers. The trumpet-shaped sepaline tube spontaneously reminds all who see the plant of a species of *Datura*.

Masdevallia leptoura Luer, sp. nov.

Species haec *M. pachyurae* Rehb. f. similis sed statura floribusque paulo majoribus et caudis sepalorum gracilioribus differt.

Plant medium in size, epiphytic, densely caespitose; roots coarse. Secondary stems erect, 3-4 cm long, enclosed by 2-3 loose, tubular sheaths. Leaf erect, coriaceous, elliptical, long-petiolate, 8-15 cm long including the 3-6 cm long petiole, 2-3 cm wide, the apex subacute to obtuse, the base cuneate into the petiole. Inflorescence a loosely several-flowered erect raceme of simultaneous colorful flowers, 15-25 cm long including the peduncle, with 1-2 bracts below the rachis, from a node low on the secondary stem; floral bract inflated, 5-6 mm long; pedicel 5-7 mm long; ovary 2-4 mm long with 3 undulating crests; sepals glabrous, pale yellow-green or whitish, with purple dots usually arranged transversely, the dorsal sepal ovate, concave, 12-15 mm long, 12-15 mm wide expanded, connate to the lateral sepals for 5-6 mm to form a shallow, gaping cup, the rounded apex contracted into a slender, yellow tail 8-12 mm long, the lateral sepals oblong, 12-14 mm long, 4-6 mm wide, connate 1.5-3 mm, the oblique apices contracted into tails similar to that of the dorsal sepal; petals white, often dotted with purple, more or less oblong, 6 mm long, 2.5 mm wide, apiculate at the apex, both margins denticulate above the middle, the lower margin with a longitudinal callus, the base unguiculate; lip brown to green marked with purple, oblong, 6 mm long, 2.5 mm wide, the margins erect, overlapping the blade above the middle as obtuse lateral lobes, the anterior portion rounded, the base truncate, cleft; column yellow-white with purple margins, semiterete, 6 mm long, the thick foot 3 mm long with a short, incurved extension.

Etymology: From the Greek *leptos*, "slender" and *-urus*, "tailed," in reference to the tails compared to those of *M. pachyura*.

Type: ECUADOR: BOLIVAR: terrestrial on the road embankment west of Guaranda, alt. 2800 m, 10 March 1982, C. Luer & S. Dalstrom 7264 (Holotype: SEL); CANAR: new road between Cuenca and Guayaquil, E. Sanchez, 16 Nov. 1979, cultivated at SEL, flowered in cult. 25 Dec. 1979, C. Luer 4840 (SEL); CHIMBORAZO: epiphytic in cloud forest remnant east of Pallatonga, alt. 2200 m, 13 Nov. 1979, C. Luer, J. Luer & A. Hirtz 4808 (SEL).

Two distinct but very similar species grow intermixed in the cloud forests of the western slopes of the Andes of central Ecuador. The smaller of the two, with thick, clavate tails, was described by Reichenbach as *M. pachyura*. The other, a little larger with more flowers with narrow, non-clavate tails, is more frequently encountered. Reichenbach's type of *M. pachyura* consists of two flowers, unmistakably those of the smaller one with clavate tails. *Masdevallia aureodactyla* is probably only an unusually colorful form of the latter. The species with the larger flowers and slender tails, described here as *M. leptoura*, was pictured and identified in *Curtis' Botanical Magazine* 8361 by Rolfe as *M. pachyura*.

Masdevallia margaretae Luer, sp. nov.

Planta mediocris caespitosa, pedunculo triquetro gracili foliis ellipticis longiore, racemo congesto successivifloro, sepalis caudatis in cupulam brevem connatis, lamina synsepali purpurea rotundata, petalis oblongis acutis carinatis, labello ad medium constricto apice verrucoso acuto.

Plant medium in size, presumably epiphytic, caespitose; roots slender. Secondary stems erect, to 2.5 cm long, enclosed by 2-3 tubular sheaths. Leaf erect, coriaceous, up to 8 cm or longer including a petiole ca. 1.5 cm long, up to 2.7 cm wide, cuneate below into the petiole. Inflorescence a congested, successively flowered raceme borne by an erect or suberect, slender, triquetrous peduncle to 12.5 cm long or longer, with a bract near the base, from a node low on the secondary stem; floral bracts imbricating, 8 mm long; pedicel 6 mm long; ovary 2.5 mm long; dorsal sepal orange, ovate, 24 mm long, 5 mm wide, connate to the lateral sepals for 1.5 mm into a shallow, sepaline cup, the acute, free portion contracted into a slender, yellow tail; lateral sepals purple, orange toward the base, ovate, oblique, connate 7 mm into a broad, rounded lamina 12 mm long, 15 mm wide expanded, the obtuse apices contracted into yellow tails 10 mm long; petals white, oblong, 6 mm long, 1.25 mm wide, the apex yellow, acute, the lower margin with a longitudinal callus ending in a rounded protuberance above the base; lip purple, subpanduriform, 6 mm long, 2.75 mm wide expanded, sharply constricted at the middle with marginal folds, the anterior half of the lip ovate, verrucose, acute, the posterior half cuneate, smooth, the base truncate, hinged beneath; column white, semiterete, 5 mm long, the foot 2 mm long with a short, incurved extension.

Etymology: Named in honor of Mrs. Margaret Herring of Seattle, Washington, who submitted this species to the Orchid Identification Center of the American Orchid Society for identification.

Type: COLOMBIA: without locality, cultivated in Seattle, WA, by Margaret Herring, s.n. 8 July 1982, *C. Luer 8075* (Holotype: SEL).

