

The Genus *Vanda*

(Roxb.) Hook. ex G. Don in J.C. Loudon, Hort. Brit.: 372 (1830)
Type: *Vanda [V.] tessellata* [VAN-da tess-sel-LAY-tah]

Vanda is a genus some 87 monopodial mostly epiphytic, some lithophytic, rarely terrestrial species found in low to upper elevation, evergreen or deciduous forest and rocky cliffs from southeastern Asia, southwest Pacific Islands, and Australia. These large to tiny plants, often forming large, scrambling clumps, have semi-rigid, strap-like to pencil-like, channeled leaves produced from the stem's tip, with lower leaves eventually being shed. Thus, after a few years, the plants become leggy with a length of bare stem that has numerous, stout aerial roots formed along the base of the stem. The erect, numerous to few-flowered inflorescence, borne from the leaf base, has comparatively large, showy, fleshy, heavily textured, fragrant flowers with strong color variations. They will last from several days to nearly two months in perfection. The sepals and petals are more or less similar and are wide spreading with wavy or crisped margins. The trilobed lip has a short, oblong to cone-like spur firmly attached to the short, rather stout, wingless column that has a short foot or is footless. The lip has erect side lobes; the often keeled midlobe is forward pointing, and has cone-like to oblong, sometimes recurved spur. There is a short column that has an indistinct foot or none at all, a two-chambered anther with 2, large pollinia with short, broad stipes.



Vanda tessellata
'Mary Motes' FCC/AOS
Mar 1995, NS 6.4 x 6.2 cm

They all appreciate bright light, even watering and fertilizer year round and do best in wooden slat baskets with little or no medium around the roots. Typically the terete leafed species appreciate much more direct sunlight than the strap leafed plants do.

Common Name or Meaning – In a local Indian language means plants of *Vanda*-like shape.

Generally, you would point scale using the *vanda* point scale.

Vandas are divided into the following twelve sections:

1. *Vanda* (*V. concolor*, *tessellata*, etc.)
2. *Cristatae* (*V. cristata*, etc.)
3. *Longicalcarata* (*V. coerulea*, *V. coerulescens*)
4. *Testacea* (*V. testacea*, *V. bensonii*, etc.)
5. *Obtusiloba* (*V. denisoniana*, *V. bicolor*, etc.)
6. *Flabellata* (*V. flabellata*, *V. vietnamica*, *V. lilacina*)
7. *Deltoglossa* (*V. deareii*, *V. insignis*, *V. luzonica*, *V. merrillii*, *V. tricolor*, etc.)
8. *Dactylobata* (*V. furva*, etc.)
9. *Roeblingiana* (*V. roeblingiana*, *V. sanderiana*, etc.)
10. *Ascocentrum* (*V. ampullacea*, *V. curvifolia*, *V. miniata*, etc.)
11. *Ascocentropsis* (*V. nana*, etc.)
12. *Neofinetia* (*V. falcata*, etc.)
13. *Eparmatostigma* (*V. dives*)

Table of species, top 5 progeny and 9 awards (OrchidWiz – Sep 2019 update)

