

SPECIES ACCOUNTS

Lehmann's orchid illustrations fall into three categories: fully coloured; part-coloured and black-and-white pencil drawings. They are arranged here alphabetically (with a few exceptions) by their currently accepted names. He numbered most with a prefix 'L', indicating Lehmann, followed by a number. The L has been misinterpreted as a figure 1, thus Lehmann L522 has been labelled by some as Lehmann 1522. His illustration numbers (as **Icon. t.**) are indicated where available. Some of the illustrations are also provided with a collection number that corresponds to one of his own herbarium collections. The majority of the herbarium specimens referred to are to be found at Kew, but some of the earlier numbers are at the Natural History Museum in London or in Vienna. Other herbarium specimens related to the same species are also cited, together with their provenance and any notes provided by Lehmann on the labels.

Lehmann identified and named many of his orchid illustrations. However, his intention to describe many as new species is obvious because he used unpublished names many of which were never validated. Only in the case of species which were jointly described with Fritz Kränzlin, and some which were published separately by him during his lifetime, bear his validly published names.

FIGURE 13. *Acianthera casapensis* (Lindl.) Pridgeon & M.W.Chase.

Icon t. 159. No given provenance.

OTHER LEHMANN COLLECTIONS: **345** as *Pleurothallis chamensis*. Colombia, above Pasto, 2000m. 18 February 1881. **4509** as *Pleurothallis chamensis*. Colombia, above Pasto, 2800-3000 m. **7099** as *Pleurothallis casapensis*. Colombia, grows on trees in the dense forests above Pacho, Dept. of Cundimarca, 2000-2600 m. Flowers in February. **7100** as *Pleurothallis casapensis*. Colombia, grows on trees in the dense forests on the Alto de Pesares above Popayán, 2400-2900 m. Flowering in February and March. **BT 96 & 97 & HK 77**. Colombia, Highlands of Popayán, 1600-2000 m. Flowering in December; **BT 344**. Colombia, Cassilla; **BT 345**. Colombia, Highlands of Popayán, 1700-2000 m. Flowering in November and December; **HK 95**. Colombia, Cabasgordas, West Andes of Antioquia, 1600-2000 m; **HK 98**. Colombia, Piedracucha.

FIGURE 14. *Acianthera sicaria* (Lindl.) Pridgeon & M.W.Chase.

BT 347 as *Pleurothallis*. Colombia, grows on trees in savanna woodland at Tocota, West Andes of Cali, 1400-1800 m. Flowers in November. **Icon. t. 482**.

OTHER LEHMANN COLLECTIONS: **1091** as *Pleurothallis*. Without provenance. **Icon. t. 227**; **7132** as *Pleurothallis*. Colombia, grows on trees in the dense forests around Papagalleros and Tocota, West Andes of Cali. Flowers in April and May and in Oct. and Nov. Plants generally small, squarrose-caespitose. Leaves leathery, yellow-green. Flowers pale yellow striped with red.

FIGURE 15. *Acineta erythroxantha* Rehb.f.

3839. Colombia, Antioquia Prov., Caramanta. **Icon. t. 650**.

FIGURE 16. *Ada aurantiaca* Lindl.

6906 as *Ada lehmannii* F.Lehm. Plants always small, loosely caespitose. Pseudobulbs oblong, slightly compressed. Leaves almost herbaceous-leathery, dark sea green. Flowers of a luminous yolk of egg yellow,

lip with yellow-white callus. Colombia, grows on trees in the moderately dense forests around Cajamarca on the western slopes of the West Andes of Roldanillo, 1400-1800 m. Flowers in Nov. and Dec. **Icon. t.601.**

FIGURE 17. *Ada* cf. *chlorops* (Endrés & Rchb.f.) N.H.Williams

7714 as *Brassia*. Tufts of plants frequently large and close. Bulbs moderately compressed, rarely over 5 cm in length. Leaves robust, yellow-green. Floral shoot from three to seven-flowered. Sepals and petals yellow, marbled with cinnamon-brown at the base. Lip white punctuated with brick-red. Column greenish. Colombia. Grows on trees in the dense and damp forests around Tocota, West Andes of Cali, 1800-2200 m, June-July. **Icon. t. 405.**

FIGURE 18. *Anathallis angustilabia* (Schltr.) Pridgeon & M.W.Chase

9076 as *Pleurothallis angustilabia* Schltr. Colombia, grows on trees in dense woods on the Rio Huangobio in the highlands of Popayán, 1700-2000 m. Flowering in Dec. 1883 and Jan. 1884. **Icon. t. 165.** Also **HK 115** – loc. cit., 1600-2200 m.

OTHER LEHMANN COLLECTION: **BT 313** as *Pleurothallis*. Flowers lemon-yellow. Colombia, Capilla.

FIGURE 19. *Anguloa virginalis* Lindl. var. *turneri* (B.S.Williams) Schltr.

HK 718 Colombia, Cali, June 1881, 1200-1600 m.

FIGURE 20. *Aspasia principissa* Rchb.f.

HK 1031 Colombia, Buenaventura, May 1899. **Icon. t. 503.**

FIGURE 21. *Anguloa clowesii* Lindl.

HK 107 Colombia, La Plata. **Icon. t. 820.**

FIGURE 22. *Barbosella cucullata* (Lindl.) Schltr.

6883 *R. antennifera* var. *angustifolia* Kraenzl (type). Plants forming large, dense and somewhat loose tufts. Leaves thickly fleshy, leathery, almost triangular, yellow-green. Flowers solitary on thin, round peduncles up to 15 cm in height, ochre-yellow washed with copper-red. Colombia, grows on trees and on the ground among scrub on the Paramo de Guanacas on the Central Andes of Popayan, 3000-3500 m. Flowers from May to Aug. **Icon. t. 137.**

OTHER LEHMANN COLLECTIONS: **286** Colombia, La Laguna above Pasto, 3500m, 21 February 1881; **466** Ecuador, Rio Maspá below Papallacta, 2500 m, 16 Jan. 1880 & 2850 m, 23 June 1878; **2046** Colombia, Paramo de Moras above Popayan, 2900-3400 m, 29 Oct. 1882; **6885** Ecuador, grows on trees and on the ground in the dense forests at Cerro Yanghuang near Pindilic, East Andes of Cuenca, 2800-3000 m, Flowers in Oct. and Nov. 1889; **s.n. & HK 313** Colombia, La Laguna above Pasto, 3500 m, 7 November 1878; **s.n.** Ecuador, Montaña de Aujel near Tuza, 2850 m, 23 June 1878. **s.n.** Ecuador, West slope of the Corazon, Silante, 2300-2500 m, Jan. 1883.

FIGURE 23. *Barbosella prorepens* (Rchb.f.) Schltr.

Icon. t. 703. No given provenance.

OTHER LEHMANN COLLECTIONS: **2379** Colombia, Alto de Oteras, 2600-3000 m, 11 Dec. 1887; **3305** Colombia, Serrania de Belalcazar, 1500-1600 m, 28 Oct. 1883. Tufts large. Flowers light yellow; **3610** Colombia, Rio Honda near Popayan, 1650 m, 5 March 1884. Tufts large. Flowers light yellow. Lip red at the base; **8367** Colombia, grows on trees, generally on the lower part of the trunks, in dense forests on the highlands of Popayan, 1500-2000 m. The plants form small, dense and somewhat irregular tufts. Leaves, thick, fleshy,

leathery, light green. Lateral sepals entirely connate with each other, forming a long oviform trough, light yellow. Dorsal sepal and petals linear, light yellow. Lip reddish. Flowers in Oct. and Nov.

FIGURE 24. *Barkeria spectabilis* Lindl.

1505 Guatemala, near Antigua and above Santa Cruz de Quiché, 1500-1800 m, 30 May 1882. **Icon. t. 308.**

FIGURE 25. *Bifrenaria coronaria* (Rchb.f.) Hoehne

3885 Colombia, Antioquia, grows on trees and on the ground in dense woods on the east side of the mountain chain between Cancan and Amalfi, 1800 m, 19 Sept. 1884. **Icon. t. 604.**

FIGURE 26. *Benzingia cornuta* (Garay) Dressler

10026 as *Chondrorhyncha*. Colombia, no exact provenance. **Icon. t. 806.**

FIGURE 27. *Brachionidium sp. nov.*

No provenance given.

FIGURE 28. *Bractia andina* Rchb.f.

Icon. t. 318. Described by Reichenbach in 1856 in *Bonplandia*. It is found in Colombia and northern Ecuador at elevations up to 2800 m. Lehmann's drawing, reproduced here, does not have a corresponding herbarium collection as far as I have been able to determine.

FIGURE 29. *Bulbophyllum antioquiense* Kraenzl. (type)

7234 as *Didactyle*. Colombia, grows on trees thickly overgrown with lichens, in the region of the mountain steppes above Ciudad Antioquia and around Hato-Viejo near Medellín, 700-1600 m. Flowers from Aug. to Oct. Tufts loose and small. Pseudobulbs from 1 to 1.5 cm in length and breadth, pentagonal, rugose, covered with whitish grey scales. Leaves leathery, yellow-green. Flowers numerous, arranged in two rows on a thin and geniculate scape growing thicker towards the top. Sepals light yellow, thickly striped with very fine red stripes from the middle towards the base. Lip red or red-brown. **Icon. t. 713.**

OTHER LEHMANN COLLECTIONS: **7311** as *Didactyle*. Colombia, grows on rocks of sandstone and on trees in the open bushy woods around Dolores, Tolima, 1000-1700 m; **BT 59** Colombia, grows on trees in woods in the highlands of Popayán, 1200-1800 m. Flowering in Nov. and Dec. 1882; **HK 417** Colombia, Rio Las Vueltas, Tigante.

FIGURE 30. *Bulbophyllum lehmannianum* Kraenzl. (type)

8070 as *Didactyle*. Colombia, grows in open chapparal woods around Hato-Viejo near Medellín, Antioquia, 1400-1800 m. Flowering in Oct. Plants loosely caespitose. Pseudobulbs pear-shaped, with four deep furrows. Leaves leathery, yellow-green. Inflorescence up to 15 cm in height, wire-like, the upper part bearing flowers somewhat thickened, always bending over to one side so as to stand at a right angle to the lower part. Flowers pendent; sepals and petals green-yellow, spotted with brown at the base. Lip red-brown. **Icon. t. 96.**

FIGURE 31. *Bulbophyllum pachyrhachis* (A.Rich.) Griseb.

Icon. t. 243. This strange orchid was described in 1861, as, by Achille Richard in Ramon de la Sagra's *Historia Física de Cuba*. August Grisebach transferred it to the present genus three years later in his orchid account in the *Flora of the British West Indies*. Its distribution ranges from Florida, the Caribbean islands and Central America south to Guiana and Ecuador. Lehmann's drawing of it bears no reference to a herbarium collection, nor has one been traced in his herbarium at Kew.

FIGURE 32. *Bulbophyllum popayanense* Kraenzl. (type)

6071 Colombia, grows on trees in open forests on the western side of the plateau of Popayán, 1200-1800 m. Flowers in Sept. and March. Clumps of plants moderately large. Pseudobulbs ovoid, quadrangular, up to 3 cm in length, one-leaved, soft-fleshy. Leaves thick, leathery, yellow-green. Floral shoot up to 40 cm in height, slightly thickened towards the top, the portion bearing the flowers bent over at a right angle. Sepals and petals light yellow-green. Lip greenish white, transversely spotted with lilac-red flecks closely packed together. **Icon. t. 406.**

OTHER LEHMANN COLLECTIONS: **8071** as *Didactyle*. Colombia, grows on rocks and on trees around Dolores, Tolima, 1300-1700 m. Flowers in Jan. and Feb.; **HK 411**. Colombia, Hato-viejo near Medellin, 1000-1600 m, Dec. 1884.

FIGURE 33. *Catasetum tabulare* Lindl.

6828 Colombia, grows on trees, occasionally on rocks also, in the open woods in the valley of the Cauca and on the Rio Dagua, 300-1200 m. Flowers from Oct. to Jan. Masses of plants dense, generally fairly large. Pseudobulbs cylindrical, up to 25 cm in length and from 3 to 4 cm thick. Leaves almost herbaceous, light sea-green. Inflorescence up to 50 cm in height, bearing 5 to 15 flowers. Flowers water-white, very thickly spotted with transverse lilac-brown flecks, the strongly protruding callus on the lip yellowish white. **Icon. s.n.**

FIGURE 34. *Cattleya aurea* Rchb.f.

4035, 8044 Colombia, Antioquia, on trees in moderately dense forests on the Rio Sucio below Frontino, 300-500 m, 20 Oct. 1884. Plant attains fairly large proportions. Bulbs enveloped in black sheaths. Leaves thick, yellow-green. Flowers up to three on a scape, light yellow. Lip yellow-striped with brown-red. **Icon. t. 615.**

FIGURE 35. *Cattleya trianaei* (Duchartre) Rchb.f. and var. *popayanensis*

8355 as *Cattleya trianaei* var. *albida*. Colombia, grows generally on trees, occasionally also on rocks, very solitarily mixed with the typical species on the Rio Paez and Rio de la Plata, Tolima, 800-1200 m. Flowers in Nov. Plants from every point of view comparable with the typical species, except that the sheaths of the inflorescences are of a delicate light yellow-green, and not punctuated with brown-red as generally is the case in the typical species. Sepals and petals of a delicate white colour. Lip white, yellow in the throat, the outspread and curly tip washed over at the margins with a delicate pink colour. **Icon. t. 614.**

OTHER LEHMANN COLLECTIONS: **6012** Colombia, grows on trees in the forests on the banks of the Rio Paez, Tolima, 1000-1300 m. Flowers in Nov. and May. 'Flor de Mayo'; **6013** as *Cattleya trianaei* var. *alba*. Occurs in very isolated specimens together with the foregoing species; **HK 600, 601, 601A** Colombia, La Teta; **BT 118, 119**. Colombia, Inaza; **BT 1300**. Colombia, Patico.

FIGURE 36. *Catasetum maculatum* Kunth.

Icon. tt. 250 & 712. One of the many orchid discoveries of Alexander von Humboldt and Aimé Bonpland who found it in 1801 near Turbaco just south of Cartagena in northern Colombia, is a common species widespread in the mountains of Central and South America from Costa Rica to Venezuela and Ecuador. Carl Kunth formally described it in 1822 in *Synopsis Plantarum*. Lehmann's detailed drawings of the male flower gives no indication of the provenance of his source materials.

FIGURE 37. *Cattleya quadricolor* Batem.

Icon. s.n. No given provenance.

OTHER LEHMANN COLLECTIONS: **1885** Colombia, Tuluá, 1000 m, Oct. 1882; **3064**. Colombia, Cauca, from Tuluá to Cartago, 800-1200 m, 31 Aug. 1883; **3064** as *C. chocoensis* var. *rosea*. Colombia, Cauca, from Tuluá to

Cartago, 800-1200 m, 31 Aug. 1883; **3138** as *C. chocoensis* var. *alba*. Colombia, Cauca, la Paila and Naranja, 1000 m, 31 Aug. 1883; **8356** as *Cattleya candida*. Colombia, grows on trees in the dense forests on the Rio Cauca between Cartago and Tuluá, 800-1100 m. Flowers in Aug. and Sept.; **HK 601B** Palmira, collected by Robert B. White.

FIGURE 38. *Caucaea radiata* (Lindl.) Schltr.

HK 1330 as *Abola*. Colombia, Coconuco, 2000-2600 m. Flowers in May and June. **Icon. t. 491.**

OTHER LEHMANN COLLECTIONS: **3616** as *Caucaea obscura* Schltr. (type). Colombia, Paisbamba and Coconuco, 2000-2500 m, 23 Feb. 1884. Also above Coconuco, 2600 m, Feb. 1884; Peñon de Pitayo, 2800-3000 m; Túquerres, 3000 m; **3541** as *Leochilus lehmannianus* Kraenzl. (syntype). Colombia, above Coconuco, 2700 m, 4 Feb. 1884; **9997** Colombia, Central Andes of Popayán, 2400-2600 m.

FIGURE 39. *Caucaea tunguraguensis* (Stacy) M.W.Chase & N.H.Williams

8562 as *Oncidium nubigenum* var. *tunguraguense*. Ecuador, grows on trees in the dense forests on the upper slopes of Volcán Tunguragua, 3000-3400 m. Flowers in Aug. and Sept. Sepals and petals light lilac-red. Lip white, thickly striped and marbled at the base with lilac-red. Plants moderately large, close but untidy. Pseudobulbs oval, slightly compressed., longitudinally plicate, two-leaved. Leaves robust, light sea green. Inflorescence two-sided, spike-like, racemose, five- to none-flowered, the flowers standing at the bent-over and nutant tip, beautifully open. **Icon. tt. 478, 710.**

FIGURE 40. *Caucaea nubigena* (Lindl.) M.W.Chase & N.H.Williams

5758 as *Oncidium nubigenum* Lindl. Ecuador, grows on trees and on rocks in dense bush-woods and in the uppermost forest region around Tamboloma and Huasi-Huaico, West Andes of Cuenca, 2800-3300 m. Flowering May to Oct. Tufts often very large, almost always loose and straggling. Pseudobulbs ovoid-oblong, longitudinally corrugate, slightly compressed, up to 4-5 cm in length, bearing two leaves. Leaves dull bluish green. Floral shoot not branched, bearing from three to ten flowers. Sepals and petals light lilac-red or brown. Lip white, later light lilac, spotted with lilac-red flecks all around the callus. **Icon. t. 478.**

OTHER LEHMANN COLLECTION: **6574**. Ecuador, grows on trees in moderately close mountain forest on the western slopes of the Páramo de Matanga, East Andes of Cuenca, 2900-3300 m. Flowering April to Aug.

FIGURE 41. *Chondroscaphe chestertonii* (Rchb.f.) Senghas & Gerlach

Icon. t. 836. No given provenance.

OTHER LEHMANN COLLECTIONS: **1903** as *Chondrorhyncha chestertonii* Rchb.f. Colombia, grows on trees in the dense and damp forests above Naranjo and La Venta del Dagua, Cauca, 500-1200 m; **8374** Colombia, grows on trees in woods at Cajamarca, West Andes of Roldanillo, 1400-1800 m. Flowers Dec.

