The Genus Phalaenopsis (L.) Blume, Bijdr. Fl. Ned. Ind.: 294 (1825) Type: Phalaenopsis [Phal.] amabilis

[fal-en-OP-sis a-MA-bill-iss]

This is a vandaceous genus comprised of 83 species, mostly epiphytic and some lithophytic species spread throughout southeast asia and the islands of southwest Pacific. Westernmost limit is Sri Lanka, India, Nepal to easternmost limit in Papua New Guinea and adjacent Australia. The northern limit is southern China, Taiwan, and the Philippines. They are monopodial typically with large succulent, drooping leaves with short stems, giving rise off the stem from among the leaves to an inflorescence which can have a few to a hundred flowers with a distinct 3-lobed clawed lip. They grow best in pots with a wood media or from wood slat baskets hung sideways with two wires. They like good air circulation and typically a minimum of light. They grow in habitats ranging from semi-desert to rainforest, from hot steamy lowlands to the Himalayan



Phalaenopsis amabillis 'Jayne Garrison' AM/AOS Jan 2010, NS 7.5 x 6.5 cm

foothills. Most are epiphytes or sometimes lighophytes and there are even a few terrestrials, usually with erect inflorrescences. The large distribution has led to a diverse cultural requirements and morphology. Some species require a dry period in which the plants adapted by being deciduous, some to seasonally cool conditions, while others have adapted to life high in the forest canopy by needing bright light and having thick leaves, while another group have adopted to very deep shade near the forest floor. All Phalaenopsis have a three-lobbed clawed lip.

Phalaenopsis plants (both hybrids and to some extent species) are among the most frequently cultivated orchids because o their rapid growth and early flowering, as well as having large, long lasting flowers (related to tetraploid seedlings of Phal. Doris) that has a wide range of size, shape, color, and pattern.

Of the roughly 83 species only 18 have not been use in hybridization or have not received an award.

Common Name or Meaning - Greek for "having moth like flowers"

Generally, for the hybrids you would point scale using the Phalaenopsis point scale but most species and novelty hybrids the General scale may be more appropriate.

	Christenson			<u>Fighetti</u>	
Subgenus	<u>Section</u>	Туре	<u>Subgenus</u>	Section	Туре
			Hygrochilus		P. japonica
			Ornithochilus		P. difformis
Parishianae		P. lobbii	Parishianae	Parishinae	P. lobbii
Parishianae		P. parishii			P. parishii
Proboscidioides		P. lowii		Aphyllae	P. lowii
Aphyllae		P. stobartiana			P. stobartiana
Aphyllae		P. taenialis			P. taenialis
Phalaenopsis	Deliciosae	P. deliciosa		Deliciosae	P. deliciosa
	Esmeralda	P. buyssoniana		Esmeralda	P. buyssoniana
	Phalaenopsis	P. amabilis	Phalaenopsis	Phalaenopsis	P. amabilis
	Stauroglottis	P. equestris			P. equestris
Polychilos	Amboinenses	P. amboinensis		Polychilos	P. amboinensis
	Fuscatae	P. fuscata			P. fuscata
	Polychilos	P. cornu-cervi			P. cornu-cervi
	Zebrinae	P. zebrina (Syn)			P. sumatana
	Zebrinae	P. tetraspis			P. tetraspis

Although there are only 83 species, Phalaenopsis have been divided into several sections. We were assigned to use the taxonomy as described by Christenson in his 2001 book Phalaenopsis – A Monograph. But based on taxonomy provided at the Carlos Fighetti there is a more recent taxonomy. The genus Phalaenopsis as understood today contains the former genera: Doritis, Hygrochilus, Kingidium, Lesliea, Ornithochilus, Nothodoritis, and Sedirea.

The changes in Fighetti article is based on the recent change made at the 2014 World Orchid Conference recognizing the distinction between Phalaenopsis borneenisi, Phalaenopsis pantherina and Phalaenopsis cornu-cervi.

A table showing the relationship between these two taxonomies and some key speicies are in the above table and discussed below.

The two genera that were Sedirea (cool growing) were moved to the Phalaenopsis subgenus Hygrochilus. The prior Ornithochilus was moved to the Phalaenopsis subgenus Ornithochilus.

An additional change has been the consolidation of the Phalasenopsis five subgenera mentioned in Christenson's book into two Phalaenopsis subgenera and then further divided into six sections. A summary of this taxonomy division is shown above for both Christenson's work and Fighetti's article.

The subgenera mentioned in Christenson's book Parishianae, Proboschidioides, and Aphyllae as well as the Phalaenopsis subgenus sections Deliciosae and Esmeralda have been considated into Fighetti's Phalaenopsis subgenus Parishianae with the following sections: Parishianae, Aphyllae, Deliciosae, and Esmeralda.

The subgenera mentioned in Christenson's book Polychilos as wells as the Phalaenopsis subgenus sections Phalaenopsis and Stauroglottis have been considated into Fighetti's Phalaenopsis subgenus Polychilos and Phalaenopsis.

We have been instructed to use Christenson's book as our baseline for this year and the remaining reports will mostly follow this request.

References:

www.orchidspecies.com

http://apps.kew.org/wcsp/qsearch.do

https://secure.aos.org/aqplus/SearchAwards.aspx

OrchidWiz Database x7.1, update: Dec 2020

Christenson, E. A.; Phalaenopsis - A Monograph, 2000

Orchids, Jun 2015, The Genus Phalaenopsis – The Species, Fighetti, C.; Vol. 84(6), pg. 352-355

Phalaenopsis Section Phalaenopsis

(L.) Blume, Bijdr. Fl. Ned. Ind.: 294 (1825)

Type: Phalaenopsis [Phal.] amabilis

[fal-en-OP-sis a-MA-bill-iss]

When one thinks of this Phalaenopsis section, Phalaenopsis subgenus - Phalaenopsis section, which presently contains nine species (OrchidWiz [update Dec 2020]), one thinks of the classical white Phalaenopsis species and hybrids. But this section is also the basis of most Phalaenopsis hybrids with two of the species, Phal. amabilis and Phal. aphrodite, involved in over 90% of all Phalaenopsis hybrids (36,840 hybrids per OrchidWiz). (Comment: The members of this section are based on the taxonomy information on the website www.orchidspecies.com and contains the species that are normally thought of as in this section as well as the



Phalaenopsis amabilis 'Jayne Garrison' AM/AOS Jan 2010, NS 7.5 x 6.5 cm

species in the Phalaenopsis subgenus – Staurogolottis section. In Christensons book he comments the plants in the Stauroglottis section are similar to and share several characteristics with those of section Phalaenopsis. The differences that are sited are: smaller flowers, subsimilar sepals and petals, and an undivided lip apex. Obviously based on more recent, unknown to me, information these differences are not sufficient to continue having them in a separate section.)

These species are characterized by having a single callus (a swelled area on the labellum) and smooth lateral lobes of the lip. With the exception of spots found at the base of the sepals and on the petals of some species (such as Phal. stuartiana) all species are essentially unmarked white or pink flowers. Most of the species are native to the Philippines growing on trees from sea level up to 4900 ft (1500 m). A table of the species is provided below, as a point of reference those species that were previously in the Stauroglottis Section are mark with a (S).

Generally, you would point scale using the Phalaenopsis point scale.

Table of species, (www.orchidspecies.com – Dec 2020 update)

Species marked with a * are	used the mos	st in hybridiza	tion, (S) Previously S	Staurogl	ottis Section	Progeny						Α	os i	Awa	rds			
Kew Name	Sub Genus	<u>Section</u>	Country	<u>Temp</u>	<u>Season</u>	F1/Total	Awds	FCC	AΜ	HCC	JC	ΑD	AQ	CCE	CCM	СНМ	CBR	Total
Phalaenopsis amabilis*	Phalaenopsis	Phalaenopsis	Sumatera, Borneo, Indonesia, New Guinea, Australia	Warm to Hot	Winter - Spring	483/33257	69		20	11	4		1		8	1		45
Phalaenopsis aphrodite*	Phalaenopsis	Phalaenopsis	Philippines, Taiwan		Winter - Spring	62/33353	66		13	8			1	2	12	1	1	38
Phalaenopsis celebensis (S)	Phalaenopsis	Phalaenopsis	Sulawesi	Hot	Year round	49/75	27		7	8	1				2		1	19
Phalaenopsis equestris (S)*	Phalaenopsis	Phalaenopsis	Philippines, Taiwan	Warm to Hot	Year round	564/23601	133	2	32	30	19		1		12	3	2	101
Phalaenopsis lindenii (S)	Phalaenopsis	Phalaenopsis	Philippines	Warm	Fall - Winter	120/654	43		12	7	1				2			22
Phalaenopsis philippinensis	Phalaenopsis	Phalaenopsis	Philippines	Warm	Spring	113/192	20		4	5	1			1	1			12
Phalaenopsis rimestadiana	Phalaenopsis	Phalaenopsis	Now Pha	al. amal	oilis													
Phalaenopsis sanderiana*	Phalaenopsis	Phalaenopsis	Philippines	Hot	Year round	117/27201	10	1	3						1		1	6
Phalaenopsis schilleriana*	Phalaenopsis	Phalaenopsis	Philippines	Warm to Hot	Winter - Spring	255/29795	72		20	13			1	6	11			51
Phalaenopsis stuartiana*	Phalaenopsis	Phalaenopsis	Philippines	Hot	Winter - Spring	399/28217	43		12	14					5	2		33

Key: Cold - 50 to 58F at night; Cold to Cool - 50 to 66F at night; Cool - 58 to 66F at night; Cool to warm - 58 to 75F at night; Cool to Cool

Because of the floral similarity between the species in this section, in particular in those listed in Christensons book (the classic white Phalaenopsis species), there has been some confusion in identifying them correctly the following table list some of the differences. Note: The key to identifying Phalaenopsis is the lip details.

Species	General	Callus	Lip de	tails	Distribution
Phalaenopsis amabilis*	Largest Flower, white flower color, round flower shape, arching raceme. Flowers per spike: 13.0, NS: 7.9 cm	Uniseriate, peltate, shield-shaped, the posterior edge smoothly notched between one pair of blunt teeth, the anterior edge obtuse- rounded			Widespread from Sumatra and Java to the southern Philippines, and eas to New Guinea and Queensland, Australia
Phalaenopsis aphrodite*		Uniseriate, the posterior edge notched forming four erect teeth, the anterior edge obtuse-rounded			Northern Philippines and southeastern Taiwan
Phalaenopsis philippinensis	Richly marked leaves, pure yellow lateral lobes, tends to open all flowers on an inflorescence quickly. Flowers per spike: 25.9, NS: 8.2 cm	Uniseriate, peltate, channeled, the posterior edge extended in a pair of wing-like teeth			Philippines
Phalaenopsis sanderiana*	Blooms mid to late summer. Flowers per spike: 14.2, NS: 8.0 cm	Uniseriate, erect, peltate, the posterior edge deeply notched in the middle, each side with one larger, taller, inner, rounded tooth and one smaller, shorter, outer, acute tooth.	Paris and	u Vu	Philippines
Phalaenopsis schilleriana*	Bright pink flowers, richly marbled foliage, and a faint, pleasing floral scent. Flowers per spike: 34.6, NS: 7.0 cm	Uniseriate, peltate, channeled, both the posterior and anterior edges notched, forming paired teeth to either side of the channel			Philippines
Phalaenopsis stuartiana*	Flowers floriferous, long lasting. Flowers per spike: 34.7, NS: 6.3 cm	Uniseriate, peltate, channeled, the posterior edge notched with a long, triangular tooth to each side, the anterior edge shallowly notched with a blunt tooth to each side	Parameter Deliver		Philippines

Hybridization:

Hybridization in the Phalaenopsis family is dominated by the species in the Phalaenopsis section over 90% of the hybrids has at least one species from this section in its heritage. A table of classical six species in the Phalaenopsis section, broken down by decade, is shown below.

<u>amabilis</u>	<u>1870</u>	1880	1890	<u>1900</u>	<u>1910</u>	<u>1920</u>	<u>1930</u>	1940	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>	1990	2000	<u>2010</u>	2020	<u>Total</u>
Reg	0	5	3	0	1	7	25	87	340	1241	3228	5802	8835	7649	5733	301	33257
Assc Awds	0	12	1	0	0	3	9	48	320	766	1247	2230	2864	2510	706	3	10719
F.4	0	_	1	0	1	2	0	1.1	26	22	10	25	100	1.45	107	_	402
F1	0	5	2	0	1	3	8	14	26	22	10	35	100	145	107	5	483
Assc Awds	0	12	1	0	0	3	5	0	2	1	2	6	54	43	14	0	143
aphrodite	4	2	_	1		_	26	0.7	252	1250	2272	E016	0704	7657	F7C0	200	22252
Reg	1	3	5	1	0	6	26	87	352	1259	3272	5816	8794	7657	5768	306	33353
Assc Awds	10	3	0	0	0	2	9	45	320	778	1255	1953	2862	2522	724	3	10486
F1	1	1	2	0	0	3	5	6	2	2	0	2	9	13	16	0	62
Assc Awds	10	3	0	0	0	0	0	0	0	0	0	8	2	4	3	0	30
philippinens	i <u>s</u>																
Reg	0	0	0	0	0	0	0	0	0	0	0	2	53	54	79	4	192
Assc Awds	0	0	0	0	0	0	0	0	0	0	0	0	31	4	10	0	45
F1	0	0	0	0	0	0	0	0	0	0	0	2	49	36	23	3	113
Assc Awds	0	0	0	0	0	0	0	0	0	0	0	0	30	3	3	0	36
sanderiana				•	•					•	•	•		•			
Reg	0	0	3	1	0	6	16	53	136	637	1930	4181	7428	7058	5472	280	27201
Assc Awds	0	0	0	0	0	1	4	3	78	284	714	1473	2502	2356	683	3	8101
F1	0	0	3	1	0	5	4	12	14	33	14	11	8	5	6	1	117
Assc Awds	0	0	0	0	0	1	0	0	4	3	0	1	1	0	0	0	10
schilleriana																	
Reg	1	1	4	1	0	9	36	78	246	768	2226	4863	8289	7415	5573	285	29795
Assc Awds	10	7	13	0	0	3	5	7	126	331	808	1642	2662	2419	689	3	8725
F1	1	1	2	1	0	6	11	15	13	31	18	24	41	43	45	3	255
Assc Awds	10	7	13	0	0	1	3	3	1	10	4	2	4	12	5	0	75
stuartiana				•	•					•	•	•		•			
Reg	0	1	8	1	0	3	14	62	142	557	1827	4344	7912	7382	5670	294	28217
Assc Awds	0	0	32	0	0	2	0	4	77	199	696	1544	2596	2458	702	3	8313
F1	0	1	6	1	0	1	4	6	5	18	34	109	125	47	39	3	399
Assc Awds	0	0	32	0	0	2	0	3	1	24	22	74	26	9	0	0	193

From the above table one can see that although the first crosses were made in was made in 1870s, and took off after World War II ended, related to the highly successful Phal. Doris crossed in which one cultivar was identified as a tetraploid. As can be seen from the above table breeding of Phalaenopsis took off.