Species marked with a * are used the most in hybridization					Progeny		AOS Awards									Total
Kew Name	Section	Habitat, Country	Temperature	Season	F1/Total	FCC	AM	HCC	JC	AD	AQ	CCE	CCM	CHM	CBR	Total
Vanda ampullacea	Ascocentrum	Himalayas to Southeast Asia	Warm to Hot	Spring-Summer	32/51	1	16	5	5			3	15	3	1	49
Vanda barnesii	Roeblingiana	Philippines	Cool to warm	Spring	0/0		2							1		3
Vanda bensonii	Testacea	Assam to Thailand	Cool to Warm	Spring-Summer	36/97		1							1		2
Vanda brunnea	Obtusiloba	Southeast Asia	Cool to Warm	Winter-Spring	29/57							1	1	1		3
Vanda christensoniana	Ascocentrum	Vietnam	Warm to Hot	Spring-Fall	4/4		3	2				1	2	1	1	10
Vanda coerulea*	Longicalcarata	Assam to Laos	Cool to Warm	Fall-Winter	341/6126	5	18	12	2			3	10	3		53
Vanda coerulescens	Longicalcarata	Assam to China/ Thailand	Cool to Warm	Spring-Summer	45/80		1	2	2				2	1		8
Vanda cristata	Cristatae	India / Nepal to Southeast Asia	Cool to Warm	Spring-Summer	62/165	1	4	2					3	1		11
Vanda curvifolia*	Ascocentrum	Assam / Eastern Himalayas to Thailand	Cool to Warm	Spring-Summer	172/3333		6	9	1				6	1		23
Vanda dearie*	Deltoglossa	Borneo, Lesser Sunda Islands	Hot	Summer-Fall	69/4144				1					1		2
Vanda denisoniana	Obtusiloba	Southeast Asia	Cool to Warm	Spring-Summer	130/685	2	21	13	2				2		1	41
Vanda dives	Eparmatostigma	Laos, Vietnam	Warm to Hot	Spring	1/1								2		1	3
Vanda falcata	Neofinetia	China, Korea, Japan	Cool to Warm	Summer-Fall	100/211	1	27	20	12			5	21	15		101
Vanda flabellata	Flabellata	China, Southeast Asia	Cool to Warm	Summer	35/160		1	1	1					1	1	5
Vanda furva	Dactylobolobata	Maluku, Philippines	Warm to Hot	Spring	2/2		1								1	2
Vanda insignis	Deltoglossa	Lesser Sunda Islands	Hot	Year round	70/536		1	1							2	4
Vanda javierae	Roeblingiana	Philippines	Cool to warm	Spring	5/5			1						1		2
Vanda lamellata	Roeblingiana	Taiwan, Philippines, Borneo	Warm to Hot	Year round	104/292											0
Vanda lilacina	Flabellata	Southeast Asia	Cool to Warm	Winter-Spring	20/33									1		1
Vanda limbata	Deltoglossa	Java, Lesser Sunda Islands, Philippines	Warm to Hot	Summer	26/41				1						1	2
Vanda luzonica*	Deltoglossa	Philippines	Warm to Hot	Fall	71/4528	1	9	2	1				1			14
Vanda merrillii	Deltoglossa	Philippines	Warm to Hot	Summer-Fall	77/522		6	4	1							11
Vanda miniata	Ascocentrum	Malaysia to Java	Cool to Warm	Spring-Summer	115/661		5	2	2			1	9	1	1	21
Vanda nana	Ascocentropsis	Laos, Thailand, Vietnam	Cool to Warm	Winter	1/1			1							1	2
Vanda roeblingiana	Roeblingiana	Philippines	Cool to Warm	Summer	13/13		2	2						1	1	6
Vanda sanderiana**	Roeblingiana	Philippines	Warm to Hot	Fall-Winter	376/6785	10	68	44				1	17		1	141
Vanda sumatrana	Deltoglossa	Sumatra	Warm to Hot	Fall	18/111											0
Vanda tessellata	Vanda	India / Nepal to Myanmar	Warm to Hot	Spring-Fall	196/711	2	21	3				1	1	2		30
Vanda testacea	Testacea	India / Nepal to Thailand	Cool to Warm	Spring-Summer	26/62								1	2		3
Vanda tricolor*	Deltoglossa	Java, Lesser Sunda Islands	Cool to Warm	Spring	137/5245	1	10	3	3				7	1		25
Vanda vietnamica	Flabellata	Vietnam	Warm	Summer-Fall	57/70		2	1						1		4

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 Hot – 58 to 85F at night; Warm – 66 to 75F at night; Warm to Hot – 66 to 85F at night; Hot – 75 to 85F at night