FIGURE 42. *Chondroscaphe fimbriata* (Linden & Rchb.f.) Dressler

10024 Colombia, without exact provenance. **Icon. t. 134.**

FIGURE 43. *Chrysocynis lehmannii* Rolfe

8252 Ecuador, grows solitarily on banks of lava around Baños on the volcano of Tunguragua, 1600-2300 m. Flowers in June and in Sept. Rhizome hard, cauliform, varying in thickness from that of a pencil to that of a finger, up to 2cm in height, forming at intervals 10 to 25 cm apart linear, oblong, slightly compressed, rimose and oblique pseudobulbs from 3 to 4cm in length and 1 to 1.5 cm in breadth. Leaves single on the pseudobulbs, broadly ovate-oblong, sharply pointed, leathery, with five sharply marked veins on each side, yellow-green. Flowers single on a stalk, the latter from 4 to 8 cm in length, closely sheathed, generally

appearing in groups of several on small excrescences at the base of the bulbs. Flower flatly spreading. Dorsal sepal oblong-boat-shaped, porrect, 3cm in length and 8mm in breadth. Lateral sepals obliquely oblong with slightly inrolled, can-nozzle-shaped tips, 3cm in length and from 1 to 1.2cm in breadth. Petals longly cuneate, slightly sickle- or sword-shaped, sharply pointed, with slightly undulate margins. Lip spatulate or ligulate, at the base arm-like winged, strongly convex, with two small obliquely angular standing warts in the middle, the strongly convex base and wings densely tomentose, the tip smooth, 1cm in length, the ligulate tip 5mm in breadth, the winged base 1cm in breadth. Column claviform, terete, the slightly prolonged base dilated, the clinandrium flattened out at right angles to the axis, always bent in a half-circle. Sepals and petal light copper red, the latter striped with red at the base. Lip orange-yellow, base and wings dark purple-red. Column yellow-green striped with cinnamon-brown. **Icon. t. 512.** Also **HK 920.** Loc.cit., 1800-2200m.

OTHER LEHMANN COLLECTIONS: **8289.** Ecuador. Grows on trees in the dense forests around Shoray and Yavilcay, East Andes of Cuenca, 1800-2200 m. Flowering in Oct. 1888. **HK 805** Colombia. Grows on trees in the dense and damp woods between El Peñol and La Paz, West Andes of Popayán, 1500-1800m. Flowering in Dec. 1891.

FIGURE 44. *Comparettia falcata* Poepp. & Endl.

8385 Colombia, grows on trees, particularly on guayavas and on Arrayan trees, in open forests on the highlands of Popayan, 1400-1800 m. Flowers from Oct. to Jan. Plants almost always small. Bulbs linear, moderately compressed. Leaves thick, hard-leathery, brown-green. Flowers of a beautiful crimson. **Icon. t. 411.**

FIGURE 45. *Comparettia jamesonii* (Lindl. & Paxt.) M.W.Chase & N.H.Williams

HK 1122 as *Scelochilus jamesoni*. Ecuador, Pacay-urcu, Zaruma. **Icon. t. 502.**

OTHER LEHMANN COLLECTION: **8079** *Scelochilus jamesoni* Lindl. & Paxt. Ecuador, grows on trees in the dense bush-woods on the Rio Chambo, on Tunguragua, 2000-2400 m. Flowers in March and April, in solitary cases up to June. The fairly large masses hang downwards always. Leaves thick and leathery, yellow-green. Flowers light yellow, the petals striped with red. **Icon. s.n.**

FIGURE 46. *Coryanthes elegantium* Linden & Rchb.f.

6824 as *Coryanthes wolfii* F. Lehm. (type). Ecuador, Naranjal, Feb.-March. **Icon. t. 610.**

FIGURE 47. *Cryptarrhena kegelii* Rchb.f.

Icon. t. 257. No provenance given.

OTHER LEHMANN COLLECTIONS: **8574.** Ecuador, Rio Zamora, nr Loja, 500-1100 m; **8687.** Colombia, las Juntas del dagua, Cali, 300-1000 m; **HK 1132.** Colombia, Paso de las Virginia, Cauca, 800-1000m, July 1891; **HK 1323.** Colombia, Popayan, Junta.

FIGURE 48. *Cyrtidiorchis rhomboglossa* (F.Lehm. & Kraenzl.) Rauschert (type)

8133 as *Chrysocycnis rhomboglossa*. Colombia, Highlands of Popayán. **Icon. t. 327.**

OTHER LEHMANN COLLECTIONS: **BT 232** Colombia, grows on trees in woods in highlands of Popayán, 1500-1900 m. Flowers from Oct. to Dec.; **HK 856** Colombia, grows on trees in woods at Anserma-vieja, Cauca, 1500-1800 m. Flowering in Aug. 1891.

FIGURE 49. *Cyrtochilum halteratum* Kraenzl.

3546 as *Oncidium undulatum*. Colombia, Popayan, 2500 m, 23 Feb. 1884. **Icon. t. 292.**

OTHER LEHMANN COLLECTIONS: **6243** Colombia, Pomplaya and Paisbamba, Popayan, 2000-2600 m; **7205** Colombia, Montana de Caramanta, 2200-2700 m, Aug. 1890.

FIGURE 50. *Cyrtochilum ventilabrum* (Rchb.f.) Kraenzl.

Icon. t. 636. No provenance given.

OTHER LEHMANN COLLECTION: **8439** as *Oncidium tenense* Rchb.f. Colombia, Popayan, 1700-2300 m.

FIGURE 51. *Dichaea morrisii* Fawcett & Rendle

Icon. t. 1001. Without given provenance.

OTHER LEHMANN COLLECTIONS: **HK 842** Colombia, La Bramadora, near Yarumal, Antioquia, 1000-2200 m, Nov. 1891.

FIGURE 52. *Dichaea* cf. *histrion* Rchb.f.

Icon. t. 711. No provenance given.

OTHER LEHMANN COLLECTIONS: **5333** Colombia, in thick woods at Cuquier and Ricaurte on the western slopes of the West Andes of Tuquerres, Flowering in June and July; **7624**. Colombia. Grows on trees in the moderately close forests around Urumita, 600-1500 m. Oct. 1891. Also around Frontino, West Andes of Antioquia, 1500-1900 m, Sept. 1891; **BT 219** Colombia, Capilla. Lip blue.

FIGURE 53. *Dichaea richii* Dodson

Icon. t. 145. Ecuador, without exact provenance.

FIGURE 54. *Dracula chestertonii* (Rchb.f.) Luer (as *Masdevallia chestertonii*)

3436 Colombia, Salado, western slopes of Fallarones de Cali, 1800 m, 30 Dec. 1883. Tufts very large. Flowers yellowish white, spotted with red-brown. **Icon. t. 310.**

FIGURE 55. *Dracula inaequalis* (Rchb.f.) Luer & Escobar

7001 Colombia, grows on trees in the dense and damp forests above las Juntas del Dagua on the lower slopes of the West Andes of Cali, 400-1000 m. Was observed for the first time in Nov. 1877. Plants moderately large, densely caespitose. Leaves robust, grass-like, stiffly erect, dark sea-green. Flower stalks terete, of irregular length and with sheaths reaching to irregular height, one-flowered, frequently many-flowered, the flowers appearing in succession. The sepaloïd perianth almost bell-shaped, milky-white, outside smooth, inside closely covered with redish papillae resembling felted hairs, and with a couple of purple spots at the bottom of the dull orange-yellow tails. Petals yellow-white with orange coloured middle nerve and similar tip. Lip and column white. **Icon t. 135.**

OTHER LEHMANN COLLECTION: **4302** as *Masdevallia carderi*. Colombia, Dept. of Valle de Cauca, Rio Dagua, 10 May 1885.

FIGURE 56. *Dracula amaliae* Luer & Escobar

Icon. t. 334. Although only described in 1978, it was illustrated by Lehmann a century earlier. Carl Luer and Rodrigo Escobar described it in the journal Colombian journal *Orquideologia* based on a collection by J. Miranda the headwaters of the Rio Naya in the Department of Cauca, Colombia which was flowered by M. and O. Robledo at la Ceja on 9 Dec. 1976. Coincidentally, the collector is the son of Senora Amalia Lehmann de Sarria, the great-granddaughter of Consul Lehmann, and the orchid was appropriately named in her honour.

FIGURE 57. *Dracula chimaera* (Rchb.f.) Luer

2970 Colombia, Cauca, San Antonio de Cali, 1800-2500 m, 20 July 1883; also woods above Tocota, West Cordillera of Cali, Oct. 1883, 1700-2200 m. Flowers yellow-white, spotted with brown. **Icon. t. 619.**

OTHER LEHMANN COLLECTIONS: **958** as *Masdevallia chimaera*. Briceño, 1700-2200 m, Nov. 1891; **2816**

Cauca, Buenavista, 2200-2800 m, 23 April 1883; **4136** Colombia, Munic. of Frontino, 2000 m, 23 Oct. 1884; **7255** Colombia, grows on trees close to the ground and on the ground in the dense and damp forests on the northern slopes of the Morro de Yarumal and Alto Chimborazo, Antioquia, 1700-2200 m. Also Cordillera de Dagua, near San Antonio, 2000 m, Sept. 1881. Also Quebrada Bramadora and at Briceño near Yaruma; **7271**. Colombia, grows on trees close to the ground and on the ground in the dense and damp forests between Rio San Miguel and Mesopotamia, Antioquia, 2200-2400 m, Dec. 1881. Also Cordillera de Dagua, near San Antonio, Sept. 1881. **10029** Colombia, grows on trees in dense forests at Pusuquer. Flowering in Sept. and Oct. Also Dept. of Narino, Tuquerres, 1500-2200 m; **HK372 & BT176** Colombia, Tocota; **s.n.** Colombia, on trees in dense and damp woods of Cordillera near Toyo, West Andes of Antioquia, 1700-2200 m, Oct. 1891; **s.n. var. similis**. Colombia, West Andes of Popayan, 1600-2000 m. Flowers in Dec. and Jan.; **s.n.** Colombia, near Cali, 1700-2200 m, Oct. 1891, 1800-2200 m. Flowers in Oct. and Nov. 1877.

FIGURE 58. *Dracula pholeodytes* Luer & Escobar

Icon. t. 313. The type collection of was made by Helmut Schmidt-Mumm in 1962 in a forested valley near Arcabuco in the Department of Boyaca in northern Colombia and it was described by Carl Luer and Rodrigo Escobar in 1982 in the journal *Selbyana*. A plant of his collection was flowered in cultivation in Colombia by M. and O. Robledo on 10 Oct. 1977. Carl Luer and Rodrigo Escobar described it in the journal *Selbyana* in 1982. Lehmann's painting of this spidery-flowered orchid appears not to have an accompanying herbarium collection but it is certain that he discovered it almost a century before it was described.

FIGURE 59. *Dracula platycrater* (Rchb.f.) Luer

3340 (type) Colombia, Belalcazar Ridge, 1500-1700 m. 27 Oct. 1883. Tufts fairly large. Flowers white, spotted with chocolate-brown. **Icon. t. 313.**

OTHER LEHMANN COLLECTION: **7041** as *Masdevallia trinema*. Colombia, grows on trees in the dense and damp woods around Canasgordas and Frontino, West Andes of Antioquia. Flowers in Oct. and Nov. Plants fairly large, densely caespitose. Leaves robust. Herbaceous, sea-green. Flower stalks thin, terete, up to 30 cm in length, bending downwards, but curving up again from the middle of their length, many-flowered; flowers blossoming successively. Sepaloid tube split into almost entire large sepals, the latter separated from each other up to the base, yellowish white, thickly spotted up to three-quarters of their length from the base with small transverse lilac-red flecks. **Icon.**

FIGURE 60. *Dracula sodiroi* (Schltr.) Luer

34 as *Masdevallia microstoma* Lehm. ined. Ecuador, Western slopes of the Corazon. **Icon t. 621.**

OTHER LEHMANN COLLECTION: **7043** Ecuador, grows as very isolated specimens on damp banks of lava rubble on the Rio Silante, on the, 2100-2400 m. Flowering in Jan. Plants generally forming small and dense tufts. Leaves long-cuneate-linear, herbaceous-robust, light green. Flower stalks thin, terete, stiffly erect, up to 45cm in height, drooping down in an arch at the top, from two- to five-flowered. Sepaloid tube long-bell-shaped with strongly contracted margin, somewhat lighter in colour towards the margin, elsewhere scarlet. Tails red-brown. Petals light scarlet with yellow borders. Lip light yellow with somewhat raised scarlet zonal lines running out into lenticular spots on the inside. Column reddish.

It is truly surprising that the distinctive *Dracula sodiroi* was not described by Lehmann or one of the botanists who received his collections. Its red-bell-like flowers are very distinctive in the genus and unlikely to be confused with any of the many flatter-flowered species. The herbarium number (*Lehmann* 34) does not correspond to that of his main collecting series and may relate to his pre-1880s collections.

Padre Sodiro, whose herbarium survives in Quito, collected the type in June 1900 on the west slopes of Pichincha, near Quito in Ecuador. It was described as *Masdevallia sodiroi* by Rudolf Schlechter in the

journal *Fedde's Repertorium Specierum Novarum Regni Vegetabilium* in 1915. Carl Luer transferred it to the present genus in 1978 in the journal *Selbyana*. It is confined to the wet forests on the western slopes of the western Cordillera of northern Ecuador where it is still locally common today.

FIGURE 61. *Dracula vampira* (Luer) Luer

7042 as *Masdevallia lothiani* Lehm. *ined.* Ecuador, grows in very solitary specimens on trees and on damp heaps of lava rubble on the western slopes of the Corazon, 1800-2300 m. Flowers in Oct. and Nov. For the first time observed in Aug. 1877. Plants generally large, densely caespitose. Leaves robust, herbaceous, undulate at the margins, dark green. Flower stalk terete, strong, up to 35cm in height, erect, many-flowered. Flowers blossoming in succession. Sepaloid tube slightly cup-shaped, light yellow, thickly striped and spotted with black-brown, and with an almost entirely black-brown zone in the middle of each of the sepals; tails black-brown. Petals yellowish white with a brown stripe in the middle and a similar papillary tip. Lip light pink; hypochile white, with small red dots around the opening. Column whitish. **Icon t. 620.**

FIGURE 62. *Dracula mopsus* (F. Lehm. & Kraenzl.) Luer

7016 (type) Ecuador, grows on trees in the dense and very damp forests on the Cuesta de Amboca and around Pacayurcu near Zaruma, 1200-1500 m. Flowers in May and June. Tufts of plants generally large and very dense. Leaves robust, grass-like, dark sea-green. Flower stalks thin, terete, of a very irregular length (5 to 12 cm), generally but one-flowered. Sepaloid tube ventriculose-cup-shaped, on the outside green-yellow, tigered with faded brown, on the inside of a delicate light yellow colour tigered with brick red, the margins covered with papillary hairs, and the short tails brown. Petals yellow with a brown zone at the base and on the saddle of the two-lobed tip. Lip yellow spotted with dark red, the base white. **Icon. t. 524.**

FIGURE 63. *Dracula radiosa* (Rchb.f.) Luer

10029 No provenance given. **Icon. t. 809.** Gustav Wallis discovered it near Frontino in the department of Antioquia, Colombia in 1873, growing at about 2600 m elevation. He sent plants to Messrs James Veitch & Sons who flowered it in 1876 and sent flowers to H.G. Reichenbach who described it as *Masdevallia radiosa* in the *Gardeners' Chronicle* of the following year. Carl Luer transferred it to the present genus in 1978 in *Selbyana*. It is a widely distributed orchid in the Western Cordillera of the Andes, found all the way from Antioquia south to northern Andes of Ecuador. It was one of Lehmann's late collections and he illustrated it towards the end of his days.

FIGURE 64. *Dracula velutina* (Rchb.f.) Luer

Icon. t. 311. No given provenance.

OTHER LEHMANN COLLECTIONS: **3217.** Colombia, Risaralda, 2000-2300 m; **7004** as *Masdevallia houtteana*. Colombia, grows on trees and on the ground in the dense and damp forests between Toyo and Canasgordas, on the West Andes of Antioquia, 1700-2300 m. Flowers in Oct and Nov.

FIGURE 65. *Dracula wallisii* (Rchb.f.) Luer

3607 as *Masdevallia aff. chimaera*. Colombia, from Bellavista to the Sintura, 2300-2800 m, 2 March 1884. Flowers light yellow, densely spotted with brown-red.

Icon. t. 335.

FIGURE 66. *Dracula woolwardiae* (F. Lehm. & Kraenzl.) Luer

7003 as *Masdevallia woolwardiae*. Ecuador, grows on trees in the dense and very damp forests on the mountain slopes around Zaruma, 1200-1700 m. Flowers in April and May. Masses of plants densely caespitose, frequently up to 15 cm in diameter. Leaves robust, almost leathery, yellow-green. Flower stalks

thin, terete, up to 20 cm in length, directed downwards, many-flowered, the flowers blossoming in succession. Sepaloid perigine dull yellow-white or white-yellow transversely striped with fine brown-red lines, covered on the inside with soft papillary hairs and running out into four to 5 cm long red-brown tails. Petals white-yellow, at the base red and at the tip spotted with red. Lip reddish white. **Icon. t. 525.**

FIGURE 67. *Dryadella hirtzii* Luer

312 Ecuador, no exact provenance. **Icon. t. 216.**

FIGURES 68 and 69. *Dryadella simula* (Rchb.f) Luer

BT 333 Colombia, Popayan, 1600-2000 m. **Icon. t. 722 and 723.**

OTHER LEHMANN COLLECTIONS: **7044** Colombia, Caldas & Tredonia, Antioquia, 1600-2000 m; **s.n.** Colombia, Popayan, 1700-2300 m.

FIGURE 70. *Epidendrum porpax* Rchb.f.