This species was imported from Colombia, unfortunately without locality. It was purchased and cultivated by Margaret Herring who submitted the plant to the OIC. In addition to other characters, this species differs from each of its Colombian relatives by its distinctive lip.

Masdevallia mendozae Luer, sp. nov.

Planta parva caespitosa, pedunculo unifloro foliis ellipticis brevior, flore aureo sepalis in tubum longum cylindricum connatis caudis brevissimis, petalis oblongis carina in dentem magnum supra basim effecta, labello oblongo basi concavo.

Plant small, epiphytic, caespitose; roots slender. Secondary stems blackish, 1-1.7 cm long, enclosed by 2 close, tubular sheaths. Leaf erect, coriaceous, the blade narrowly elliptical, 3-5.5 cm long including the 1-1.5 cm long petiole, 1.2-1.6 cm wide, the apex obtuse, cuneate below into the more or less blackish petiole. Inflorescence a solitary, bright orange, tubular flower borne by a slender peduncle 3 cm long, with a bract near the base, from a node low on the secondary stem; floral bract close, tubular, 5 mm long; pedicel 5 mm long; ovary 3-4 mm long; sepals orange, glabrous externally, shortly pubescent within above the middle, carinate along the midveins, the dorsal sepal linear-oblong, curved, 27 mm long, 8 mm wide expanded, connate to the lateral sepals for 22 mm to form a curved, cylindrical tube, the free portion rounded, abruptly contracted into a 2 mm long, recurved tail, the lateral sepals connate 19 mm into a more or less oblong, curved lamina 24 mm long, 14 mm wide expanded, the free portions rounded, convex, abruptly contracted into tails 1.5 mm long; petals orange, oblong, 6.5 mm long, 1.75 mm wide, the truncate apex lightly trilobed, with a carina along the lower margin becoming a large, thick, incurved tooth extending beyond the unguiculate base; lip orange, oblong, 7.5 mm long, 2.9 mm wide, the apex truncate, lightly decurved, with a low callus, the base truncate, thickened, concave on the end and hinged below, the disc with a pair of low, parallel, indistinct calli; column semiterete, 5.5 mm long, the foot 3 mm long, with a slender, incurved extension.

Etymology: Named in honor of Hartman Eudaldo Mendoza of Vilcabamba, Ecuador, who discovered this species.

Type: ECUADOR: ZAMORA-CHINCHIPE: Loma del Aguila, road to Valle de Numbala, east of the pass, alt. 2200 m, Sept. 1979, collected by H. Mendoza, cultivated by A. Andreetta in Cuenca, flowered in cult. 27 Oct. 1982, *C. Luer 8201* (Holotype: SEL).

To date only a single plant of this species has been discovered. In a remote virgin cloud forest, H. Mendoza found the plant with a single flower lying near the trail on the forest floor as if it had fallen from a perch higher in the trees. He could find no more. In April 1982 another intensive search for plants was conducted in this area by three persons, but again in vain. The original plant was gradually deteriorating in the warm climate of Vilcabamba, but it quickly began to thrive in the cool climate of Cuenca after it was given to Padre Andreetta. The plant has now quadrupled in size, and it has already produced two flowers. The long, curved, bright orange, cylindrical sepaline tube suggests a hummingbird as the pollinator.

Masdevallia panguiensis Luer & Andreetta, sp. nov.

Species haec *M. ayabacanae* Luer affinis sed flore minore, sepalis intus valde verrucosis caudis multibrevioribus et labello plano verrucoso differt.

Plant medium in size, epiphytic, caespitose, roots coarse. Secondary stems stout, erect, 2-2.5 cm long, enclosed by 2-3 tubular sheaths. Leaf erect, thickly coriaceous, narrowly obovate, 11-14 cm long, 2-2.3 cm wide, the apex obtuse, gradually narrowed below to the subpetiolate base. Inflorescence a succession of solitary flowers borne in a congested raceme 1-1.5 cm long, by an ascending peduncle 11 cm long or longer, with 3-4 bracts, from a node low on the secondary stem; floral bract and pedicel each 5-6 mm long; ovary 10 mm long; sepals dark purple, coarsely verrucose within, the dorsal sepal ovate, 47 mm long, 8 mm wide, connate to the lateral sepals for 6 mm to form a short, cylindrical tube, the acute free portion acuminate into an erect, rigid tail becoming yellow toward the apex, the lateral sepals ovate, oblique, 47 mm long including the tails, connate 16 mm into a lamina 19 mm wide, the acute apices acuminate into rigid tails 1.5-2 cm long; petals dark purple, fleshy, cuneate, unguiculate, 6 mm long, 4 mm wide, the apex broadly bilobed with an obscure, obtuse apiculum externally between the lobes; lip dark purple, oblong, flat, 6 mm long, 2.5 mm wide, the obtuse apex minutely serrulate, verrucose above the middle, smooth below the middle with thin, erect margins above the subcordate base; column dark purple, semiterete, 4.5 mm long, the thick foot with a very short, incurved extension.

Etymology: Named for the community of Panguí, near the locality where this species was found.

Type: ECUADOR: MORONA-SANTIAGO: epiphytic in cloud forest above Panguí, alt. 1500 m, M. Portilla, cultivated by A. Andreetta in Cuenca, flowered in cult. 1 Nov. 1982, *C. Luer 8289* (Holotype: SEL).

