

Phragmipedium longifolium

(WAR SZ. & RCHB. F.) ROLFE
ORCHID REV. 4(47): 332. 1896

Synonyms: *Cypripedium longifolium* Warsz. & Rchb. f., Bot. Zeitung (Berlin) 10(40): 690. 1852.
Selenipedium longifolium (Warsz. & Rchb. f.) Rchb. f. & Warsz., Xenia Orchid. 1: 3. 1854.
Paphiopedilum longifolium (Warsz. & Rchb. f.) Pfitzer, Pringsh. Jahrb. Wiss. Bot. 2: 6: 159. 1888.
Phragmopedilum longifolium (Warsz. & Rchb. f.) Pfitzer, Bot. Jahrb. Syst. 25: 527. 1898.

Type: Central America. *J. Warszewicz s.n.* (holotype, W).

Illustrated specimen: Colombia. Valle del Cauca, Municipality of Buenaventura, Quebrada Pericos, 300 m. November 2017. *Juan Sebastian Moreno 402* (CAUP; LCDP voucher).

Epiphytic, caespitose *herb*, up to 50 cm tall including the inflorescence. *Leaves* linear to lanceolate, glabrous, margins finely revolute, emarginate, minutely apiculate, oblique, 15–45 × 2–5 cm. *Inflorescence* a spicate raceme, 30–40 cm tall, with 3 to 6 consecutive flowers; *floral bracts* lanceolate, 7–8 cm long. *Flowers* green to yellow with purple veins in the sepals, the base of the petals green, becoming purple towards the apex, the margins white in the basal half, the lip green spotted with brown. *Dorsal sepal* lanceolate, glabrous, reflexed, undulate, obtuse, 4.5 × 2.0 cm. *Synsepal* ovate, undulate, obtuse, 4.5 × 3.0 cm, glabrous. *Petals* linear, obtuse, undulate at the base, curled towards the apex, 75–80 × 7.0–7.5 mm. *Lip* deeply saccate, glabrous on the abaxial surface, with white trichomes in the base of the adaxial surface, with two auriculate lobes, 4.6 × 1.8 cm. *Column* 6.5 mm long, the staminode rhomboidal, covered with dark purple trichomes on the upper margins, 4.5 × 6.0 mm; stigma ca. 5 × 6 mm, hidden by the staminode, covered by small papillae. *Anthers* bilocular, 2.5–3.0 mm long. *Pollen masses* granulose, 2.5–3.0 mm long.

Phragmipedium longifolium is recognized by its lithophytic habit, growing mostly in wet rocks close to creeks or waterfalls, the linear leaves, large flowers with a saccate lip and linear, spreading petals no much longer than the lip.

Most species of *Phragmipedium* can be found growing on middle

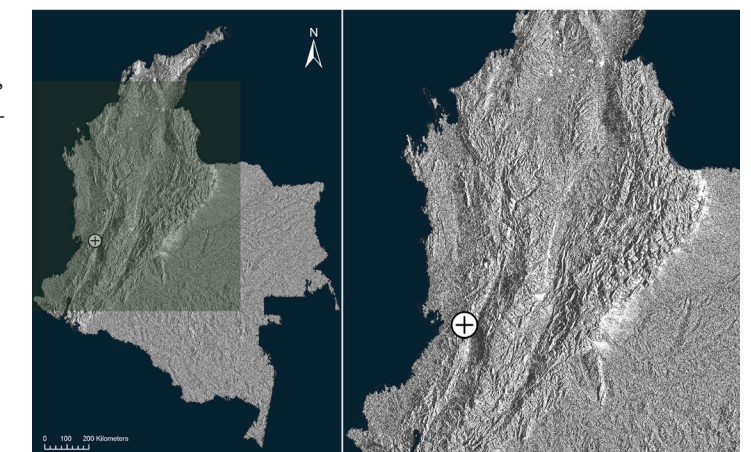
to high elevations, but *P. longifolium* can grow near the sea level. This species is pollinated by a syrphid fly attracted to the flower by a brood-site deception. The insects approach the flowers looking for a place to lay their eggs and eventually fall inside the lip and remove the pollen masses when trying to exit the flowers.

References:

Atwood, J.T. 1991. *Phragmipedium*. In: Escobar, R. *Orquídeas nativas de Colombia. Vol. 3: Maxillaria-Ponthieva*. Sociedad Colombiana de Orquideología, Medellín.

Díaz-Morales, M. 2017. Biología reproductiva y mecanismo para la atracción de polinizadores de *Phragmipedium longifolium* (Orchidaceae: Cypripedioideae) en Costa Rica. Grade thesis, University of Costa Rica.

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LCDP: *Phragmipedium longifolium* (Warsz. & Rchb. f.) Rolfe. A. Habit. B. Flower. C. Dissected perianth. D. Dissected lip, abaxial and adaxial view. E. Column, lateral view. F. Column without stigma, dorsal and ventral view. G. Stigma, dorsal and ventral view. H. Anthers.