8339 Colombia. Grows on trees in the dense forests in the savannas around Tocota, West Andes of Cali, 1400-1800 m. Flowers in May. Plants forming large, flexuous and loose tufts. Stems rarely over 5 cm in length. Leaves thick, fleshy, of a metallic light green colour with reddish margins. Sepals and petals reddish light yellow, the former reddish on the outside. Lip copper-red with yellow margins. Column copper-red with a greenish tip. **Icon. t. 46.**

FIGURE 71. *Eriopsis biloba* Lindl.

8125 as *Eriopsis rutidibulbon*. Colombia, grows on trees in the open oak forests on the highlands of Popayan, 1600-1800 m. Flowers in March and April. Masses of plants moderately large, caespitose. Pseudobulbs pear-shaped, up to 15 cm in length, finely longitudinally rugose, form two- to three-leaved. Leaves leathery, yellow-green. Inflorescence up to 60 cm in height. Flowers arranged in densely beset spike-like racemes; sepals reddish Indian yellow, brick-red on the outside petals light Indian yellow with red borders. Lip reddish yellow, with a white tip punctuated with red. Column white. **Icon. t. 817.**

FIGURE 72. *Euryblema andreae* (P.Ortiz) Dressler

10025 as *Chondrorhyncha*. Colombia. Grows on trees and on the ground in the dense and damp woods at Ricaurte, West Andes of Túquerres, 1000-1500 m. Flowers in July and Aug. **Icon. t. 805.**

FIGURE 73. *Gongora* cf. *fulva* Lindl.

1090. Colombia, without exact locality. **Icon. t. 465.**

FIGURE 74. *Helcia sanguinolenta* Lindl.

8569 Colombia, grows on trees in the dense forests around Pipulquer, on the western slopes of the West Andes of Túquerres, 1500-2000 m. Flowers in May and June. Sepals and petals thickly fleshy, greenish on the outside, yellow and spotted with brick-red on the inside. Lip white striped with a fan-like pattern of broken carmine lines, the basal part yellow and lined with red. Plants dense, caespitose, somewhat untidy. Leaves leathery, bluish green, single on long drop-shaped and not compressed pseudobulbs from 8 to 12 cm in length. **Icon. t. 465.**

OTHER LEHMANN COLLECTION: **HK 1022** Ecuador, Zaruma, Piedra to Aricha, Chiguinda.

FIGURE 75. *Houlletia odoratissima* Rchb.f.

8576 Colombia, West Andes of Cali, 1600-2100 m. June to Oct. **Icon. t. 651.**

OTHER LEHMANN COLLECTION: **BT 80** Colombia, near Cali, 1700-2100 m.

FIGURE 76. *Huntleya citrina* Rolfe

96 Colombia, grows on trees in dense forests around Buenaventura. 29 Oct. 1880. Plants mostly small. Rhizome very short, throwing out at close intervals above one another leaf-fans consisting of 3-5 leaves. Leaves spathe-like at the base, long-cuneate from a very narrow base, sharply pointed, 18-24 cm long, 2.5 cm broad at the widest point, of a thin membranous texture, with distinctly prominent nerves, bluish light green. Flower stalk bearing one flower, 2-2.5 cm long; wrapped in 2 spathes. Flowers flat, salver-shaped, up to 5 cm in diameter, coloured all over a very delicate lemon or Indian-yellow, the teeth of the hypochile reddish. **Icon. 323.**

OTHER LEHMANN COLLECTIONS: **HK 633** as *Batemannia*. Colombia, grows on trees in the dense and damp forests of Barbacoas; **HK 634** as *Huntleya*. Colombia, grows on trees in the dense and damp forests of Rio Timbiquí, 100-1000 m, flowering in March 1899. **Icon. s.n.**; **HK 635** as *Huntleya*. Colombia, grows on trees in the dense and damp forests of rivers near Buenaventura. Flowering in November.

FIGURE 77. *Ixyophora viridisepala* (Senghas) Dressler

s.n. as *Warscewiczella ventricosa* F.Lehm. Ecuador, grows on trees in dense and damp forests between Chiguinda and Cuchipamba on the east side of the east Andes of Cuenca, 1500-1700 m. Flowers in Dec. **Icon. t. 493.**

FIGURE 78. *Jacquinella teretifolia* (Sw.) Britton & P.Wilson

Icon. t. 432. No provenance given.

OTHER LEHMANN COLLECTIONS: **4408** type of *Epidendrum aporoides* Lehm. & Kraenzl. Colombia, Cajibío, Popayan; **HK 436** Colombia, Popayan, 1600-1800 m. May.

FIGURE 79. *Kefersteinia gemma* Rchb.f.

8602 Colombia, Popayan. **Icon. t. 492.**

FIGURE 80. *Huntleya wallisii* Lindl.

26 as *Huntleya burtii* var. *wallisii*. Colombia, grows on trees in dense, damp forests on the Rio Timbiquí and Cuaiquer on western slopes of Western Andes of Túquerres, 900-1000 m, 19 July 1880. Also Rio Timbiquí. 0-500 m. Flowering in May and June. **Icon. t. 617.**

OTHER LEHMANN COLLECTIONS: **6800** as *Huntleya burtii* var. *ecuadorensis* Lehm. ined. Ecuador, grows on trees in dense and very damp forests around Chacuyacu at the foot of the West Andes above Naranjal. Flowering May; **6879** as *Huntleya burtii* var. *wallisii*. Colombia, grows on trees in dense and very damp forests around Córdoba in the littoral region of Buenaventura. Flowering in June and July.

FIGURE 81. *Kefersteinia lehmannii* P.Ortiz

Icon. t. 172. Without provenance given.

FIGURE 82. *Kefersteinia ocellata* Garay

8602 Colombia, grows on trees in the dense and damp forests around Ricaurte, West Andes of Tuquerres, 1000-1400 m. Flowers in June and July. Masses of plant generally small, caespitose, with a slightly elongated rhizome. Leaves grass-like, yellowish leek-green. Flowers white-yellow with small dull brown spots. **Icon. t. 469.**

OTHER LEHMANN COLLECTION: **HK 681**, same locality.

FIGURE 83. *Koellensteinia graminea* (Lindl.) Rchb.f.

8153 Colombia, grows on damp clay banks, occasionally also raised roots of trees bordering rivers, Poreto on the Rio Dagua in the littoral region, 0-300 m. Flowering continuously. Plants always small. Leaves grass-like but robust, dark green. Inflorescence longer than the leaves, thin, terete, rarely branched, from three- to ten-flowered. Flowers thin-textured, yellow-white, striped with dark red. **Icon. t. 407.**

FIGURE 84. *Leochilus labiatus* (Sw.) O.Kuntze

1116 Without exact provenance. **Icon. t. 247.**

OTHER LEHMANN COLLECTIONS: **8086** as *Leochilus depauperatus* (type). Ecuador, grows on *Psidium guyava* around El Entable above Naranjal, sea level to 300 m. Flowers in Oct. The same species, or probably a species closely related to it, was also observed around Balsapamba at the foot of the West Andes of Guaranda; **HK 1141** Colombia, Popayán; **HK 1326.** Colombia. Antioquia, Roblarcito, Sonsón; **HK 1325.** Without provenance.

FIGURE 85. *Leochilus scriptus* (Scheidw.) Rchb.f.

1096 Colombia, without exact provenance. **Icon. t. 246.**

FIGURE 86. *Liparis nervosa* (Thunb.) Lindl.

Icon. t. 719. No given provenance.

OTHER LEHMANN COLLECTIONS: **2246** Colombia, Tolima. 28 November 1882. Also grows in the woods at El Pedregal, near Inza, Popayán, 1200-1600 m. Flowering in Dec. and Jan.; **2782** Colombia, on the Rio Paez and Rio de la Plata, State of Tolima, 1000-1600 m. 22 Feb. 1883; **7620** Colombia, grows on the ground in the dense bushwoods around Frontino, 1200-1600m. Flowering in Sept.; **8863** Colombia, grows on steep heaps of rocks in mountain savannas below Quetame, East Andes of Bogotá, 1200-1500 m. 10 July 1897; **BT 61** Colombia, Popayán, 1500-1800 m. Flowering Dec. and Jan.

BT 60 and **1309.** Colombia, without exact provenance.

FIGURE 87. *Lycaste cruenta* (Lindl.) Lindl.

s.n. Guatemala, on the mountains of Chaoño, Cerro Salama, 1300-2000 m. 12 May 1882. **Icon. t. 329.**

FIGURE 88. *Malaxis sp.*

Icon. t. 720. Without exact locality.

FIGURE 89. *Lycaste ciliata* (Ruiz & Pavon) Rchb.f.

7250 Colombia, grows solitarily on the ground, very rarely on trees, in the dense forests around Frontino, Antioquia, 1600-1800 m. Sept. 1891. Masses of plants frequently very large. Pseudobulbs oblong, angular, up to 12 cm in length and from 6 to 8 cm in breadth, two-leaved. Leaves long-cuneate, plicate, up to 60 cm in length and from 12 to 15 cm in breadth, grass-green. Flowers appearing in large numbers on the terminal bulb, on short and closely sheathed stalks, greenish white, very sweetly scented. **Icon. t. 605.**

FIGURE 90. *Masdevallia amanda* Warsc. & Rchb.f.

3490 Colombia, Popayan, 1740 m, 28 Jan. 1884. Flowers white, spotted with red, and with yellow bristles. **Icon. t. 217.**

OTHER LEHMANN COLLECTIONS: **2360** Colombia, Rio Cabrera, 2800 m, Jan. 1883; **3123** Aguada, 2200 m. 17 Sept. 1883; **4234** Colombia, Alto de Poleal above Caramanta, 3 Sept. 1884; **5003** Colombia, Grows on trees in park-like woods on the plateau of Popayan, 1700-2300 m, flowers in October and November; **7014**

Colombia, above Popayan, 1700-2200 m, 1891; **7020** Colombia, grows on trees and on steep earth banks in the dense and damp forests on the highlands between Envigado and El Retiro, 1700-2300 m. Flowers in Nov. and Dec. 1891; **s.n. (HK 368)** Colombia, above Pupalquer, West Andes of Tuquerres, 1600-2000 m, Aug. 1894.

FIGURE 91. *Masdevallia anachaeta* Rchb.f. (type)

306 as *M. nutans* (type). Ecuador, damp forest near Rio Silante, western slopes of Corazon, 7500 ft. **Icon t. 347.**

OTHER LEHMANN COLLECTIONS: **32** Ecuador, Santo Domingo de los Colorados, in volcanic soil; **7025** as *M. falcata* F.Lehm. Ecuador, grows, in so far as it has been observed up to now, only in one place on banks consisting of lava rubble in the dense and damp forests around Milligalle on the western slopes of the Corazon, 2200 m. Flowers in Sept. Plants forming dense and small tufts. Leaves thick, leathery, yellow-green, from 1.5 to 3 cm in height. Flower stalks twice as long as the leaves, thin, terete, one-flowered. Sepaloid tube closed up to half of its length, the free parts elongated into sickle-like hooked laciniae directed upwards, red-brown at the base, the tips yellowish. Petals white. Lip and column purple-red. **Icon. t. 312; s.n.** as *M. vulcanica* (type) Ecuador, damp forest near Rio Silante, western slopes of Corazon, 7500 ft.

FIGURE 92. *Masdevallia angulata* Rchb.f.

10028 Colombia, Pupalquer, western slopes of West Andes of Tuquerres. **Icon. t. 808.**

OTHER LEHMANN COLLECTIONS: **7013** Ecuador, grows on trees and on heaps of volcanic rubble in the dense forests around Milligalle, Canzacoto and Silante on the western slopes of Corazon, 1800-2500 m. Flowers from Sept. to March; **Icon. tt. 519 & 113; s.n.** Ecuador, occasionally on rocks near Santo Domingo de los Colorados, 6800 ft, March 1877.

FIGURE 93. *Masdevallia aphanes* Koeniger

10016 as *M. trifurcata* F.Lehm. Ecuador, without exact provenance. **Icon. t. 127.**

OTHER LEHMANN COLLECTIONS: **7015** as *M. trifurcata* F.Lehm. No provenance given. **Icon. t. 128.**

This dwarf orchid was described by Willibald König based on his own collection in Aug. 1878 from cloud forest at 2000m between Chachapoyas and Pomacochas in northern Peru. Its distribution extends northwards into northern Ecuador.

Lehmann drew it twice but the collection number on his earlier drawing is the same as that of a collection of *Masdevallia peristeria* and it is obvious that he muddled the numbers. The second drawing is one of late collections and no corresponding specimen has been located.

FIGURE 94. *Masdevallia bicolor* Poepp. & Endl.

6742 as *M. aurorubra* Colombia, grows on trees in the park-like dense forests on the highlands of Popayan, 1400-1800 m, Flowers from March to May. Plants generally small, densely caespitose. Leaves thick, leathery, yellow-green, with a sharp keel and rolled back margins. Flowers appearing in twos on not very long triangular peduncles, but little open, dark carmine-brown, the dorsal sepal and the tails orange-yellow. **Icon. t. 337**

OTHER LEHMANN COLLECTIONS: **74** Ecuador, Rio Pastaza, c. 1900 m, March 1877; **814** as *M. auropurplea*. Colombia, Rio Buga, 1500 m, 28 Dec. 1881; **3280** as *M. auropurplea*. Colombia, on trees in open forests on the high ridge of Belalcazar, above Anserma Vieja, 1800 m, 27 Oct. 1883; **4129** as *M. subumbellata* (type). Colombia, Highlands of Popayan, 1400-1800 m, 22 Jan. 1884; **4303** as *M. auropurplea*. Colombia, Anserma Vieja, 2000 m, 29 Aug. 1884.

FIGURE 95. *Masdevallia bonplandii* Rchb.f.

6741 as *M. endotrachys* (type). Ecuador, grows on volcanic Cangahua soil around Tuza, El Puntal and Pucara,

200 m. Flowers in Feb. and March. Plants forming dense and frequently large tufts. Leaves thick, leathery, yellow-green. Flowers light yellow, thickly spotted with dull purple-brown. Lip red-brown. **Icon. tt. 134 & 520.**

OTHER LEHMANN COLLECTIONS: **318** Ecuador, Paramo de Tuza, 2800 m, 31 Jan. 1881. Also Colombia, Paramo de Fusagasuga, 2800 m, 31 Jan. 1881; **479** Ecuador, Villa de Ibarra, Tulcan, between Rumicacha and Ypiales, 2000-2500 m, 8 Feb. 1880.

FIGURE 96. *Masdevallia brachyura* F. Lehm. & Kraenzl.

6522 as *M. chrysonota* (type). Ecuador, Grows on trees and on rocks in the dense and very damp forests around Chiguinda, on the eastern slopes of the East Andes of Sigsig, 1600-1800 m. Flowers in April and May. Occurs very rarely. **Icon. t. 124.**

FIGURES 97 and 98. *Masdevallia campyloglossa* Rchb.f.

3655 Colombia, Paisbamba, 2600 m. 4 March 1884. Flowers water-white, sprinkled and striped with lilac. **Icon. t. 340.**

7037 as *M. fertilis* (type). Colombia, grows very abundantly on trees in the dense forests of the Rio Chico above San Pedro and around El Valle between Santa Rosa de Osos and El Yarumal, Antioquia, 2200-2600 m. Flowers in May and June; **8369** Colombia, grows abundantly on trees in the dense forests above Poblazon near Popayan, 2000-2600 m. Flowers in Oct. and Nov. **Icon. t. 531.**

OTHER LEHMANN COLLECTIONS: **3276** Colombia, above Anserma-vieja, Guatica, Arroyanal etc. 1600-2000 m. 26 Oct. 1883. Tufts fairly large, dense. Flowers water-white with brownish nerves; **10041** as *M. sarcophylla* (type). Colombia, grows on trees in dense woods on Rio Huangobio, highlands of Popayan, 1700-1800 m. Flowers from May to Nov.

FIGURE 99. *Masdevallia carruthersiana* F. Lehm. & Kraenzl.

6530 (type) Ecuador, grows in isolated specimens on trees in the dense, damp forests around Chiguinda on the eastern slopes of the East Andes of Sigsig, 1700-2000 m. Flowers in May 1887. Plants moderately large, densely caespitose. Leaves softly leathery with an extremely sharp carina, yellow-green. Inflorescence somewhat taller than the leaves, sharply triangular, bearing up to 10 flowers, the later developing in succession. Dorsal sepal orange-yellow, punctuated on both sides with red; the 3.5cm long cauda yellow. The lateral sepals dark carmine-brown, yellow at the base, tails yellow. Petals white with yellow tips. Lip dark carmine. **Icon. t. 442.**

FIGURE 100. *Masdevallia caudata* Lindl.

Icon. t. 211 No provenance given.

OTHER LEHMANN COLLECTIONS: **2639** as *M. shuttleworthii*. Colombia, western slopes of Sabana de Bogota, 2000-2600 m, 29 Jan. 1883. Also near Alejandria at Tequendama, on the Penon de Fusagasuga above Pasca; **7031** as *M. caudata* Lindl. var. *xanthocorys*. Colombia, grows on trees in the dense forests above Pacho, Cundinamarca, 1800m, January 1882. Also above Pacho on way from Zipaquira, 2000-2400 m. Flowers from May to Oct.; **HK 341** as *M. caudata* var. *xanthocorys*. Colombia, State of Cundinamarca, grows in damp forests between Libate and Fusagasuga, 1800-2400 m.

FIGURE 101. *Masdevallia chimboensis* Kraenzl. (type)

6748 as *M. daguensis* F. Lehm. Colombia, grows in very solitary specimens on trees in the dense and very damp forests on the Rio Dagua, in the littoral region of Buenaventura. Flowers in Dec. Plants dense, caespitose, generally small. Leaves robust, leathery, dark green. Flower stalks thin, terete, considerably longer than the leaves, multi-flowered. Flowers appearing in succession, yellowish, thickly spotted with transverse red-

brown spots; dorsal sepal orange at the base. Petals yellow. Lip purple-brown. **Icon. t. 129.** Also Ecuador. Forests of Puente de Chimbo, Western Andes of Milagro, 200-300 m.

FIGURE 102. *Masdevallia chontalensis* Rchb.f.

1060 No provenance given. **Icon. t. 206.**

FIGURES 103 and 104. *Masdevallia corazonica* Schltr.

