A MANUAL

OF

ORCHIDACEOUS PLANTS

CULTIVATED UNDER GLASS IN GREAT BRITAIN.

VOL. II.

VANDEÆ-CYPRIPEDIEÆ.

VANDE FO-OVPRIPEDIER.

JAMES VEITCH & SONS.

in and

ROYAL EXOTIC NURSERY, 544, KING'S ROAD, CHELSEA, S.W.

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1887-94.

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PART IV.

CYPRIPEDIUM.

JAMES VEITCH & SONS, ROYAL EXOTIC NURSERY, 544, KING'S ROAD, CHELSEA, S.W.

1889.

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ANDA.

TRIBE—CYPRIPEDIEÆ.

CYPRIPEDIUM.

Linn. Gen. p. 272, No. 687 (1737). Id. Gen. ed. VI. p. 464, No. 1015 (1764). Lindl. Gen. et. Sp. Orch. p. 525 (1840). Benth. et. Hook. Gen. Plant. III. p. 634 (1883).

The genera, with their contained species and varieties, hitherto described in this work, follow each other, in the great majority of cases, by gradations so small, or are so closely connected by other genera, necessarily omitted on account of their included species possessing no qualities recommending them to the attention of the cultivator, that the systematic botanist not infrequently experiences considerable difficulty in pointing out the characters by which they may be best distinguished from each other; and even the tribes and sub-tribes are not always separated by an easily discernible frontier line. Not so, however, with the CYPRIPEDIEX, for here the transition is so abrupt and so striking that the singular divergence in structure exhibited by the flowers of this tribe from those of all the others, is as perplexing to account for as it is difficult to find limiting characters in many of the genera of the other tribes.

A comparison of the flower of Cypripedium with that of any genus belonging to another tribe, shows that it differs from it structurally far more than any two flowers of other tribes—even if selected from genera included in different tribes—differ from each other, so that "an enormous amount of extinction must have swept away a multitude of intermediate forms, and left this single genus as a record of a former and more simple state of the great Orchidean Order."*

Nor does the structure of the flowers furnish the only evidence of the Cypripedes being a more primitive race of orchids than any other existing forms. The geographical distribution of the genus, especially of the two sections of it that form the subject of these pages, reveals some remarkable facts respecting the present history of the included

^{*} Darwin, *Fertilisation of Orchids*, p. 271. Aspasia and Neuwiedia, the former with two and the latter with three perfect anthers, and the labellum in both genera similar to the sepals and petals, were probably either unknown to Darwin or were overlooked by him when writing the passage quoted. The statement in the text is not, however, in the least affected thereby.

CYPRIPEDIUM.

the meantime it had been found by Mr. Jenman, Superintendent of the Botanic Garden at Georgetown, Demerara, growing on the rocks under the Kaieteura Fall, on the Potaro River, and communicated by him to the Royal Gardens at Kew, where it flowered in the autumn of 1885. The species is named in compliment to Dr. Lindley, who "unwillingly consented at the particular instance of Dr. Schomburgk to allow this plant to bear his name, he having no title to the compliment."*

C. longifolium.

Leaves narrowly ligulate, tapering to an acute point, 18—24 inches long. Scapes stoutish, erect, as long as the leaves, deep purple, pubescent, 6—10 or more flowered. Flowers $3\frac{1}{2}$ —4 inches across from the tip of the upper sepal to toe of slipper; upper sepal ovate-lanceolate, undulate, pale green with rose-colour veins and whitish margin; lower sepal nearly as broad again as the upper one, ovate, acuminate, pale green with green veins; petals linear-lanceolate, spreading, slightly twisted, pale yellow-green with rose-colour margins except towards the base where the margins are whitish; lip calceolate, with an angular auricle between the sac and the inflexed side lobes, yellow-green tinged with brown in front, the infolded lobes yellow-green dotted with rosepurple. Staminode triangular-cordate, pale yellow-green with a blackish fringe on the back margin, and a blunt, deflexed tooth on the front one. Cypripedium longifolium, Rchb. et Warsc. in Bot. Zeit. 1852, p. 690. Bot. Magt. 5970 (1869). Belg. hort. 1873, p. 65. Selenipedium longifolium, Rchb. Xen. Oreh. I. p. 3 (name only). Id. in Gard. Chron. 1869, p. 1206. S. dariense, Rchb. S. Reichenbachii, Endres fide Rchb. Cypripedium Reichenbachii, Hort.

var.—gracile.

