

# Phragmipedium caricinum (Lindl. & Paxton) Rolfe 1896

## The Reed Grass-like Phragmipedium

SUBFAMILY Cyripedioideae

Section Phragmipedium



## Synonyms

*Cypripedium caricinum* Lindl. & Paxton 1850-1; *Cypripedium pearcei* (Rchb. f.) hort. ex J.H. Veitch 1889; *Paphiopedilum caricinum* (Lindl. & Paxton) Pfitzer 1895; *Phragmopedilum caricinum* Rolfe ex Pfitzer 1903; *Selenipedium caricinum* (Lindl. & Paxton) Rchb. f. 1893; *Selenipedium pearcei* Rchb. f.<sup>3</sup>

## Description

A medium sized, hot warm growing, fan-shaped terrestrial or lithophyte with no pseudobulbs and several, imbricate, conduplicate, leaf-bearing sheaths carrying several, linear, acuminate, glossy, dark green, conduplicate below into the base leaves blooming on a basal, 1 to 2' [30 to 60 cm] long, erect, purplish green, shortly pubescent, few to several [3 to 7] flowered inflorescence with 1 to 3 elongate, subremote, tubular bracts and longer, spreading floral bracts that exceed the ovary in length and has successively single flowers occurring in the late winter through early fall.<sup>3</sup>

Small to large terrestrial, lithophytic or epiphytic *herbs* with elongate, fibrous roots arising from a short to elongate rhizome. Erect *shoots* leafy, clustered or less frequently well-spaced, glabrous, the base enclosed by two to four sheathing sterile bracts, three- to several-leaved above. *Leaves* several, coriaceous, conduplicate, spreading or sabered, ligulate, elliptic, or oblong, obtuse to acute, often tridentate at apex, mid- to dark green on upper surface, lighter green below, glabrous, ciliate or not on the margins. *Inflorescence* terminal, occasionally branching, few- to many-flowered; *rachis* terete, hairy, glandular or glabrous; bracts conduplicate, elliptic, lanceolate, ovate or oblong, green, sometimes spotted or Hushed or striped with purple, ciliate or not. *Flowers* deciduous, usually showy, concolorous or not, vernation imbricate; pedicel obscure to short; ovary trilocular, three-ribbed, glabrous or hairy. *Dorsal sepal* erect to hooded over lip, ovate, lanceolate, obovate or elliptic, obtuse, acute or acuminate, glabrous or pubescent on the outer surface, sometimes pubescent within at base, ciliate or not. *Lateral sepals* usually fused to form a concave synsepal that is more or less similar to the dorsal sepal, sometimes keeled on outer surface. *Petals* free, spreading or pendent, flat, reflexed or spiraling, elliptic, ovate, lanceolate, linear-lanceolate, linear or oblanceolate, rounded, obtuse, acute or acuminate at apex, often pubescent in basal half within, usually ciliate. Lip deeply pouched and inflated, slipper-shaped or urn-shaped, with more or less pronounced incurved side lobes, rarely petaloid, hairy within especially on lower surface, glabrous or hairy on outer surface; front margin incurved or not. Column short, stalked, porrect; anthers two, bi-ocular, borne on short obtuse to acute filaments; pollen powdery or viscid; staminode terminal on column, sessile or shortly stalked, transversely reniform, oblong, ovate, obcordate or linear, flat, convex or longitudinally conduplicate, glabrous to papillose or finely pubescent, ciliate or not; stigma stalked, dependent, tripartite, more or less papillose. Capsule erect to pendent, three-ribbed, cylindrical to almost ellipsoidal. <sup>5</sup>

## Range and Habitat

Occurring in Peru and Bolivia in tropical rainforests near waterfalls or on river boulders at elevations of 150 to 1000 meters.<sup>3</sup>

Santa Cruz, Bolivia. It is found near waterfalls at 1200-1500 ft. (366-457 m). In Peru it grows at 525-853 ft. (160-260 m) on river boulders, where the plants are often flooded during high water.<sup>4</sup>

## F-1 Hybrids and Progeny

*Phragmipedium caricinum* has been used in 37 F-1 crosses. Of these, 18 are primary crosses with *Phragmipedium* species. Oddly there are 3 registered grexes with *Phragmipedium caudatum*. No particular varietal forms were listed to differentiate the grexes. It may be poor record keeping as all were registered in the late 1800's. Of the three, Dominianum Vetch 1970 has been remade are has 6 AOS awards since 1974. Mary

Bess, a cross with *Phragmipedium besseae*, is the most awarded F-1 with 4 AM, 3 HCC and 3 cultural awards. *P. besseae* was the dominant parent in the cross based on the color and form of the segments.