This species is closely related to *M. ayabacana* from adjacent northern Peru to the southwest and from above Bomboiza to the north. *Masdevallia panguiensis* may be identified by the smaller habit, smaller flowers with much shorter tails, sepals coarsely verrucose within, and a flat lip without the recurved apical callus which extends beneath as a prominent tuberosity in *M. ayabacana*.

Masdevallia receptrix Luer & Vásquez, sp. nov.

Planta mediocris caespitosa, pedunculo triquetro foliis subaequilongo, racemo successivi-bifloro congesto, sepalis brunneis in cupulam latam connatis, cauda sepalis dorsalis erecta crassa caudis sepalorum lateralium duplongiore, petalis bidentatis supra basim callosis, labello subpandurato arcuato apice rotundato.

Plant medium in size, presumably epiphytic, caespitose; roots coarse. Secondary stems erect, stout, 1.5-4.5 cm long, enclosed by 2-3 loose, tubular sheaths. Leaf erect, coriaceous, oblong-elliptical, 9-15 cm long including an indistinct petiole 2-3 cm long, 2-2.6 cm wide, the apex rounded, minutely notched, cuneate below into the petiole. Inflorescence a successively 2-flowered (? always) congested raceme borne by an erect, stout, triquetrous peduncle up to 11 cm long or longer, from a node at the base of the secondary stem; floral bracts imbricating, 15 mm long; pedicels 10-13 mm long, 5 mm apart; ovary 6 mm long; sepals rigidly fleshy, brown, yellow toward the bases, the margins more or less reflexed, microscopically pubescent within, the blade of the dorsal sepal ovate, carinate, 13 mm long, 10 mm wide, connate to the lateral sepals for 5 mm to create a gaping cup, the subacute apex contracted into an erect, yellow tail 35 mm long, 2 mm thick in the distal half, the lateral sepals ovate, oblique, 20 mm long, 15 mm wide, connate 13 mm and forming a cavity below the mentum with the column-foot to accommodate the apex of the lip, the subacute apices contracted into yellow tails 16 mm long; petals yellow, oblong, 7 mm long, 2 mm wide; the apex brown, unequally bidentate, the lower margin with a longitudinal callus ending in a rounded swelling above the base; lip tan, marked with dark brown, oblong-pandurate, arcuate, 7 mm long, 3 mm wide, with marginal folds near the middle, ovate and lightly verrucose above with undulate margins, the apex rounded, rectangular below the middle, the truncate base hinged beneath; column yellow, semiterete, 5 mm long, the foot equally long.

Etymology: From the Latin *receptor*, *receptrix*, "a receptor," in allusion to the concavity of the synsepal to accommodate the apex of the lip. The development of a similar cavity may be seen in several other species (e.g. *M. odontopetala* Luer).

Type: BOLIVIA: LA PAZ: collected by Dino Menato of Chulumani, probably in the Prov. of Sud Yungas, without locality, cultivated in Spielberg, West Germany, by B. Wuerstle, flowered in cult. April 1982, *C. Luer 8144* (Holotype: SEL).

This species was collected by Dino Menato and cultivated by him at his home in Chulumani. A division of his plant was given to us at the time of our visit in January 1980. The division was taken to Germany in May, and it flowered two years later in the greenhouse of Berthold Wuerstle.

Masdevallia ustulata Luer, sp. nov.

Planta mediocris caespitosa, pedunculo gracili unifloro foliis plus minusve aequilongo, sepalis flavis brunneo striatis glabris in tubum gibbosum connatis caudis gracilibus aequilongis, petalis truncatis basi uncinatis, labello oblongo subtruncato.

Plant medium in size, epiphytic to terrestrial, caespitose; roots slender. Secondary stems erect, slender, 2-4.5 cm long, enclosed by 2-3 loose, tubular sheaths. Leaf erect, coriaceous, long-petiolate, 8-14 cm long including the slender 3-5 cm long petiole, 2-3.2 cm wide, the apex subacute to obtuse, cuneate below into the petiole. Inflorescence a solitary flower borne by a slender peduncle 7.5-15 cm long, with a bract near the base, from a node low on the secondary stem; floral bract 8-12 mm long; pedicel 8-9 mm long; ovary 6-9 mm long; sepals yellow, veined in purple-brown, glabrous, the blade of the dorsal sepal 20-23 mm long, 7-8 mm wide, connate to the lateral sepals for 14-16 mm to form a cylindrical tube, the free portion triangular, the acute apex contracted into an erect, slender tail 3-4.5 cm long, the lateral sepals oblong-falcate, connate 13-17 mm to form a shallow concavity above the short mentum with the column-foot, the free portions gradually narrowed into slender tails, the entire length 5-6 cm, the width 1-1.5 cm together; petals light yellow, intensely marked with purple on the lower half, oblong, 6-7 mm long, 2-2.75 mm wide, the truncate apex bilobed, with a carina along the lower margin ending in an acute, retrorse, uncinata tooth above the base; lip cream to rose, marked with purple, oblong, 6.5-7 mm long, 3.25 mm wide, the apex truncate or broadly obtuse, lightly recurved, the truncate base shallowly retuse, hinged below; column white with purple margins, semiterete, 6 mm long, the stout foot 3 mm long with a short, incurved extension.

Etymology: From the Latin *ustulatus*, "singed, scorched," in allusion to the yellow color of the sepals with brownish veins.