Also included in this table of is the registration of F1 crosses for each species. From is information it is clear that breeding with Phal. amabilis is still going strong, Phal. aphrodite is low but of increasing interest in the past two decades, Phal. philippinensis is at a low to moderate level since being introduced in the 1980s, while interest in Phal. sanderiana appears to be waning. Interest in breeding with Phal. schilleriana and Phal. stuartiana is remaining at a moderate level today.

Species	Conoral	Breedir	ng
Species	General	Strength	Weakness
Phalaenopsis amabilis	Largest Flower, white flower color, round flower shape, arching raceme. Flowers per spike: 13.0, NS: 7.9 cm	Large, round flowers, arching inflorescences, Can reflower by branching on old inflorescences, efficient pollinator, quick to reach maturity, easy growth requirements	Variable lip color, the presence and density of red spots on lip side- lobes, and flower shape
Phalaenopsis aphrodite	The other large flower, white flower color. Flowers per spike: 16.7, NS: 7.5 cm	Similar to Phal. amabilis, fuller flowers, more flowers per inflorescences	Some what smaller flowers
Phalaenopsis philippinensis	Richly marked leaves, pure yellow lateral lobes, tends to open all flowers on an inflorescence quickly. Flowers per spike: 25.9, NS: 8.2 cm	Pure yellow lateral side- lobes, tends to open all flowers on an inflorescence at once, large number of flowers per inflorescences	Recently introduced, large plant size
Phalaenopsis sanderiana	Blooms mid to late summer. Flowers per spike: 14.2, NS: 8.0 cm	Mid to late summer blooming, normal size inflorescence in the summer	Flowers may have pinkish overtones,
Phalaenopsis schilleriana	Bright pink flowers, richly marbled foliage, and a faint, pleasing floral scent. Flowers per spike: 34.6, NS: 7.0 cm	Easy to grow to specimen size plants, has fragrance, massive flower display on multi- branched inflorescences; white lip	Fragrance not detected by all
Phalaenopsis stuartiana	Flowers floriferous, long lasting. Flowers per spike: 34.7, NS: 6.3 cm	Spots on lateral sepals and lip, massive floral display, number of flowers per inflorescence, long lasting flowers	Smaller flower size, highly variable species

The final hybridizing point that I want to bring up is the wide range of color and patterns that have been obtained with Phalaenopsis breeding, most colors of the rainbow, specular patterns, strips, spots, flower size, etc. The following pictures are just a small sample of Phalaenopsis breeding, most progeny and awards for each species above.



Phal. Doris
(Phal. Elisabethae x
Phal. Katherine Siegwart)
262 / 32,093 progeny
29 AOS awds
'Hazel McCoy' AM/AOS
Mar 1967



Phal. Golden Buddha (Phal. Cher Ann x Phal. Yardstick) 309 / 2503 progeny 6 AOS awds 'Raspberry Delight' AM/AOS Mar 1987, NS 7.3 cm



Phal. Orchid World (Phal. Malibu Imp x Phal. Deventeriana) 22 / 25 progeny 103 AOS awds 'Trenton' FCC/AOS Mar 1990, NS 7.0 cm



Phal. Sogo Yukidian (Phal. Yukimai x Phal. Taisuco Kochdian) 167 / 542 progeny 12 AOS awds 'Symphony Angel' AM/AOS Mar 2002, NS 14.0 x 12.0 cm



Phal. Mini Mark (Phal. Micro Nova x Phal. philippinensis) 7 / 7 progeny 14 AOS awds 'Dixie Pixie' AM/AOS Mar 2000, NS 3.9 x 3.9 cm



Phal. OX Lucky Boy (Phal. KS Culiacan x Phal. Nobby's Amy) 7 / 7 progeny 2 AOS awds 'OX 1649' AM/AOS Mar 2015, NS 6.3 x 5.6 cm



Phal. Leopard Prince (Phal. Sun Prince x Phal. Ho's French Fantasia) 242 / 837 progeny 12 AOS awds 'Hwa Yuan Red Leopard' FCC/AOS Mar 2013, NS 11.2 x 9.6 cm



Phal. Ambo Buddha (Phal. Brother Buddha x Phal. amboinensis) 4 / 4 progeny 30 AOS awds 'Phoenix' FCC/AOS Apr 2000, NS 7.1 x 6.8 cm



Phal. Solar Flare (Phal. Golden Sands x Phal. Golden Pride) 19 / 71 progeny 29 AOS awds 'Classic' AM/AOS Apr 1986, NS 7.5 cm



Phal. Abendrot (Phal. Lippezauber x Phal. Lippstadt) 229 / 4504 progeny 16 AOS awds 'Celia' FCC/AOS Dec 1984, NS 9.8 cm



Phal. Misty Green (Phal. Barbara Moler x Phal. Bamboo Baby) 103 / 4709 progeny 28 AOS awds 'Selsal' AM/AOS Feb 1994, NS 8.9 x 8.5 cm



Phal. Cassandra (Phal. equestris x Phal. stuartiana) 226 / 3759 progeny 24 AOS awds 'Little Prince' AM/AOS Mar 1998, NS 4.7 x 4.5 cm

The following grexes have been identified to represent some additional breeding lines, not depicted by above grexes, representing novel color patterns (harlequin, stripes, spots, splash) and flower shapes (Big Lip) that are / were key breeding lines, but not necessarily key grexes for these lines.



Phal. Golden Peoker (Phal. Misty Green x Phal. Liu Tuen-Shen) 218 / 4087 progeny 9 AOS awds 'Nan-Cho' AM/AOS Apr 1996, NS 6.5 x 6.0 cm



Phal. Little Gem Stripes (Phal. Taisuco Stripe x Phal. Taisuco Gem) 157 / 411 progeny 16 AOS awds 'Stones River' AM/AOS Jan 2012, NS 6.4 x 5.5 cm



(Phal. Golden Sun x Phal. Salu Spot) 75 / 788 progeny 8 AOS awds 'Cat's Paw Mystique' HCC/AOS May 2012, NS 7.8 x 7.2 cm

Phal. Ching Her Buddha



Phal. Snow Leopard (Phal. Alida x Phal. Francine) 74 / 186 progeny 4 AOS awds 'Colorama' HCC/AOS Feb 1983, NS 7.4 cm

References:

www.orchidspecies.com http://apps.kew.org/wcsp/qsearch.do https://secure.aos.org/aqplus/SearchAwards.aspx OrchidWiz Database x7.1, update: December 2020 Christenson, E.; *Phalaenopsis – A Monograph*, 2001



(Phal. May Hitch x Phal. Kathy Sagaert) 48 / 670 progeny 3 AOS awds 'Biogfoot' JC/AOS Apr 1997, NS 8.5 x 8.4 cm

Phal. World Class



Phal. Taisuco Firebird (Phal. Happy Smile x Phal. Taisuco Candystripe) 163 / 1498 progeny 12 AOS awds 'Alisan' HCC/AOS Jan 2010, NS 10.4 x 9.5 cm

Building Block Data Sheet

Phalaenopsis stuartiana, Rchb.f., Gard. Chron., n.s., 16: 748 (1881)

[fal-en-OP-sis stu-ar-TEE-aa-na]

Phalaenopsis [Phal.] stuartiana is native to the northern provinces of Mindanao Island, Philippines. Known for long (24 inches or more) arching branching flowerous (not uncommon for over 50 flowers) inflorescences above shiny, slivery-green, mottled leaves. The typical flowers, with a substance silimar to paper, are white-to-creamy-white with degrees of intense maroon spotting on the lateral sepals and lip. A basal greenish white color on the lateral sepals is evendent beneath the maroon spotting on some specimens. The degree of spotting on the dorsal sepal, petals, and upper lateral sepals varies from none to heavy spotting concentrated around the column. The intensity of the lip's and lower lateral sepals color is directly proportional to the amount of spotting: the greater the amount of spotting, the darker, more heavily marked is the lip.



Phalaenopsis stuartiana 'Grange Gold' AM/AOS Dec 1997, NS 6.5 x 6.1 cm

Breeding Characteristics:

It is a member of the Phalaenopsis subgenus - Phalaenopsis section, which forms the basis of the classical white Phalaenopsis species and hybrids. As a parent, Phal. stuartiana contributes an increase in flower count, prevents overcrowding, medium size, and the lightly spotted forms do NOT influence the color of the progeny. When the heavily spotted forms are bred with pink flowers, the off-spring may bear earth-toned or mauve-colored flowers. The greenish color on the inside of the lateral sepals can result in progeny with 'dirty' colored flowers. Due to large size of the inflorescences and large robust leaves the plants are difficult for windowsill growers.

The table below has the registration of Phal. stuartiana progeny and associated awards with separate lines for total progeny as well as first (F1), second (F2), and third (F3) generations.

	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010	2020	Total
Reg	0	1	8	1	0	3	14	62	142	557	1827	4344	7912	7382	5670	294	28217
Assc Awds	0	0	32	0	0	2	0	4	77	199	696	1544	2596	2458	702	3	8313
F1	0	1	6	1	0	1	4	6	5	18	34	109	125	47	39	3	399
AA	0	0	32	0	0	2	0	3	1	24	22	74	26	9	0	0	193
F2	0	0	2	0	0	2	5	10	17	31	33	77	238	104	46	3	568
AA	0	0	0	0	0	0	0	0	2	18	47	67	93	29	3	0	259
F3	0	0	0	0	0	0	5	22	7	45	45	67	315	363	225	7	1101
AA	0	0	0	0	0	0	0	0	0	24	13	55	186	147	24	0	449

From this table one sees that Phal. stuartiana has been a major contributor with approximately 77% of all Phalaenopsis hybrids being Phal. stuartiana progeny. The first hybrid was registered in 1888 and an early peak of eight hybrids registered in the 1890s. There was then a significant lull until the 1930s with a significant increase after World War II. The use of Phal. stuartiana peaked as a primary and secondary parent in the 1990s with the peak in third generation progeny occurring in the 2000s.

The chart below indicates some of the major Phal. stuartiana breeding lines, the lines used to improve floral form are not included in this table. The starting point for this table was:

- * The top five primary hybrids (F1, both in F1 progeny and Associated Awards)
- * The top ten in progeny (F1 progeny) and Awards (per OrchidWiz X7.1, December 2020 update, this includes awards from other organizations besides AOS)
- * The six grexes as well as some of their top progeny that were mentioned in the John Stubbings article on Judging Spotted Phalaenopsis
- * Seven grexes mentioned by Carlos Fighetti in Brooklyn Botanic Garden web article on Phalaenopsis (5 of 7 were Phal. stuartiana progeny).