311 as *M. anachaeta*. Without exact provenance. **Icon. t. 346.**

6744 as *M. anachaeta* (type of *M. sphenopetala* Kraenzl.). Ecuador, grows as solitary specimens on trees in the dense forests around Silante on the western slopes of the Corazon, similarly on lava soil, 2000-2300 m. Flowers in March and July. Tufts very small, dense. Leaves on long petioles, leathery, light green, brownish at the margins. Flowers up to 5 on peduncle somewhat longer than the leaves, directed towards the inside, yellowish white, the short tails greenish brown. **Icon.**

FIGURE 105. *Masdevallia corderoana* F.Lehm. & Kraenzl.

6561 (type). Ecuador, grows on damp rocks and on trees in the dense bush woods around Churrucos on the upper eastern slopes of the East Andes of Sigüig, 3000-3200 m. Flowers in April and May, and in Sept. and Oct. Plants moderately large, densely caespitose. Leaves thick, leathery, on comparatively long petioles, oblong-elliptical, with obtusely pointed tips strongly bending downwards, yellow-green; entire length from 12 to 18 cm by 3 cm breadth; petiole from 8 to 12 cm in length, sharply carinate and deeply sulcate. Flowers solitary on thin and round peduncles shorter by from 2 to 4 cm than the leaves. Peduncles supplied at the base with a small, obliquely opened, sharply pointed paleaceous sheath and with another one of similar shape under the ovary. Sepaloid cupule fleshy, tubularly conerescent for 1.3 cm of its length, slightly bent, with sharply a protruding mentum. Dorsal sepal widely cucullate, from 1 to 1.3 cm in length, 1.5 cm in breadth, abruptly tapering into a 4 cm long and somewhat fleshy cauda. Lateral sepals long-cuneate and falciform, with slightly undulate margins, from 2.5 to 3 cm in length and 2 to 1.3 cm in breadth and elongated into 4 cm long and fleshy tails. Petals 1 cm in length and 4 mm in breadth, liguliform-sigmoid, with abruptly rounded tips terminating in laciniae, the underside thickly fleshy angular, warty at the base, white with red middle nerve and red underside acies. Lip 1.5 cm in length, 0.7 cm in breadth, fusiform-lingulate, at the base angular-cordiform, at the tip slightly panduriform, angularly pointed, underside with one carinate decurrent callus, upperside with two carinate decurrent calli broadening out towards the tip, the narrower portion of the tip slightly warty on the upper side. Sepals light yellow, each with 3 purple-red stripes; lip crimson-brown. Column semicircular, at the base elongated into a long bent foot and an acute-angular isthmus part directed upwards, white with a red back and red wing margins. **Icon t. 440.**

FIGURE 106. *Masdevallia crescenticola* F.Lehm. & Kraenzl.

230 (type). Ecuador. Common on *Crescentia* trees, Rio Bogota near Concepción in the plains. 18 Sept. 1874. **Icon. t. 84.**

FIGURE 107. *Masdevallia dynastes* Luer

317 Ecuador, without given provenance. **Icon. t. 275.**

FIGURES 108—110. *Masdevallia erinacea* Rchb.f.

7002 as *M. torulosa* Lehm. Colombia, grows on trees in the dense and damp forests around Frontino on the western slopes of the West Andes of Antioquia, 1000-1600 m. Flowers in Oct. Plants densely caespitose, generally small. Leaves thick, leathery, linear-long-cuneate, dark yellow-green. Flowers in twos appearing one after the other on thin stalks, somewhat longer than the leaves. Flower stalks filiform, thin, of the same

length as the leaves, one-flowered, occasionally two-flowered. Sepaline-tube at the bottom cup-shaped, connate; the dorsal sepal free, yellow, traversed by greenish and hairy nerves. Lateral sepals considerably larger, vesiculose-torulose, obtusely pointed and running out into 1cm long and drop-shaped tails, light yellow, thickly punctuated with brick-red. Petals yellow. Lip yellow punctuated with red. **Icon. t. 111.**

OTHER LEHMANN COLLECTIONS: **23** as *M. clavicaudata* F.Lehm. ined. Colombia, grows on trees very little above ground in dense forests on the boundaries of the mangrove forests near Buenaventura, 16 Aug. 1880. Also Buenaventura near the coast, 29 Oct. 1880; **2634** as *M. heteromorpha*. Colombia, Buenaventura near the coast, 16 March 1883; **4138** Colombia, Frontino, 2000 m, 23 Oct. 1884; **7049** Ecuador, grows on trees and on rocks in the dense and damp forests around El Cucho at the western foot of the West Andes above Santa Rosa, 400-600 m, Dec. 1892; **7252** as *M. antennifera* F.Lehm. ined. Colombia, grows on trees in the dense and very damp forests at Cerro Platrado above Frontino, 1800-2000 m, October 1891. **Icon. t. 110; HK 329 & HK 347** Colombia, Grows on trees in forests near Buenaventura, Nov. 1880. **Icon. t. 343; HK 331, 334** Colombia, Tela.

FIGURE 111. *Masdevallia estradae* Rchb.f.

4020 Colombia, grows in Antioquia, in moderately dense woods between Antioquia and Abriaqui, 2200 m. 15 Oct. 1884. Tufts moderately large, dense. Leaves thick, dark green. Stalks black. Flowers white, washed over with lilac-violet. Tails yellow. **Icon. t. 474.**

OTHER LEHMANN COLLECTIONS: **4131** Colombia, grows on trees in the dense forests of Quillao on the Rio Tonusco above Antioquia, 1800-2200 m, Oct. 1884. Also in dense damp woods of El Roblarcito near Sonson, Antioquia, 2200-2500 m, Dec. 1891. Rhizome creeping. Leaves thick, robust, yellow-green.

7030 as *Masdevallia ludibunda*. Colombia, grows on trees, almost always close to the ground, in the dense forests on the western slopes of the Paramo de Guerrero between pacho and Zipaquira, 2000-2500 m. Flowers in Oct. **Icon. t. 121**; Also **HK 338** Without locality.

FIGURE 112. *Masdevallia fasciata* Rchb.f.

4286 as *M. palmensis* Kraenzl. (type). Colombia, around La Palma above Envigado, 2000-3000 m. Oct. 1884. **Icon. t. 443.**

FIGURE 113. *Masdevallia filaria* Luer & Escobar

7032 as *Masdevallia ventricularia* var. Colombia, grows on trees in the dense forests around La Bramadora near El Yarumal in Antioquia, 2000-2100 m. Flowers in Nov. Tufts of plants dense, always small. Leaves leathery, dark green. Flowers solitary on thin stalks freely rising above the leaves, dark cherry-brown with veins of a faded yellow colour and with yellow tails. **Icon. t. 203.**

OTHER LEHMANN COLLECTIONS: **2006** as *Masdevallia ventricularia* var. *longicaudata*. Colombia, grows on trees in dense forests on West Andes of Cali, 1700-2200 m, Oct. 1882; **HK 328** as *Masdevallia ventricularia* var. Colombia, grows on trees at la Conga, western slopes of West Andes of Popayan, 1800-2500 m. Flowers in Oct.

FIGURE 114. *Masdevallia fractiflexa* F.Lehm. & Kraenzl.

10020 (type). Ecuador, Grows on trees in dense and damp forests between Loja and Zamora, 1800 m. **Icon. s.n.**

FIGURE 115. *Masdevallia herradurae* F.Lehm. & Kraenzl. (type)

4139 (type). Colombia, grows in dense savannah woods on Rio Herradura between Frontino and Cañasgordas, 1400-1700 m, Oct. 1884. Also on trees in dense forests at Frontino, West Andes of Antioquia, 1200-1600 m, Oct. 1891. **Icon. t. 184.**

FIGURE 116. *Masdevallia impostor* Luer & Escobar

6746 as *Masdevallia maculata* var. *popayanensis*. Colombia, grows on trees in the park-like woods on the highlands of Popayan, 1600-1900 m. Flowers in March, and in Aug. and Sept. Tufts of plants generally small and dense. Leaves leathery, yellow-green. Flower stalks somewhat longer than the leaves, sharply triangular, many-flowered. Flowers appearing in succession. Dorsal sepal orange-yellow finely spotted with red-brown in the middle. Lateral sepals dark carmine-brown with yellow tails. Petals white-yellow. Lip purple-red. **Icon. t. 338.**

OTHER LEHMANN COLLECTIONS: **s.n.** Colombia, near Hatico, near Popayan, 1800 m, 19 Nov. 1878; **BT 177** Highlands of Popayan, 1500-1900m, 21 Aug. 1881.

FIGURE 117. *Masdevallia macropus* F.Lehm. & Kraenzl.

6562 (type). Ecuador, grows on wet rocks covered with moss and mud around Churrucos, on the upper eastern slopes of the Paramo de Matanga, 3000-3200 m. Flowers in April and May. Tufts of plants somewhat loose, squarrose, moderately large. Leaves leathery, dark green, with black petioles, the younger ones standing in large sheaths. Flowers solitary on thin, terete peduncles somewhat shorter than the leaves, and appearing from 2 to 3 on the stem. Dorsal sepal yellow striped with brown, the cauda yellow. Lateral sepals yellowish, thickly spotted transversely with dull brown. Petals white. Lip red-brown. **Icon. t. 441.**

FIGURE 118. *Masdevallia 'megalosoma'* Lehm. ined.

6507 (Icon. t. 125). No given provenance.

FIGURE 119. *Masdevallia molossus* Rchb.f.

7227 as *Masdevallia mucronata* (type of *M. antioquiensis* F.Lehm. & Kraenzl.). Colombia, grows on trees in the dense forests on the West Cordillera of Antioquia, on the Alto de Toyo, 1800-1900 m. Only a few specimens were found. 31 Aug. 1891. Also at Santo Gregorio and Nariño, 1800-2200 m. Tufts very small. Leaves moderately thick, dark yellow-green. Flowers solitary on thin stalks somewhat shorter than the leaves, brownish red with a yellow border and tails. Lip dark carmine. **Icon. t. 107.**

FIGURES 120—123. *Masdevallia nidifica* Rchb.f.

7028 Ecuador, grows on trees and on heaps of lava rubble in the dense forests around Milligalle and Canzacoto, western slopes of the Corazon, 1600-2100 m. Flowers in March. This form represents the type on which Reichenbach created the species. **Icon. t. 204.**

OTHER LEHMANN COLLECTIONS: **24** Ecuador, West slopes of Pichincha, 6000 ft, March 1877; **131** Colombia, San Pablo between Barbacoas and Pasto, 1300 m, 25 July 1879; **314** Ecuador, Rio Silanti, western slopes of Mt Corazon, 1800-2000 m, 11 Jan. 1881. **Icon. t. 349**; **322** Colombia, Calicali, 1800-2000 m, 28 Nov. 1880. **3435** Colombia, from the watershed above Cali, 1800-2000 m, 31 Dec. 1883. Small. Flowers yellow, with red brown; **6743** as *Masdevallia nidifica* var. *minuta*. Ecuador, grows on trees in the dense and very damp forests around Puente de Chimbo near Guayaquil, 200 m, Flowers in May and June. 8 June 1887; **7027** Colombia, grows on trees in the dense and damp forests around Frontino, western slopes of the West Andes of Antioquia, 100-1700m. Flowers in Sept. and Oct. 1881. Plants forming small and dense tufts. Leaves leathery, dark green, frequently brownish with red borders. Flowers solitary on filiform stalks somewhat longer than the leaves, reddish pale yellow, with reddish longitudinal nerves and brown-red tails. **Icon. t. 105**; **7029** Ecuador, grows on trees and on rocks in the dense and damp forests around El Cuche and Savoian at the foot of the West Andes above Santa Rosa, 400-1000 m. Flowers in Dec. and Jan. **Icon. t. 104**; **HK 334** Colombia, Highlands of Popayan, 1600-2100 m, May 1878; **HK 343** Colombia, grows on trees in woods at Ricaurte, West Andes of Tuquerres, 1000-1800 m, Flowers in July; **HK 346** Colombia. West of Tuquerres, 1500-2000 m.

FIGURE 124. *Masdevallia ophioglossa* Rchb.f. (type)

7026 Ecuador, grows on damp banks consisting of lava rubble, occasionally on trees in the dense and very damp forests around Milligalle and Canzacoto on the western slopes of the Corazon, 1800-2200 m. Flowers in March. Plants forming small and dense tufts. Leaves thick, almost fleshy, yellow-green. Flowers appearing in great abundance, solitary on thin, terete stalks considerably longer than the leaves, white with a yellow border and yellow tails. **Icon. t. 109.**

OTHER LEHMANN COLLECTIONS: **27** Ecuador, western slopes of Pichincha, 1850 m, March 1877. **310** Ecuador, grows on trees near Canzacoto and Silante, western slopes of Corazon, 2000-2400 m, 13 Jan. 1881. **Icon. t. 348.**

FIGURES 125—126. *Masdevallia pachyantha* Rchb.f.

6750 Colombia, grows very abundantly on trees and on the ground in the dense forests above Pitayo, Silvia, Tortoto and on the volcano of Puraes on the western slopes of the Central Andes of Popayan, 3000-3400 m. Flowering continuously. May 1878. Plants dense, caespitose, attaining large dimensions. Leaves thick, leathery, yellow-green. Flowers on peduncles considerable shorter than the leaves, fleshy, reddish light yellow, very faintly punctuated with brown. Lip red-brown. **Icon. tt. 339, 473.**

OTHER LEHMANN COLLECTIONS: **2062** Colombia, Paramo de Moras, 3000 m, 29 Oct. 1882; **4126** Colombia, Paramo de Guanacas, 3000-3600 m, 16 March 1884; **4205** Colombia, Paramo de Guanacas, 3000-3600 m, 16 March 1884.

FIGURE 127. *Masdevallia peristeria* Rchb.f.

150 Colombia, Pasto, near Cucuel and Pusuquer, 1400 m, 31 July 1879. **Icon. t. 85.**

OTHER LEHMANN COLLECTIONS: **7015** Colombia, grows on trees in the dense forests, especially on trees bordering river banks, around Frontino on the western slopes of the West Andes of Antioquia, 1500-1800 m. Flowers in Oct. and Nov. Tufts of plants dense and moderately large. Leaves thick, leathery, dull sea-green. Flowers stalks somewhat shorter than the leaves, one-flowered. Sepaloid tube fleshy, on the outside whitish green-yellow thickly spotted with dull lilac-red and with strongly standing out greenish veins, on the inside dull reddish light yellow spotted with small spots of a somewhat deeper lilac-red colour. Petals yellowish white. Lip of the same ground colour but thickly spotted with lilac-red. Column greenish white, with reddish margins. **Icon. t. 479.**

FIGURES 128—130. *Masdevallia picturata* Rchb.f.

Icon. tt. 120, 210 & 205. No given provenance.

OTHER LEHMANN COLLECTIONS: **1076** Venezuela, Aguas Calientes, 1500 m, 5 Jan. 1882; **2344** Colombia, Rio Cabrera, 2000 m, 10 Jan. 1883; **2732** as *Masdevallia picturata* var. *minor* (type). Colombia, Tocota, Rio de Salado, 1600-1800 m, 10 March 1883 & 2000 m, 10 Jan. 1883. Small, belonging to the fimbriata; **2787** Colombia. El Tambo, 2000 m, 3 May 1883. Also Boca del Monte above Chapa, 2000 m; **4309** Colombia, West Andes of Cali, 1800 m, 21 April 1885; **HK 348**, same locality, 1800-2200 m. Flowers from Oct. to Dec.; **7011**. Colombia. Grows on trees and on earth banks in the dense forests around Tocota, West Andes of Cali, 1600-2000 m. Flowers in Nov. and in May; **BT 178, 179** belong here; **7024** Colombia, grows very abundantly on steep banks of crumbling earth in the dense park-like forests on the highlands of the Rio Negro, la Ceja, El Retiro, Abejoral etc. in Antioquia, 1700-2200 m. Flowers in Dec. and in May.

FIGURE 131. *Masdevallia platyglossa* Rchb.f.

7039 as *Masdevallia macroglossa*. Colombia, grows on trees, always close to the ground, in the dense and damp forests on the Rio Dolores between Angostura and Santa Rosa de Osos, Antioquia 1800-2200 m.

Flowers in Nov. and Dec. Plants somewhat loosely caespitose, generally small. Leaves on short peduncles, leathery, dark yellow-green with blackish peduncles. Flower stalks thin, terete, one-flowered, from 4 to 7 cm in length, directed downwards. Sepaloid tube fleshy, light yellow, on the outside punctuated with very small blackish dots. Petals yellow. Lip brownish. **Icon. t. 102 & 316.**

OTHER LEHMANN COLLECTIONS: **2334** Colombia. Rio Cabrera, 2000 m, 9 Jan. 1888; **3761** as *Lothiana bilabiata* F. Lehm. (type). Colombia. West Cordilleras of Cali, 2000 m, 23 March 1884.

FIGURE 132. *Masdevallia polysticta* Rchb.f.

7017 as *M. spathulifolia* Kraenzl. (type). Ecuador, grows on trees and on damp banks around Milligalle and Canzacoto on the western slopes of the Corazon, 2000-2500 m. Flowers in Oct. Plants moderately large, densely caespitose, of a beautiful symmetrical shape. Leaves robust, leathery, yellow-green, strongly bent backwards at the tips. Flower stalks up to 25 cm in height, longer than the leaves, thin, terete, light green marked with red lines. Flowers in a two-sided, alternate, spike-like raceme bearing from four to weight flowers. Sepaloid tube white transversely spotted with lilac-red, the tails of a delicate yellow colour. The dorsal sepal free, considerably larger, hood-shaped. Petals light pink on the inside, outside white spotted with red. Lip of a delicate light pink colour speckled with red. Column white with crimson borders. **Icon. t. 523.**

OTHER LEHMANN COLLECTIONS: **227** as *Masdevallia spathulifolia*. Ecuador, grows on trees and on the ground around Milligalle, western slopes of Mt Corazon, 2000 m, 14 Jan. 1881; **406** as *Masdevallia spathulifolia*. Ecuador, grows on trees near Tamboloma and La Palma, near Guaranda, 1900-2500 m, 23 Dec. 1879.