The genus Vanda has been hybridized roughly equally intra-genera (4734 hybrids) and inter genera (3564 hybrids). Among this group of ~8300 hybrids, six species are involved with probably about 90% of the hybrids. These six species are, in order of percent of total number of hybrids: V. sanderiana (81.8%), V. coerulea (73.8%), V. tricolor (63.2%), V. luzonica (54.6%), V. dearie (49.9%), V. curvifolia (40.2%). The next species is V. tessellata whose progeny represent 8.6% of all vanda progeny. A quick snapshot of what each species brings follows:

- V. sanderiana – Large flat round flowers held well above the plant in a pleasant cylinder, color pattern
- V. coerulea – Blue colored flowers, large flower size, long erect inflorescence, + flower count, tessellation
- V. tricolor (primarily var. suavis) – Solid color flowers sometimes with a white picotee, + flower count
- V. luzonica – breeds pink to red progeny (suppresses yellows and browns)
- V. dearie – Yellow progeny
- V. curvifolia – Small plant size, brilliant red color, increase flower count but small flowers, erect inflorescence
- V. tessellata – Large flower size, color range (creamy white – yellow – pink – red – purple – almost black)

To look at the breeding in the Vanda family, decided to look at the first Vanda OrchidWiz screen with the most progeny as well most awards. From these two screens I pulled out all of the hybrids and made the following genealogy table:

