

Building block

***Phalaenopsis equestris* (Schauer) Rchb.f., Linnaea 22: 864 (1850).**

The Horse Phalaenopsis - In China Xiao Lan Yu Hu Die Lan

Synonyms

- *Stauroglottis equestris* Schauer, Nov. Actorum Acad. Caes. Leop.-Carol. Nat. Cur. 19(Suppl. 1): 432 (1843).
- *Phalaenopsis rosea* Lindl., Gard. Chron. 1848: 671 (1848).
- *Phalaenopsis equestris* var. *leucaspis* Rchb.f., Gard. Chron., n.s., 15: 688 (1881).
- *Phalaenopsis rosea* var. *deliciosa* Burb., Garden (London, 1871-1927) 22: 119 (1882).
- *Phalaenopsis equestris* var. *leucotranthe* Rchb.f. ex God. -Leb., Orchidophile (Argenteuil) 3: 490 (1883).
- *Phalaenopsis rosea* var. *leucaspis* Rolfe, Gard. Chron., n.s., 26: 276 (1886).
- *Phalaenopsis rosea* var. *aurantiaca* Gower, Garden (London, 1871-1927) 41: 216 (1892).
- *Phalaenopsis riteiwanensis* Masam., Trans. Nat. Hist. Soc. Formosa 24: 213 (1934).
- *Phalaenopsis equestris* var. *alba* H.R.Sweet, Amer. Orchid Soc. Bull. 38: 334 (1969).
- *Phalaenopsis equestris* var. *rosea* Valmayor & D.Tiu, Philipp. Orchid Rev. A-V(3): 18 (1983).
- *Phalaenopsis equestris* f. *alba* (H.R.Sweet) Christenson, Phalaenopsis: a monograph: 244 (2001).
- *Phalaenopsis equestris* f. *aurea* Christenson, Phalaenopsis: a monograph: 245 (2001).
- *Phalaenopsis equestris* f. *cyanochila* O.Gruss, Orchidee (Hamburg) 52: 749 (2001).
- *Phalaenopsis equestris* f. *leucaspis* (Rchb.f.) O.Gruss, Orchids (West Palm Beach) 86(10, Suppl.): 19 (2017).
- *Phalaenopsis equestris* f. *leucotranthe* (Rchb.f. ex God. -Leb.) O.Gruss, Orchids (West Palm Beach) 86(10, Suppl.): 22 (2017).

Inflorescence 1 – 4, arcuate, often branched, densely many-flowered racemes, long pedunculate, the apex frequently forming a plantlet (keiki), 25-45 cm long; flowers delicate, variable in size and coloration, pink to violet, 2.5 – 4 cm. in diameter, dorsal sepal oblong-elliptic to ovate-elliptic, acute, margins recurved, 10-17 mm long and 5 – 7 mm wide; lateral sepals similar to dorsal sepal, oblong-elliptic to ovate-elliptic, acute, 10-16 mm long and 5-8 mm wide; petals elliptic to rhomboidal, acute or obtuse, margins recurved, 8-14 mm long and 5 -8 mm wide; lip trilobed, 10 – 14 mm long and 10-16 mm wide.

Phalaenopsis equestris is highly variable both vegetatively and in flower color. Several independent genes control the expression of both anthocyanins and carotenoids on the lip of *P.*

equestris, and several horticultural varieties have been published based on the permutations of whether or not these genes are expressed. (Christenson 2001).

P. equestris var. *rosea*, instead of bearing pale pink or white sepals and petals with a darker, central patch, the floral segments are uniformly dark rose purple without any lighter borders.

In addition to these varieties, two types are mentioned, but have no taxonomic status and are really described as Type Ilocus or Type Apari. (Gruss 2017)

Type Ilocus, this form exists in a very small area north of the Philippine Island of Luzon-Bangui. It has the smallest leaves of all the forms of the species and has a slightly different lip structure, especially the callus. Dr. Christenson also added that the flowers are smaller of other variants of *P. equestris* and produce full, round flowers with overlapping segments. The standard form which are found southwest of Luzon-Quezon province, it has the largest leaves up to more than two feet long and flowers spikes three to five feet long are called 'Tagalog' form.