FIGURE 133. *Masdevallia pterygiophora* F.Lehm. ex Luer & Escobar

7275 Colombia, grows on trees in the dense and damp forests around San Gregorio, on the road from Sonson to Nariño, Antioquia, 2200 m. Was found only once. Dec. 1891. Tufts small and dense. Leaves up to 5 cm in length and 4 mm in breadth, long-cuneate, distinctly three-toothed at the tip, dark green with black petioles. Flowers greenish yellow with three brown nerves in each one of the three sepals. Petals greenish yellow with a red-brown nerve in the middle. Lip yellowish spotted with red. Column yellow. **Icon. t. 166.**

FIGURE 134. *Masdevallia pygmaea* Kraenzl.

Icon. t. 108. No provenance given.

OTHER LEHMANN COLLECTIONS: **1073** Costa Rica, above San Isidro, 1600 m, 29 Dec. 1881; **2734** *Masdevallia muriculata* F.Lehm. (type). Colombia, grows on trees in damp forest at Salado above Papagalleros, Rio Dagua, 1800 m, 10 March 1883; **4143** Colombia, Frontino, 1400-1800 m, 7 Nov. 1884.

FIGURE 135. *Masdevallia racemosa* Lindl.

6751 Colombia. Grows generally on the ground, and on trees in the dense forests above Pitayo, Silvia, Tortoto and San Isidro, on the western slopes of the Central Andes of Popayan, 3000-3400 m. Flowers continuously. May 1878. Also Paramo de Guanacas and Paramo de las Delicias, 3000-3300 m, January 1886 and Paramo de Guanacas and Paramo de Moras, Central Andes of Popayan, 2900-3400 m, May 1878. Rhizome elongated, creeping, with squarrose branches, up to 30cm in length, hard and brittle. Leaves thick, leathery, greenish dark coppery brown. Inflorescence bearing up to 18 flowers, rarely more, thin, terete, up to 30cm in height; flowers opening in succession, orange-scarlet with strongly protruding veins lighter in colour. Petals and lip white. **Icon. tt. 528 & 326.**

OTHER LEHMANN COLLECTIONS: **966** Colombia, Paramo de Moras, 2900-3600 m, 16 March 1884. Also above Pitayo and Silvia, Central Andes of Popayan, 2900-3400 m, August 1881; **HK 319 & 320** may be same collection. **2098** Ecuador. Grows on trees in dense montane forests of Paramo de Moras, 3000-3800 m, 29 Oct. 1882; **BT 183** may be the same collection.

FIGURE 136. *Masdevallia reichenbachiana* A. Endres ex Rchb.f.

1048 Costa Rica, Candelaria near La Palma, Irazu, 1800-2000 m, 24 Dec. 1881. **Icon. t. 208.**

FIGURES 137 and 138. *Masdevallia saltatrix* Rchb.f.

4137 (type). Colombia, 2000 m, Cerro de Plateado near Frontino, Antioquia, 25 Oct. 1884. Also Cauca state, in small riverside formations on the Rio Ovejas between Cali and Popayan, 1200-1400 m. 12 Oct. 1885. **Icon. tt. 103 & 521.**

FIGURE 139. *Masdevallia schizopetala* Kraenzl. (type)

3836 as *Masdevallia onychosepala* Lehm. ined. Colombia, between Cartago and Anserma Vieja, 1200-1600 m. **Icon. t. 101.**

FIGURES 140 and 141. *Masdevallia strumifera* Rchb.f.

7034 as *Masdevallia chrysochaete* F.Lehm. (type). Colombia, grows on trees in the dense and damp forests on the Paramo de Guerrero above Zipaquira, 2600-3000 m. Flowers in Feb. Plants densely caespitose, moderately large. Leaves robust, leathery, dark green with black petioles. Flowers appearing in great abundance, solitary on thin and terete stalks somewhat taller than the leaves. Sepaloid tube white, the base and the long tails yellow. Petals white. Lip yellow, the base and tip orange. **Icon. t. 114.**

OTHER LEHMANN COLLECTIONS: **3720** Colombia, Highlands of Volcan Sotora and Pitayo, Cauca State, 2900-3200m. 21 Feb. 1884. Tufts fairly large. Flowers white, at the base and tips yellow. **Icon. t. 342; 8868** as *Masdevallia chrysochaete* F.Lehm. Colombia, grows on trees, occasionally also on rocks, on the western slopes of the east Andes of Bogota, 2600-3000 m. Flowers in July. Collected 8 July 1897 at Boqueron de Chipaque. Tufts small. Leaves dark green. Flowers white, with tails yellow.

FIGURE 142. *Masdevallia trochilus* Rchb.f.

3889 as *M. ephippium*. Colombia, Sonson, 18 Oct. 1884. **Icon. t. 414.**

OTHER LEHMANN COLLECTIONS: **3538** as *M. mosquerae*. Flowers brown with orange-coloured tails. Colombia. Forests above Popayan, 1700-2200 m, 7 Feb. 1884 & 1750-2000 m, 23 Feb. 1884; **6529** as *M. ephippium* var. *acrochodonia*. Ecuador, grows as isolated specimens on trees in the dense and very damp forests around Chiguinda, on the eastern slopes of the East Andes of Sigsig, 1700-2000 m. Flowers in April and May 1887.

FIGURE 143. *Masdevallia tubulosa* Lindl.

6740 as *M. stenantha* F.Lehm. (type). Colombia, grows on trees in the dense forests around the Hacienda de Sotara and around Poblazon, above Popayan, 2000-2300 m. Flowers in May and June. Plants densely caespitose, occasionally fairly large. Leaves leathery, dark green with blackish petioles. Flowers white with light yellow tails, and somewhat yellowish at the base of the cupule. **Icon. t. 115.**

OTHER LEHMANN COLLECTION: **7033** as *M. cyphoselenium* F.Lehm. ined. Colombia, grows on trees in the dense and damp forests around La Ceja, above Tuza, on the eastern slopes of the central Andes of Popayan, 1700-2300 m. Flowers in Nov. Also forests of Rio Dulce between Nariño and Pensilvania, Antioquia, 2000-2400 m, Dec. 1891.

FIGURE 144. *Masdevallia ustulata* Luer

Icon. t. 183. This widespread and rather common orchid gets its name from the scorched appearance of its flowers, “*ustulata*” being the Latin for burnt. Carl Luer described it in 1983 in the journal *Phytologia* based on his own and Padre Andreaetta’s collection from 1700 m in cloud forest east of Paute in southern Ecuador. It is widespread in the Andes from northern Colombia where it is rare to central Peru. It is commonest in

Ecuador, growing as an epiphyte between 1500 and 3000 m elevation. Flower colour can vary from yellow through tan and brown to purple with darker stripes. Although only described in 1983, *Masdevallia ustulata* was known to Lehmann. His drawing had previously been misidentified as the Venezuelan *M. ensata*. No corresponding herbarium specimen has been located.

FIGURE 145. *Masdevallia ventricularia* Rchb.f.

231 Ecuador, grows on trees and liana, in woods and in dense damp forests at Anque, Calacali to Naranjal, West Andes of Quito, 1800-2000 m. Nov. 1880 & Feb. 1883. **Icon. t. 274.**

OTHER LEHMANN COLLECTION: **23 (type)** Ecuador. Angue, near Nanegal, 6000-7000 ft, Sept. 1877.

FIGURE 146. *Masdevallia wagneriana* Lindl.

s.n. Without provenance. **Icon. t. 263.**

OTHER LEHMANN COLLECTIONS: **s.n.** *Masdevallia*. Without provenance. **Icon. tt. 341 & 706.**

H. Wagner, collecting for the Linden establishment in Brussels, discovered this pretty orchid at Carabobo in Venezuela in July 1850. It was described by John Lindley two years later in Paxton's *Flower Garden*. Neither of Lehmann's drawings of it is accompanied by any reference to herbarium material.

FIGURES 147—149. *Masdevallia xanthina* Rchb.f.

4287 Colombia, Rio Chico, near San Pedro, Antioquia, 2000-2300 m. **Icon. t. 475.**

6090 Colombia, Cauca, grows on trees in the dense forests around La Ceja above Tuza, eastern slopes of the Central Andes of Popayan, 1700-2200 m. Flowers between March and Aug. **Icon. t. 122.**

OTHER LEHMANN COLLECTIONS: **422** Ecuador, West slopes above Penachu near Quito, 2800 m, 4 Jan. 1880; **4130** Colombia, Santa Elena above Medellin, 2000 m, 10 Nov. 1884; **HK 342** Colombia, above Gutaquer, highlands of Cerro Gualcala, 2000-2400 m. Aug. 1894.

FIGURE 150. *Masdevallia zahlbruckneri* Kraenzl.

7022 as *M. zamorensis* F.Lehm. ined. Ecuador, grows as very isolated specimens on trees in the dense and damp forests around Zamora on the eastern slopes of the East Andes of Loja, 800-1200 m. Flowers in Dec. Plants densely caespitose, always small. Leaves robust, leathery, yellow-green. Flower stalks thin, terete, directed downwards, up to 6cm in length, many-flowered; flowers blooming in succession. Dorsal sepal yellowish, the lateral ones white, very finely spotted with red. **Icon. t. 126.**

FIGURE 151. *Maxillaria cf. acuminata* Lindl.

8134 as *Maxillaria reptans* F.Lehm. ined. Colombia, grows on trees in the dense and very damp forests around Buenaventura on the coast. Flowering in Oct. and Nov. Rhizome long and creeping, thin, closely clothed in papery sheaths, forming at intervals from 5 to 8cm apart, oblong, slightly compressed pseudobulbs up to 2 cm in length. Leaves hard, leathery, dark yellow-green. Flowers of a delicate white colour, lip light yellow. **Icon. t. 81.**

FIGURE 152. *Maxillaria aggregata* (Kunth) Lindl.

Icon. t. 579. Carl Kunth described this species in his *Nova Genera et Species Plantarum* in 1815 as *Dendrobium aggregatum* based on a collection by Alexander von Humboldt and Aimé Bonpland from between Meneses and Pasto in Colombia. It was transferred to *Maxillaria*, as in *Genera and Species of Orchidaceous Plants* in 1832. It is a widespread and variable Andean species, ranging from Venezuela to Peru. I have not been able to trace any Lehmann herbarium collection but the illustration reproduced here appears to be of the above species.

FIGURE 153. *Maxillaria alpestris* Lindl.

6566 Ecuador, grows on trees in the dense and damp forests around Chiguinda, East Andes of Cuenca, 1600-2000m. Flowering in April and May 1887. Rhizome erect, elongate, up to 60cm in length, forming at intervals of 5 to 10cm small rounded, scarcely noticeable compressed pseudobulbs. Leaves robust, reddish yellow-green. Flowers yellowish brown, petals yellower. **Icon. t. 420.**

OTHER LEHMANN COLLECTIONS: **3896** Plant from Porse. **8292** Colombia, grows on trees in the dense forests between Mesopotamia and Sonsón, Antioquia, 2000-2500 m. Flowering in Dec. 1891.

FIGURE 154. *Maxillaria augustae-victoriae* F. Lehm. & Kraenzl.

6500 (type) Ecuador, grows on trees and on rocks in the dense and very damp forests around Chiguinda, on the eastern slopes of the East Andes of Sigsig, 1600-2000 m. Flowers in April and May. Occurs very rarely. Tufts of plants always small. Pseudobulbs flat, rhomboidal, from 5 to 6 cm in length and 3 to 3.5 cm in breadth, entirely hidden in large and dry sheaths. Leaves on short petioles, elliptic-linear, obtusely pointed, up to 50 cm in length and 8 cm in breadth, robust, almost leathery, light green. Flowers widely open, very sweetly scented, and up to 5 on a bulb, standing on stalks from 25 to 35 cm in length, procumbent at the base and enveloped in large sheaths. Sepals and petals of a delicate white, pink on the backside of the tips, the latter always rolled backwards. Petals white, longitudinally veined with dark pink. Lip inside yellow, outside crimson-pink, striped longitudinally with purple-red towards the sides. Column white with longitudinal brown-red lines on the flat side. **Icon. t. 606.**

FIGURE 155. *Maxillaria brunnea* Linden & Rchb.f.

7194 Colombia, grows on trees in the dense and very damp forests around Ricaurte, on the West Andes of Túquerres, 1000-1500 m. Flowers from July to Aug. Tufts of plants always small, laxly caespitose. Pseudobulbs egg-shaped, flat. Leaves almost leathery, dull sea-green. Flowers light yellow with reddish tips. Lip yellow with two red spots close under the lip on the outside. **Icon. t. 546.**

FIGURE 156. *Maxillaria callichroma* Rchb.f.

8274 as *Maxillaria luteo-alba* var. *grandiflora*. Colombia, grows on trees in the dense forests San Antonio de Cali on the West Andes of Cali and at Munifique near Popayán, 1500-2000 m. Plants generally forming large and dense masses. Pseudobulbs oblong-ellipsoidal, from 5 to 7 cm in length and 3 to 4 cm in breadth. Sepals white with yellow margins and tips. Lip yellow spotted with dark carmine. **Icon. t. 838.**

OTHER LEHMANN COLLECTION: **2249** Colombia. Tolima, Rio de la Plata. 1 Dec. 1882. Plant large. Leaves robust, yellow-green.

FIGURE 157. *Maxillaria fractiflexa* Rchb.f.

7192 Colombia. Grows on trees and on the ground in the dense and damp forests on both slopes of the West Andes of Popayán, 1500-2000 m. Flowering in May. Plants always forming small and dense tufts. Pseudobulbs oblong-ellipsoidal, flat, the angles rounded, up to 6 cm in length and from 2.5 to 3 cm in breadth, running out into long petioles. Leaves almost leathery, dark yellow-green. Sepals of a delicate Isabel-yellow colour, spotted with red-brown at the base on the outside. Petals of a delicate yellow-white. Lip yellow, spotted with dark red on both the outside and inside. **Icon. t.644.**

OTHER LEHMANN COLLECTIONS: **9080** Colombia, Rio Huangobio, highlands of Popayán, 1700-1800 m. Flowering in March and April; **HK919** Colombia, grows in woods on trees in the dense damp woods of the West Andes of Cali, 1600-2000 m; **BT194** Colombia. Highlands of Popayán, Rio Huangobio, 1600-2000m. Flowering in Jan. and Feb. 1886.

FIGURE 158. *Maxillaria friedrichsthallii* Rchb.f.

1098 Colombia. **Icon. t. 253.**

8107 Colombia, Popayan, 1600-1800 m, 10 Oct. 1887; **8285** Colombia, Popajane, Rio Palace, 1700-2300 m.

FIGURE 159. *Maxillaria grandiflora* (Kunth) Lindl.

8136 as *Maxillaria carruthersiana* F.Lehm. ined. Ecuador, grows on the ground, readily also on heaps of rocks overgrown with sphagnum moss, in the dense forests around El Dictamo on the eastern slopes of the East Andes of Loja, 1600-1800 m. Flowering in Dec. and Jan. Plants small and densely caespitose. Pseudobulbs oblong, flat, up to 5 cm in length and 3 cm in breadth. Leaves on long petioles, obtusely pointed, of a thick and robust texture, bluish light green, the leaf lamina up to 35 cm in length and from 6 to 8 cm in breadth. Flowers on stalks from 25 to 35 cm in length and generally spreading on the ground. Sepals and petals white, frequently washed over with pink. Lip striped with purple on a white ground, yellow on the inside. **Icon. t. 641.**

OTHER LEHMANN COLLECTIONS: **3760** Colombia, on the eastern slopes of the Central Cordillera of Popayán, 2300-3000 m. 20 March 1884; **5189** Colombia, grows on trees in dense, damp forests around Corrales, middle eastern slopes of the Páramo de Guanacas, Central Andes of Popayán, 2200-2700 m. Flowers from June to Aug.; **6262** Colombia, grows on tree and rocks around Corrales on the Rio Ullucos (state of Cauca), 2000-2600 m, Jan. to May 1885

FIGURE 160. *Maxillaria hastulata* Lindl.

6896 Discovered by Carl Theodor Hartweg near Popayán and described by John Lindley in Bentham's *Plantae Hartwegianae* in 1845. It seems probably that Lehmann's collection also came from the same region, an area where he collected extensively over many years. **Icon. t. 73**

FIGURE 161. *Maxillaria huebschii* Rchb.f.

6602 as *Maxillaria pachyantha*. F.Lehm. ined. Ecuador, grows on trees and on the ground in the dense forests on the Rio Masar around Shoray, East Andes of Azogues, 1800-2400 m. Flowering in May and June. Plants large, forming dense and massive tufts. Leaves up to 50 cm in length, from 3.5 to 5 cm in breadth, leathery, bluish green, the petioles covered with small scales. Flowers appearing in great numbers, standing on peduncles somewhat shorter than the leaves. Sepals and petals white with reddish tips. Lip whitish yellow striped with brown. **Icon. t. 642.**

OTHER LEHMANN COLLECTION: **HK 941** Colombia, Zeunachacas.

FIGURES 162—164. *Maxillaria lepidota* Lindl.

4190 Ecuador, grows on trees in damp woods around Auque, western slopes of Pichincha, 1800-2200 m. Flowers in February and March and from June to Sept. Tufts moderately large, very dense. Pseudobulbs almost cylindrical. Leaves robust, blue-green. Perianth yellow, the sepals with brown tips. Lip yellow spotted with brown. **Icon. t. 330.**

OTHER LEHMANN COLLECTIONS: **4645** Colombia, grows on trees in dense, damp forests around Santo Domingo, Antioquia, 1800-2200 m. Flowering in April and May; **6894** Colombia, grows on trees in the dense forests around La Ceja on the eastern slopes of the Central Andes of Popayán, 1700-2200 m. **Icon. t. 67;** **6895** Ecuador, without exact provenance; **7189** Ecuador, grows on trees in the dense forests around Chagal on the western slopes of the West Andes of Cuenca, 1800-2400 m. Flowering from March to May; **8145** Colombia, grows on trees around Corrales on the Rio Ullucos, eastern slopes of the Central Andes of Popayan, 2000-2500 m. Flowers in August. **Icon.;** **8146** Colombia, grows on trees around Corrales on the Rio Ullucos, eastern slopes of the Central Andes of Popayán, 2000-2500 m. Flowers in Aug.; **BT 193** Colombia. Highlands

of Popayán, 1600-2000 m. Flowering in Jan., Feb. and May 1886; **BT 198** Colombia. Ricaurte, Altaquer; **HK 889** Colombia, Capilla; **HK 906** Colombia, Conga; **6456** as *Maxillaria lepidota* var. *albida*. Ecuador, grows on trees and on rocks in the dense and very damp forests around Chacayacu and Huahuiducal, on the western slopes of the West Andes of Cuenca, 500-1600 m. Flowers from April to June; **7190** *Maxillaria lepidota* var. *albida*. Colombia, grows on trees in the dense and very damp forests around Ricaurte, on the West Andes of Túquerres, 1000-1400 m. Flowers in Aug.; **3841** as *Maxillaria lepidota* Lindl. var. *lutea*. Colombia, above Guatica. 30 Aug. 1884. Flowers yellow. **Icon. t. 413.**

FIGURE 165. *Maxillaria longissima* Lindl.