Kew Name	Parent 1	Parent 2	Year	Hybridizer	Progeny F1/Total	AOS Awards											Total
						FCC	AM	HCC	JC	ADA	AQ	CCE	CCM	CHM	CBR		
V. Gilbert Triboulet	V. coerulea	V. tricolor	1919	Gratiot	27/1711		1										1
V. Faustii	V. Gilbert Triboulet	V. luzonica	1934	Munich Bot. Gdns.	6/1627												0
V. Betsy Sumner	V. Faustii	V. sanderiana	1949	O. Kirsch	21/1621		1										1
V. Pukele	V. Betsy Sumner	V. sanderiana	1957	O. Kirsch	29/1434		1	1									2
V. Yip Sum Wah	V. Pukele	V. curvifolia	1965	Roy T. Fukumura	304/1209	1	44	59	1				3				108
V. Guo Chia Long	V. Mem. Madame Pranerm	V. Yip Sum Wah	1970	Patamakom	81/171		1	3	1								5
V. John De Biase	V. Kasem's Delight	V. Yip Sum Wah	1983	R. F. Orchids	26/30	4	15	13		1		1					34
V. Fiftieth State Beauty	V. Yip Sum Wah	V. Meda Arnold	1970	R. Perreira	19/20		23	15									38
V. Suk Sumran Beauty	V. Gordon Dillon	V. Yip Sum Wah	1983	S. Oun-Anong	4/4		14	15									29
V. Bicentennial	V. Bonanza	V. Yip Sum Wah	1977	Roy T. Fukumura	2/2		17	11									28
V. Bonnie Blue Fukumura	V. Pukele	V. coerulea	1967	Roy T. Fukumura	19/154			1									1
V. Peggy Foo	V. Bonnie Blue Fukumura	V. curvifolia	1970	Roy T. Fukumura	72/130		12	18									30
V. Rothschildiana	V. coerulea	V. sanderiana	1931	Chassaing	254/5340	5	48	41					4				98
V. Meda Arnold	V. curvifolia	V. Rothschildiana	1950	Sideris	207/1657		27	39									66
V. Bonanza	V. Pukele	V. Meda Arnold	1970	Sorayama	34/49		15	13									28
V. Onomea	V. Rothschildiana	V. sanderiana	1948	Tani	93/2853	3	19	15					3				40
V. Beebe Sumner	V. Onomea	V. Clara Shipman Fisher	1955	Nishimura	10/1675												0
V. Sun Tan	V. Beebe Sumner	V. sanderiana	1972	J. Raksa	28/1652												0
V. Kasem's Delight	V. Sun Tan	V. Thospol	1978	K. Boonchoo	120/937	1	7	3									11
V. Fuchs Delight	V. Kasem's Delight	V. Gordon Dillon	1982	R. F. Orchids	86/528		8	3									11
V. Doctor Anek	V. Fuchs Delight	V. Ponpimol	1988	A. Arayangura	150/252		2										2
V. Robert's Delight	V. Kasem's Delight	V. Madame Rattana	1984	R. F. Orchids	35/49	2	8	2	1				1				14
V. Madame Rattana	V. Sun Tan	V. Mem. Madame Pranerm	1974	J. Thephasdin	82/1281		3	1									4
V. Gordon Dillon	V. Madame Rattana	V. Bangkok Blue	1978	K. Boonchoo	124/990		5	2					1				8
V. Ponpimol	V. Madame Rattana	V. Phairot	1981	CD Orchids	26/452												0
V. Sunray	V. Sarojini	V. Sun Tan	1973	J. Thephasdin	29/747												0
V. Phairot	V. Laurel Yap	V. Sunray	1977	Phairot's	13/479												0
V. Jennie Hashimoto	V. sanderiana	V. Onomea	1954	E. Iwanaga	84/742		20	23					2				45
V. Joan Swearingen	V. luzonica	V. Rothschildiana	1948	R. Swearingen	7/1648												0
V. Joan Rothsand	V. Joan Swearingen	V. Onomea	1964	P. Lenavat	20/1638												0
V. Lenavat	V. Joan Rothsand	V. sanderiana	1969	P. Lenavat	63/1515		1										1
V. Thospol	V. Lenavat	V. Rothschildiana	1973	T. Bhimayothin	7/995												0
V. Tatzeri	V. sanderiana	V. tricolor	1919	A. Tatzer	49/3321												0
V. Clara Shipman Fisher	V. sanderiana	V. Tatzeri	1940	Shipman	42/3220		3										3
V. Ohuohu	V. Clara Shipman Fisher	V. sanderiana	1947	Hirose	49/2248		6	5									11
V. Mabelmae Kamahele	V. Ohuohu	V. sanderiana	1953	T. Ogawa	49/1017		14	15									29
V. Sarojini	V. coerulea	V. Mabelmae Kamahele	1965	T. Ogawa	16/849												0
V. Ellen Noa	V. dearei	V. sanderiana	1946	J. K. Noa	85/3501		2	1									3
V. Waipuna	V. Ellen Noa	V. Rothschildiana	1952	Y. Fujinaga	19/2966		2	2									4
V. Eisenhower	V. Ellen Noa	V. sanderiana	1953	Kodama	87/3006		9	8									17
V. Mem. Madame Pranerm	V. Waipuna	V. Eisenhower	1962	Palm Orchids	53/2616												0
V. Manila	V. luzonica	V. sanderiana	1943	Rapella	54/2338		1	1									2
V. Bill Sutton	V. Manila	V. sanderiana	1951	O. Kirsch	39/2193		2	3									5
V. Hilo Blue	V. Bill Sutton	V. coerulea	1960	M. Miyao	49/1808		4						2				6
V. Diane Ogawa	V. Hilo Blue	V. sanderiana	1964	T. Ogawa	54/1581		6	3									9
V. Bangkok Blue	V. Diane Ogawa	V. coerulea	1972	B. G. S. Orchids	26/1030		1										1
V. Ophelia	V. Bill Sutton	V. curvifolia	1960	O. Kirsch	76/323		10	15									25
V. Memoria T. Iwasaki	V. dearei	V. tricolor	1934	Shimadzu	20/2342												0
V. Frank Scudder	V. coerulea	V. Memoria T. Iwasaki	1943	Gillmar	23/812												0
V. Honolulu	V. Frank Scudder	V. sanderiana	1948	R. Tanaka	24/779												0
V. Frank Crook	V. Honolulu	V. sanderiana	1956	R. E. Warne	32/734												0
V. Laurel Yap	V. Frank Crook	V. coerulea	1965	M. Miyao	38/591		2	2									4
V. Memoria G. Tanaka	V. dearei	V. Memoria T. Iwasaki	1945	B. Tanaka	12/1404												0
V. Gertrude Miyamoto	V. Memoria G. Tanaka	V. sanderiana	1951	E. Iwanaga	17/1389		1	2									3
V. Tubtimtepya	V. sanderiana	V. Gertrude Miyamoto	1961	Tubtimtepya	12/1347		1										1
V. Thananchai	V. Mem. Madame Pranerm	V. Tubtimtepya	1968	Sunthonwan	93/1325												0