Type: ECUADOR: MORONA-SANTIAGO: epiphytic in cloud forest east of Paute, alt. 1700 m, 10 July 1977, C. Luer, J. Luer, G. Luer & A. Andreetta 1660 (Holotype: SEL); NAPO: cloud forest north of Baeza, alt. ca. 1500 m, 10 Aug. 1978, C. Luer, J. Luer, A. Hirtz & A. Andreetta 3214 (SEL); COLOMBIA: PUTUMAYO: without locality, collected by Hermano Octavio Ospina de Sibundoy, flowered in cult. 5 Aug. 1978, C. Luer 3093 (SEL); PERU: AMAZONAS: cloud forest between Leimebamba and Chachapoyas, alt. 2500 m, Aug. 1978, W. Koeniger 7b, cultivated in Munich, West Germany, flowered in cult. 28 May 1980, C. Luer 5280 (SEL).

This species, known from the cloud forests of the eastern slopes of the Andes from southern Colombia to northern Peru, is similar to *M. ensata* Rchb. f. from the Eastern Cordillera of Colombia and Venezuela, but *M. ustulata* may be distinguished by the larger flower with a shorter mentum of the column-foot. The petals are heavily marked with purple on the lower half which ends in a sharp, hooked tooth slightly longer than the base of the petal.

Masdevallia venatoria Luer & Malo, sp. nov.

Planta parva caespitosa pedunculo unifloro foliis ellipticis brevipetiolatis brevioribus, flore specioso aurantiiorubescenti, sepalis brevicaudatis in cupulam brevem connatis, petalis oblongis supra basim cum dente obtuso, labello elliptico apice parvalosulo.

Plant small, epiphytic, caespitose; roots slender. Secondary stems blackish, slender, 0.5-1 cm long, enclosed by 2 loose, tubular sheaths. Leaf erect, coriaceous, elliptical, short-petiolate, 3-5 cm long including the 0.8-1.5 cm long petiole, 1-1.7 cm wide, the apex obtuse, cuneate below into the more or less blackish petiole. Inflorescence a solitary flower borne by a suberect peduncle 2-2.5 cm long, with a bract near the base, from a node low on the secondary stem; floral bract thin, tubular, 6 mm long; pedicel 5 mm long; ovary 5 mm long; sepals colorful, glabrous, the free margins minutely erose, the dorsal sepal light red-orange below the middle fading into yellow above the middle, obovate, shallowly concave, 15 mm long, 9.5 mm wide, connate to the lateral sepals for 6 mm to form a shallow, gaping cup, the apex rounded, abruptly contracted into a slender, orange tail 16 mm long, the lateral sepals red on the lower third turning to red-orange on the middle third and light red-orange on the distal third, oblong, 18 mm long, 10 mm wide,

more or less reflexed, connate for 6 mm to form a shallow mentum, the apices obtuse, oblique, contracted into slender orange tails 10 mm long; petals white with a few purple dots, oblong, 6 mm long, 2 mm wide, the truncate apex shallowly bilobed, with a carina along the lower margin ending in a short, obtuse tooth above the base; lip yellow, dotted with purple, elliptical, 6 mm long, 2.75 mm wide, the apex rounded with a small, marginal, purple callus, the base truncate, hinged beneath; column white, marked with purple on the margins, semiterete, 5 mm long, the foot with a slender, incurved extension 2 mm long.

Etymology: From the Latin *venatorius*, "of or belonging to the hunter," in dedication to all those who look for orchids.

Type: *ECUADOR: ZAMORA-CHINCHIPE:* epiphytic in cloud forest of the eastern slope of the mountain range east of the old trail from Loja to Zamora, alt. 2300 m, 9 Sept. 1981, B. Malo, cultivated at Tarqui, flowered in cult. 26 Oct. 1982, *C. Luer 8195* (Holotype: SEL).

Only one plant of this showy little species has been discovered to date. Benigno Malo describes finding a single flowering plant growing on a small transverse branch in a remote cloud forest. A search for more plants yielded a small but venomous snake in the Crotalid family lurking among the lush growth of epiphytes growing on the same branch. The snake met with disaster and was brought home in a glass jar, but no other plant of the new *Masdevallia* could be found. A second search has not yet been conducted.

Myoxanthus affinoides Luer, sp. nov.

Species haec *M. affinis* (Lindl.) Luer similis sed habitu minore, foliis angustissimis, inflorescentia pauciflora, sepalis extus spiculatis et labello subpandurato supra medium bilamellato differt.

Plant medium in size, epiphytic, shortly repent, caespitose; roots coarse, flexuous. Secondary stems slender, erect, unifoliate, 10-34 cm long, enclosed by a series of 6-8 close, imbricating, tubular sheaths, the lowermost hispidulous. Leaf erect, coriaceous, narrowly ovate, 7-15 cm long, 1-1.5 cm wide, the apex acute, tridenticulate, the base narrowly cuneate, subsessile. Inflorescence a succession of solitary flowers produced singly or 2-3 simultaneously from a cluster of exerted nodes near the apex of the secondary stem; peduncles spiculate, 2-3 mm long; floral bract spiculate, 3 mm long; pedicel glabrous, 2 mm long; ovary densely short-spiculate, 1.5-2 mm long; sepals yellow-green, dotted with purple along the veins, covered by short red spicules externally, glabrous within, the dorsal sepal ovate, acute, 9 mm long, 3.25 mm wide, the lateral sepals ovate, oblique, acute, 8 mm long, 3 mm wide, connate basally, pubescent within near the base; petals yellow, thick, 8.5 mm long, 2.5 mm wide, ovate below the middle, minutely serrate and contracted near the middle into a semiterete, narrowly obtuse apex; lip yellow below the middle, dark purple above the middle, oblong-subpandurate, 3 mm long, 1.5 mm wide, the margins below the middle broadly rounded and erect, the apical half rounded, with a pair of converging lamellae; column rosy white, semiterete, 3 mm long, the foot thick, concave, 2 mm long.