6029 Colombia, grows on trees in the dense, damp forests on the western slopes of the Páramo de Guanacas, Central Andes of Popayán, 2300-2600 m. Flowers in Jan. Forming moderately large, dense tufts. Pseudobulbs small, ellipsoidal, compressed. Leaves leathery, dull sea-green. Flowers appearing in fairly large numbers on stalks shorter than the leaves. Sepals and petals white, purple-brown from the middle up to the tip. Lip dull light yellow punctuated with brown. **Icon. t. 415.**

FIGURE 166. *Maxillaria luteo-alba* Lindl.

HK 928 Colombia. Grows on trees in dense forests on West Andes of Cali, 1500-1800 m. **Icon. t. 314.**

FIGURE 167. *Maxillaria parvibulbosa* C.Schweinf.

3893. Without exact provenance. **Icon. t. 416.** The Lehmann drawing reproduced here agrees well with the type collection and description of this species described in the *Botanical Museum Leaflets of Harvard University* in 1945 while Schweinfurth was preparing the orchid account for the *Flora of Peru*. He based it on a collection made by G. Klug from Zepelacio near Moyobamba in Peru in May 1934.

FIGURE 168. *Maxillaria* cf. *poicilotheca* Schltr.

8373 Colombia, grows on trees in the dense and damp forests on the western slopes of the West Andes of Popayán, 1400-1700 m. Flowers in Oct. The plants form large, dense, somewhat loose tufts. Pseudobulbs small, elliptical, somewhat compressed, hidden by large dry and thin-textured sheaths. Leaves robust, leathery, dark yellow-green. Flowers on very short and thin stalks, dull chrome yellow transversely speckled with chestnut brown, the tips cinnamon-brown. Lip yellow, spotted with red at the tip. **Icon. t. 558.**

OTHER LEHMANN COLLECTION: **7195** Colombia, grows on trees in the dense and damp forests on the western slopes of the West Andes of Popayán, 1300-1600 m. Plants generally large, loosely tufted. Pseudobulbs oblong-elliptic, up to 3 cm in length and from 1 to 1.5 cm in breadth, slightly compressed. Leaves scarious, leathery, dark yellow-green.

FIGURE 169. *Maxillaria ponerantha* Rchb.f.

8372 Colombia, grows on trees in the dense forests on the highlands of Popayán, 1600-2000 m. Flowering in Nov. The plants form small, dense, erect tufts up to 30 cm in height. Rhizome stem-like, erect, forming oblong-ovoid compressed pseudobulbs at short intervals apart. Leaves robust, dark green and shiny. Sepals and petals yellowish white. Lip of a beautiful red colour on the inside, the tip white, lined with reddish on the outside. Column light yellow. **Icon. t. 1005.**

FIGURE 170. *Maxillaria porrecta* Lindl.

7254 Colombia, grows on trees and amongst low scrub in the dense and very damp forests around Palmichal and Malabtigo, on the northern declivity of the highlands of Santa Rosa, Antioquia, 2000-2500 m. Flowering in Nov. 1891. Rhizome thick, stem-like, up to 50 cm in length, at intervals forming many-bulbed tufts. Pseudobulbs small, ovoid-oblong, slightly compressed, longitudinally rugose. Leaves leathery, brown-greeb

with red-brown margins. Flowers appearing in very large numbers, of a deep yellow and spotted with red on the outside. Lip black-brown at the tip. **Icon. t. 510.**

FIGURE 171. *Maxillaria procurrens* Lindl.

8361 as *Ornithidium*. Colombia, grows solitarily on trees in the open forests on the highlands of Popayán, 1600-2000m. Flowering in Oct. and Nov. Rhizome stem-like, erect, elongate, up to 30 cm in height, forming small, flat, elliptical pseudobulbs at short distances apart. Leaves robust, of a fresh yellow-green colour. Sepals red-brown, yellowish at the tips. Petals of a somewhat fresher brown-red colour. Lip dark carmine-brown. **Icon. t. 559.**

FIGURE 172. *Maxillaria ramosa* Ruiz & Pavon

BT 230 Colombia, Popayan, 1600-2000 m, March 1884. **Icon. t. 1005.**

FIGURE 173. *Maxillaria rufescens* Lindl.

10005 Without exact provenance. **Icon. t. 511.**

FIGURE 174. *Maxillaria sandariana* Rchb.f.

6900 Ecuador, Yavilcay & Chiquinda, Rio Paute of Agogues and Rio Masor, 1600-2200 m. Oct.-Nov.

FIGURE 175. *Maxillaria speciosa* Rchb.f.

10023 as *Maxillaria scurrilis* F.Lehm. ined. Colombia. Conga. **Icon. t. 803.**

OTHER LEHMANN COLLECTION: **HK 909** as *Maxillaria scurrilis* F.Lehm. ined. Colombia, Cauca Valley.

FIGURE 176. *Meiracyllium trinasutum* Rchb.f

t. 206 as *Meiracyllium*. A small genus of two Central American species, was established by H.G. Reichenbach in 1854 in the first volume of his *Xenia Orchidacea*. The type of the genus is *M. trinasutum* Rchb.f. which was based on a specimen in José Pavon's herbarium in the possession of Edmund Boissier in Geneva. It is likely that the Pavon specimen came from Mexico. Lehmann's excellent illustration, reproduced here, was almost certainly drawn during his expedition to Guatemala in 1882. No accompanying herbarium specimen is indicated nor has one been traced.

FIGURE 177. *Miltioniopsis vexillaria* (Rchb.f.) Godefr.-Leb.

Icon. t. 19. Without given provenance.

OTHER LEHMANN COLLECTIONS: **4136** as *Odontoglossum vexillarium* var. *rubellum*. Colombia, grows in the state of Cauca: on trees in dense, damp woods above La Porquera, on the upper Rio Dagua, 1600-2000 m, 26 April 1885. Flowers dark crimson-pink with a white red-striped ocellus in front of the yellowish base of the lip. **4625** as *Odontoglossum vexillarium*. Colombia, grows in trees in dense, damp forests around San Andres and Bricene on the northern salient of the plateau of Santa Rosa de Osos, Antioquia, 1400-1800 m, Flowers in May 1884. Tufts fairly large and dense. Flowers 3 to 9 on the shafts, lilac –pink. Lip with a white zone in front of the base; **6524** as *Odontoglossum vexillarium* var. *ecuadorensis*. Ecuador, grows as isolated specimens on trees in the dense and very damp forests around Chiguinda and Cuchipamba, on the eastern slopes of the East Andes of Sigisig, 1200-1800 m. 5 May 1887. Flowers up to 5 in the inflorescence, dark crimson pink, frequently crimson. Lip with a small, oblong white zone striped with red in front of the yellow lamina of the base. **Icon.** See diary 5 April 1887.

FIGURE 178. *Nidema boothii* (Lindl.) Schltr.

1119 as *Epidendrum*. Guatemala. 1882 expedition. **Icon t. 240.**

FIGURE 179. *Oerstedella endresii* (Rchb.f.) Hágsater

1141 as *Epidendrum endresii*. Costa Rica. March 1878. **Icon. t.239**

FIGURE 180. *Oerstedella wallisii* (Rchb.f.) Hágsater

Icon. t. 560. No given provenance.

OTHER LEHMANN COLLECTIONS: **4027** as *Epidendrum wallisii*. Colombia, without exact provenance. **Icon. t. 657. 7236** as *Epidendrum wallisii*. Colombia, grows on trees in the dense and damp park-like forests around Frontino, Antioquia, 800-1400 m. Flowers almost continuously, Oct. 1884 and Aug. 1891; **8190** as *Epidendrum wallisii*. Colombia, grows on trees in open forests, particularly readily in the vicinity of rivers, around Frontino, West Andes of Antioquia, 1000-1600 m, 30 Oct. 1884.

FIGURE 181. *Oliveriana egregia* Rchb.f.

Icon. t. 501. No given provenance.

OTHER LEHMANN COLLECTIONS: **7280** as *Chrysocycnis*. Colombia, grows in dense forests on the Rio Palmas and Rio Dulce, eastern slopes of the Páramo de Sonsón, Antioquia, 1500-2000 m. Dec. 1891. Sepals and petals reddish light yellow with dull brown veins. Lip light yellow. Column brownish, connate with the lip; **BT 231** Colombia, Minas Inza; **HK 807** Colombia, grows on trees in dense woods of Popayán, 1700-2600 m. Dec. 1891; **HK 904.** Without exact locality.

FIGURE 182. *Oncidium aspidorrhinum* (F.Lehm.) M.W.Chase & N.H.Williams

10021 *Odontoglossum aspidorrhinum* (type). Colombia, western slopes of the West Andes of Cauca, 2000-2500 m.

OTHER LEHMANN COLLECTION: **7267** as *Odontoglossum aspidorrhinum* F. Lehm. Colombia, grows on trees in the dense forests around Briceno and Santa Barbara, near Yarumal, Antioquia. 1800-2000 m. Nov. 1891.

FIGURES 183 and 184. *Oncidium alexandrae* Bateman

HK 160. No given provenance.

OTHER LEHMANN COLLECTIONS: **201** as *Odontoglossum crispum* Lindl. var. *lehmannii* Rchb.f. Colombia, Dense woods between Isala and Sebondoy, Pasto, 2500 m. Flowers Dec. to March; **494** as *Odontoglossum crispum* Lindl. Colombia, grows on trees between Santiago to Sebondoy, Eastern Cordillera of Pasto, 2000 m, 20 Feb. 1880. **2397** Colombia, Tolima, near La Arenosa on the Rio Cabrera, 2000-2400 m, 9 Jan. 1883; **6004** Colombia, grows on trees in dense forests on the eastern slopes of the Central Andes of Popayán, 1800-2500 m. Flowers from January to March. Also on Páramo de las Delicias. NOTE This is the variety with the smallest flowers. It is smaller than the real variety *lehmannii*, which originates from the East Andes of Pasto; **8059** Colombia, grows on trees in the dense woods around Santiago, Putumayo and Sebondoy, East Andes of Pasto, 1800-2300 m. Flowers Jan. and Feb.; **8552** Colombia, woods above Pacho, western highlands of Zipaquia, 1800-2500 m. Flowers in Feb. and March. Also between Fasataria and Chiquiniquira, highlands of Bogotá; **HK 3** Colombia, on trees in dense forests around Pasto; **HK 4** Colombia. State of Cundinamarca, above Fusagasuga and Pasca, 2000-2500 m, March 1892; **BT 138, 139** Without provenance.

FIGURE 185. *Oncidium praestanoides* M.W.Chase & N.H.Williams

10009. Icon. t. 633. No provenance given.

FIGURE 186. *Oncidium cristatum* (Lindl.) Beer

HK 4 – Ecuador, grows on trees in dense woods at Pacayurcu above Zaruma and above Ayabamba and Paccha, 1300-1700 m. Flowers in May. **Icon. t. 1012.**

OTHER LEHMANN COLLECTIONS: **6263** Ecuador. Grows on trees in the dense forests between Huaca and

Tuza, 2500-2800 m. Flowers in June and July 1886. Clumps of plants almost always small. Pseudobulbs ovoid-oblong, longitudinally plicate, bearing two flowers. Leaves dark yellow-green. Inflorescence a spike-like raceme with a slight tendency to branch and bearing up to 12 or more flowers. Sepals dull chestnut brown with yellow base and tips. Petals yellow spotted with red-chestnut brown. Lip yellow with a brownish zone in front of the crests; **6270** as *Odontoglossum denticulatum*. Ecuador, grows on tall trees in the dense, damp forests on the western slopes of the West Andes of Quito, 2000-2500 m. Flowers in June and July. Clumps of plants small and dense. Pseudobulbs ovoid-oblong, strongly compressed, rugose, longitudinally plicate, brown-green. Leaves longly cuneate, narrow, sharply pointed, dark green. Inflorescence a loose spike-like raceme with from 5 to 12 flowers. Sepals ochre-brown. Petals ochre-brown, spotted and transversely striped with yellow. Lip yellow with a small reddish brown longitudinal zone in the middle. **HK 21, 24** Ecuador, no exact provenance; **HK 25** Ecuador, grows on trees above Zaruma and Paccha.

FIGURE 187. *Oncidium cruentoides* M.W.Chase & N.H.Williams

6550 as *Odontoglossum cruentum* Rchb.f. Ecuador, grows on trees in the dense woods between Granadillas and Churrucos, on the eastern slopes of the East Andes of Sigüig, 2000-2500 m. Flowers in April and May. Clumps of plants generally small, densely caespitose. Pseudobulbs ovoid-oblong, strongly compressed, rugose and longitudinally plicate, brown-green, from 7 to 11 cm in length and 3 to 4 cm in breadth, two-leaved. Leaves robust, brown-green. Inflorescence a simple scape-like raceme, up to 50 cm in height. Sepals and petals red-brown with yellow tips and base. Lip yellow with a red-brown zone in front of the crests. **Icon. t. 629.**

FIGURE 188. *Oncidium cuculligerum* (Schltr.) M.W.Chase and N.H.Williams

Icon. t. 701 as *Sigmatostalix*. Colombia, Tocota, W Andes of Cali, 1700-2000 m, March-April.

OTHER LEHMANN COLLECTION: **8074** Colombia, Tocota, W Andes of Cali, 1700-2000 m.

FIGURE 189. *Oncidium eliae* (Rolfe) MW.Chase & N.H.Williams

6558 as *Sigmatostalix eliae* Rolfe. Ecuador, grows on trees in the dense and very damp forests around Chiguinda, East Andes of Cuenca, 1600-1900 m. Flowers in April and May. **Icon. t. 169.**

OTHER LEHMANN COLLECTION: **HK 1123** Same locality. March and April. Tufts of plants generally small. Pseudobulbs flat, compressed, smooth. Leaves dark green. Flowers yellow spotted with red-brown. **Icon. t. 717.**

FIGURE 190. *Oncidium harryanum* (Rchb.f.) M.W.Chase & N.H.Williams

7253 as *Odontoglossum harryanum* Rchb.f. Colombia, grows on trees in the dense and damp forests around La Bramadora, near Dolores, on the Alto de Guanacas and in other places on the northern highlands of Santa Rosa, Antioquia, 1800-2300 m. Flowers in May and June. Tufts of plants rarely large. Pseudobulbs oviform, flat, plicate from 4 to 8 cm in length and 3 to 4 cm in breadth, two-leaved. Leaves robust, almost leathery, bluish light green. Floral shoot three- to twelve-flowered, simple. Flowers up to 9 cm in diameter, very sweet-scented. Sepals and petals red-brown, almost olive-brown with a few yellow-green transverse spots, the latter striped with yellow at the base. Lip the basal half purple-red with whitish nerves, the hairy crests yellow, the apical half white or yellow-white. Column white-yellow. nom. vern. in Antioquia. 'La Reina'. **Icon. t. 624.**

FIGURE 191. *Oncidium lehmannii* (Rchb.f.) M.W.Chase & N.H.Williams

10005. No provenance given.

OTHER LEHMANN COLLECTIONS: **282** as *Odontoglossum cristatellum* Rchb.f. Ecuador, Nariño, Laguna Cocha; **491** Ecuador, Putumayo, Sibundoy; **s.n.** *Odontoglossum lehmannii* (type). Ecuador, Tunguragua, 2700 m.

FIGURES 192 and 193. *Oncidium luteopurpureum* (Lindl.) Beer

6786 as *Odontoglossum luteopurpureum* var. *sceptrum*. Colombia, grows on trees in the dense and damp forests of the Central Andes of Popayán, 2200-2600 m. Flowers from July to Sept. Plants moderately large, densely caespitose. Pseudobulbs ovoid-oblong, moderately compressed, rugose and flatly plicate, up to 10 cm in length and from 4 to 4.5 cm in breadth. Flower stalk up to 1 m in height, spike-like, racemose, rarely with a branch, bearing 12 to 30 flowers. Sepals almost entirely dark chestnut brown, the tips yellow. Petals of similar colour but somewhat more yellow at the tips and at the base. Lip yellowish white. **Icon. t. 627.**

FIGURE 194. *Oncidium pictoides* MW.Chase & N.H.Williams

8257 Ecuador, grows on trees in the dense forests around Pacay-urcu above Zaruma. 1300-1700 m. Flowers in May. Plants very small, rarely having more than three bulbs on the rhizome. Pseudobulbs elliptical, flat, from 2.5 to 3 cm in length and 2 cm in breadth, one-leaved. Leaves thick, grass-like, from 5 to 9 cm in length and 1 to 1.5 cm in breadth, dark green on the upperside, greenish purple-red on the underside. Inflorescence spike-like, racemose, bearing from 5 to 10 flowers alternately standing on both sides. Sepals and petals brownish. Lip brick-red with a yellow tip. **Icon. t. 159.**

OTHER LEHMANN COLLECTION: **4337** as *Sigmatostalix picta* Rchb.f. Ecuador, forests of Nanegal, West Andes of Quito, 1000 m.