*Phragmipedium caricinum* has 63 progeny in 4 generations. Considering it was first crossed in 1870, it is not a great record. The most awarded of any cross is Phrag. Nitidissimum created by N. C. Cookson in 1888. It has 2 FCC, 8 AM, 6 HCC and 4 cultural awards since 1988. The records indicate that Krull-Smith remade the cross in 1988.



Phragmipedium Mary Bess AM/AOS



Phragmipedium Dominionum AM/AOS



Phragmipedium Nitidissimum 'Wilhelmina Laarman' FCC/AOS

## Awards

*Phragmipedium caricinum* has 1 AM, 4 HCC and 4 CCM from the AOS. Its progeny have garnered 17 awards in 3 generations.

## Culture

### Light:

*Phragmipedium caricinum* require medium to bright light (30000-70000 lux). It must be kept out of direct sunlight. It like more light in winter. It will grow in lower light but are much slower growing and will tend to climb more. Flower colour is also more intense when grown in bright light. Young seedling plants are reported to require less light.

### Temperature:

It is an intermediate temperature plant with the optimum minimum temperature being about 10°C. The maximum temperature should ideally not exceed 30°C but higher temperatures up to 40°C will be tolerated for short periods if humidity is raised by misting or other techniques and good airflow is maintained with a fan if necessary. If daytime temperatures are above 35- 40°C the light level should be reduced further with additional shading or plants placed down low in the shade house.

### Humidity:

The Reed Grass-Like *Phragmipedium* like high humidity preferably above 50%. Good air movement should be ensured. Growths that do not dry out by evening can get bacterial rot. Fans may be required to aid air movement if fungal or bacterial diseases are a problem.

### Substrate, growing media and repotting:

*Phragmipedium caricinum* are best grown in deeper nursery shaped pots rather than squat pots. The potting mix contains a standard seedling grade 5-10mm bark mix containing perlite and sometimes coarse river sand and vermiculite.

It is recommend to repotting every year, to every year and a half. Keep the pot size as small as possible, just large enough to accommodate the roots. Trim any damaged or dead roots and let the potting mix fall away. If the plant is root bound, no further trimming is necessary, just pot into a slightly larger pot.

### Watering:

These plants should be kept moist year round with frequent watering and not allowed to dry out. Plants can be kept a little drier in winter. Some growers stand the pots in shallow trays containing water about 2cm deep in warmer weather. In summer plants can be watered every 2 to 3 days in hot weather but in winter they may require watering only every 7-14 days depending on the potting mix and weather conditions.

### Fertilizer:

It is recommended to applying a 20-20-20 or similar balanced fertilizer once every 2 to 3 weeks. Less fertilizer should be used in winter. Some growers suggest high phosphorus fertilizer in autumn encourages flower development but others actively discourage it.<sup>6</sup>

## References

**Aldridge, Peggy. 2008.** *An Illustrated Dictionary of Orchid Genera*. Selby Botanical Garden Press.

<sup>1</sup>**la Croix, Isobyl. 2008.** *The New Encyclopedia of Orchids*. Timber Press

<sup>2</sup>**Meisel, Kaufmann, Pupulin 2014.** *Orchids of Tropical America*. Cornell University Press

<sup>3</sup>Jay Pfahl's IOSPE at [www.orchidspecies.com](http://www.orchidspecies.com)

<sup>4</sup>OrchidWiz.Database X5.0

<sup>5</sup> **Chase MW. 2006.** Cyripedioideae. In: Pridgeon AM, Cribb PJ, Chase MW, Rasmussen F, eds. *Genera Orchidacearum, Vol. 1*. Oxford: Oxford University Press, 153-161.

<sup>6</sup><https://travaldo.blogspot.com/care-and-culture.html>

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