	artiana progeny	<u> </u>			Progeny					AC	S Aw	vards				
Kew Name	Parent 1	Parent 2	Year	Hybridizer	F1/Total	Awds	FCC	ΔМ	HCC		-			СНМ	CBR	Total
Phal. stuartiana					399/28217	8313						,				1000
Phal. Cassandra	Phal. equestris	Phal. stuartiana	1896	Veitch	226/3759	25		7	9	3			5			24
Phal. Suwanee	Phal. Cassandra	Phal. Barbara Beard		Frederick L. Thornton	6/1482	0				_						0
Phal. Pink Fantasy	Phal. Percy Porter	Phal. Suwanee	-	Richella	3/1473	0										0
Phal. Be Glad	Phal. Swiss Miss	Phal. Cassandra		Hager Orchids	137/1488	18		7	10				1			18
Phal. Be Tris	Phal. Be Glad	Phal. equestris	1989	Krull-Smith	77/413	19		1	16	1						18
Phal. Glad Melinda	Phal. Be Glad	Phal. Melinda Nan		H. Hager	34/202	2		1	1	_						2
Phal. Gladrose	Phal. Melinda Rose	Phal. Glad Melinda		H. Hager	32/140	8		3	5							8
Phal. Joyful	Phal. Gladrose	Phal. equestris	1	H. Hager	7/17	3			3							3
Phal. Pixie Star	Phal. pulcherrima	Phal. Joyful	-	M. Pendleton	6/9	21		10	10				1			21
Phal. Timothy Christopher	Phal. Cassandra	Phal. aphrodite		J. Sandrik	204/750	8		2	3	_	1		1			7
Phal. Tying Shin Fantastic World	Phal. Chian Xen Pearl	Phal. Timothy Christopher	1	Kuo Liang Hung	3/3	17		7	1	_	1		3			12
Phal. Little Netsuke	Phal. Snow Leopard	Phal. Cassandra	_	E. Carlson	10/19	10		2	7	_	+		1			10
Phal. Brecko Dawnet	Phal. Little Netsuke	Phal. Dawn Treader		Breckinridge	6/9	8			7	-	-	+ +	1			8
Phal. Terilyn Fujitake	Phal. Pink Fantasy	Phal. stuartiana		R. Fujitake	14/1469	0				_						0
Phal. Carmela's Pixie	Phal. Terilyn Fujitake	Phal. Cassandra		Carmela	160/1454	22		9	11	1			1			22
Phal. Zuma's Pixie	Phal. Carmela's Pixie	Phal. equestris		Zuma Canyon	137/883	25		6	16	1	1		1			24
Phal. Sogo Vivien	Phal. Sogo Alice	Phal. Zuma's Pixie	1992		191/478	9		2	10	1	1	1	1			4
Phal. Petite Snow	Phal. Cassandra			Richella		5		2	1	1			1			4
		Phal. stuartiana	-		23/32				1	+					 	+
Phal. Annie Hoffman	Phal. Doris	Phal. stuartiana		R. Swearingen	4/1422	0				-		-				0
Phal. Kruemel	Phal. Annie Hoffman	Phal. Francine		A. Rohl	3/1398	0				-		-				
Phal. Kruemeline	Phal. Kruemel	Phal. Francine	1	A. Rohl	11/1395	0				-		-				0
Phal. Joline	Phal. Joyau	Phal. Kruemeline		Marcel Lecoufle	17/1329	0		_	4	-		-				0
Phal. Coquinette	Phal. Scaramouche	Phal. Joline	-	Marcel Lecoufle	40/1214	4		3	1		-				<u> </u>	4
Phal. Ho's Fancy Leopard	Phal. Elise de Valec	Phal. Coquinette	-	Tin-Fan Ho	23/1095	1		1			-				<u> </u>	1
Phal. Wiganiae	Phal. schilleriana	Phal. stuartiana		S. Low	17/21520	4				_						0
Phal. Fontainebleau	Phal. schilleriana	Phal. Wiganiae	-	Vacherot-Lecoufle	21/18656	0				_						0
Phal. Rosita	Phal. Fontainebleau	Phal. Roselle	-	O. Kirsch	2/3945	0				_						0
Phal. Harlequin	Phal. Rosita	Phal. Grace Palm		O. Kirsch	19/3942	3		1	2						<u> </u>	3
Phal. Percy Porter	Phal. Harlequin	Phal. Mildred Karleen		A. S. Cavaco	44/3643	1									<u> </u>	0
Phal. Wendel George	Phal. Percy Porter	Phal. Aglow		R. Takase	17/1649	1			1							1
Phal. Hawaii	Phal. Fontainebleau	Phal. schilleriana		Armacost	12/14961	0										0
Phal. Dark Hawaii	Phal. Hawaii	Phal. Regnier	-	Mrs. L. McCoy	9/6900	0										0
Phal. Alice Bowen	Phal. Dark Hawaii	Phal. Pink Cloud		Mrs. L. McCoy	11/6886	7		4	3						L	7
Phal. Betty Beard	Phal. Alice Bowen	Phal. Virjudy		C. Beard	12/5220	0									L	0
Phal. Palm Beach Rouge	Phal. Virginia	Phal. Alice Bowen	1963	C. Beard	9/4141	0									L	0
Phal. Ann Marie Beard	Phal. Palm Beach Rouge	Phal. Rozada		C. Beard	53/4118	2		1	1							2
Phal. Vicki Sue Lockhart	Phal. Ann Marie Beard	Phal. Irene Van Alstyne		W. Lockhart	32/2523	0									L	0
Phal. Pink Hawaii	Phal. Hawaii	Phal. Pink Glory		Alberts / Merkel	9/11892	1										0
Phal. Ruby	Phal. Pink Hawaii	Phal. Summit Queen		W. Romanoff	2/11777	0										0
Phal. Ruby Wells	Phal. Ruby	Phal. Bess Wells		G. de Jong	12/10730	0										0
Phal. Lipperose	Phal. Ruby Wells	Phal. Zada		F. Hark	141/10260	0										0
Phal. Lippstadt	Phal. Doris Wells	Phal. Lipperose	1971	F. Hark	53/6817	1			1							1
Phal. Samson	Phal. Sesam	Phal. Lippstadt		F. Hark	19/3402	0										0
Phal. Abendrot	Phal. Lippezauber	Phal. Lippstadt		F. Hark	229/4504	17	1	6	9							16
Phal. Morgenrot	Phal. Lipperose	Phal. Lippstadt		F. Hark	24/2818	1			1							1
Phal. Aalsmeer Rose	Phal. Ruby	Phal. Marmouset	1960	Shaffer's	33/6566	1			1							1
Phal. Raycraft	Phal. Aalsmeer Rose	Phal. Doris	1962	Santa Cruz	23/5391	6			4							4
Phal. Otohime	Phal. Grace Palm	Phal. Raycraft	1973	M. Watanabe	45/5098	0										0
Phal. Happy Valentine	Phal. Otohime	Phal. Odoriko	1983	Dogashima	201/4132	17		5	10							15
Phal. Nobby's Valentine	Phal. Happy Valentine	Phal. Eva's Nevado Puro	2000	Nobby Orchids	2/1150	0										0
Phal. Arai	Phal. Arthur Freed	Phal. Raycraft	1977	H. Arai	24/3045	1			1							1

HH		Phal. Eva's Nevado Puro	Phal. Hinamatsuri	Phal. Arai	1999	Orquideas Eva	5/1157	0									1 1	0
1111		Phal. Elisa	Phal. Grace Palm	Phal. Aalsmeer Rose	1959	Shaffer's	32/1906	13		6	7							13
		Phal. Naughty Pink	Phal. Elisa	Phal. Pink Chief	1966	Rod McLellan Co.	9/1799	0										0
Ш	Ť		Phal. Musashino	Phal. Naughty Pink	1983	K. Nagai	34/1772	4		3	1							4
HH		Phal. Roswell	Phal. Ruby Wells	Phal. Aalsmeer Rose		Shaffer's	25/752	3		1	2							3
Ш	+	+++	Phal. Gladys Read	Phal. Roswell		Shaffer's	15/246	0										0
нн	Ь		·	Phal. Doris		Alberts / Merkel	4/225	2			1						$\vdash \vdash$	1
HH	_	nal. Rosalie	Phal. Hawaii	Phal. schilleriana		Mrs. L. McCoy	5/9745	0									$\vdash \vdash$	0
HH	_												-				$\vdash \vdash$	
Ш	_	Phal. Rosalani	Phal. Rosalie	Phal. Monique		Mrs. L. McCoy	1/9738	0									$\vdash \vdash \vdash$	0
Ш	+		Phal. Rosalani	Phal. Marmouset		Mrs. L. McCoy	10/9737	0									$\vdash \vdash$	0
Ш	4	Phal. Riley	Phal. Pink Wave	Phal. Zada	_	Fantastic Gardens	1/4051	1			1						igspace	1
Ш		HH	Phal. Pink Chief	Phal. Riley		J. F. Hughes	37/4050	6			6	_					ш	6
Ш		Phal. Flor de Mato	Phal. Zada	Phal. Satin Rouge	1972	Hager Orchids	92/3625	5		3	2							5
Ш		Phal. Corralitos Rose	Phal. Satin Rouge	Phal. Pink Chief	1979	J. F. Hughes	3/209	0										0
Pł	ha	l. Pamela	Phal. Elisabethae	Phal. Fontainebleau	1939	S. Low	20/15400	0										0
	Ph	nal. Pink Glory	Phal. Hawaii	Phal. Pamela	1943	Alberts / Merkel	13/12352	0										0
HH	Р	Phal. Judith	Phal. Pink Glory	Phal. Doris	1956	Alberts / Merkel	7/6114	0										0
HH	_	Phal. Virjudy	Phal. Virginia	Phal. Judith		C. Beard	4/5344	0										0
HH	_	nal. Pink Sunset	Phal. Reve Rose	Phal. Pamela		Mrs. L. McCoy	18/9016	0									\vdash	0
HH	_		Phal. Doris			Mrs. L. McCoy		0									$\vdash \vdash$	0
HH	_			Phal. Pink Sunset			14/1715					+	+			\dashv	$\vdash\vdash$	0
HH	_	0	Phal. Pink Sunset			Mrs. L. McCoy	7/4922	0			4	+	+				$\vdash \vdash$	
HH	_		Phal. Reve Rose	Phal. Pink Sunset		Mrs. L. McCoy	1/4518	1		_	1	+	+				$\vdash \vdash$	1
Ш	_	Phal. Pink Vision	Phal. Pink Sunset	Phal. Shocking Pink		Mrs. L. McCoy	17/4517	2		1			\bot				$\vdash \vdash$	1
Щ	_	,		Phal. Mary Manda		Mrs. L. McCoy	3/508	0				_ _					igsqcut	0
Ш		Phal. Radiant Glow	Phal. Pink Victory	Phal. Doris	1959	Mrs. L. McCoy	16/505	0										0
Pł	ha	l. Rothomago	Phal. Fontainebleau	Phal. Reve Rose	1943	Vacherot-Lecoufle	10/6925	0										0
$ \prod $	Ph	nal. Mistinguett	Phal. Rothomago	Phal. Helle	1956	Marcel Lecoufle	47/6913	4			1							1
Ш	Р	Phal. Pino	Phal. Phobos	Phal. Mistinguett	1962	Marcel Lecoufle	2/6913	0										0
HH	Ť	Phal. Joyau	Phal. Pino	Phal. Lipperose	1977	Marcel Lecoufle	50/1424	0										0
HH	_	Phal. Ondine	Phal. Mistinguett	Phal. sanderiana		Vacherot-Lecoufle	29/4140	0				1						0
HH	_		Phal. Ondine	Phal. Elizabeth Marshall	_	Shaffer's	11/80	0				+				-+		0
HH	+	T		Phal. Modine		Carmela	27/57	1			1						$\vdash \vdash$	1
HH	_				_						2		+				$\vdash \vdash$	2
Ш	_	Phal. Melinda Nan	-	Phal. Mouchette		Shaffer's	30/368	2			2	-					$\vdash \vdash$	
Ш	_		Phal. Corralitos Rose	Phal. Melinda Nan		J. F. Hughes	23/204	0				_					$\vdash \vdash$	0
Ш		Phal. Sourire	Phal. Henriette Lecoufle	Phal. Mistinguett		Vacherot-Lecoufle	14/1205	0				_					igwdapsilon	0
Ш	_		Phal. Sourire	Phal. Barbara Beard		Vacherot-Lecoufle	11/474	0									igsquare	0
Ш	1	Phal. Cataracte	Phal. Cinnamon Candy	Phal. Abondance	1978	Vacherot-Lecoufle	36/375	0				_					ш	0
Ш		Phal. Vladimir Horowitz	Phal. Cataracte	Phal. Dame de Coeur	1989	B. Woodson	17/23	3			3							3
Pha	al.	Lutece	Phal. aphrodite	Phal. Wiganiae	1930	Vacherot-Lecoufle	2/5191	0										0
Pł	hal	l. Ispahan	Phal. Jardin des Plantes	Phal. Lutece	1944	Vacherot-Lecoufle	1/5189	0										0
	Ph	ial. Damas	Phal. Ispahan	Phal. Fanchette	1960	Vacherot-Lecoufle	5/5188	0										0
Ш	Р	hal. Eva	Phal. Damas	Phal. Diva	1966	Vacherot-Lecoufle	4/2778	0										0
Pha	al.	Jardin des Plantes	Phal. Ariadne-Amabilis	Phal. Wiganiae	1937	Jardin des Plantes	8/9036	0										0
					1948	Vacherot-Lecoufle	8/8619	0										0
				Phal. Cendrillon		Vacherot-Lecoufle	8/5101	0				1						0
			Phal. aphrodite	Phal. Jardin des Plantes		Vacherot-Lecoufle	18/9013	0				\dashv	+				\Box	0
+		nal. Lachesis	Phal. Fanchette	Phal. Cendrillon		Vacherot-Lecoufle	24/6704	1			1	+	+			-+	\vdash	1
-	_		Phal. Isis			Vacherot-Lecourle Vacherot-Lecourle	3/2289	0			1	+	+			\dashv	$\vdash\vdash$	0
HH	_			Phal. Lachesis								+	+			\dashv	$\vdash \vdash \vdash$	
HH	_	Phal. Henriette Lecoufle	Phal. Lachesis	Phal. Ramona		Vacherot-Lecoufle	56/3550	0		-		+	+			\longrightarrow	$\vdash \vdash$	0
HH	_	Phal. Opaline		Phal. Capitola		Vacherot-Lecoufle	61/1780	6			1	+	+				$\vdash \vdash$	1
Щ	_	H-,		Phal. Vallehigh		Hans Koch	4/1231	0					+				$\vdash \vdash$	0
Щ				Phal. Meridian		Taiwan Sugar	61/1165	3	1		1	_	\downarrow				$\vdash \vdash$	2
Щ	_	HH	Phal. Yukimai	Phal. Taisuco Kochdian	1998		167/542	35		4	1	_ _		6	1			12
Ш		1 1 1 1	Phal. Mount Kaala	Phal. Taisuco Kochdian	1993	Taiwan Sugar	65/388	6		2								2
ШП	╝	Phal. Taisuco Crane	Phal. Taisuco Windian	Phal. Taisuco Kaalakian	1995	Taiwan Sugar	27/81	2		1								1
ПП			Phal. Musashino	Phal. Taisuco Kochdian	1998	Sogo	28/99	4		3				Ī				3
Ш	_		Phal. Winter Kaala	Phal. Taisuco Kochdian	1993	Taiwan Sugar	27/293	3		1	2							3
Ш			Phal. Diva	Phal. Fanchette		Vacherot-Lecoufle	1/2274	0										0
ПП	_	·	Phal. Exquis	Phal. Eva		Vacherot-Lecoufle	9/2273	0										0
++			Phal. Fanchette	Phal. Isis		Vacherot-Lecoufle	9/5011	0				1				$\neg \uparrow$	\sqcap	0
+++	_	Phal. Rapture	Phal. Anouche	Phal. Isis		Vacherot-Lecoufle	17/3869	0				\dashv				-	\Box	0
HH	_					Vacherot-Lecoufle	37/1716	0				+				-	\vdash	0
+++	_		Phal. Artigny	Phal. Rapture								+	+		-+	\dashv	$\vdash\vdash\vdash$	0
HH	_	Phal. Scherzo	Phal. Francine	Phal. Rapture		Vacherot-Lecoufle	5/2938	0				+	+			\dashv	$\vdash \vdash \vdash$	-
HH	+	-	·	Phal. Rapture		Hausermann	34/223	0				+	+				$\vdash \vdash$	0
HH	+	L		Phal. Melissa Dawn		Orchid Zone	2/55	0					+				$\vdash \vdash$	0
I + I + I			·	Phal. Anouche		Vacherot-Lecoufle	11/639	0				_	$\downarrow \downarrow \downarrow$				igsquare	0
HH		Phal. Alida	Phal. Artigny	Phal. Minouche	1979	Vacherot-Lecoufle	36/373	0									igsqcut	0
Ш	1	Phal. Ann Krull									5							11