Phalaenopsis equestris var. *alba*, this is the pure white form of the species with no pigment associate with the callus. Other white-flowered forms have a yellow callus.

Phalaenopsis equestris var. *aurea*, this exceptional variant bears pure white flowers with a highly contrasting solid yellow lip. (Christenson 2001).

This species stands in good favor with hybridizers because of its multiple branching and the number of flowers in its progeny.

Variations the species is quite variable in the structure of the inflorescence and the color of the flowers. Because most of these varieties and shapes have proven to be homozygous (breeding true). Seedling populations can usually be found in the trade (Gruss 2017)

P. equestris was used early on to create primary and complex hybrids, as well as some intergeneric hybrids. It became much more widely used in the 1990s. (Livingston 2002).

The building blocks of multiflora, branched with smaller flower type of breeding are *P. Cassandra* (*P. equestris* x *P. stuartiana*), registered by Veitch in 1896; *P. Swiss Miss* (*P. Mildred Karleen* x *P. equestris*), registered by Hager in 1974; *P. Be Glad* (*P. Cassandra* x *P. Swiss Miss*), registered by Hager in 1978; and *P. Carmela's Pixle* (*P. Terilyn Fujitake* x *P. Cassandra*), registered by Carmela Orchids in 1990. (Christenson 2001).

The following table show these hybrids and the information was extracted from OrchidWiz X7.2

Hybrids	Offspring (First Generation)	Total Progeny
P. Cassandra (P.equestris x P. stuartiana)	226	3781
P. Swiss Miss (P. Mildred Karleen x P. equestris)	15	1545
P. Be Glad (P. Cassandra x P. Swiss Miss)	137	1503
P. Carmela's Pixle (P. Terilyn Fujitake x P. Cassandra)	160	1468

P. Cassandra (*P. equestris* x *P. stuartiana*) received 24 AOS awards. Both parents are floriferousness, *P. Cassandra* 'Frisky' 80 points AM/AOS owned by Dr. Christenson was awarded in 1975 got and impressive 116 flowers in one inflorescence. The lovely dots on the sepals are impart by *P. stuartiana*.



P. Cassandra 'Frisky' 80 points AM/AOS

P. Swiss Miss (*P. Mildred Karleen* x *P. equestris*), registered by Hager in 1974 does not earned any award, not picture had been found and *P. Mildred Karleen* earned 1 AM and 2 HCC, according to the description flowers maybe flat white colored

P. Mildred Karleen 'Velvet' AM/AOS 81 points points AM/AOS



Crossing with *P. aphrodite*, unfortunately shape of the oblong-elliptic petals of *P. equestris* are dominant over the progeny. There is a peloric flower, *P. Intermedia* 'Carolyn Grove' AM/AOS 82 points.

P. Intermedia 'Carolyn Grove' AM/AOS 82 points



Looking at primary crosses of *P. equestris* I wonder if there is one without the shape dominance of it and there are multiples nice crosses like *P. Little Mary* 'Houghton' HCC/AOS 76 points. Also, a relatively recent award plant, awarded in 2006, a peloric flower, *P. Little Mary* 'Oriental Fairy' AM/AOS 80 points. (*P. Mary Tuazon* x *P. equestris*).



P. Little Mary 'Houghton' HCC/AOS



Photographer: Michael Pearson

P. Little Mary 'Oriental Fairy'

Another positive breeding with *P. equestris* is imparting to the progeny a deep colored lip and according to Dr. Christenson, *P. equestris* is in the background of nearly all semi-alba and striped hybrids.

It seems that *P. equestris*'s hybrids inherited the blooming flush, this feature combined with branched smalls multiflora give a beautiful display.

References

- Christenson, E. A. 2001. Phalaenopsis a monograph.
- Griesbach R.2005. Orchids. A scientific approach to breeding blue orchids. May 2005 Vol 74 (5) P.378
- Livingston B. Orchid Digest. Hybridizing with Phalaenopsis species Vol. 66. 2002. Pp 209
- OrchidPro
- Orchidwiz Encyclopedia X7.2
- www.orchidspecies.com. Retrieve 4-17-21