

## Selenipedium Rchb.f. 1854

## SUBFAMILY Cyrtipediodeae

ETYMOLOGY: From the Greek 'selene', a moon or crescent, and 'pedilon', a sandal or slipper, in allusion to the incurved margins of the lip which are crescent shaped if viewed from above.<sup>3</sup>

TYPE SPECIES: *Selenipedium chica* Rchb.f 1854

DESCRIPTION: Tall terrestrial *herbs*. *Roots* elongate, fibrous, arising from a short to elongate rhizome; *rhizomes* present, short, creeping, rather fleshy. *Stems* erect, 2-5 m tall, often branching, rather woody, leafy, clustered or well-spaced, terete, hairy, enclosed by sheathing sterile bracts below and leaf bases above, several-leaved; *pseudobulbs* absent. *Leaves* spreading or suberect, several-many, plicate, many-veined, elliptic-lanceolate to linear-lanceolate, acute or acuminate, green, glabrous or sparsely hairy, ciliate or not on the margins, contracted at the base to form a cylindrical sheath. *Inflorescence* terminal, racemose or branching from base, many-flowered; *rachis* terete, densely hairy; bracts usually leaf-like but much smaller than the uppermost leaf, lanceolate, hairy. *Flowers* with a persistent perianth, small to medium-sized, resupinate, concolorous or bicoloured; *pedicel* obscure to short, hairy; *ovary* trilocular, with parietal placentation, three-ribbed, hairy, crowned with a marcescent perianth. *Sepals* valvate. *Dorsal sepal* erect to hooded over lip, ovate or elliptic, obtuse or acute, pubescent on the outer surface, ciliate or not; *lateral sepals* usually fused to form a concave synsepal that is similar to the dorsal sepal but free at the tips, pubescent on outer surface, ciliate or not. *Petals* free, spreading or incurved, lanceolate or linear-lanceolate, blunt, acute or acuminate, often pubescent in basal half within, not ciliate. *Lip* deeply pouched and inflated, slipper-shaped, glabrous on outer surface; *side lobes* obscure, incurved, entire; *midlobe* deeply saccate, calceiform or urceolate, incurved on front margin, hairy within especially on lower surface. *Column* porrect, short, stalked; *anthers* two, bilocular, borne on short obtuse filaments; *pollen* powdery or viscid; *staminode* terminal on column, more or less sessile or stalked, ovate or trullate, somewhat conduplicate, glabrous; *stigma* very short stalked, dependent, trisulcate, papillose or not, wider than the staminode. *Capsule* spreading to dependent, three-ribbed, cylindrical to fusiform, smelling of vanilla; seeds subglobose, crustose.<sup>3</sup> The delightful, deeply pouched flowers of *Selenipedium* are unmistakable, borne on cane-like stems reaching 15 feet (4.6 m) in height. **Flower:** A highly modified lip, its edge broadly rolled inward, forms the slipper-like pouch. The rim's shape, like a crescent moon, gives rise to the genus name: Greek for "moon slipper." Narrow petals are dwarfed by the lip and the broad, somewhat hooded dorsal sepal. Lateral sepals are fused for most or all of their length, and held beneath the pouch. **Plant:** Many leaves emerge from two opposing sides of the tall, slender, occasionally branched stems. Leaves are pleated and lightly hairy. Inflorescences arise from on top of the stems, bearing multiple flowers; usually just one is open at a time.<sup>5</sup>

DISTRIBUTION A small genus of about five or possibly six species in the tropical Americas from Panama and Trinidad, south to Venezuela, the Guyanas, Brazil, Colombia, and Ecuador.<sup>3</sup>

ECOLOGY and HISTORY The blossoms of *Selenipedium* are fantastically modified as trap flowers. They attract flies with a combination of narrow, sometimes twisting petals and disorderly splotches of bruised colors that call to mind rotting meat or vegetation. Flies seeking to lay their eggs on decaying carcasses are visually attracted to such cues. Having alighted on the lip, hapless insects are apt to slip off the rolled rim into the smooth pouch. The only exit is a series of stiff hairs at the rear of the sac, an escape ladder that guides the visitor directly under the short column where pollinia are smeared on its back or pressed into the stigmatic zone. Like other slipper orchids, *Selenipedium* has suffered at the hands of greedy fanatics, who call to mind collectors of past centuries in their willingness to strip whole forests bare. One of the tallest terrestrial orchids (and a vanilla substitute), *S. chica* is now exceedingly rare in Central America; currently, widespread deforestation is its principal threat. Happily, slipper orchid clubs have sprung up worldwide, working passionately to protect remaining habitat and to ensure that all commercially traded plants are produced only in greenhouses.<sup>5</sup>

## References

<sup>1</sup> Jay Pfahl's IOSPE at [www.orchidspecies.com](http://www.orchidspecies.com)

<sup>2</sup> Aldridge, Peggy. 2008. *An Illustrated Dictionary of Orchid Genera*. Selby Botanical Garden Press.

<sup>3</sup> Chase MW. 2006. Cyripedioideae. In: Pridgeon AM, Cribb PJ, Chase MW, Rasmussen F, eds. *Genera Orchidacearum, Vol. 1*. Oxford: Oxford University Press, 105-161.

<sup>4</sup> la Croix, Isobyl. 2008. *The New Encyclopedia of Orchids*. Timber Press

<sup>5</sup> Meisel, Kaufmann, Pupulin 2014. *Orchids of Tropical America*. Cornell University Press