Phal. VitrailPhal. RapturePhal. Anouche1975 Vacherot-Lecoufle11/680Phal. Sarah Elizabeth RowePhal. Melissa DawnPhal. Vitrail1983 John E. Wilson4/3233Phal. MouchettePhal. FrancinePhal. Anouche1972 Vacherot-Lecoufle71/41060Phal. Elise de ValecPhal. RaptignyPhal. Mouchette1980 Vacherot-Lecoufle70/198011Phal. Dame de CoeurPhal. Elise de ValecPhal. Frisson1984 Vacherot-Lecoufle33/82413Phal. ScaramouchePhal. MarquisePhal. Mouchette1979 Vacherot-Lecoufle30/14520Phal. FrissonPhal. MouchettePhal. Scherzo1979 Vacherot-Lecoufle75/27900Phal. Ever-spring StarPhal. Matou FreedPhal. Frisson1990 Ever-spring1/12470Phal. RousserolePhal. CataractePhal. Frisson1984 Vacherot-Lecoufle76/132615					0 3 0 1
Phal. Mouchette Phal. Francine Phal. Anouche 1972 Vacherot-Lecoufle 71/4106 0 Phal. Elise de Valec Phal. Raptigny Phal. Mouchette 1980 Vacherot-Lecoufle 70/1980 1 1 Phal. Dame de Coeur Phal. Elise de Valec Phal. Frisson 1984 Vacherot-Lecoufle 33/82 4 1 3 Phal. Scaramouche Phal. Marquise Phal. Mouchette 1979 Vacherot-Lecoufle 30/1452 0 Phal. Frisson Phal. Mouchette Phal. Scherzo 1979 Vacherot-Lecoufle 75/2790 0 Phal. Ever-spring Star Phal. Matou Freed Phal. Frisson 1990 Ever-spring 1/1247 0 Phal. Rousserole Phal. Cataracte Phal. Frisson 1984 Vacherot-Lecoufle 76/132 6 1 5					0 1
Phal. Elise de ValecPhal. RaptignyPhal. Mouchette1980 Vacherot-Lecoufle70/198011Phal. Dame de CoeurPhal. Elise de ValecPhal. Frisson1984 Vacherot-Lecoufle33/82413Phal. ScaramouchePhal. MarquisePhal. Mouchette1979 Vacherot-Lecoufle30/14520Phal. FrissonPhal. MouchettePhal. Scherzo1979 Vacherot-Lecoufle75/27900Phal. Ever-spring StarPhal. Matou FreedPhal. Frisson1990 Ever-spring1/12470Phal. RousserolePhal. CataractePhal. Frisson1984 Vacherot-Lecoufle76/132615	-				1
Phal. Dame de Coeur Phal. Elise de Valec Phal. Frisson 1984 Vacherot-Lecoufle 33/82 4 1 3 Phal. Scaramouche Phal. Marquise Phal. Mouchette 1979 Vacherot-Lecoufle 30/1452 0 Phal. Frisson Phal. Mouchette Phal. Scherzo 1979 Vacherot-Lecoufle 75/2790 0 Phal. Ever-spring Star Phal. Matou Freed Phal. Frisson 1990 Ever-spring 1/1247 0 Phal. Rousserole Phal. Cataracte Phal. Frisson 1984 Vacherot-Lecoufle 76/132 6 1 5	-		++		
Phal. Dame de Coeur Phal. Elise de Valec Phal. Frisson 1984 Vacherot-Lecoufle 33/82 4 1 3 Phal. Scaramouche Phal. Marquise Phal. Mouchette 1979 Vacherot-Lecoufle 30/1452 0 Phal. Frisson Phal. Mouchette Phal. Scherzo 1979 Vacherot-Lecoufle 75/2790 0 Phal. Ever-spring Star Phal. Matou Freed Phal. Frisson 1990 Ever-spring 1/1247 0 Phal. Rousserole Phal. Cataracte Phal. Frisson 1984 Vacherot-Lecoufle 76/132 6 1 5	1		1 1		
Phal. ScaramouchePhal. MarquisePhal. Mouchette1979 Vacherot-Lecoufle30/14520Phal. FrissonPhal. MouchettePhal. Scherzo1979 Vacherot-Lecoufle75/27900Phal. Ever-spring StarPhal. Matou FreedPhal. Frisson1990 Ever-spring1/12470Phal. RousserolePhal. CataractePhal. Frisson1984 Vacherot-Lecoufle76/132615					4
Phal. FrissonPhal. MouchettePhal. Scherzo1979 Vacherot-Lecoufle75/27900Phal. Ever-spring StarPhal. Matou FreedPhal. Frisson1990 Ever-spring1/12470Phal. RousserolePhal. CataractePhal. Frisson1984 Vacherot-Lecoufle76/132615			+	-+	0
Phal. Ever-spring Star Phal. Matou Freed Phal. Frisson 1990 Ever-spring 1/1247 0 Phal. Rousserole Phal. Cataracte Phal. Frisson 1984 Vacherot-Lecoufle 76/132 6 1 5		-	+ +	-+	
Phal. Rousserole Phal. Cataracte Phal. Frisson 1984 Vacherot-Lecoufle 76/132 6 1 5					0
					0
	;				6
Phal. Sylvie Phal. Elisabethae Phal. Jardin des Plantes 1942 Vacherot-Lecoufle 5/6169 0			+ +	-	0
			+-+		
Phal. Domremy Phal. Sylvie Phal. Fanchette 1960 Vacherot-Lecoufle 2/6164 0					0
	.				1
Phal. Snow Leopard Phal. Alida Phal. Francine 1982 C. Hoover 74/186 4 3	1				4
Phal. Sand Pebbles Phal. Snow Leopard Phal. Sarah Elizabeth Rowe 1986 E. Carlson 14/24 5 1 3			1 1		4
	-		+		
Phal. Melissa Dawn Phal. Alice Gloria Phal. Francine 1973 R. Ernst 15/212 2 2					2
Phal. Hokuspokus Phal. Lipperose Phal. Francine 1974 A. Rohl 67/794 1 1 1					1
Phal. Dawn Promise Phal. Dawn Welcome Phal. stuartiana 1992 J. Ewing 2/51 0					0
Phal. Dawn Treader Phal. Dawn Promise Phal. Gladrose 1992 H. Hager 25/48 6 1 5					6
			+-+	1	
Phal. Gloriosa Phal. Pink Glory Phal. stuartiana 1948 Alberts / Merkel 7/4803 3 1				1	2
Phal. Kathy MaguirePhal. GloriosaPhal. Zada1964 C. Beard4/478922	!				2
Phal. Kathryn Leahey Phal. Kathy Maguire Phal. Betty Beard 1969 C. Beard 5/4780 0	ΙT		17		0
Phal. Eagle Phal. Kathryn Leahey Phal. Irene Van Alstyne 1973 C. Beard 7/4763 0	T		1 1		0
	+		+	-+	0
	+		+	$-\!\!\!+\!\!\!\!-$	
Phal. New Cinderella Phal. Pinlong Cinderella Phal. New Eagle 1997 Brother 48/1985 2 1					1
Phal. Nobby's Pink Lady Phal. Nobby's Valentine Phal. New Cinderella 2000 Nobby Orchids 51/1146 7 3 2	:			1	6
Phal. Chian Xen Pearl Phal. Ching Hua Spring Phal. Nobby's Pink Lady 2002 Fu-Liang Huang 174/1042 25 5 4					9
Phal. Cypress Pink Phal. New Eagle Phal. Samson 1987 Lo Tzung-Jen 5/2857 0	$\pm \pm$		$\dagger \dagger$	-+	0
			+-+		
Phal. Sun Prince Phal. Cypress Pink Phal. Houpi Beauty 1995 Sogo 39/2844 0					0
	;				7
Phal. Leda Phal. amabilis Phal. stuartiana 1888 Veitch 16/51 0					0
Phal. Ariadne (1896) Phal. aphrodite Phal. stuartiana 1896 Veitch 8/23093 0					0
			+		_
Phal. Perle Blanche Phal. Ariadne (1896) Phal. Rothschildiana 1896 Vacherot-Lecoufle 1/20825 0		_			0
Phal. Psyche Phal. Gilles Gratiot Phal. Perle Blanche 1932 Vacherot-Lecoufle 10/20824 0					0
Phal. Altadena Phal. La Canada Phal. Psyche 1946 Orchid Research 7/20776 0					0
Phal. Doctor Henry O. Eversole Phal. Altadena Phal. Winged Victory 1950 Orchid Research 14/9474 1 1					1
			+ +	-+	0
	.	-	+ +		
Phal. Golden Sands Phal. Fenton Davis Avant Phal. lueddemanniana 1964 Fields Orchids 140/7717 18 1 8 6	-		4	1	16
	;				9
Phal. Brother Angel Phal. Golden Buddha Phal. Golden Amboin 1988 Brother 2/100 1 1					1
Phal. Salu Beauty Phal. Golden Amboin Phal. Sentra 1995 Ching Her 8/636 0			1 1		0
	.		+		
Phal. Salu Spot Phal. Paifang's Auckland Phal. Golden Amboin 1992 Ching Her 44/1868 3 1 2	-	_			3
	!				3
	;			1	11
Phal. Liu Tuen-Shen Phal. gigantea Phal. Golden Sands 1979 I. Dobkin 80/5548 6 4				2	6
			+-+		
Phal. Fortune Buddha Phal. Golden Buddha Phal. Liu Tuen-Shen 1983 Brothers 82/950 3 1 2	-		+		3
Phal. Brother Buddha Phal. Fortune Buddha Phal. Brother Angel 1992 Brother 26/98 1 1	.				1
Phal. Ambo Buddha Phal. Brother Buddha Phal. amboinensis 1993 Brother 4/4 30 1 14 13	3		1	1	30
Phal. Darling Taiwan Phal. Barbara Moler Phal. Liu Tuen-Shen 1982 Darling 17/1595 0			1 1		0
Phal. Three Stars Phal. Paifang's Queen Phal. Darling Taiwan 1994 H. N. Hsiao 2/1553 0	+		+	-+	0
	++	-	+	$-\!\!\!+\!\!\!\!-$	
Phal. Sentra Phal. Paifang's Queen Phal. Three Stars 1994 H. N. Hsiao 16/1550 0	$+\!\!\!+\!\!\!\!+$		+ +	\longrightarrow	0
Phal. Paifang's Auckland Phal. Liu Tuen-Shen Phal. Paifang's Queen 1987 Paifang Orchid Garden 43/2059 0			\perp		0
Phal. Solar Flare Phal. Golden Sands Phal. Golden Pride 1979 Fort Caroline 19/71 29 19 10	o 🗆				29
Phal. Mattie Shave Phal. Mary Lou Stoddard Phal. Fenton Davis Avant 1962 Roy Fields 6/1832 0	\top		1 1		0
	+		+	-+	
Phal. Miami Maid Phal. Mattie Shave Phal. Winifred Prahl 1968 Fields Orchids 48/1815 2 1	+		+		1
Phal. Winter Maiden Phal. Miami Maid Phal. White Gull 1973 Hausermann 62/991 2 2	$\perp \! \! \perp \! \! \perp$				2
Phal. Winter Kaala Phal. Winter Maiden Phal. Mount Kaala 1985 Aromic Gardens 18/522 0					0
Phal. Margaret Bean Phal. Doris Phal. Altadena 1953 R. Bean 35/17082 7 1 2	-		T		3
			+	-+	0
Phal. Spitfire Phal. Margaret Bean Phal. Roselle 1960 Rod McLellan Co. 4/10923 0	$+\!+$		+		
Phal. Mad Hatter Phal. Spitfire Phal. Ann Hatter 1965 Rod McLellan Co. 104/10910 3 1 1	.			1	3
Phal. Mad Lips Phal. Ann Hatter Phal. Mad Hatter 1969 Rod McLellan Co. 42/1758 0					0
Phal. Hugo Freed Phal. Ella Freed Phal. Mad Lips 1973 Freed 63/1062 8 8	:		1 1		8
		1	+	-+	2
	-		+		
Phal. Freed's Danseuse Phal. Ella Freed Phal. Career Girl 1975 Freed 54/5159 4 4			+ +	\longrightarrow	4
		l	⊥ 1		0
Phal. Lien-Hung Lip					0
		1		$-\!-\!\!-\!\!-$	
Phal. Zuma Dancer Phal. Barbara Freed Saltzman Phal. Freed's Danseuse 1979 Zuma Canyon 10/3806 0	++		1 1		1
Phal. Zuma Dancer Phal. Barbara Freed Saltzman Phal. Freed's Danseuse 1979 Zuma Canyon 10/3806 0 Phal. Jason Beard Phal. Pueblo Jewel Phal. Mad Hatter 1972 C. Beard 46/6521 4 4			$+ \overline{1}$		4
Phal. Zuma Dancer Phal. Barbara Freed Saltzman Phal. Freed's Danseuse 1979 Zuma Canyon 10/3806 0				1	0 6