Leaves narrower, scapes more slender and paler in colour, and the bracts more compressed. Flowers somewhat smaller and coloured, as in the variety *Hartwegii.*[†]

C. longifolium gracile, supra. C. gracile, Hort.

var.—Hartwegii.

Plant more robust with longer and broader leaves; scapes taller, green (not purple as in the type). Flowers somewhat larger, the dorsal sepal usually with a pale rose-colour stain on the apical half, the petals bordered with rose-pink.

C. longifolium Hartwegii, supra. C. Hartwegii, Rchb. in Bot. Zeit. 1852, pp. 714, 765. Selenipedium Hartwegii, Rchb. in Bonpl. II. p. 116. Id. Xen. Orch. I. p. 3 (name only), and p. 70, t. 27. Id. Otia. Hamb. I. pp. 20, 30. Cypripedium Roezlii, Regel's *Gartenfl.* 1871, p. 164. *Id.* 1873, t. 754. Rev. hort. 1873, p. 416, icon. xyl. *Illus. hort.* 1873, t. 138. *Bot. Mag.* t. 6217. Selenipedium Roezlii, Rchb. in Regel's Gartenfl. 1871, p. 164. S. longifolium coloratum, Rchb. in Gard. Chron. 1873, p. 289.

* Gen. et Sp. Orch. p. 531. † As seen in the collection of Mr. R. I. Measures at Cambridge Lodge, Camberwell, a collection exceptionally rich in rare Cypripedes.

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var.—Hincksianum.

Scapes shorter and bearing fewer flowers than those of the variety *Hartwegii*, but conforming in every other respect to it.

C. longifolium Hincksianum, supra. C. Hincksianum, Rehb. in Gard. Chron. IX. (1878), p. 202.

Cypripedium longifolium was first discovered by Warscewicz, in 1849, on the Cordillera of Chiriqui, at 5,000-7,000 feet elevation. It remained known to science only as an imperfect herbarium specimen till 1867, when it was re-discovered by Endres, by whom it was introduced into European gardens. In its native home it is a sub-terrestrial plant, growing among the moss beneath the trees of the forest, always in the shade and flowering all the year round.* Of the origin of the variety gracile we find no record. The variety Hartwegii, better known in gardens under the name of Roezlii, was first detected by Hartweg about the year 1842, on the eastern slopes of the Andes of Ecuador, near Quito, at 4,000 feet elevation,† while collecting plants in that region for the Horticultural Society of London. It was subsequently found by Dr. Seeman on the Isthmus of Darien, and still later by Roezl (1871) on the banks of the small river Dagua that flows down the western slopes of the central Cordillera of New Granada; by the last-named collector it was introduced to M. Linden's horticultural establishment at Ghent, whence it became generally distributed among British and continental gardens; it flowered for the first time in Europe in the St. Petersburg Botanic Garden in January, 1873, and in England in January of the following year at our Chelsea Nursery. The variety Hincksianum is a more recent importation that appeared for the first time in the collection of Captain Hincks, at Breckenbrough, The three varieties we have distinguished above are, in Thirsk. fact, nothing more than geographical forms differing from the original type and from each other more in their vegetative organs than in any other particular. The flowers of the varieties Hartwegii, gracile, and Hincksianum are more brightly coloured than those of C. longifolium proper, but are not distinguishable from each other in this respect.

* R. Pfau in Gard. Chron. XX. (1883), p. 722.

+ The presence of *Cypripedium longifolium* in this latitude seems to require confirmation. The plants now in cultivation under the names of *C. Hartwegii* and *C. Roezlii* show no tangible characters by which the one may be distinguished from the other All the *C. longifolium* forms in cultivation have been brought from the northern geographical limits of the Selenipedia, a circumstance that has occasioned some doubt as to the correctness of the locality assigned to Hartweg's discovery.