Etymology: Named for the similarity of the flowers of this species to those of *M. affinis*.

TYPE: *ECUADOR: ZAMORA-CHINCHIPE:* epiphytic in cloud forest south of the pass south of Yangana, alt. 2600 m, 3 March 1982, *C. Luer, A. Andre-etta, D. D'Alessandro & S. Dalström 7114* (Holotype: SEL); Quebrada Honda, south of Yangana, alt. 1800 m, June 1982, *D. D'Alessandro 238* (SEL).

Distribution. Southern Ecuador.

This species is most similar to *M. affinis*, but *M. affinoides* may be recognized by the smaller habit, the much narrower leaves, the fewer flowers covered by red spicules, and the subpandurate, bilamellate lip. The clinandrium of both species is bidentate.

Myoxanthus gorgon Luer, sp. nov.

Inter species generis *Myoxanthi* Poepp. & Endl. planta grandis floribus flavis brevipedunculatis, bracteis floralibus dilatatis longipubescentibus, ovario et basibus sepalorum bractea obtectis, petalis longis crassis semiteretibus infra medium denticulatis, labello parvo simplici.

Plant large, epiphytic, caespitose; roots coarse. Secondary stem stout, erect, 30-40 cm tall, enclosed by a series of 6-7 close, imbricating, tubular sheaths, the lowermost densely short-hispidulous. Leaf erect, rigidly coriaceous, narrowly elliptical-ovate, acute, 20-30 cm long, 3.5-5 cm wide, longitudinally veined, the base cuneate, sessile. Inflorescence a fascicle of simultaneous, solitary, yellow flowers borne from a cluster of nodes near the apex of the secondary stem; peduncles 1-2 mm long, shortly pubescent; floral bract with a white pubescence, broadly expanded enclosing the pedicel, ovary and bases of the sepals, 5 mm long, ca. 9 mm wide at the orifice expanded; pedicel 0.5 mm long; ovary 1 mm long, minutely pubescent; dorsal sepal elliptical-ovate, obtuse, 15 mm long, 4.5 mm wide; lateral sepals lightly adherent nearly to the apex, oblong-ovate, 12 mm long, 7 mm wide together, the apex obtuse or more or less rounded together; petals 15 mm long, ovate in the lower third, 3.5 mm wide with denticulate margins, the distal two thirds thickened, semiterete, curved, 1.5 mm wide, narrowly obtuse; lip white, marked with purple, ovate with the apex rounded, 2.5 mm long, 1.25 mm wide, with a low, yellow callus at the base, the disc with a pair of low, longitudinal carinae; column light green, thick, broadly winged, 2 mm long, the apex bidentate, the thick foot 1.5 mm long.

Etymology: Named for a gorgon of Greek mythology in reference to the similarity of the inflorescence to a head of snake locks.

Type: ECUADOR: MORONA-SANTIAGO: epiphytic in cloud forest north of Gualaquiza, alt. 1500 m, March 1982, C. Luer & A. Andreetta, cultivated at SEL, flowered 14 March 1983, C. Luer 8693 (Holotype: SEL).

This species is similar to *M. monophyllus* Poepp. & Endl. in size, and the pubescent floral bracts also engulf the bases of the sepals. The flowers are smaller, yellow, and with thick, elongated, curved petals. The lateral sepals are lightly adherent. The petals are thick and semiterete in the distal two thirds. The simple lip is much smaller than the stout, bidentate column.

Myoxanthus priapus Luer, sp. nov.

Inter species *Myoxanthi* Poepp. & Endl. species haec habitu gracili, floribus purpureis breviter pubescentibus et labello oblongo callo supra basin crasso erecto dignoscenda.

Plant medium in size, epiphytic, shortly repent, caespitose; roots coarse, flexuous. Secondary stems slender, erect, unifoliolate, 10-21 cm long, enclosed by a series of 6-7 close, imbricating, tubular sheaths, the lowermost hispidulous. Leaf erect, coriaceous, narrowly elliptical, 6-12 cm long, 1-1.5 cm wide, the apex acute, tridenticulate, the base narrowly cuneate, subsessile. Inflorescence a succession of solitary flowers produced singly or 2-3 simultaneously from a cluster of exerted nodes near the apex of the secondary stem; peduncles pubescent, 3-4 mm long; floral bract pubescent, 2-3 mm long, pedicel 2 mm long; ovary densely short-pubescent, 1.5 mm long; sepals purple, shortly pubescent externally, glabrous within, the dorsal sepal oblong, acute, 6 mm long, 2.5 mm wide, the lateral sepals ovate, oblique, concave, obtuse, apiculate, 5 mm long, 3 mm wide, connate basally; petals yellow with a purple midvein, 4.5 mm long, 1.75 mm wide, oblong below the middle, subacutely angled at the middle into a semiterete, 2 mm long, narrowly obtuse apex; lip purple-black, oblong, 2.25 mm long, 1 mm wide, with a pair of small, uncinately marginal lobes near the middle, the apex rounded, the base truncate, with a short pair of acute marginal angles, the disc with a thick, erect, 0.5 mm tall, shallowly grooved callus above the base, with a pair of low, parallel carinae above the middle; column purple, semiterete, 2 mm long, the thick foot concave, with a pair of marginal calli.

Etymology: Named for Priapus, the Greek mythological god of reproduction, in allusion to the callus of the lip.

