

# UROPEDIUM LINDENII LINDLEY

## ORCHIDEAE § CYPRIPEDIEAE – TRIANDRIA (!) MONOGYNIA

CHARACT. GENER. – *Sepala* lateralialia in unum inferius, ovatum, longe acuminatum plane concreta; superiore (in flore resupinato-nutante) oblongo, erectiusculo, incurvo. *Petala* 3, e basi lineari-oblonga sensim longissime lorato-caudata, inferiore (*labello*) lateralibus subconformi. *Stamina* fertilia 3, petalis opposita (ideoque verticillum androcaei anteriorem sistentia), inferiore *labello* anteposito, styli basi imae adhaerenti, *filamento* cylindraceo; *antherae* loculis 2, terminalibus, inter se parallelis, *connectivo* crassiusculo insidentibus, unilocularibus, *polliniis* in loculo singulo 2, primum solidis, serius mollificatis, fereque in unum collapsis; *staminibus lateralibus* una cum postico sterili stylique basi in *gynostemium* brevem crassumque concretis; *filamentis* apice tantum brevissime liberis, incurvis; *antheris* bilocularibus, subhorizontalibus, antice versis; *staminodia* (nempe stamine androcaei exterioris sepalo postico opposito, more Cypripedicarum sterili, apud Orchideas fere omnes normaliter fertili) gynostemii apicem terminante,

antice rostrato. *Stylus* basi ima excepta liber, apice sensim dilatato bilabiatus, labio inferiore (*labello* opposito) minore, superiore e duobus stigmatibus concretis conflato latiore, utroque intus dense stigmatico-papilloso. *Ovarium* inferum, elongatum, cylindraceum, obtuse trigonum, *triloculare* (!) loculis cum petalis staminibusque fertilibus alternantibus, *placentis* in angulo interno positis, multi ovulatis.

Herba Novo-Granatensis, *regionum temperatarum montium incola, terrestis, facie* CYPRIPEDII CAUDATI; radicibus *fibrosis*; caule *brevi inferne foliis distichis petiolis compressis equitantibus, lamina late-lineari, coriacea donatis obsito, superne in scapum pauciflorum foliis breviorum desinente, bracteis ad basim floris cujusvis solitariis navicularibus, floribus amplis, speciosis, sepalis albidis apice virescentibus venisque viridibus ornatis, petalis albidis in longum vinosostriatis, caudis longissimis plus minusve saturate vinosis.*

(Charact. ex descript. cl. Brongniart et ex icone).

*Species unica*: UROPEDIUM LINDENII Lindley, in *Orchidaceae lindenianae* (1846), Nr. 143. – *Flore des serres*, 6: 123-124 (1850) (cum icone xylograph.). – A. Brongniart, in *Annales des sciences naturelles*, 1849, pp. 113-118, t. II.

This strange orchid flowered for the first time in 1850 in Europe in the collection of Mr. Pescatore. It was discovered by Mr. Linden in 1843 in the territory of the Chiguara Indians in Columbia, growing in small thickets of *Weinmannia*, *Eugenia* and especially among high ferns (*Gleichenia*) that, at an altitude of about 5,500 feet above sea level, interrupt the green prairies of the Savannah on a plateau of which the northern extremity dominates the vast and dark virgin forests that cover the immense area between Lake Maracaybo and the basis of the Merida Cordillera. Later, *Uropedium Lindenii* was also found in the province Ocaña by Mr. Schlim, at various altitudes and among different types of vegetation, sometimes covering the rocks, sometimes epiphytic, but generally as a terrestrial\*.

### \* Editor's note

The authors of the *Pescatorea* were in the erroneous belief, that *Uropedium Lindenii* (and all slipper orchids, at that time all referred to as belonging to the genus *Cypripedium*) was a terrestrial plant. This assumption, unfortunately, can still be found in some "illustrious" modern-day monographies.