ПП	П	Phal. Elwyn	Middleton	Phal. Ruby Lips	Phal. Goleta	1962 C. Beard	5/11432	0								0
HH		Phal. Suen		Phal. Susan Merkel	Phal. Elwyn Middleton	1965 C. Beard	24/9849	0				-		-		0
HH				+	,					1		-		-		
HH		Phal. Red		Phal. Pink Jewel (1964)	Phal. Suemid	1968 C. Beard	21/6570	1		1		_	_	_		1
Ш	4	Phal. H		Phal. Red Lip (1968)	Phal. Lois Jansen	1972 C. Beard	30/4711	3		1	1				<u> </u>	2
Ш	Ш		Ella Day	Phal. Ella Freed	Phal. Happy Day	1992 Lo Ching-Po	1/4419	0								0
		Phal.	Tsuei You Queen	Phal. Terry-Beth Ballard	Phal. Ella Day	1992 Tsuei You	1/4418	0								0
		Phal. Car	ter Shenk	Phal. Lois Jansen	Phal. Suemid	1972 C. Beard	16/5275	0								0
HH		Phal. Lu		Phal. Lucky Lady	Phal. Carter Shenk	1979 Kelly Yu	4/5219	0								0
HH		Phal. Midl		Phal. Ruby Lips	Phal. Elwyn Middleton	1966 C. Beard	9/3045	0								0
HH	+	Phal. Lad			,	1971 C. Beard		3		1	2	-		+-		3
HH	+			Phal. Ruby Zada	Phal. Midlip		64/2881			1	2	_		-		
Ш	44	Phal. Redfa		Phal. Goleta	Phal. Ann Hatter	1967 Rod McLellan Co.	68/8101	0								0
Ш	Ш	Phal. Marc	quise	Phal. Redfan	Phal. Lady Ruby	1975 Vacherot-Lecoufle	64/1823	1			1					1
		Phal. Eva l	Lou	Phal. Suemid	Phal. Redfan	1971 C. Beard	54/5744	1			1					1
		Phal. Cindy	Brandt	Phal. Goleta	Phal. Palm Beach	1963 C. Beard	26/1788	2		2						2
Ш	Ħ	Phal. Dary	l Beard	Phal. Dos Pueblos	Phal. Cindy Brandt	1966 C. Beard	58/1627	1			1					1
HH		++	ra Henderson	Phal. Daryl Beard	Phal. Long Life	1974 C. Beard	15/206	0								0
HH	+	Phal. Fl		Phal. Teakwood	_	1984 Krull-Smith	77/186	6		4	2	-		-		6
HH	+				Phal. Vera Henderson					4		_	_			
Ш		hal. Dazzler		Phal. Margaret Bean	Phal. Thomas Tucker	1957 H. D. Wright	4/615	0								0
Ш	Ш	Phal. Galaxy	•	Phal. Dazzler	Phal. Arcadia	1957 H. D. Wright	2/560	2								0
		Phal. Reco	verer	Phal. Winifred Prahl	Phal. Galaxy	1960 H. D. Wright	3/558	0								0
	П	Phal. Val	ley Queen	Phal. Royal Veil	Phal. Recoverer	1968 H. Kagawa	3/555	0				Π				0
Ш	\prod	Phal. Q	ueen Anna	Phal. Anna Tham	Phal. Valley Queen	1980 Kodama	1/520	0								0
ΠН	$\dagger \dagger$			Phal. Queen Anna	Phal. Mount Martian	1980 Kodama	12/519	1		1		+	\top	1	<u> </u>	0
HH	+			Phal. Hakalau Wonder	Phal. Danny Lee	1985 Carmela	67/383	7		5	2	+	+	+	1	0
HH	+				,			0		٦		+		+	 	
Ш	4		al. Tokyo Bridal	Phal. Hakalau Queen	Phal. Mount Kaala	1997 Tokyo Orchid Nursery	3/183					_	_	_		0
Ш			hal. Cygnus	Phal. Tokyo Bridal	Phal. Silky Moon	1997 Kokubunji	47/179	5	1	2	1					0
Ш	Pha	I. Innocence	<u> </u>	Phal. Elisabethae	Phal. Psyche	1945 Vacherot-Lecoufle	5/6899	0								0
	Ph	ıal. Altano		Phal. Altadena	Phal. Innocence	1948 Orchid Research	1/6871	0								0
	F	hal. White F	oam	Phal. Altano	Phal. Winged Victory	1956 Shaffer's	8/6870	0								0
HH		Phal. Pinoco		Phal. White Foam	Phal. equestris	1959 O. Kirsch	4/6860	0								0
+-		Ariadne-Ama		Phal. amabilis	Phal. Ariadne (1896)	1896 Unknown	1/9037	0								0
				+	` '			7		2	4	-		+-		7
_		nda Vasquez		Phal. Hugo Freed	Phal. stuartiana	1976 Zuma Canyon	5/6			3	4	_	_	_		
_		ollie's Joy		Phal. Goldiana	Phal. stuartiana	1983 Livingston's Orchids	2/2	7		4	2				1	7
Phal	. Flo	or Del Valle		Phal. Golden Amboin	Phal. stuartiana	1985 J. Ewing	2/2	11		3	8					11
Phal	. Ch	narisma		Phal. Jolly Roger	Phal. stuartiana	1984 J. Ewing	2/2	7		3	4					7
Phal	. Не	ermione		Phal. lueddemanniana	Phal. stuartiana	1899 Veitch	11/8840	3			1				2	3
Pha	al. R	Rosy Charm		Phal. Hermione	Phal. Pink Wave	1962 E. Iwanaga	32/8474	13		5	7					12
-		Ministripes		Phal. Rosy Charm	Phal. Pinocchio	1968 Stoddard	10/6855	3		1	1					2
		I. Jiminy Cric		Phal. Ministripes		1971 Jones & Scully	6/6720	1		1	-					1
HH	_				Phal. Red Lip (1965)	· · · · · · · · · · · · · · · · · · ·				1		_	_			
Ш		al. Cindy Tsa		Phal. Red Lip (1965)	Phal. Jiminy Cricket	1975 I. Dobkin	12/5686	0				_		_		0
Ш		hal. Chiali S	•	Phal. Cindy Tsai	Phal. Lucky Shenk	1983 Long River	21/5211	0								0
Ш		Phal. Houpi		Phal. Tsuei You Queen	Phal. Chiali Stripe	1992 Lai Ching-Feng	5/4417	0								0
		Phal. Mode	rn Stripes	Phal. Freed's Danseuse	Phal. Chiali Stripe	1987 Lee Peng-Lang	21/4447	0								0
Ш	П	Phal. Okay	/ Seven	Phal. Modern Stripes	Phal. Houpi Beauty	1992 Liao Lung-Hsien	24/2865	1		1						1
		Phal. Tai:		Phal. Okay Seven	Phal. equestris	1997 Taiwan Sugar	25/593	4		1	3					4
-			Shang's Stripes	Phal. Modern Stripes	Phal. Matou Freed	1989 M. Lin	84/2528	5		1	4					5
-							· · · · · ·			_	-		_	-		
+		Phal. Ta		Phal. Lien-Hung Lip	Phal. Chih Shang's Stripes	1996 Sogo	4/1796	0		<u> </u>	$\vdash \vdash \vdash$	+	+	+	!	0
Щ		hal. Chiali F		Phal. Cindy Tsai	Phal. Ella Freed	1983 Long River	25/4433	0				_			<u> </u>	0
Ш		Phal. Matou		Phal. Vicki Sue Lockhart	Phal. Chiali Freed	1988 Ma-Tou	11/557	0							<u> </u>	0
ШП	Ш	Phal. Minh	no Lit-Rose	Phal. Matou Rose	Phal. equestris	1996 Min-Ho	8/520	0		L				┸		0
Ш	П	Phal. Sog	go Alice	Phal. Minho Lit-Rose	Phal. Taisuco Jewel	1999 Sogo	13/508	1		1		T		T		1
-		Phal. Matou		Phal. Zuma Dancer	Phal. Chiali Freed	1988 Ma-Tou	41/3796	0				1	1	1		0
+-		Martha Ken		Phal. Sunrise	Phal. Rosy Charm	1967 Mrs. L. McCoy	1/1591	0				+	+	+	†	0
			•		·	· · · · · · · · · · · · · · · · · · ·						+	+	+	 	
HH	_	I. Waimanal		Phal. Martha Kennedy	Phal. Harlequin	1978 John Noa	3/1590	0		_		-	+	+	-	0
Ш	_	al. Kathleen	ı Al	Phal. Waimanalo Sunrise	Phal. Wendel George	1978 David Ai	139/1587	13		3	9	_		4	1	13
Pha	al. V	iolet Glow/		Phal. Hermione	Phal. Susie Darlin	1963 E. Iwanaga	4/1647	1			1				<u> </u>	1
L P	hal.	Schilglow		Phal. Violet Glow	Phal. schilleriana	1968 E. Iwanaga	1/1670	1		L	1			┸		1
ПП	Pha	l. Elaine Mis	hima	Phal. Viola Tanaka	Phal. Schilglow	1982 H. Tanaka	3/1669	0								0
ΠП		al. Jutta Bru		Phal. Elaine Mishima	Phal. Lipperose	1982 H. Tanaka	10/1505	0				1				0
HH	_	hal. Carmel		Phal. Jutta Brungor	Phal. Frisson	1989 G. & D. Kobayashi	73/1300	2			2	+	\dashv	1	1	2
+			•	-						 		+	+	+	 	0
HH			rench Fantasia	Phal. Ho's Fancy Leopard	Phal. Carmela's Spots	1993 Tin-Fan Ho	41/1071	0	_	-	_	+		+	 	
Щ		Phal. Leop		Phal. Sun Prince	Phal. Ho's French Fantasia	1997 Sogo	242/837	32	1	4	6	_			1	12
Ш	Ш	Phal. I-H	sin Sun Beauty	Phal. Salu Peoker	Phal. Leopard Prince	2003 W. T. Chien	10/15	15		2	4				1	7
ШП	Ph	al. Hilo Lip		Phal. Hilo Beauty	Phal. Elaine Mishima	1985 H. Tanaka	72/172	17	L	3	11	_ :	1	1		15
Phal	. Liv	ely Susan		Phal. Bataan	Phal. stuartiana	1951 Mrs. L. McCoy	2/9221	0				T	\top	1		0
-		unrise		Phal. Lively Susan	Phal. Roselle	1956 Mrs. L. McCoy	21/9219	2			2	+	\top	1	<u> </u>	2
		Sunbeam		Phal. Gigi	Phal. Sunrise	1963 Mrs. L. McCoy	8/4906	0				+		+	 	0
	ıaı.			Phal. Moon Monarch	Phal. Sumbeam	1967 Jones & Scully	4/4890	0		-	\vdash	+	+	+	1	0
+	Dh-	I. Honey Dev										- 1				

Phal. Bamboo Baby	Phal. Honey Dew	Phal. amboinensis	1971 Jones & Scully	72/4878	21	1	10	8					19
Phal. Misty Green	Phal. Barbara Moler	Phal. Bamboo Baby	1981 J. Redlinger	103/4709	28		12	16					28
Phal. Golden Peoker	Phal. Misty Green	Phal. Liu Tuen-Shen	1983 Brothers	218/4087	9		4	2	2		1		9
Phal. Ever-spring Light	Phal. Ever-spring Star	Phal. Golden Peoker	1992 Ever-spring	26/1246	5		1	2	1				4
Phal. Ching Hua Spring	Phal. Minho Princess	Phal. Ever-spring Light	1998 Ching Hua	6/1182	0								0
Phal. Yellow Peoker	Phal. Golden Peoker	Phal. Salu Beauty	1998 Ching Her	18/508	0								0
Phal. Salu Peoker	Phal. Yellow Peoker	Phal. Golden Sun	2000 Ching Her	94/387	4			3					3
Phal. I-Hsin Black Jack	Phal. Golden Peoker	Phal. Leopard Prince	1999 W. T. Chien	28/212	14		3	7	1				11
Phal. Orglade's Lemon Dew	Phal. Honey Dew	Phal. Deventeriana	1989 Jones & Scully	8/8	20		10	6		1	1		18
Phal. Best Girl	Phal. Pink Vision	Phal. Sunrise	1961 Mrs. L. McCoy	62/4423	6			4					4
Phal. Dear Heart	Phal. Best Girl	Phal. Ondine	1971 Hager Orchids	13/3551	0								0
Phal. Herbert Hager	Phal. Dear Heart	Phal. Flor de Mato	1977 Stewart Inc.	56/2936	14		3	11					14
Phal. Pinlong Cinderella	Phal. Morgenrot	Phal. Herbert Hager	1983 Today Tropical Nursery	23/2299	1								0
Phal. Ann Lovelace	Phal. Radiant Glow	Phal. Sunrise	1962 Mrs. L. McCoy	39/406	3			3					3
Phal. Pink Formal	Phal. Pink Chiffon	Phal. Ann Lovelace	1972 Freed	6/251	0								0
Phal. Rhoda Fredricks	Phal. Ann Marie Beard	Phal. Pink Formal	1973 Freed	9/189	4		1	3					4
Phal. Hilo Beauty	Phal. Mamie Moser	Phal. Rhoda Fredricks	1985 H. Tanaka	1/173	0								0
Phal. Arctic Tern	Phal. Elinor Shaffer	Phal. stuartiana	1979 Beall	1/57	0								0
Phal. Good Tern	Phal. Arctic Tern	Phal. Alida	1986 Livingston's Orchids	9/56	2		1	1					2
Phal. Bright Morning	Phal. Good Tern	Phal. French Delight	1989 Carmela	10/13	4		2	2					4
Rnthps. Mildred Jameson	Renanthera monachica	Phal. stuartiana	1969 H. Wallbrunn	4/4	16		3	8			1		12

Observations related to above table:

- * Of the 399 Phal. stuartiana F1 Hybrids, only 17 are on the table.
- * In all cases Phal. stuartiana is used as the seed/pod parent.
- * Lines were determined by the most recent introduction of Phal. stuartiana and related F1 hybrids. (If a F3 Phal. stuartiana grex was crossed with a F5 Phal. stuartiana grex, the hybrid would be placed in the F3 grex line.)
- * There was one intergeneric hybrid in above list of the 193 total intergeneric Phal. stuartiana hybrids (second most intergeneric progeny and most awards).
- * Of the 17 Phal. stuartiana F1 Hybrids on the table only seven have 10 or more progeny included on the table. Comments on some of these F1 hybrid lines follow:



Phal. Cassandra (Phal. equestris x Phal. stuartiana) 'Soroa' AM/AOS Mar 1989, NS 4.5 cm

> Phal. Tying Shin Fantastic World (Phal. Chian Xen Pearl x Phal. Timothy Christopher) 'Diana' AM/AOS Mar 2013, NS 7.1 x 6.7 cm



- * <u>Phal. Cassandra</u> (Phal. equestris x Phal. stuartiana) was made in 1896 by Veitch, there are a total of 226 F1 hybrids and 3759 total progeny.
 - * All of these hybrids would be considered miniature, aka. small, Phalaenopsis
 - * The above table includes six F1 hybrids and 17 total progeny (Included in the Phal. Cassandra line is the allied Phal. Terilyn Fujitake (Phal. Pink Fantasy x Phal. stuartiana) line).
 - * Of the grexes in this table, six grexes have received the 10 most AOS awards in this group.
 - * Of the grexes in this table, four grexes have the 10 most F1 progeny in this group.
 - * The most recently registered grex in this table is Phal. Tying Shin Fantastic World (Phal. Chian Xen Pearl x Phal. Timothy Christopher) was made in 2008 by Kuo Liang Hung, there are a total of 3 F1 progeny.