TYPE: ECUADOR: LOJA: epiphytic in cloud forest east of Yangana, Altos de Numbala, alt. 2800-2900 m, June 1982, *D. D'Alessandro 195* (Holotype: SEL). C. Luer illustr. 8118.

Distribution: Southern Ecuador.

This species differs from all the other known species of the genus by the large, thick, erect callus above the base of the lip. Except for the lip, *M. priapus*, a species of high altitude, appears most similar to *M. georgei* (Luer) Luer, a species of low altitude.

Platystele viridis Luer, sp. nov.

Planta pro genere grandis, racemo multifloro foliis longipetiolatis multilongiore, floribus viridibus, sepalis oblongis obtusis, petalis oblongis acutis et labello minuto oblongo semitereti.

Plant large for the genus, presumably epiphytic, caespitose; roots slender. Secondary stems erect, slender, 2.5-3.5 cm long, enclosed by 3-4 loose, thin, ribbed, tubular sheaths. Leaf erect, thinly coriaceous, narrowly obovate, long-petiolate, 5-7 cm long including the 2-3 cm long petiole, 1.2-1.5 cm wide, the apex obtuse, cuneate below into the slender petiole. Inflorescence an erect raceme, up to 20 cm long including the peduncle, with up to 23 simultaneous, light green, glabrous flowers; floral bract 1.5 mm long; pedicel 2 mm long; ovary 1 mm long; sepals oblong-ovate, obtuse, the dorsal sepal 4 mm long, 1.25 mm wide, the lateral sepals connate 1 mm, 4 mm long, 2.25 mm wide together; petals oblong, lightly oblique, acute, 3 mm long, 1.75 mm wide; lip oblong, semiterete, obtuse, 1.6 mm long, 0.5 mm wide, the surface and margins microscopically cellular; column 0.5 mm long, hooded with a bilobed stigma, footless.

Etymology: From the Latin *viridis*, "green," referring to the flowers.

Type: ECUADOR: without locality, cultivated by the Jesups in Bristol, Connecticut, flowered in cultivation 28 March 1982, *C. Luer 7425* (Holotype: SEL).

Unfortunately, the locality of this giant of the genus is unknown. It is easily recognized by the tall raceme of numerous, simultaneous, green flowers. The sepals are narrowly ovate but obtuse, and the minute lip is semiterete.

Pleurothallis megalophora Luer, sp. nov.

Planta parva caespitosa, racemo foliis ellipticis brevior, floribus successivis atropurpureis, ovario trialato grandi, sepalis anguste triangularibus carnosius clausis, petalis anguste ovatis pubescentibus, labello parvissimo quinquelobato.

Plant very small, epiphytic, shortly climbing to caespitose; roots very fine. Secondary stems fascicled, 3-5 mm long, enclosed by 2-3 thin, ribbed, tubular sheaths. Leaf erect to suberect, coriaceous, elliptical, subacute, 15-22 mm long, 5-8 mm wide, cuneate below into the subpetiolate base. Inflorescence a raceme 5-15 mm long including the peduncle, of several, successive flowers, borne from a node on the secondary stem; floral bract and pedicel each 1.5-2 mm long; ovary proportionately large, 2 mm long, 2.5 mm wide, trialate; sepals purple, non-spreading, glabrous, thick, narrowly triangular, acute, subconduplicate, 8 mm long, 1.5-2 mm wide expanded; petals narrowly ovate, acute, 5 mm long, 1 mm wide, the midvein subcarinate and glandular-pubescent externally; lip more or less oblong, 5-lobed, 1.5 mm long, 0.3 mm wide, ovate and narrowly obtuse above the middle, with a pair of uncinata, marginal lobes below the middle and a pair of pedunculated, membranous lobes at the base, with a minute, cleft callus immediately above the base; column semiterete, 1.25 mm long, the clinandrium erose, with a thick, curved foot.

Etymology: From the Greek *megalo*, "large," *oön*, "egg," and *phoros* "bearing," hence, bearing a large ovary.

Type: ECUADOR: NAPO: epiphytic in wet forest near Rio Jatuncayu west of Tena, alt. 600 m, 21 Feb. 1982, *C. Luer, A. Hirtz & X. Leon 6933* (Holotype: SEL).

The oversized ovary accompanied by essentially unopened flowers suggests cleistogamy, but the flowers fade, usually falling without persisting fruit as seen in most other cleistogamous species. This species had been found in previous trips to this area, and attempts have been made in vain to cultivate it in the hope of obtaining an open flower.

Pleurothallis tipuloides Luer, sp. nov.

Planta parva caespitosa, caulibus secundariis gracilibus foliis ovatis acuminatis longioribus, floribus tenuibus successivis longipedunculatis, sepalo dorsali synsepalo petalisque longiacuminatis, petalis ciliatis, labello trilobato, lobis basalibus rotundatis erectis serrulatis, lobo antico longiattenuato basi calloso.

Plant small, epiphytic, densely caespitose, roots slender, flexuous. Secondary stems suberect to erect, slender, unifoliate, 4-9 cm long, with a close, tubular sheath below the middle and another 1-2 sheaths at the base. Leaf coriaceous, suberect to spreading, ovate, 3.5-6 cm long, 1.5-2 cm wide, the apex acuminate, acute, tridenticulate, the middle tooth long-apiculate, the base rounded, sessile. Inflorescence a succession of solitary, delicate flowers borne by an ascending peduncle 1.5-2 cm long, from a 2 mm long spathe at the base of the leaf; floral bract 3 mm long; pedicel 4 mm long; ovary 2 mm long; sepals translucent light green suffused with purple toward the base, glabrous, the dorsal sepal concave, ovate basally, 28 mm long, 3 mm wide unspread, the apex acuminate into a filiform tail, the lateral sepals connate into a synsepal similar to the dorsal sepal, 28 mm long, 3.5 mm wide unspread; petals widespread, translucent green mottled with brown, narrowly ovate, oblique, 20 mm long, 1.5 mm wide, the lower portion ciliate, gradually contracted above into a filiform tail; lip 3-lobed, 5 mm long, 2 mm wide unspread, the basal lobes light green, rounded, erect, embracing the column, minutely denticulate anteriorly, the anterior lobe orange, smooth, narrowly ovate, attenuate, acute, thickened at the base with a glenion between the lateral lobes; column stout, 1.5 mm long, footless.