It is, however, a fact that all tropical and subtropical slipper orchids, meaning the species now considered to belong to the genera *Paphiopedilum*, *Phragmipedium* (incl. *Uropedium*) and *Selenipedium* are epiphytes, that, however, sometimes root in the leafy humus on the forest floor or in the cracks and crevices of rocks, making them susceptible for misinterpretation. (see Braem G.J., *A Monography of the Genus Paphiopedilum*. Naturalia Publications, Turriers, France; in preparation.)

Although the discovery of this remarkable *Cypripedium* dates back to 1843, the plant had, until 1849, been described in a very short note only, without discussing the particularities of its structure which have been so well described by Mr. A. Brongniart. The plant had been interpreted simply as some kind of a *Cypripedium* with a flat and linear lip, a mistake that is easily understood if one considers the similarity of our *Uropedium* with *Cypripedium caudatum* <sup>(1)</sup>. Indeed, this could become a reality if it were to be proven that *Uropedium Lindenii*, instead of being a normal and constant form, is a monstrous variety of some unknown *Cypripedium*.

No matter what amount of truth is to be accorded to that ingenious hypothesis, somewhat cautiously stated by Mr. Brongniart and suggested by the strange metamorphoses that has been observed in certain proteiform orchids such as *Catasetum*, *Myanthus* and *Monachanthus*, it must be stated that, if it were not for the strange lip, *Uropedium Lindenii* does in fact only differ from *Cypripedium caudatum* by the somewhat less intense colouration of its petals.

The petals of *Uropedium Lindenii* are like narrow, long ribbons. Analogous structures, as far as appearance is concerned, can be found in various *Aristolochia*-species such as *Aristolochia trilobata* as well as in the genera *Strophanthus* and certain *Buttneriaceae* (*Herrania* Goudot) and in many orchid genera, such as *Brassia*, *Habenaria*, and *Cirrhopetalum*. The length of the strap-like petals in all these plants, however, does never attain such dimensions as in *Uropedium*. One should imagine these appendices as being vermiform as shown, although reduced, in the line drawing of our illustration. They are 21.5 inches long, and the entire flower, therefore, when spread, is more than 3.3 feet high.

Here, just as in *Cypripedium caudatum*, the prolongation of the petals occurs at a very amazing pace <sup>(2)</sup>, nearly entirely after the flowers have started to open. The entire development is concluded in about 12 days, counted from the moment the flower starts to open. Each flower lasts five to six weeks.

*Uropedium Lindenii* is one of the strangest forms within a very paradox family, but in spite of its bizarre appearance, it may just be the most symmetric form of the *Orchidaceae*.

Let us, in accordance with the ingenious ideas of Robert Brown <sup>(3)</sup> develop the ideal and symmetric plan of an orchid flower. In this way, we will be able to appreciate to what degree orchid flowers, in general, deviate, and how close the flower of *Uropedium Lindenii* agrees.

<sup>(1)</sup> Another Columbian orchid that was introduced by Mr. Linden. The first flowering of this species in Europe occurred in 1850 in the collection of Mrs Lawrence, England.

<sup>(2)</sup> Listed here are the measurements taken by one of us (Mr. Lueddemann) during the actual development of a flower of *Uropedium Lindenii*:

April 19th	Petals and Labellum	7.1 inches	April 25th	Petals and Labellum	16.5 inches
April 20th	Petals and Labellum	7.9 inches	April 26th	Petals and Labellum	19.0 inches
April 21st	Petals and Labellum	7.9 inches	April 27th	Petals and Labellum	20.1 inches
April 22nd	Petals and Labellum	10.2 inches	April 28th	Petals and Labellum	20.9 inches
April 23rd	Petals and Labellum	12.6 inches	April 29th	Petals and Labellum	21.6 inches
April 24th	Petals and Labellum	15.0 inches			

<sup>(3)</sup> *On the organs and mode of fecundation in Orchideae etc.* (Linn. Transact., ann. 1833).