Phal. Wiganiae (Phal. schilleriana x Phal. stuartiana)



Phal. Chian Xen Pearl (Phal. Ching Hua Spring x Phal. Nobby's Pink Lady) 'Ming-Ho' AM/AOS Mar 2002, NS 9.3 x 7.5 cm

<u>Phal. Wiganiae</u> (Phal. schilleriana x Phal. stuartiana) was made in 1899 by S. Low, there are a total of 17 F1 hybrids and 21,520 total progeny (there are a total of 36,840 total Phalaenopsis hybrids).

* Includes the largest number of grexes, 110, in above table will divide into major 'lines'

- Phal. Fontainebleau (Phal. schilleriana x Phal. Wiganiae) was made in 1930 by Vacherot-Lecoufle, there are a total of 21 F1 hybrids and 18,656 total progeny.
 - * Has most of the classic pinks associated with Phal. stuartiana, not unusal for the same grexes to be 'spotted.'
 - Two grexes are in the top ten in number of F1 grexes,
 Phal. Happy Valentine most recently registered.



Phal. Happy Valentine (Phal. Otohime x Phal. Odoriko) 'Excell' AM/AOS Mar 1993, NS 11.7 x 8.7 cm

- * Phal. Chian Xen Pearl (Phal. Ching Hua Spring x Phal. Nobby's Pink Lady), included in above table, is the most recent progeny in the table of Phal. Happly Valentine.
- * Phal. Jardin des Plantes (Phal. Ariadne-Amabilis x Phal. Wiganiae)

was made in 1899 by Jardin des Plantes, there are a total of 8 F1 hybrids and 9,036 total

progeny – Phal. Lachesis (Phal. Fanchette x Phal. Cendrillon) was made in 1955 by Vacherot-Lecoufle, there are a total of 24 F1 hybrids and 6,704 total progeny.

- * This line has the Classical Large White Phalaenopsis.
- * Phal. Sogo Yukidian is among the top ten in above table in number of F1 progeny. The clone picture had 54 flowers and 2 buds on one multi-branched inflorescences.
- * The name 'French spots' are tied to
 - * Plants that were breed by Vacherot-Lecoufle with spots
 - * Spot Webster's New World Dictionary defines spot as "a small area that is different, as in color or texture, from the background or main area of which it is a part." With Phalaenopsis a spot can be circular, a blotch (a large or irregular spot), or a bar (strip, band or broad line)



Phal. Sogo Yukidian (Phal. Yukimai x Phal. Taisuco Kochdian) 'V3' CCE/HCC/AOS Mar 2015, NS 12.8 x 11.3 cm

- * The classical 'French spots' are mostly in two related lines
 - * Phal. Jardin des Plantes (Phal. Ariadne-Amabilis x Phal. Wiganiae) was made in 1899 by Jardin des Plantes, there are a total of 8 F1 hybrids and 9,036 total progeny Phal. Anouche (Phal. Fanchette x Phal. Isis) was made in 1970 by Vacherot-Lecoufle, there are a total of 9 F1 hybrids and 5,011 total progeny.
 - * Phal. Sylvie (Phal. Elisabethae x Phal. Phal. Jardin des Plantes) was made in 1942 by Vacherot-Lecoufle, there are a total of 5 F1 hybrids and 6,169 total progeny.
- * There are two breeding programs of 'French spots'



Phal. Dame de Coeur (Phal. Elise de Valec x Phal. Frisson) 'Ponkan's Beauty Spot' HCC/AOS Jan 1986, NS 8.2 cm

- The original 'French' line as defined above
- * The 'American' line which started with Vacherot-Lecoufle plants bred by American breeders but soon add plants outside of the original Vacherot-Lecoufle line.

* Phal. Ariadne (1896)

(Phal. aphrodite x Phal. stuartiana) was made in 1896 by Veitch, there are a total of 8 F1 hybrids and 23,093 total progeny (there are a total of 36,840 total Phalaenopsis hybrids).

- * Includes the second largest number of grexes, 68, in above table will divide into major 'lines'
 - * Phal. Golden Sands (Phal. Fenton Davis Avant x Phal. lueddemanniana) was made in 1964 by Fields Orchids, there are a total of 140 F1 hybrids and 7,717 total progeny.
 - * The introduction Phal. lueddemanniana in this line has enhanced the tendance for spots, especially blotches.
 - * Two grexes in this line were in the top 10 for number of AOS awards, Phal. Ambo Buddha (Phal. Brother Buddha x Phal. amboinensis) and Phal. Solar Flare (Phal. Golden Sands x Phal. Golden Pride).
 - * Margaret Bean (Phal. Doris x Phal. Altadena) was made in 1953 by Rod McLellan Co., there are a total of 4 F1 hybrids and 10,923 total progeny.
 - * This is line included white Phalaenopsis with a red lip as well as another white Phalaenopsis line.
 - * Two noted grexes in this line are: Phal. Florida Snow (Phal. Teakwood x Phal. Vera Henderson) and Phal. Cygnus (Phal. Tokyo Bridal x Phal. Silky Moon).



Phal. Sand Pebbles (Phal. Snow Leopard x Phal. Sarah Elizabeth Rowe) 'Echo Valley' HCC/AOS Feb 1989, NS 9.0 cm



Phal. Ambo Buddha (Phal. Brother Buddha x Phal. amboinensis) 'Phoenix' FCC/AOS Apr 2000, NS 7.1 x 6.8 cm



Phal. Cygnus (Phal. Tokyo Bridal x Phal. Silky Moon) 'Ono-2' FCC/AOS Feb 2001, NS 14.0 x 12.0 cm



Phal. Hermione (Phal. Lueddemanniana x Phal. stuartiana) 'Songer'

Phal. Hermione

(Phal. lueddemanniana x Phal. stuartiana) was made in 1899 by Veitch, there are a total of 11 F1 hybrids and 8,840 total progeny.

- This line of breeding is known for stiped Phalaenopsis and dark lips.
- * Examples grexes from the table would be:
 - * Phal. Kathleen Ai(Phal. Waimanalo Sunrise xPhal. Wendel George) was

made in 1953 by Rod McLellan Co., there are a total of 4 F1 hybrids and 10,923 total progeny.



Phal. Sunrise (Phal. Lively Suzan x Phal. Roselle) 'Rose' HCC/AOS Mar 1959

* Phal. Leopard Prince (Phal. Sun Prince x Phal. Ho's French Fantasia) was made in 1997 by Sogo, there are a total of 242 F1 (the most F1 progeny with Phal. stuartiana parentage, yet registered in 1997) and 837 total progeny.

- * Phal. Lively Susan (Phal. Bataan x Phal. stuartiana) was made in 1951 by Mrs. L. McCoy, there are a total of 2 F1 hybrids and 9,221 total progeny.
- * Includes the third largest number of grexes, 28, in above table. With one major line Phal. Lively Suzan Phal. Sunrise.
- * This line of breeding is known for smaller, branched inflorescence, pink Phalaenopsis.
- * The key grex from this line is Phal. Golden Peoker (Phal. Misty Green x Phal. Liu Tuen-Shen) made in 1983 by Brothers, there are 218 F1 and 4087 total progeny.



Phal. Kathleen Ai (Phal. Waimanalo Sunrise x Phal. Wendel George) 'Memoria Pauline Krause' AM/AOS May 1992, NS 9.6 x 8.2 cm



Phal. Leopard Prince (Phal. Sun Prince x Phal. Ho's French Fantasia) 'Hwa Yuan Red Leopard' FCC/AOS Mar 2013, NS 11.2 x 9.6 cm



Phal. Golden Peoker (Phal. Misty Green x Phal. Liu Tuen-Shen) 'Cat's Paw Magician' AM/AOS Mar 2002, NS 7.4 x 7.6 cm



Phal. stuartiana f. nobilis 'Paraiso Tropical' AM/AOS Apr 2013, NS 7.0 x 6.2 cm

Synonyms:

None recently

Varieties / forms:

There are two recognized forms:

Phal. stuartiana f. nobilis – pale, sulfuryellow flowers. There maybe some very lite spotting on the dorsal sepal and petals.

Phal. stuartiana f. punctatissima – spotting on the dorsal sepal and petals like the spotting on the lateral sepals. Spotting is unstable, dependent on environmental changes when the flowers are in bud, resulting in random spots from flower to flower (note example).



Phal. stuartiana f. punctatissima 'Sogo' HCC/AOS Apr 1996, NS 5.5 x 4.5 cm

Awards:

Phal. stuartiana	FCC	AM	HCC	AQ	JC	CCM	CCE	СНМ	CBM	TOTAL
AOS		12	14			5		2		33
Voor(a) Arronded		1977-	1977-			1974-		2007-		1974-
Year(s) Awarded		2013	1998			2011		2013		2013

AOS Quality Awardees (not included prior, highest point if more than one):



Phal. Solar Flare
'Arizona Sunshine' AM/AOS
Mar 1984, NS 5.5 cm
(Phal. Golden Sands x
Rlc. Golden Pride
[Phal. Ariadne (1986) –
Golden Sands line])



Phal. Misty Green
'Selsal' AM/AOS
Feb 1994, NS 8.9 x 8.5 cm
(Phal. Barbara Moler x
Phal. Bamboo Baby
[Phal. Lively Suzan line])



Phal. Zuma's Pixie
'Cat's Paw Purr-fect' AM/AOS
Feb 2004, NS 4.5 x 4.7 cm
(Phal. Carmela's Pixie x
Phal. equestris
[Phal. Cassandra line])



Phal. Taida Lawrence
'Chester Shimizu' AM/AOS
May 2006, NS 7.8 x 8.1 cm
(Phal. Brother Lawrence x
Phal. Goldberry
[Phal. Lively Suzan line])



Phal. Brother Precious Stones 'Sedona's First Son' AM/AOS Feb 2004, NS 6.1 x 8.3 cm (Phal. Brother Fancy x Phal. Brother Purple [Phal. Lively Suzan line])



Phal. Carmela's Pixie
'Lines' AM/AOS
Oct 1996, NS 4.9 x 5.3 cm
(Phal. Terilyn Fujitake x
Phal. Cassandra
[Phal. Cassandra Line])



Phal. Maki Watanabe
'Myrna's Memory' AM/AOS
Jun 2014, NS 11.5 x 10.9 cm
(Phal. Romance Miki x
Phal. Otohime
[Phal. Wiganiae –
Phal. Fountainebleau Line])



Phal. Baldan's Kaleidoscope 'Golden Treasure' AM/AOS Apr 1992, NS 9.3 x 8.5 cm (Phal. Hausermann's Candy x Phal. Daryl [Phal. Wiganiae – Phal. Fountainebleau Line])

Most recent awardees:



Phal. Fuller's Paint Brush 'Mayfield' AM/AOS Apr 2019, NS 10.5 x 9.7 cm (Phal. Fuller's Miss x Phal. Sung Woei Rosaria [Phal. Cassandra Line])



Phal. Lioulin R Lip 'Snookie' JC/AOS Jan 2020, NS 8.2 x 7.5 cm (Phal. Tying Shin Unicorn x Phal. Lioulin Pretty Lip [Phal. Hermione Line])



Phal. AL Sun Hannover 'RED' AM/AOS Jan 2020, NS 6.7 x 7.0 cm (Phal. Mituo Sun x Phal. Hannover Passion [Phal. Ariadne – Phal. Golden Sands line])



Phal. Peggy Tauscher
'Owen' AM/AOS
Mar 2020, NS 9.3 x 8.5 cm
(Phal. Sogo Lawrence x
Phal. Tying Shin Forever Love
[Phal. Ariadne –
Phal. Golden Sands line])



Phal. Phoenix Legacy
'Shadow' HCC/AOS
Mar 2020, NS 6.7 x 6.0 cm
(Phal. Sogo Lawrence x
Phal. Brother Dendi
[Phal. Ariadne – Phal. Golden
Sands line])



Phal. Stuart Henderson
'Memoria Harold Smith' AM/AOS
Mar 2019, NS 14.5 x 12.5 cm
(Phal. John Naugle x
Phal. Crystelle Smith
[Phal. Phal. Ariadne –
Phal. Margaret Bean Line])



Phal. Susan Philips
'Logan' HCC/AOS
Mar 2020, NS 7.7 x 7.7 cm
(Phal. Emeraude x
Phal. Tsay's Evergreen
[Phal. Ariadne –
Phal. Doctor Henry O.
Eversole line])



Phal. Walnut Valley Purple Pixie

'B & M' AM/AOS

Sep 2020, NS 3.5 x 3.8 cm

(Phal. Purple Gem x

Phal. Pixie Star

[Phal. Cassandra Line])

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Building Block Data Sheet

Phalaenopsis amabilis, (L.) Blume, Bijdr. Fl. Ned. Ind.: 294 (1825)

[fal-en-OP-sis a-MA-bill-iss]

Phalaenopsis [Phal.] amabilis has one of the widest ranges of all phalaenopsis, northern Australia, Indonesia, Papua & New Guinea, the Philippines and New Britain. It is usually found in rainforests on trunks and branches overhanging rivers, swamps and streams occuring at elevations up to 600 meters. It is a medium sized, hot to warm growing, robust, epiphyte with a short, pendulous, robust stem enveloped by imbricating leaf bases and carrying 3 to 5 fleshy or coriaceous, shiny green leaves. It usually blooms in the spring and summer on a slender, to 3' [90 cm] long, racemose or paniculate, laxly few to many flowered inflorescence carrying color and size variable, fragrant, showy, long-lasting flowers.

Phal. amabilis is variable in many of its characters, as one would expect in a species with a broad geographic range that has genetic isolating mechanisms formed by the disjointed island biology. Most of the variation is minor and does not warrant formal recognition. This variation includes the amount of red and yellow pigment on the



Phalaenopsis amabilis 'Jayne Garrison' AM/AOS Jan 2010, NS 7.5 x 6.5 cm

lip, the presence and density of red spots on the lateral lobes of the lip and the overall flower shape.

It can handle more light than the average Phalaenopsis. You can tell if it is receiving the proper light levels if the leaves have a slight reddish cast.

Phal. amabilis is adaptable to a wider range of temperatures than other species in the genus. The temperature can range from 54-95 F (12-35 C), with the optimum temperature range from 64-90 F (18-31C). Leaf surfaces must be provided 70 percent shade from May to October and 50 percent shade in winter (temperate areas). If temperatures are under 68 F (20 C), the plants need to be cultivated under rather dry conditions as overwatering invites root rot. Flowering can be induced by maintaining a temperature of less than 64F (18 C) at night and 77 F (25 C) during the day for six to eight weeks.