Etymology: Named for the fancied resemblance of the flower to a crane fly (*Tipula*).

TYPE: ECUADOR: PICHINCHA: epiphytic in cloud forest west of Mindo toward Puerto Quito, alt. 1600 m, 13 March 1982, C. Luer, A. Hirtz & S. Dalström 7324 (HOLOTYPE: SEL).

Distribution: Western Ecuador.

This fragile little species is related to *P. amphigyra* Luer & Escobar, *P. arachnion* Luer, and what is assumed to be *P. quadricaudata* Schltr. (the latter was described from a flower without a lip!), but *P. tipuloides* may be distinguished from them by the serrulate basal lobes and the long-attenuate middle lobe of the lip.

Pleurothallis valladolidensis Luer, sp. nov.

Planta mediocris caespitosa, caulibus secundariis gracilibus folio deflexo anguste cordato longioribus, spatha magna erecta, flore magno successivo roseobrunneo, sepalo dorsali synsepaloque late ellipticis obtusis, petalis hastatis acutis unguiculatis marginibus minute erosis, labello suborbiculari concavo intus verruculoso basi unguiculato calloso.

Plant medium in size, epiphytic, caespitose, roots slender, flexuous. Secondary stems slender, unifoliate, 10-30 cm long, with a close tubular sheath below the middle and another at the base. Leaf horizontal to deflexed, very narrowly ovate, 10-15 cm long, 1.8-2 cm wide, the apex acute, tridenticulate, the sessile base deeply cordate, the basal lobes ca. 1 cm deep. Inflorescence a succession of large, solitary flowers borne from an erect, foliaceous spathe 15-18 mm long, 6 mm wide, at the base of the leaf, the flower rosy brown, facing downward; peduncle 5 mm long, the floral bract 10 mm long, the pedicel 8 mm long, all concealed within the spathe; ovary 7 mm long, minutely verrucose; sepals glandular-cellular, the dorsal elliptical, obtuse, 15 mm long,

11 mm wide, 7(9)-veined, the laterals completely connate into a lamina similar to the dorsal sepal; petals glandular-cellular, ovate-hastate, 11 mm long, 6 mm wide, 3-veined, the apex acute, the margins minutely erose-denticulate, the base unguiculate; lip yellow, suborbicular, 7 mm long, 6.25 mm wide, concave with thickened, slightly irregular margins, verrucose within toward the base, the apex rounded, the base unguiculate with a flattened callus beneath the column; column stout, pedestal-like without a foot, 3 mm long, 3.5 mm wide, the stigma bilobed.

Etymology: Named for the community of Valladolid near the locality where the species was discovered.

TYPE: *ECUADOR:* ZAMORA-CHINCHIPE: epiphytic in cloud forest near the river above Valladolid, alt. ca. 2000 m, 21 Feb. 1982, D. D'Alessandro 167 (HOLOTYPE: SEL), C. Luer illustr. 8080.

Distribution: Southern Ecuador.

This species is another of many distinguished by a deflexed, narrowly cordate leaf with a conspicuous, erect spathe. The flower of *P. valladolidensis*, however, is large, rosy brown, with a unique, yellow, round, concave lip verrucose within toward the unguiculate base.

***Restrepiopsis carnososa* Luer & Vásquez, sp. nov.**

Inter species generis *Restrepiopsis* Luer species haec habitu grandi, floribus aurantiacis carnosis, sepalis lateralibus connatis, labelli lobis basalibus parvis et disco canaliculato distinguitur.

Plant large for the genus, epiphytic, caespitose; roots coarse. Secondary stems stout, erect, 7-8.5 cm long, enclosed by a series of 6-7 laterally compressed, loose sheaths; leaf erect, thinly coriaceous, elliptical, acute to subacute, 6-7.5 cm long, 2.5-3 cm wide, the base cuneate into a petiole ca. 1 mm long. Inflorescence a succession of solitary flowers borne in a fascicle from near the apex of the secondary stem, the pedicels 5 mm long; floral bract 5 mm long; pedicel 2.5 mm long, with a slender filament; ovary 4 mm long; sepals yellow-orange, fleshy, studded within above the middle by papillary cells, the dorsal sepal elliptical-ovate, concave, acute, 10 mm long, 4.5 mm wide, the lateral sepals connate to the apex into an obtuse, elliptical-ovate lamina 9 mm long, 5 mm wide; petals oblong-elliptical, 6 mm long, 2 mm wide, the apex rounded, the margins cellular; lip light green, oblong, 3-lobed, 4.5 mm long, 2 mm wide, the margins cellular denticulate, the apex rounded, shallowly retuse, the lobes basal, small, erect, obtuse, oblique, the disc longitudinally channeled, broadly at the base between the basal lobes, narrowly in the middle, disappearing at the apex; column light green, semiterete, 3 mm long, the foot 1 mm long.

