

* CHYSIS aúrea.

Golden-flowered Chysis.

GYNANDRIA MONANDRIA.

Nat. Ord. ORCHIDACEÆ, § EPIDENDRÆÆ.

CHYSIS. *Sepala* paulò connata, patula; lateralìa pedi producto columnæ adnata et calcar simulantia. *Petala* sepalis conformia. *Labellum* trilobum, patulum, venis basi callosis. *Columna* marginata, canaliculata, mutica. *Anthera* subrotunda, opercularis, glabra. *Pollinia* 8, in laminam luteam semifusa; quatuor exterioribus tenuibus quatuor interiora crassiora abscondentibus. *Rostellum* laminatum, convexum.—Herbæ epiphytæ, occidentales ab arboribus pendulæ; caulibus *Cyrtopodii depauperatis*, foliis nervosis basi vaginantibus, racemis lateralibus multifloris.

Chysis aurea.

Caules penduli, subclavati, articulati, squamis fuscis, membranaceis vestiti. Folia ovato-lanceolata, basi vaginantia, nervosa, undulata. Racemi pedunculati, ex axillâ folii inferioris erumpentes, penduli, multiflori. Sepala ovata, obtusa, subundulata, basi alba, cæterum crocea; lateralium margine anteriore infracto. Petala ovato-oblonga, obtusa, magnitudine et colore sepalis similia. Labellum album, concavum, venis sanguineis, trilobum; lobo laterali oblongo, obtuso, crispo, apice subsaccato; venis 5 mediis tumidis callosis, tribus lateralibus utrinque pubescentibus elevatis. Pollinia sunt hujusmodi; lamina adest tenuis, lutea, pulverulenta, bipartita, utrinque biloba, in clinandrium prona, marginibus suis incrassatis, et incurvis (= pollinia 4 basi in laminis duabus geminatim coherentia.) Præterea ad sunt 4 alia minora, et prioribus supertecta, quorum duo ab angulis posterioribus, et duo ab anterioribus lamellæ supradictæ fissæ oriuntur (= pollinia 4 alia minora). Horum corporum vera indoles latet; sed verosimiliter pollinia 8 ad sunt quorum 4 exteriora in laminam fissam margine bilobam deliquescunt.

The first knowledge I had of this beautiful epiphyte was from Messrs. Lowe and Co. of Clapton, who sent it to me in June 1836, with a note, from which the following is an extract:—

* Χύσις a melting. The pollen masses of this plant are as it were fused together.

"It was collected in 1834 by Mr. Henschman, in the valley of Cumanacoa, in Venezuela. Mr. H. describes it as growing suspended by long fibrous roots from the lateral branches of trees, so that its pseudo-bulbs, which in their growing state are uncommonly brittle, hang downwards and wave in the wind, which would otherwise be sufficient to break them. It has a very delicate perfume in the morning, but appears to lose it in the heat of the day. The remains of spikes have been seen, which had produced ten flowers."

Shortly afterwards Mr. Bateman forwarded it from Knypersley, with this memorandum:—

"The plant which produced the specimen from which your drawing is made, I derived in September (1835) from Messrs. Lowe and Co. of the Clapton Nursery. It had then been only recently imported, and was just beginning to push a shoot, which has ever since continued to increase in length and strength. It is now, although apparently far from completed, upwards of two feet long, and equal in girth to the stem of an ordinary *Cyrtopodium*. It is suspended from a rafter in a pot (filled with broken potsherds and turfy peat), and its stems are completely pendulous, like those of some eastern *Dendrobia*. Common as is this pendent habit in the Old World, our present subject presents, as far as I am aware, the only example of its occurrence in the New. It may also be worthy of remark that the fleshy stems of this species, although apparently similar in structure to those of *Cyrtopodium*, *Catasetum*, *Myanthes*, *Mormodes*, *Cynoches*, and the like, seem utterly incapable of pushing a shoot after the *radical eye* is gone, several healthy pieces having remained without *breaking* for more than a year; whereas from any of the above-named genera, under similar circumstances, plants would have been long since obtained."

With regard to the affinity of this genus, although it has in so many respects the habit of certain genuine *Dendrobia*, and in others that of *Cyrtopodium* and its allies, it is in reality essentially different from those genera, and much more nearly akin to *Epidendrum* and its section. Its pollen masses consist of two yellow plates, placed side by side in the bed of the anther, united at the back and slightly notched on the outer edge, so that it is in reality four-lobed, the lobes being extremely unequal; each lobe has a thickened margin, and rising up, overlies and conceals four other lobes of a thicker texture and smaller size, two of which arise from the back and two from the front of the inner edge of the principal lobes of the plate above described. This remarkable structure may be theoretically described as being equivalent to eight pollen masses, of which the straps of connection, such as exist in all *Epidendreae*, are run together into two plates, from an expansion of the edges of which the pollen masses appear to spring.

This is a very showy plant; the colours of the flower being very bright, its texture firm, and its surface even and waxy. The lip, with its crimson veins, and narrow elevations radiating from the base, is especially worthy of attention.

Fig. 1. is a representation of the upper portion of the column; 2. is the lip laid open; 3. are the pollen masses spread open, to shew their structure.