Breeding Characteristics:

It is a member of the Phalaenopsis subgenus - Phalaenopsis section, which forms the basis (along with Phal. aphrodite) of the classical white Phalaenopsis species and hybrids. As a parent, Phal. amabilis contributes an increase in flower count, large size, and long arching inflorescences. Due to large size of the inflorescences and large robust leaves the plants are difficult for windowsill growers.

The table below has the registration of Phal. stuartiana progeny and associated awards with separate lines for total progeny as well as first (F1), second (F2), and third (F3) generations. This main feature of this table is it essentially show the breeding of ALL phalaenopsis since this table has 33,256 grexes while there are 36,935 grexes, that is 90% of all hybrids have Phal. amabilis lineage.

<u>amabilis</u>	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010	2020	Total
Reg	0	5	3	0	1	7	25	87	340	1241	3228	5802	8835	7649	5733	301	33257
Assc Awds	0	12	1	0	0	3	9	48	320	766	1247	2230	2864	2510	706	3	10719
F1	0	5	2	0	1	3	8	14	26	22	10	35	100	145	107	5	483
AA	0	12	1	0	0	3	5	0	2	1	2	6	54	43	14	0	143
F2	0	0	1	0	0	4	16	40	75	49	13	42	208	201	187	12	848
AA	0	0	0	0	0	0	4	38	12	6	8	376	156	72	33	0	705
F3	0	0	0	0	0	0	1	28	146	221	119	57	290	325	251	14	1452
AA	0	0	0	0	0	0	0	6	158	166	24	24	123	105	42	0	648

From this table one sees that Phal. amabilis has been and continues to be a major contributor in Phalaenopsis breeding programs. The first hybrid was registered in 1886. There was then a significant lull until the 1930s with a more significant increase after World War II. The use of Phal. amabilis peaked in the 1990s and 2000s.

The chart was generated to determine some of the major breeding lines, but is to large to be included here. Since Phal. is the basis of most Phalaenopsis, did focus on white Phalaenopsis. The starting point for this table was:

- * The Phal. stuartiana table from my report on Phal. stuartiana
- * The top five primary hybrids in number of awards and top 10 primary hybrids in number of their F1 progeny
- * The top five white hybrids in number of awards and top eight white hybrids in number of F1 progeny (per OrchidWiz X7.1, December 2020 update, this includes awards from other organizations besides AOS)
- * The five most recently awarded white phalaenopsis in OrchidWiz and in AOS OrchidPro
- * Seven white grexes mentioned by Carlos Fighetti in Brooklyn Botanic Garden web article on Phalaenopsis. The included the entire parentage of each grex identified above, with each grex listing parents, registration information, number of progeny, and awards. Observations related to above described table:
- * Of the 687 hybrids listed in the table, only 36 did NOT have Phal. amabilis, ~95% have Phal. amabilis progeny
- * Of the 483 Phal. amabilis F1 Hybrids, only 28 are on the table, 92.5%.
- * Phal. amabilis was used as the seed parent 17 times and the pod parent 12 times, this is roughly equal.
- * Lines were determined by the most recent introduction of Phal. amabilis and related F1 hybrids. (Example: An F3 Phal. amabilis grex is crossed with a F5 Phal. amabilis grex, the hybrid would be placed in the F3 grex line.)
- * There was NO intergeneric hybrids in this list.
- * Of the 28 Phal. stuartiana F1 Hybrids on the table 18 have 100 or more total progeny included on the table.

Another observation that was made was breeding lines associated with parentatage, as an example see the below table that show breeding between species in the subsection Phalaenopsis:

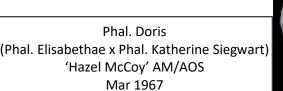
	amabilis	aphrodite	celebensis	equestris	lindenii	philippinensis	sanderiana	schilleriana	stuartiana		
amabilis		300++	1	5	3	2	12	15	5		
Number of crosses in table of 687 hybrids											
amabilis		91	0	2	0	1	1	4	1		

Clearly there has been significant breeding between Phal. amabilis and Phal. aphrodite. The 300+ grexes is associated with ~88% Phal. amabilis and ~13% Phal. aphrodite, this ratio of Phal. amabilis and Phal. aphrodite appears to be a key to breeding classical white Phalaenopsis. There where of other ratios between the members of this family that appear routinely but will not be discussed here.

Comments on some of these F1 hybrid lines follow:



Phal. Elisabethae (Phal. amabilis x Phal. rimestadiana) AM/RHS Mar 1929





- * <u>Classic Phalaenopsis Lines</u> are all tied to either Phal. Doris or Phal. Elisabethae (Phal. amabilis x Phal. rimestadiana [syn. Phal. amabilis], a parent of Phal. Doris, which is actually a 2nd generation Phal. amabilis. A 3rd generation Phal. amabilis is Phal. Jane L. Kingsbury (Phal. amabilia x Phal. Elisabethae)).
 - * The introduction of the tetraploid Phal. Doris caused an explosion of breeding in Phalaenopsis and to this day Phal. Doris progeny is ~87% of all Phalaenopsis Hybrids.
 - * Phal. Doris is 87.5% Phal. amabilis and 12.5% Phal. aphrodite.
 - * The continue crossing of Phal. amabilis and Phal. aphrodite is the foundation of the classic white Phalaenopsis with ~700 hybrids that are 95% or better similar parentage.
 - * The introduction of Phal. schilleriana results in the 'pink' lines and 'stripe' lines, such as Phal. Zada line, Phal. Cherubin line, Phal. Monique line, Phal. Rothschidiana line, Phal. Reve Rose, etc. to name just a few
 - * The introduction of Phal. equestris results in increase flower count, contrasting lips and additional peloric forms.
 - * The introducion of the other species in the sug-genus Phalaenopsis improves form, fower count, substance, etc.
 - * The most recent breeding trends is the introduction of species from the other phalaenopsis subgenera to additional color (such as solid yellow and reds), true miniature plants, etc.



Phal. Ruby Lips (Phal. Roselle x Phal. Doris) 'Malibu' AM/AOS Mar 1968



Phal. Abendrot (Phal. Lippezauber x Phal. Lippstadt) 'Zuma Canyon' AM/AOS May 1984, NS 11.5 cm



Phal. Charming Crystal Water (Phal. Tying Shin Valentine's Day x Phal. Fureshing Mark) 'Lee 1288' FCC/AOS Mar 2017, NS 9.0 x 8.7 cm



Phal. Fuller's Sunset (Phal. Taisuco Date x Phal. Chian Xen Queen) 'A08154' AM/AOS Mar 2015, NS 9.1 x 8.2 cm



Phal. Doris (Phal. Elisabethae x Phal. Katherine Siegwart) 'Angel' AM/AOS (89 pts) Feb 1952, NS 11.5 cm

- * Phal. amabilis Phal. aphrodite line is the cornerstone of breeding white Phalaenopsis.
 - As an indication of how the judging bar has moved since the introduction of Phal. Doris
 - * To the left is the oldest available picture of Phal. Doris 'Angel' although receiving an AM/AOS (there are two FCC's earlier for Phal. Doris but pictures were not available) it did received 89 pts, one point away from an FCC
 - * To the right the most recently awarded FCC to a grex in the Phal. amabilis Phal. aphrodite line, Phal. Joseph Palm 'Waterfield Snowball'



Phal. Joseph Palm (Phal. Joseph Palm x Phal. Grace Palm) 'Waterfield Snowball' FCC/AOS Jun 2011, NS 15.8 x 13.0 cm 11 flowers, 3 buds

- * Clearly the intensive breeding in this line has resulted in fuller and larger flowers that are crowded.
- * Breeding along this line was wanned in favor of the lines which include additional species from the subgenus Phalaenopsis that reduces the crowding from the increasingly larger flowers.



Phal. Taisuco Kochdian
(Phal. Kochs Schneestern x
Phal. Meridian)
(Crownfox Sugarloaf' FCC/AOS
Mar 2000, NS 14.0 x 12.0 cm
6 Flwrs, 3 Buds, 1 Infl
Phal. schilleriana 2.7%
Phal. stuartiana 1.2%
Phal. sanderiana 0.8%



Phal. Taisuco Crane
(Phal. Taisuco Windian x
Phal. Taisuco Kaaladian)
'Cat's Paw Ghost' AM/AOS
Mar 1988, NS 12.7 x 11.5 cm
10 Flwrs, 3 Buds, 1 Infl
Phal. schilleriana 4.2%
Phal. stuartiana 0.6%
Phal. sanderiana 0.6%



Phal. Cygnus
(Phal. Tokyo Bridal x
Phal. Silky Moon)
'Ono-2' FCC/AOS
Feb 2001, NS 14.0 x 12.0 cm
8 Flwrs, 4 Buds, 1 Infl
Phal. schilleriana 3.1%
Phal. stuartiana <0.1%
Phal. sanderiana 0.0%



Phal. Sogo Musadian (Phal. Musashino x Phal. Taisuco Kochdian) 'Orchid Konnection' AM/AOS Mar 2005, NS 13.2 x 11.0 cm 5 Flwrs, 8 Buds, 1 Infl Phal. schilleriana 2.9% Phal. stuartiana 0.6% Phal. sanderiana 0.4%



Phal. Rothschildiana (Phal. amabilis x Phal. schilleriana) 'M & B' HCC/AOS Feb 2008, NS 8.0 x 7.0 cm



Phal. Zada (Phal. San Songer x Phal. Doris) 'Shirley' AM/AOS Oct 1976, NS 9.8 cm Phal. schilleriana 28.1% Phal. sanderiana 12.5%



Phal. Saint Andre (Phal. Rothschildiana x Phal. schilleriana) 'Pink Fragrance' HCC/AOS Feb 2017, NS 6.9 x 6.3 cm

- * The introduction of Phal. schilleriana results in the 'pink' lines but the 'pink' was just a various amounts of pink blush centrally. Introduction of some of the other species in the sub-genus Phalaenopsis darken / and more uniformly distributed color, such as Phal. Zada line, Phal. Cherubin line, Phal. Monique line, Phal. Rothschidiana line, Phal. Reve Rose, etc. to name just a few
 - * The pink from Phal. schilleriana appears to not be a dominate color from a breeding point of view, most crosses are lightly blushed pink.
 - In the breeding of pinks, compared to white, relatively quickly other species were introduced into the Phal. amabilis – Phal. schilleriana breeding line to improve color.
 - * Some of the species introduced to improve color are: Phal. sanderiana, Phal. pulcherrima, Phal. lueddemanniana, Phal. amboinensis, Phal. violacea, etc.
 - * Some of the recent pink grexs are shown below:



Phal. Brother Purple Passion (Phal. Golden Sun x Phal. Brother Red Splendor) 'Cat's Paw' AM/AOS Mar 2004, NS 9.0 x 8.0 cm 6 Flwrs, 2 Buds, 1 Infl Phal. lueddemanniana 20.8% Phal. amboinensis 8.5% Phal. gigantea 5.5% Phal. schilleriana 3.9% Phal. equestris 1.9%, etc.



Phal. Ruey Lih Beauty
(Phal. Hsing Lady x
Phal. Formosa Rose)
'Beth Martin' AM/AOS
Jan 2010, NS 8.8 x 7.6 cm
14 Flwrs, 2 Infl
Phal. schilleriana 20.6%
Phal. sanderiana 7.7%
Phal. stuartiana 2.2%
Phal. equestris 1.4%
Phal. pulcherrima 0.8%, etc.



Phal. Plantation Rhapsody (Phal. Tretes Rapture x Phal. Plantation Elegance) 'The Queen' AM/AOS Mar 2004, NS 11.0 x 8.8 cm 7 Flwrs, 5 Buds, 1 Infl Phal. schilleriana 26.3% Phal. sanderiana 6.6% Phal. stuartiana 1.7% Phal. equestris 0.2% Phal. lueddemanniana 0.2%



Phal. Malibu Marron
(Phal. Malibu Tidings x
Phal. Gallant Beau)
'Sierra Vasquez' HCC/AOS
Jul 2002, NS 12.0 x 9.8 cm
10 Flwrs, 1 Infl
Phal. schilleriana 16.4%
Phal. sanderiana 7.8%
Phal. equestris 4.3%
Phal. lueddemanniana 1.5%
Phal. amboinensis 1.4%, etc.



Phal. equestris 'Krull Smith' AM/AOS Oct 2014, NS 3.4 x 3.4 cm 53 Flws, 19 Buds, 1 Infl



Phal. Artemis (Phal. amabilis x Phal. equestris) 'Winter Carnival' HCC/AOS Jan 2003, NS 5.9 x 5.0 cm 29 Flws, 18 Buds, 1 Infl



Phal. Ruby Lips (Phal. Roselle x Phal. Doris) 'Malibu' AM/AOS Feb 1963 5 Flws, 8 Buds, 1 Infl

- * The introduction of Phal. equestris results in smaller flowers, increase flower count, contrasting lips and peloric forms.
- * Major progeny from a breeding point of view are: Phal. Artemis and Phal. Roselle (Phal. Elisabethae x Phal. equestris, major progeny are Phal. Ruby Lips, Phal. Sunrise, Phal. Spitfire, Phal. Rosita)
- * To look into the impact of Phal. equestris breeding I looked at the F1 offspring of Phal. equestris and selected Phal. Jaisuco Jewel, largest num ber of F1 progeny. I then selected the most award F1 progeny of Phal. Jaisuco, Phal. Elfin King, in an attempt to get more recent breeding habits. I then, using the OrchidWiz 'cousins' key gather data on the awarded Phal. Elfin King cousins. The data on 94 'cousins' was reviewed. Selected grexes shown below.
 - * Although as a general rule the number of flowers per inflorescences increases this was not always the case. There were ~7% of the cases with fewer than 10 flowers per inflorescences, clearly not an

increase, but in general Phal. equestris does increase the number of flowers per inflorescences.



Phal. Taisuco Gem
(Phal. Taisuco Gaster x
Phal. equestris)
'SIO's Little Rose' AM/AOS
Nov 2007, NS 3.9 x 4.4 cm
27 Flwrs, 22 Buds, 2 Infl
Phal. equestris 51.6% (1F1)
Phal. amabilis 24.7%
Phal. schilleriana 6.6%
Phal. aphrodite 6.3%, etc.