Etymology: From the Latin *carnosus*, "fleshy," in reference to the substance of the flowers.

Type: *BOLIVIA:* LA PAZ: Dept. of Nor Yungas: epiphytic in cloud forest west of Coroico, alt. 1820 m, Feb. 1983, C. Luer, J. Luer, E. Besse & R. Vasquez, cultivated at SEL, flowered in cultivation 15 June 1983, C. Luer 9083 (Holotype: SEL).

This is the first report of the genus from Bolivia. The flowers are orange, large and fleshy. The lateral sepals are connate to the apex, and the lip is three-lobed, the lobes small and basal.

***Restrepiopsis pulchella* Luer, sp. nov.**

Inter species generis *Restrepiopsis* Luer species haec habitu parvo, foliis late ovatis, sepalis latis et labello supra medium transverse oblongo bilobato cum callo inter lobos distinguitur.

Plant small, epiphytic, caespitose; roots slender. Secondary stems erect, slender, 2-4 cm long, enclosed by a series of 3-4 close, tubular sheaths. Leaf erect, coriaceous, suffused with purple beneath, ovate, subacute, 2-3.3 cm long, 1.2-2.4 cm wide, the rounded base contracted into a 3 mm long petiole. Inflorescence a solitary flower borne in succession in a fascicle from near the apex of the secondary stem by a filamentous peduncle 5-7 mm long; floral bract 3-4 mm long; pedicel 4-5 mm long with a small filament; ovary 3 mm long; sepals free, spreading, translucent yellow-green, minutely dotted with purple, the

dorsal sepal ovate, obtuse, concave, 7.5 mm long, 5 mm wide unexpanded, 3-veined, the lateral sepals narrowly obovate, subacute, 7 mm long, 2.5 mm wide, 3-veined; petals elliptical, 5 mm long, 2.5 mm wide, 1-veined, the apex rounded, the surface and margins prominently cellular; lip pandurate-trilobed, 4 mm long, 3.25 mm wide below the apex, transversely oblong above the middle, the apex broadly rounded or bilobed, lightly retuse, with erect, low, broad, obtuse marginal lobes above the base, the disc with calli at the bases of the lobes, concave between, and with a midline callus between the apical lobes, the base concave, hinged to the column-foot; column green, semiterete, 3.5 mm long, with a short, thick foot.

Etymology: From the Latin *pulchellus*, "pretty," in reference to qualities of the plant.

Type: VENEZUELA: without locality, obtained by B. Wuerstle from Hubben, cultivated at Spielberg, West Germany, flowered in cultivation, 13 Sept. 1982, *C. Luer 8143* (Holotype: SEL).

This species may be distinguished from the others of the genus by the small habit and ovate leaves. The sepals are comparatively wide and the lip is widened across the transversely oblong, bilobed apex with a midline callus. The basal lobes are short, broad, and obtuse.

Scaphosepalum dodsonii Luer, sp. nov.

Inter species *Scaphosepali* Pfitz. habitu parvo, foliis spatulatis, pedunculo filiformi descendenti, flore atrorubro maculato, synsepalo mentoso, pulvinis triangularibus, petalis obliquis apiculatis basi callosis et labello alte bilamellato distinguitur.

Plant small, epiphytic, caespitose; roots slender, flexuous. Secondary stems blackish, unifoliate, 10-15 mm long, enclosed by 2-3 loose, ribbed sheaths. Leaf erect, coriaceous, elliptical-spatulate, long-petiolate, 20-35 mm long including the 5-15 mm long petiole, 12-16 mm wide, cuneate below into the slender, blackish petiole. Inflorescence a successively flowered raceme borne by a smooth, filiform, descending peduncle 5-7 cm long including the rachis, from a node high on the secondary stem near the abscission layer; floral bract 2 mm long; pedicel 4-7 mm long; ovary 2 mm long; sepals translucent green, spotted with dark red; middle sepal ovate and concave below the middle, tricarinate, 7.5 mm long, 3 mm wide expanded above the base, the apex contracted into a slender, terete tail; lateral sepals connate 4.5 mm into an oblong, carinate lamina with minutely ciliate margins and forming a deep, longitudinal mentum, 6 mm long, 5 mm wide expanded, the "cushions" distinct, triangular, 2.5 mm long, 1.5 mm wide, the rounded apices prolonged by the carinae into slender tails 5.5 mm long; petals oblong, oblique, 2.75 mm long, 1.5 mm wide, the rounded apex asymmetrically apiculate, the base with a low, rounded callus on the antilabellar half; lip suboblong, multangular, arcuate, 2.5 mm long, 1.25 mm wide, the margins broad below the middle from a minutely lobulated base, ending abruptly near the middle, the disc with a pair of tall, erect lamellae filling the middle third, the anterior third spatulate, rounded, denticulate; column slender, arcuate, 3 mm long, broadly winged above the middle, the thick foot 2 mm long.

Etymology: Named in honor of Calaway H. Dodson, investigator of the flora of Ecuador, who discovered this species.

TYPE: ECUADOR: COTOPAXI: epiphytic in cloud forest, Tenefuerste, Rio Pilalo, alt. 1200 m, Feb. 1982, *C. H. Dodson & A. H. Gentry 12265* (Holotype: SEL), *C. Luer* illustr. 8117.

Distribution: Western Ecuador.

This small species resembles a dwarf *S. swertiaefolium* (Rchb. f.) Rolfe, but *S. dodsonii* is immediately distinguished by the minute flowers and habit with spatulate leaves, and the lip lacks the lateral lobes seen in *S. swertiaefolium*.