FIGURE 195. *Oncidium mirandum* (Rchb.f.) M.W.Chase & N.H.Williams

7208 *Odontoglossum mirandum* Rchb.f. Colombia, grows on trees in the dense and damp forests in the Montaña de Caramanta between Rio Sucio and El Jardin, Cauca-Antioquia, 2400-2800 m. 5 Aug. 1891. Plants moderately large. Pseudobulbs ovoid-oblong, flat with three deep plications on each side, two-leaved. Leaves robust, dark yellow-green, up to 15 flowers in closely arranged unbranched and overhanging panicles, from 40 to 50 cm in length. Flowers very sweetly scented. Sepals and petals cinnamon-brown with yellow borders and tips; lip of a delicate yellow colour at the base, borders and tip lemon-yellow with a cinnamon-brown zone in front of the large, two-toothed and white wart. Column of a delicate yellow colour with some brown at the tip. **Icon. t. 631.**

OTHER LEHMANN COLLECTION: **HK 18** as *Odontoglossum mirandum*. Colombia, San Pedro, Antioquia.

FIGURE 196. *Oncidium rhynchanthemum* (Rchb.f.) M.W.Chase & N.H.Williams

8551 as *Odontoglossum rhynchanthemum* Rchb.f. Colombia, grows around Pacho from 1900 to 2400 m altitude, on trees in the dense forests and flowers in Feb. and March. Sepals and petals of a delicate gamboge yellow colour, the former with a chestnut-brown zone in the middle and a few similar lines at the base; the latter with three such stripes at the base. Lip white, greenish at the base of the claw. Column white, greenish at the base. Plants moderately large, dense and firm. Bulbs but slightly compressed, rugose and longitudinally plicate, brownish and shiny. Leaves hard-papery, dark green. Inflorescence a spike-like raceme, very loosely arranged, 3- to 7-flowered. **Icon. t. 626.**

FIGURE 197. *Otogglossum globuliferum* (Kunth) N.Williams & M.Chase

Icon. t. 261. Colombia, no given provenance.

8561 as *Oncidium globuliferum*. Colombia, grows on trees in the open forests around Pacho, department of Cundinamarca, 1700-2300 m. Flowers in January. Rhizome wire-like, thin, up to 4 m in length, winding. Pseudobulbs oblong-elliptic, very flat, up to 3cm in length and from 2 to 2.5 cm in breadth, brown and shiny. Flowers single, rarely in twos, on very short stalks, of a luminous gamboge yellow colour, the sepals and petals striped at the base with carmine, the lip with a few brick red spots around the crest.

FIGURE 198. *Peristeria elata* Hook.

8152. Colombia, Las Juntas del Dagua, 0-600 m, Oct. **Icon. t. 613.**

FIGURE 199. *Pescatoria coelestis* (Rchb.f.) Dressler

6878 as *Bollea coelestis* Rchb.f. Plants generally forming large and somewhat loose masses. Rhizome elongated up to 30cm in length, forming at intervals of dense and many-leaved fans of leaves from 5 to 10cm apart. Leaves membranaceous-herbaceous, with strongly protruding ribs on the underside, yellow-green. Flower-stalks up to 25cm in height, round. Flowers fleshy, brownish violet with a somewhat darker zone in the anterior half of the sepals and petals. The callus of the lip yellowish. Colombia. Grows on trees in the dense and damp forests on the upper western slopes of the West Andes of Cali, 1700-2200m. Flowers from March to July. **Icon. t. 645.**

OTHER LEHMANN COLLECTIONS: **2849** Colombia. Salado, Western Andes of Cali, 1600m. **Icon. 2971** Colombia. Between Rio Dagua and Rio Digua, Salado, 1500m, 6 August 1883. **8036** Colombia. Grows on trees, always some 1 to 3m above the ground, in the dense and damp forests around Tocota on the upper western slopes of the West Andes of Cali, 1600-2100m. Flowers from May to July. **BT 103** Without exact locality.

FIGURE 200. *Pescatoria dayana* Rchb.f.

HK666 Without given provenance. *Pescatoria* is a small genus of about 16 species distributed in the mountains of the tropical Americas from Costa Rica south to Ecuador. Reichenbach named it after M. V. Pescatore of the Chateau Celle St. Cloud (near Paris), who had a fine collection of orchids at the time. The spelling of the generic name is problematic. Reichenbach used *Pescatoria* but many subsequent authors have treated that as an orthographic error and have corrected it to *Pescatorea*. Reichenbach, who considered it a “very curious novelty”, described *Pescatoria dayana* in the *Gardeners' Chronicle* of 1872, naming it for John Day, the well-known London-based orchid grower, who flowered the type collection. He thought that it came from Colombia, having also received a preserved flower from Gustave Wallis. The provenance of Lehmann's collection (**HK666**) is unknown. **Icon. t. 608.**

FIGURE 201. *Pescatoria klabochorum* Rchb.f.

4085 as *Pescatoria dayana*. The plant forms fairly large tufts. Leaves of a soft texture, yellow-green. Flowers milky white, reddish violet at the tips of the sepals and petals. Lip beset with villous papillae, reddish-violet. Grows in Colombia, in the state of Cauca: on trees in damp, dense woods around Juntas on the Rio Dagua, 50-400 m, 20 April 1885. **Icon. s.n.**

OTHER LEHMANN COLLECTIONS: **960** Colombia, without exact provenance, 1877. **2986** Colombia, Las Pavas, 1500-2000m. 7 Aug. 1883. Flowers white with crimson tips. **6877** as *Pescatoria dayana*. Colombia, grows on trees in the dense and damp forests above La Naranja and Las Juntas on the Rio Dagua, 500-1600m. Flowers from May to Aug. **Icon. 8039** Colombia, grows on trees in the dense and damp forests on the Rio Dagua, 400-1300 m. Flowers from May to Aug. **HK659** Colombia, grows on trees in woods at Papagalleros, 1000-1500 m.

FIGURE 202. *Pescatoria lehmannii* Rchb.f.

25 Colombia, grows on trees much above the ground, in dense damp forests between Quebrada de Colombia. Cuyambi and San Francisco on western slopes of Western Andes of Túquerres, 900-1300 m, Sept. 1878. **Icon. t. 609.**

OTHER LEHMANN COLLECTIONS: **42** as *Pescatoria lehmannii* var. *albida*. Colombia, grows on trees in dense forests between Rastradero and the Lagunas of Chimbusa on the coast of Tumaco, 11 Aug. 1880. **8037** Colombia, grows on trees close to the ground, in the dense and very damp forests on the Quebrada Cuyambi, and on the Rio Imbi and Cartagena, western slopes of the Andes of Túquerres, 800-1300 m. Flowers from April to Aug. 1878.

FIGURE 203. *Phragmipedium boissierianum* (Rchb.f.) Rolfe

8045 as *Selenipedium reticulatum*. Ecuador, grows on wet accumulations of rubble on the steep river banks of the Rio Bambusaro and Timbara, East Andes of Loja, 800-1200 m. Plants always small. Leaves leathery, dark yellow-green, up to 1m in length. Inflorescence up to ten-flowered, the flowers developing in succession. Sepals light greenish yellow with sharply marked darker veins forming a net pattern. Petals greenish white, veined with darker colour, whitish on the inside. **Icon. t. 660.**

FIGURE 204. *Phragmipedium schlimii* (Linden & Rchb.f.) Rolfe (as *Selenipedium schlimii*)

8048 as var. *album* Colombia, grows on damp heaps of rubble, readily on landslips, in the deep mountain dales around Barbosa and Don Matías, also around Angostura, Antioquia, from 1400 to 1700 m. Grows together with 8047. Flowers of a pure white colour, with only this red frame around the opening of the slipper. **Icon. t. 658.**

OTHER LEHMANN COLLECTIONS: **7259** Colombia, grows on rocks or on slopes covered with rubble on which have collected masses of clay, on the Rio Grande near Don Matías, 1500-1800 m. This species occurs also around Santo Domingo and around Sonson in Antioquia. Large and beautiful specimens also occur around Angostura and on the Rio Canaverales. Sepals reddish light green. Petals reddish white, frequently of a pure white. Lip white or pink, with crimson stripes around the opening. **8047** as *Selenipedium schlimii* var. *roseum*. Sepals greenish white-pink. Petals and slipper white, the latter with a dark crimson frame around the opening. Column yellow. Colombia. Grows on damp heaps of rubble, readily on landslips, in the deep mountain dales around Barbosa and Don Matías, also around Angostura, Antioquia, from 1400 to 1700m.

FIGURE 205 and 206. *Phragmipedium wallisii* (Rchb.f.) Garay (neotype)

6868 as *Selenipedium caudatum* var. *wallisii*. Ecuador, grows on trees in the dense and very damp forests on the Rio Zamora, East Andes of Loja, 800-1200 m. Flowers in Oct. and Nov. Plants generally small. Leaves leathery, dark yellow-green, shiny. Inflorescence from two- to five-flowered. Sepals yellowish white with sharply standing out yellowish green veins. Petals greenish white at the base with reddish veins, lilac-brown in the lower part of the tips. Slipper reddish white with lilac-pink veins, the inside of a very delicate white colour with carmine dots on the border. **Icon. t. 659.**

10027 No provenance given. **Icon. t. 1007.**

FIGURE 207. *Plectrophora alata* (Rolfe) Garay

8380 Colombia, grows on trees in the dense forests around Cajamarca, West Andes of Roldanillo, 1000-1600 m, August 1895. Flowering from July to Nov. The plants form very dense, small, caespitose tufts. Leaves leathery, light green. Flowers on short and thin stalks. Sepals yellowish white. Petals white. Lip white in the throat, yellowish, thickly spotted with beautiful light red dots. **Icon. t. 163.**

FIGURE 208. *Pleurothallis ciliata* Knowles & Westc.

1120 as *Pleurothallis*. No provenance given. **Icon. t. 229.**

FIGURE 209. *Pleurothallis reginae* Garay

7075 as *Pleurothallis*. Colombia, Antioquia Prov. **Icon. t. 480**

FIGURE 210. *Pleurothallis scoparum* Rchb.f.

4513 as *Pleurothallis*. Ecuador, grows on moist rocks in dense, very damp forests around Chaca-yacu, at the foot of the West Andes of Cuenca, 500-800 m. Flowering in Oct. Tufts moderately large, dense. Leaves

leathery, light green. Flowers at the tips of the leaves. Sepals white, lilac at the tips. Petals and lip white flushed with lilac. **Icon. t. 450.**

OTHER LEHMANN COLLECTION: **s.n.** as *Pleurothallis*. Ecuador, Province of Pichincha, West Andes, c. 500 m.

FIGURE 211. *Pleurothallis truncata* Lindl.

Icon. t. 364. No provenance given.

OTHER LEHMANN COLLECTION: **332** as *Pleurothallis*. Ecuador, Calacali, 2800-3000 m, 28 Nov. 1880.

FIGURE 212. *Pleurothallis talpinaria* Rchb.f.

Icon. t. 356. No provenance given.

OTHER LEHMANN COLLECTION: **6920** Colombia Volcano of Sotara, Cauca, 2800-3300 m, June-July. **7063** Colombia, Paramo de Guerrero, near Zipaquira. Jan.-March.

FIGURE 213. *Ponthieva grandiflora* Rchb.f.

5318 Ecuador, grows on trees covered with mosses, in dense forests around Yerbabuena, upper western slopes of the West Andes of Cuenca, 2600-2800 m, flowering in Sept. and Oct. Tuber caterpillar-like, up to 6 cm in length. Leaves of a soft texture, slightly hairy, of a greasy light yellow-green colour. Flowers up to 10 on a simple stalk, opening in succession. Dorsal sepal greenish; lateral sepals greenish at the base, otherwise pinky white. Petals yellow, striped with ochre-brown. **Icon. t. 452.**

OTHER LEHMANN COLLECTION: **7635** Ecuador, Yerbabuena, West Andes of Cuenca, Oct. 1878. **HK 1227** Ecuador, between Yerbabuena and Pangor, West Andes of Cajabamba, 2600-2900 m, Dec.

FIGURE 214. *Ponthieva pseudoracemosa* Garay

Icon. t. 84. No given provenance.

OTHER LEHMANN COLLECTION: **6455** Ecuador, grows on heaps of porphyraceous rubble in the dense forests around Chagal on the western slopes of the West Andes of Cuenca, 2300-2700 m. April – Oct. 1888; **7110** Ecuador, grows on steep and damp mountain slopes around Shoray on the western slopes of the East Andes of Azogues, 1800-2400 m, Oct.; **7130** Ecuador, grows on steep slopes covered with rubble on the Rio Pastaza between Punapi and Baños, 1800-2400 m. Aug. and Sept. 1894.

FIGURE 215. *Porroglossum mordax* (Rchb.f.) Sweet

3620 Colombia, Dept. of Cauca, western slopes of Munchique near Popayan, 2300 m. **Icon. t. 350.**

FIGURE 216. *Porroglossum muscosum* (Rchb.f.) Schltr.

2810 Colombia, from Munchique, 2000-2300 m. With long-haired flower stalks. **Icon. t. 351.**

FIGURE 217. *Psymorchis pumilio* (Rchb.f.) Dodson & Dressler

Icon. t. 258. No provenance given.

OTHER LEHMANN COLLECTIONS: **HK 1052** Colombia, Frontino, Antioquia, 1200-1600 m. **HK 1053** Colombia, Soledad, Sayja and Timbiqui, June 1901.

FIGURE 218. *Restrepia antennifera* H.B.K.

Icon. tt. 353, 354. No given provenance.

OTHER LEHMANN COLLECTIONS: **6247 (in part)** Colombia, grows on trees in the dense forests on the western

slopes of the volcano of Sotara and above Almaguer, 2000-2800 m. Flowers in June and Oct. and Nov. **6257** Colombia, grows on trees in the dense forests of the Tajumbina between La Cruz and El Tablon, province of Pasto, 2500-2800 m. Flowers in June and July.

FIGURE 219. *Rodriguezia lehmannii* Rchb.f.

3638 Colombia, grows in woods on the highlands of Popayán, 1500-1800m. Flowers in April and May. Also 1000-1750m, April 1878 & near Piagua, 1740m. 5 March 1884. **Icon. t. 409.**

OTHER LEHMANN COLLECTIONS: **4266** Colombia, grows on Mimosa near Popayán at Rio Ambato and Palo, 1000-1750m, 18 March 1884. **7251** Colombia. Grows fairly abundantly on the ground, very rarely on trees, in the dense forests around Frontino, Antioquia, 1600-1800 m, Sept. 1891. **Icon. t. 408; HK 1006** Colombia, grows on trees in woods at La Tapa and Inza.

FIGURE 220. *Sobralia dichotoma* Ruiz & Pav.

BT 50 as *Sobralia mosquerae* Lehm. ined. Colombia, Pipulquer. **Icon. t. 839.**

OTHER LEHMANN COLLECTIONS: **8599** Colombia, grows in bush formations in the mountain savannahs on the Rio Paez, Tolima, 1000-1600 m. Flowering in March. Masses of plants large and caespitose. Stems up to 4 m in height, rarely thicker than the thumb, leafy on both sides. Leaves leathery, firm, yellow-green and shiny. Flowers arranged in loose and broad racemes standing in the axils of the leaves in the vicinity of the top, very sweetly scented. Sepals and petals white, slightly washed over with pink, the former reddish on the outside. Lip lilac-brown, yellowish in the throat; **BT 1202** Colombia, without exact provenance; **BT 1206** Colombia, Patico.

FIGURE 221. *Sobralia violacea* Lindl.

6114 Colombia, grows frequently on ground covered with rocks in the open bush-wood formations around Dolores and above Melgar, Tolima, 1400-1700 m. Flowering in Jan. and Feb. Tufts of plants for the most part small only, fairly dense. Stems the thickness of a quill and up to 1 m in height. Leaves leathery, slightly plicate, yellow-green. Flowers crimson, the lip darker. **Icon. t. 454.**

FIGURE 222. *Specklinia grobyi* (Batem. ex Lindl.) F.Barros

48 as *Pleurothallis*. Colombia, grows on trees in dense woods near Buenaventura. 16 Aug. 1880. Plants forming small, dense, graceful tufts. Stems thin, up to 1.3 cm long, entirely clothed in membranous, paleaceous sheaths. Leaves distinctly stalked, long-elliptic, sharply pointed, dark green, 1.5-2 cm long, 0.5-0.8 cm wide. Inflorescence filiform, up to 6cm high, two-sided, alternately bearing small flowers on a stalk 3 cm in length. Flowers gaping; dorsal sepal long, hood-shaped, yellow with a reddish base, up to 5 mm long; lateral sepals connate, navicular with the point directed downwards, of the same size and colour as the former, only considerably wider. Petals a delicate light yellow. Lip narrowly tongue-shaped, curved downwards, lilac-red. **Icon. t. 280, t. 295.**

OTHER LEHMANN COLLECTIONS: **4520** as *Pleurothallis*. Colombia, grows on trees, especially on oaks, in dense park-like woods around Piendamó and Palace, plateau of Popayán, 1600-1800 m. Flowering in Sept. and Oct; **BT 329** as *Pleurothallis*. Colombia, on trees and rocks in woods at Buenaventura, 9 Feb. 1900; **HK 151** as *Pleurothallis*. Colombia, Rio Dagua.

FIGURE 223. *Stanhopea carchiensis* Dodson

Icon. t. 468. No provenance given.

FIGURE 224. *Stanhopea florida* Rchb.f.

6821 No provenance given. **Icon. t. 655.**

OTHER LEHMANN COLLECTIONS: **6579** Ecuador, E Andes of Sigsig, 1500-1800 m, April and May; **HK 786** Colombia, Popayan, Santo Domingo de los Colorados.

FIGURE 225. *Stanhopea frymirei* Dodson

8614 Colombia, no exact provenance given. **Icon. t. 467.**

FIGURE 226. *Stanhopea jenischiana* F.Kramer ex Rchb.f.

6491 Colombia, Cauca, Torito.

OTHER LEHMANN COLLECTIONS: **3651** Colombia, Popayan, 1500-1700 m. **HK 784** Santo Domingo de los Colorado; **HK 778, 785, 786, 792, 793** Popayan.