Phal. Sogo Alice
(Phal. Minho Lit-Rose x
Phal. Taisuco Jewel)
'Iowa' AM/AOS
Feb 2002, NS 5.3 x 4.4 cm
9 Flwrs, 5 Buds, 1 Infl
Phal. equestris 54.1% (2F2)
Phal. amabilis 22.8%
Phal. aphrodite 5.9%
Phal. schilleriana 5.7%, etc.



Phal. Taisuco Jewel (Phal. Okay Seven x Phal. equestris) 'FANGtastic' AM/AOS Mar 1994, NS 5.6 x 4.4 cm 19 Flwrs, 11 Buds, 1 Infl Phal. equestris 55.5% (1F1) Phal. amabilis 25.8% Phal. aphrodite 5.8% Phal. sanderiana 3.3%, etc.



Phal. Sogo Vivien
(Phal. Sogo Alice x
Phal. Zuma's Pixie)
'Diana' AM/AOS
Mar 2017, NS 5.9 x 4.5 cm
74 Flwrs, 17 Buds, 4 Infl
Phal. equestris 59.7% (1F2, 2F3)
Phal. stuartiana 13.6%
Phal. amabilis 12.9%
Phal. schilleriana 3.7%, etc.

- * The reduction in flower size is a dominate trait, with most flowers having a natural spread of 6.0 cm or less. Of the 94 'cousins', there were five 'cousins' that were 4th generation Phal. equestris or greater and of these there was one (Phal. Lioulin Yenlin, 2F4, 5F5) with a natural spread of 11.0 cm. The next largest award grex (Phal. Soroa Snowflake, 1F1) flower had a natural spread of 8.3 cm. NOTE: There is a slight element of truth in the thought that the larger the flower the fewer flowers per inflorescence.
- * The dark (usually red, dark purple, etc.) lip of Pha I. equestris is a dominate factor and has led to many lines of flowers with a colored lip, the most developed being white flowers with a red lip (Phal. City Girl, 1F5) but there are also yellow flowers with red lips (Phal. Fuller's Sunset) and many others.



Phal. Lioulin Yenlin
(Phal. Lioulin Grape x
Phal. Chia E Yenlin)
'CX491' AM/AOS
Nov 2017, NS 11.0 x 10.0 cm
25 Flwrs, 9 Buds, 2 Infl
Phal. equestris 49.4% (2F4, 5F5)
Phal. amabilis 20.5%
Phal. stuartiana 12.7%
Phal. aphrodite 5.2%, etc.



Phal. Soroa Snowflake
(Phal. Hakalau x
Phal. equestris)
'Frankie's Gemstone' AM/AOS
Mar 1996, NS 8.3 x 7.2 cm
21 Flwrs, 2 Infl
Phal. equestris 50.0% (1F1)
Phal. amabilis 40.5%
Phal. aphrodite 8.3%
Phal. schilleriana 0.8%, etc.



Phal. City Girl
(Phal. Odoriko x
Phal. Jason Beard)
'New Age #3' AM/AOS
Mar 1993, NS 10.8 x 8.2 cm
11 Flwrs, 1 Infl
Phal. amabilis 62.1%
Phal. aphrodite 12.9%
Phal. pulcherrima 9.4%
Phal. equestris 8.6% (1F5), etc.



Phal. Fuller's Sunset (Phal. Taisuco Date x Phal. Chian Xen Queen) 'Dorothy's Sunset' AM/AOS Apr 2015, NS 8.5 x 8.0 cm 14 Flwrs, 12 Buds, 3 Infl Phal. amabilis 47.8% Phal. amboinensis 14.1% Phal. aphrodite 9.7%, ... Phal. equestris 2.3% (1F7), etc.

* Phal. equestris has a greater than normal tendancy to generate peloric forms. There are two common forms, petals similar to the lip and the lip similar to the petals ('big lip'). Examples of both forms shown.



Phal. Lioulin Diana Lip (Phal. Lioulin Thick Lip x Phal. KS Big Diana) 'Iowa' AM/AOS Mar 2019, NS 10.5 x 11.0 cm 4 Flwrs, 4 Buds, 1 Infl



Phal. Liu's Bride Rouge (Phal. Pentel Gem x Phal. equestris) 'KF #1' HCC/AOS Sep 2019, NS 3.5 x 4.1 cm 9 Flwrs, 5 Buds, 1 Infl

- * The most recent breeding trends is the introduction of species from the other phalaenopsis sub-genera to add additional color (such as solid reds and yellows), harlequins / splash petals, true miniature plants (lobbii), etc.
 - * For red Phal. amabilis progeny there are rougly two breeding trends with starrett shaped flowers, both with in the Subgenus Phalaenopsis, one results in heavy substance, waxy flowers similar to those in Section Polychilos, such as Phal. AL Sun Hannover, and the other to more classically textured flowers as in the Section Phalaenopsis, such as Phal. Krull's Sunrise.
 - * For yellow Phal. amabilis progeny there are rougly two breeding trends, both with in the Subgenus Phalaenopsis, one results in more starrett flowers similar to those Section Polychilos, such as Phal. Taida Yellow Passat, and the other to classically shaped flowers in the Section Phalaenopsis, such as Phal. OX New Moon.



Phal. AL Sun Hannover
(Phal. Mituo Sun x
Phal. Hannover Passion)
'RED' AM/AOS
Jan 2020, NS 6.7 x 7.0 cm
2 Flwrs, 1 Infl
Phal. amabilis 13.3%
Other Sect. Phal. 5.1%
Phal. mariae 25.0 %
Other Sect. Polychilos 56.7%



Phal. Krull's Sunrise
(Phal. Krull's Golden Champion x Phal. Citrus Champion)
 'Krull-Smith' AM/AOS
Jan 2019, NS 4.9 x 4.7 cm
 18 Flwrs, 8 buds, 1 Infl
 Phal. amabilis 17.1%
 Other Sect. Phal. 25.7%
 Phal. amboinensis 24.1%
 Other Sect. Polychilos 33.1%



Phal. Taida Yellow Passat (Phal. Brother Passat x Phal. Sogo Chin Chien) 'Apple Green' HCC/AOS Feb 2016, NS 7.0 x 7.3 cm 5 Flwrs, 3 Buds, 2 Infl Phal. amabilis 40.2% Other Sect. Phal. 5.6% Phal. venosa 25.0% Other Sect. Polychilos 39.3%



Phal. OX New Moon
(Phal. Lioulin Moon x
Phal. OX Success)
'OX 3015' AM/AOS
Apr 2015, NS 8.5 x 8.0 cm
19 Flwrs, 3 Infl
Phal. amabilis 50.7%
Other Sect. Phal. 26.6%
Phal. lueddemanniana 7.4%, ...
Other Sect. Polychilos 15.3%

- * Harlequin Phalaenopsis are Phalaenopsis whose flowers have random, non-repetitive patterns. The patterns can be spots, bars, blotches, picotees, splash petals, etc. Two examples, not complete set of examples, are Phal. Angel of Music and Phal. Ever Spring Prince
- * There are a true miniature Phalaenopsis and in an attempt to obtain the classical Phalaenopsis shaped flower on a miniature crosses have been made between the these miniature spieces and Phal. amabilis hybrids. A couple of grexes are shown below.



Phal. Angel of Music (Phal. Fairy Tales x Phal. Medellin Spring) 'Crystelle' AM/AOS Mar 2016, NS 7.5 x 6.2 cm 25 Flwrs, 1 Bud, 2 Infl



Phal. Ever Spring Prince (Phal. Golden Poeker x Phal. Taisuco Beauty) 'Susan' HCC/AOS Dec 2017, NS 8.7 x 8.0 cm 14 Flwrs, 2 Infl



Phal. Liu's Cute Angel (Phal. Jiaho Cherry x Phal. lobbii) 'Yaphon' AM/CCM/AOS Mar 2013, NS 3.5 x 3.9 cm 64 Flwrs, 116 Buds, 5 Infl



Phal. Joy Nancy Lady (Phal. Anna-Larati Soekardi x Phal. Bright Peacock) 'Krull-Smith' AM/AOS Jan 2008, NS 4.0 x 3.5 cm 7 Flwrs, 7 Buds, 1 Infl

Synonyms:

None recently

Varieties / forms:

As mentioned in the introduction, Phal. amabilis is variable in many of its characters, as one would expect in a species with a broad geographic range that has genetic isolating mechanisms formed by the disjointed island biology. Most of the variation is minor and does not warrant formal recognition. This variation includes the amount of red and yellow pigment on the lip, the presence and density of red spots on the lateral lobes of the lip and the overall flower shape. But there are two reconized sub-spieces: Phal. amabilis subsp. moluccana – identified by having no lateral teeth at the base of the midlobe of the lip. It is considered endemic to Indonesia in Sulawesi, the molucca Islands, and eastern Sabah.



Phal. amabilis subsp. rosenstromii 'Ken' HCC/AOC Sep 2002, NS 7.6 x 6.6 cm

Phal. amabilis subsp. rosenstromii – identified by the shorter, narrowly triangular midlobe of the lip, with inconspicuous teeth at the base. This subspecies is in endemic to New Guinea and Australia.

Awards:

Phal. amabilis	FCC	AM	HCC	AQ	JC	CCM	CCE	СНМ	CBM	TOTAL
AOS		20	11	1	4	8		1		33
Year(s) Awarded		1984- 2010	1984- 2019	1994	1999- 2020	1990- 2012		2009		1984- 2020

AOS Quality Awardees:



Phal. Orchid World

'Mem. Irene Moran' AM/AOS

Mar 2000, NS 7.4 x 7.6 cm

(Phal. Malibu Imp x

Rlc. Deventeriana)

2 Flwrs, 2 Buds, 1 Infl

Phal. amabilis 25%

Phal. amboinensis 50%

Other Sect. Polychilos 25%



Phal. Sweet Memory
'Amy Dawn' AM/CCM/AOS
May 2000, NS 7.6 x 8.3 cm
(Phal. Deventeriana x
Phal. violacea)
87 Flwrs, 3 Buds, 9 Infl
Phal. amabilis 25%
Phal. violacea 50%
Other Sect. Polychilos 25%



Phal. Maraldee
'Queen of Hearts' AM/AOS
May 1993, NS 6.9 cm
(Phal. Maestro Rafael Alers x
Phal. Deventeriana)
5 Flwrs, 1 Bud, 1 Infl
Phal. amabilis 25%
Phal. amboinensis 56.3%
Other Sect. Polychilos 18.8%



Phal. Sogo Yukidian
'Iowa' AM/AOS
Sep 2007, NS 13.7 x 11.5 cm
(Phal. Yukimai x
Phal. Taisuco Kochdian)
11 Flwrs, 2 Infl
Phal. amabilis 81.5%
Phal. aphrodite 15.3%
Phal. schilleriana 2.1%

Most recent awardees:



Phal. Phoenix Legacy 'Shadow' HCC/AOS Mar 2020, NS 6.7 x 6.0 cm (Phal. Sogo Lawrence x Phal. Brother Dendi) 2 Flwrs, 2 Buds, 1 Infl Phal. amabilis 28.3% Phal. amboinensis 40.6%



Phal. Susan Philips
'Logan' HCC/AOS
Mar 2020, NS 7.7 x 7.7 cm
(Phal. Emeraude x
Phal. Tsay's Evergreen)
8 Flwrs, 3 Infl
Phal. amabilis 41.4%
Phal. amboinensis 21.9%



Phal. Walnut Valley Purple Pixie
'B & M' AM/AOS
Sep 2020, NS 3.5 x 3.8 cm
(Phal. Purple Gem x
Phal. Pixie Star)
7 Flwrs, 18 Buds, 1 Infl
Phal. amabilis 2%
Phal. pulcherrima 50%



Phal. Peggy Tauscher
'Owen' AM/AOS
Mar 2020, NS 9.3 x 8.5 cm
(Phal. Sogo Lawrence x
Phal. Tying Shin Forever Love)
4 Flwrs, 4 Buds, 1 Infl
Phal. amabilis 22.5%
Phal. amboinensis 32.8%

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Award Descriptions (Feb 2021)



Phalaenopsis Harry's Fidimo – Quality Award Description

(Phal. Barbara x Phal. Fidibus)

Seven flowers on one 30 cm inflorescence; sepals and petals white, spotted wine red, more densely spotted to fused basally, lower half of lateral sepals larger and dark marron spots; lip cream mid lobe overlaid wine red, side lobes distally overlaid wine red, lip centrally overlaid light yellow with wine red spots convalescing to blotches, callus yellow, a few random wine red spots, centrally convalescing to a single broad

wine red line; column and anther cap white; substance

firm; texture matte.

Phalaenopsis Yaphon Cupid – Quality Award Description

(Phal. Yaphon Lobspis x Phal. Tying Shin Cupid)

Twenty-two flat stellate dark burnt-orange flowers and two buds on two inflorescences to 27cm long; sepals and petals burnt-orange picotee, yellow halo basally; lip dark

> orange; column and anther cap white; substance firm; texture crystalline.



Phalaenopsis Pylo's Dynamite – Cultural Award Description

(Phal. Natasha x Phal. Joy Spring Canary)

Fifty-five full, slightly cupped and five buds well-displayed on eleven inflorescences on an extremely well-grown, 70-cm tall by 120-cm wide plant grown in a 14-cm square teak basket in fir bark; sepals and petals ovate, charteuse distally transitioning to

white centrally, dense random maroon blotches; lateral sepals inferior maroon blothes convalese; lip

white, midlobe distally overlaid magenta, side lobes upright, yellow basally; column and anther cap white; substance hard; texture waxy.

Phalaenopsis Micro Sun – Quality Award Description

(Phal. Mituo Sun x Phal. Miro Buddha)

Four round, flat carmine flowers and one bud on one well-held inflorescence; sepals and petals cream, heavily blotched carmine leaving a thin picotee; lip carmine, midlobe apex overlaid dark carmine, sidelobe apex overlaid slightly darker carmine; column and anther cap white; substance very heavy; texture waxy.



Phalaenopsis Karisma Starlight – Quality Award Description

(Phal. Carmela's Wonder x Phal. Sharon Truscott)

Sixteen full, flat crystalline white flowers and one bud on one inflorescence; lip white with orange callus, sidelobe dark maroon striations basally, basally inferior margin yellow, midlobe superior margin light yellow; column and anther cap white, substance tissue-paper; texture crystalline.