FIGURE 227. *Stellilabium andinum* (L.O.Williams) Garay & Dunst. (type)

8358 as *Trichoceros*. Colombia, grows on *Psidium guayava* in the moderately dense and damp forests around Pipulquer, western slopes of the West Andes of Tuquerres, 1500-1700 m. Flowering in July and Aug. Plants small. Leaves herbaceous, yellow-green. Flowers blooming in succession. Sepals and petals reddish-light yellow, veined with dull red. Lip chestnut-brown, darker at the base. **Icon. t. 144.**

FIGURE 228. *Stellilabium astroglossum* Schltr.

8357 as *Trichoceros*. Ecuador, grows on trees, usually on *Psidium guayava*, in the dense and damp forests around Chiguinda on the eastern slopes of the East Andes of Sigsig, 1000-1700 m. Flowering in Aug. and Sept., rarely still in Oct. Plants very small. Leaves sword-shaped, herbaceous, brownish dark green. Flowers appearing in succession. Sepals and petals greenish yellow, washed over with brown. Lip dark brown. **Icon. t. 718.**

OTHER LEHMANN COLLECTION: **10012** Ecuador, grows on trees in dense forests at Zamora, East Andes of Loja, 800-1200 m. **Icon. t. 43.**

FIGURE 229. *Stanhopea pozoi* Dodson & D.Bennett

Icon. t. 543.

FIGURE 230. *Stellilabium ecuadorensis* (Schltr.) Dodson et Escobar **comb. nov.**

Sodirolella ecuadorensis Schltr. in Fedde, Repertorium Specierum Novarum Regni Vegetabilium, Beihefte 8: 108 (1921). Type: Ecuador, Chimborazo, *A. Sodiro* s.n. (holo. B⁺).

8359 as *Trichoceros*. Ecuador, grows on trees, usually *Psidium guayava*, in the dense bushy woods around Guamampata and Palletanga, West Andes of Alausi, 600-1500 m. Flowering in Sept. and Oct. Plants tiny. Leaves herbaceous, yellow-green, frequently reddish. Flowers blooming in succession, arranged in two-sided, spike-like racemes. Sepals and petals lemon-yellow. Lip and column white, the former yellow at the tip. **Icon. t. 145.**

FIGURE 231. *Telipogon nervosus* (L.) Druce

6874 Colombia, grows on trees and amongst bushes in the dense forests around La Boca del Monte on the western slopes of the highlands of Bogotá, 2400-2600 m. Flowering in Jan. and Feb. Flowers dull yellow longitudinally striped with thin brown-red stripes. **Icon. t. 40.**

FIGURE 232. *Telipogon obovatus* Lindl.

4566 Ecuador, grows on trees in the dense forests around Yuerbabuena and Molleturo, West Andes of Cuenca,

2600-2800 m. Flowering in Aug. and Sept. 1876. Plants small. Leaves herbaceous, yellow-green. Flowers lemon-yellow, the exceptionally large, hairy column red-brown. **Icon. t. 143.**

OTHER LEHMANN COLLECTION: **HK 1175** Ecuador, Rio Hondo, Yuerbabuena.

FIGURE 233. *Teuscheria elegans* Garay

7244 as *Maxillaria*. Colombia, grows on trees on the banks of the rivers around Frontino, Antioquia. 1000-1600 m. Flowering in Sept. 1891. Rhizome thin, up to 50cm in length, forming small oviform pseudobulbs at short intervals apart. Pseudobulbs hidden in large and dry sheaths, one-leaved. Flowers solitary on short and thin stalks. Sepals and petals milky white with pink tips, entirely of this colour on the outside and yellowish at the base. Lip trilobed, the middle-lobe white, the lateral ones orange striped with red. Column white. **Icon. t. 515.**

FIGURE 234. *Ticoglossum oerstedii* (Rchb.f.) Halbinger

1056 as *Odontoglossum*. Costa Rica, Volcán Irazú, 2800m. 20 Jan. 1882. **Icon. t. 202.**

OTHER LEHMANN COLLECTION: **s.n.** same locality, Dec. 1881.

FIGURE 235. *Ticoglossum krameri* (Rchb.f.) Halbinger

Icon. t. 15 Lehmann's illustration, drawn while he was in Costa Rica in 1881 and 1882, does not have an accompanying herbarium specimen as far as can be determined. It is endemic to montane forests, between 600 and 1200 m elevation, on the Pacific slope in Costa Rica. This zone has now largely been destroyed for coffee and sugar cane plantations so that this orchid is now largely confined to gallery forests.

FIGURE 236. *Trichocentrum longicalcaratum* Rolfe

3330 Colombia, Los Robles, near Anserma Nueva, Cauca, 1500-1600 m, Nov. 1884. **Icon. t. 312.**

OTHER LEHMANN COLLECTION: **8379** Colombia, Cajamarca, Roldanillo, 1400-1800 m, July – Nov.

FIGURE 237. *Trevoria chloris* F.Lehm.

10035 (type). Colombia, West Andes of Cauca, 1500-1700 m. **Type. Icon. 827.**

FIGURE 238. *Trichocentrum tigrinum* Linden & Rchb.f.

HK 1002 Ecuador, Jipijapa, Santa Rosa & Rio Calena, between Ayabam and Zaruma, 0-1000 m, Sept. 1876. **Icon. t. 504.**

OTHER LEHMANN COLLECTION: **HK 1001** Ecuador, Santa Rosa.

FIGURE 239. *Trichoceros antennifer* (Humboldt & Bonpland) Kunth

6869 Ecuador, grows on the ground, especially readily on agaves in hedges around Cuenca and Sigisig, 2200-2800 m. Flowers almost continuously, especially in May and June. The plants forming loosely squarrose and small tufts. Rhizome stems thin, brittle, up to 20 cm in length. Leaves thick, leathery, brown-green, frequently entirely copper brown. Inflorescences up to 36 cm in height, bearing up to 10 flowers, thin-terete. Flowers opening in succession, widely open. Sepals and petals dull Indian yellow, thickly longitudinally striped with lilac-red. Lip of a similar ground colour. Wings striped with red, the middle lobe striped and spotted at the base. Column black-brown. **Icon. t. 545.**

OTHER LEHMANN COLLECTION: **HK 1168** Ecuador, grows on rocks near Loja, 200-2400 m. Flowering in Aug.

FIGURE 240. *Trichopilia conceptionis* Kraenzl.

Icon. t. 1011 Colombia, Rio Huangobio, highlands of Popayán, 1600-1800 m. Flowering in Nov. and Dec. 1890. Fritz Kränzlin described *Trichopilia conceptionis* in 1920 in *Notizblatt den Botanischer Garten Berlin-Dahlem* based upon a Colombian collection made by Kalbreyer from Concepcion, Medellín, in the department of Antioquia.

FIGURE 241. *Trichopilia fragrans* (Lindl.) Rchb.f.

6794 Colombia, grows on trees in the dense forests above Inza, 1600-2000 m. Flowering in April and May. Plants moderately large, densely caespitose. Pseudobulbs linear-oblong, flat, 10cm in length and from 2 to 3.5 cm in breadth. Leaves leathery, dark steel-green. Inflorescence two- to three-flowered. Flowers sweetly scented. Sepals and petals greenish white with undulate-curly margins. Lip of a delicate white with an orange-yellow zone in the throat of the lip. **Icon. t. 401.**

OTHER LEHMANN COLLECTIONS: **4018** Colombia, State of Antioquia, grows on trees and rocks above Barbosa, 1800m, 6 Oct. 1884; **6792** Colombia, grows on trees in the moderately dense forests on the highlands of Popayán, 1600-2000 m. Flowering in Oct. and Nov. Also Andes of Santiago, Putumayo and Sibandoy, Pasto Province, 2000-2200 m. Also Pasto, 1800-2400 m; **6795** Colombia, grows on trees in the dense forests around Santiago and Putumayo, East Andes of Pasto Province, 2000-2200 m. Flowering in April and May; **6796** Ecuador, grows on trees and frequently on lava soil between open bushes on Volcán Tunguragua, 1600-2000 m. Flowering from March to May; **10030** Without provenance. **Icon.;** **BT 90 & HK 1016** Colombia, Piedra Aricha; **BT 91** Colombia, grows on trees in dense woods on Rio Huangobio and in the highlands of Popayán, 1700-1800 m. Flowering in Nov.; **HK 1015** Colombia. Popayán.

FIGURE 242. *Trichopilia laxa* (Lindl.) Rchb.f.

BT 92 Colombia, grows in woods on the highlands of Popayán, 1700-2200 m. Flowering in Oct. and Nov. **Icon. t. 466.**

FIGURE 243. *Trichopilia rostrata* Rchb.f.

Icon. t. 402. Described in 1872 in Saunders' *Refugium Botanicum*, naming it for its erose, rostrate column-apex. He based his description on two specimens imported from Colombia, the first in 1866 by Messrs Hugh Low & Co. of Upper Clapton, and the second by Jean Linden of Brussels in 1871 or 1872. It is found in both Colombia and Ecuador, although Lehmann's drawing is without an accompanying herbarium collection, and its provenance is unknown.

FIGURE 244. *Trichosalpinx multicuspidata* (Rchb.f.) Luer

2386 as *Pleurothallis* Colombia, Department of Tolima, west slopes of Alto de Osevas, 2800-3200 m, 11 Jan. 1883. **Icon. t. 283.**

FIGURE 245. *Trigonidium insigne* Rchb.f. ex Bentham & Hook.f.

BT 235 Colombia, Rio Timbiqui, 0-400 m. **Icon. t. 1104.**

OTHER LEHMANN COLLECTIONS: **HK 806** Colombia, Timbiqui, Aug. 1903; **HK 806** Colombia, grows on trees in the dense forests at Barbacoas, Hylaea. Flowering in March.

FIGURE 246. *Trisetella triaristella* (Rchb.f.) Luer

7010. Ecuador, Rio Zamora, 800-1200 m, Oct.-Jan. 1888. **Icon. tt. 132, 207.**

FIGURE 247. *Trisetella tridactylites* (Rchb.f.) Luer

1187 Costa Rica, without exact provenance.

1980 Costa Rica, without exact provenance.

FIGURE 248. *Vanilla palmarum* Lindl.

8378 Colombia, Roldanilla, Cauca valley, 1000 m, Sept. **Icon. t. 555.**

FIGURE 249. *Warrea warreana* (Lodd. ex Lindl.) C. Schweinf.

8610 Colombia, Highlands of Popayan, 1000-1400 m, Jan.-Feb. **Icon. t. 648.**

OTHER LEHMANN COLLECTIONS: **8611** Colombia, near Inza, 1300-1600 m, Feb.-March; **s.n.** Rio Orejas and Rio Mondamo, Cauca, 1200-1500 m. Jan.-Feb. 1884.

FIGURE 250. *Warczewiczella discolor* (Lindl.) Rchb.f.

8040 as *Chondrorhyncha*. Colombia, grows on trees in the dense and damp forests around Las Juntas del Dagua, West Andes of Cali, 300-600 m. Flowers in July. Masses of plants small but dense. Leaves of a soft grass-like texture, light green. Flowers of a delicate greenish white colour. **Icon. t. 53.**

FIGURE 251. *Warczewiczella ionoleuca* Rchb.f.

Icon. t. 506. H.G. Reichenbach described this orchid as *Zygopetalum ionoleucum* in 1865 in the *Botanisches Zeitung* based on a collection by Blunt from Colombia and flowered by Messrs Hugh Low & Co. of Upper Clapton, London. It was transferred to the present genus in 1920 by Rudolf Schlechter in the *Beihefte* of Fedde's *Repertorium* as *Warscewiczella ionoleuca* Rchb.f. No reference to a Lehmann collection is provided on his illustration reproduced here.

FIGURE 252. *Warczewiczella amazonica* Rchb. f. & Warsz.

Icon. t. 326. No provenance given.

FIGURE 253. *Warczewiczella marginata* Rchb.f.

Icon. t. 325. No given provenance.

OTHER LEHMANN COLLECTIONS: **3357** as *Warscewiczella velata* Rchb.f. Colombia, grows on trees in the dense woods of the Cauca valley and at Belalcazar, near Anserma-vieja, 1000-1500 m. Flowers from July to November. Also at Anserma-nueva, 1000 m, 27 Oct. 1883; **8600** as *Warscewiczella velata*. Colombia, grows on trees in the dense bushy woods on the Cesta de Limon and around Uramita, West Andes of Antioquia, 1000-1500 m. Flowers in Oct.; **HK 663** as *Warscewiczella velata*. Colombia, dense woods of Cali valley, near Tulua, 800-1000 m; **HK 664** as *Warscewiczella velata*. Colombia, grows on trees in dense woods at las Juntas del Dagua, West Andes of Cali, 300-1000 m; **BT 1318** as *Warscewiczella velata*. Colombia, grows on trees in the dense woods on the Rio Cajamarca and Rio Garrapatos, West Andes of Roldanillo. 1000-1600 m. Flowers from Sept. to Nov.

FIGURE 254. *Xylobium colleyi* (Batem. ex Lindl.) Rolfe

8440 Ecuador, grows on trees in the dense forests near Zamora on the eastern slopes of the East Andes of Loja, 1700-1800 m. Plant forming a close and firm caespitose mass. Pseudobulbs ovoid-oblong, smooth, not compressed, from 4 to 5 cm in length and from 2 to 2.5 cm in diam. Leaves robust, stiff, slightly plicate, yellow-green. Flowers in a densely packed raceme sitting close to the pseudobulb, half-closed. Sepals and petals reddish white, the tips on the outside slightly reddish. Lip white-yellow, the thick and spoon-shaped tip thickly striped with dull lilac-brown on the outside and inside. Column yellow-white, the staminode yellow, lined with brown on the front. **Icon. t. 561.**

FIGURE 255. *Xylobium corrugatum* (Lindl.) Rolfe

4529 Colombia. West Andes of Cali, 1500-2000 m. **Icon. t. 484.**

OTHER LEHMANN COLLECTIONS: **4329** Colombia, grows on trees in dense woods at Inza and La Ceja on the Rio Ullucos, 1600-1800 m. Flowering in April and May; **HK 692** as *Xylobium* Colombia, grows on trees at Tocota, 1500-2000 m.

FIGURE 256. *Zootrophion dayanum* (Rchb.f.) Luer

6933, 6934 as *Cryptophoranthus argus* Ecuador, Amboea, 1200-1700 m. **Icon. t. 301.**

OTHER LEHMANN COLLECTION: **7050** Ecuador, W Andes of Tuquerres, Pipulquer, 1500-1800 m.

BIBLIOGRAPHY

The titles below were used to help identify the Lehmann illustrations. The author takes full responsibility for the names provided, but would appreciate hearing from readers who question the identity of particular identifications.

- Diels, F. (1937). Beitrage zur Kenntnis der Vegetation und Flora von Ecuador. *Bibliotheca Botanica* 29 (116): 1-190.
- Dodson, C. H. (2001-2004). *Native Ecuadorian Orchids*, Vols. 2-5. Dodson Trust, Sarasota, Florida.
- Dodson, C. H. & Escobar R., R. (1993). *Native Ecuadorian Orchids*, Vol. 1. Colina, Medellín.
- Dressler, R. L. (1981). *The Orchids. Natural History and Classification*. Harvard University Press.
- Dressler, R. L. (1993). *Phylogeny and Classification of the Orchid Family*. Cambridge University Press.
- Escobar R., R. (1990-1992). *Colombia Orchids* Vols. 1-4. Editorial Colina, Medellín.
- Escobar R., R. (1994-1998). *Colombia Orchids* Vols. 5, 6. Co. Litografica Nacional, Medellín.
- Luer, C.L. (1987). Systematics of *Acostea*, *Condylago* and *Porroglossum*. *Icones Pleurothallidarum* IV. Missouri Botanical Garden Monographs 24.
- Luer, C. A. (1993). Systematics of *Dracula*. *Icones Pleurothallidarum* X. Monographs in Systematic Botany, Monographs in Systematic Botany, Missouri Botanic Garden, St. Louis, St. Louis.
- Luer, C. A. (2000). Systematics of *Masdevallia* Pt 1. *Icones Pleurothallidarum* XIX. Monographs in Systematic Botany, Monographs in Systematic Botany, Missouri Botanic Garden, St. Louis, St. Louis.
- Luer, C. A. (2000). Systematics of *Masdevallia* Pt 2. *Icones Pleurothallidarum* XXI. Monographs in Systematic Botany, Monographs in Systematic Botany, Missouri Botanic Garden, St. Louis, St. Louis.
- Luer, C. A. (2001). Systematics of *Masdevallia* Pt 3. *Icones Pleurothallidarum* XXII. Monographs in Systematic Botany, Monographs in Systematic Botany, Missouri Botanic Garden, St. Louis, St. Louis.
- Luer, C. A. (2002). Systematics of *Masdevallia* Pt 4. *Icones Pleurothallidarum* XXIII. Monographs in Systematic Botany, Monographs in Systematic Botany, Missouri Botanic Garden, St. Louis, St. Louis.
- Luer, C. A. (2003). Systematics of *Masdevallia* Pt 5. *Icones Pleurothallidarum* XXV. Monographs in Systematic Botany, Monographs in Systematic Botany, Missouri Botanic Garden, St. Louis, St. Louis.
- Prideon, A.M. & Chase, M.W. A phylogenetic reclassification of Pleurothallidiane (Orchidaceae). *Lindleyana* 16: 235-271.
- Pridgeon, A.M., Cribb, P.J., Chase, M.W. & Rasmussen, F. eds. (1999). *Genera Orchidacearum* I. Oxford University Press.
- Pridgeon, A.M., Cribb, P.J., Chase, M.W. & Rasmussen, F. eds. (2001). *Genera Orchidacearum* II. Oxford University Press.
- Pridgeon, A.M., Cribb, P.J., Chase, M.W. & Rasmussen, F. eds. (2003). *Genera Orchidacearum* III. Oxford University Press.
- Pridgeon, A.M., Cribb, P.J., Chase, M.W. & Rasmussen, F. eds. (2006). *Genera Orchidacearum* IV. Oxford University Press.
- Pridgeon, A.M., Cribb, P.J., Chase, M.W. & Rasmussen, F. eds. (2009). *Genera Orchidacearum* V. Oxford University Press.