This table clearly shows the dominate use of V. sanderiana with it being a parent in 20 of the 56 crosses listed. The next most used as a direct parent is V. coerulea with 8 crosses. Two of the crosses were used as direct parents in 5 crosses;

V. Rothschildiana (V. coerulea x V. sanderiana), the hybrid with the most total progeny (5340 to V. Ellen Noa with 3501 total progeny) of ALL Vandas and V. Yip Sum Wah (V. Pukele x V. curvifolia), the cross that started ‘miniature’ vandas.

The final item by the above table are the various lines:

V. Rothschildiana – Appears somewhere in the background of most of today’s Vanda hybrids.

‘Yellow’ Vanda Lines – Breeding started with V. Memoria T. Iwasaki (V. dearei x V. tricolor) and a sibling V. Memoria G. Tanaka (V. dearei x V. Memoria T. Iwasaki) which led to influential V. Thananchai, foundation for concolor ‘yellow’ vandas. The other successful line of breeding ‘yellow’ Vandas with a V. sanderiana masking was the V. Ellen Noa (V. dearei x V. sanderiana) and resulting crosses V. Waipuna (V. Ellen Noa x Rothschildiana), V. Eisenhower (V. Ellen Noa x sanderiana), and the cross of siblings (V. Memoria Madame Pranerm (V. Waipuna x V. Eisenhower).

‘Pink’ Vanda Lines – Is represented above by the V. manila (V. luzonica x V. sanderiana), sibling V. Bill Sutton (V. Manila x V. coerulea) to V. Diane Ogawa (V. Hilo Blue x V. sanderiana) line of breeding. But the major line for present day ‘pink’ vandas has been in the V. Lenavat (V. Joan Rothsand x V. sanderiana) especially the V. Thospol (V. Lenavat x V. Rothschildiana) such as the pink forms of V. Kasem’s Delight (V. Thospol x V. Sun Tan).

‘Blue’ Vanda Lines – Many of the ‘Blue’ Vanda lines are the same as the ‘pink’ Vanda lines since V. coerulea includes both color forms.

A final comment on breeding of Vandas is observed by looking at registration of first generation Vanda hybrids, see table. The first Vanda hybrid was registered in 1890s and there was a very low interest in Vanda hybrids until the 1940s. I suspect this is a result of Hawaiian breeding of the highly successful V. Rothschildiana registered in 1931 as well as another V. sanderiana primary hybrid, V. Manila (1943) as well as V. Memoria T. Iwasaki (1934) and V. Clara Shipman Fisher (1940).

	1890	1900	1910	1920	1930	1940	1950	1960
F1 Reg	2	1	2	5	2	23	14	29

‘Major’ Hybrid (Intra-genera):

Vanda Rothschildiana (V. coerulea x V. sanderiana), 1931, Chassaing, 254 F1 and 5340 total progeny, 98 AOS awards (5 FCCs, 48 AMs, 41 HCCs, 42 CCMs). Select major progeny: **V. Meda Arnold** (V. curvifolia x V. Rothschildiana), 1950, Sideris, 207 F1 and 1657 total progeny, 66 AOS awards (27 AMs, 39 HCCs); **V. Doctor Anek** (V. Fuchs Delight x V. Ponpimol), 1988, A. Arayangura, 150 F1 and 252 total progeny, 2 AM/AOS awards; **V. Jennie Hashimoto** (V. sanderiana x V. Onomea), 1954, E. Iwanaga, 84 F1 and 742 total progeny, 45 AOS awards (20 AMs, 23 HCCs, 2 CCMs); **V. John De Biasse** (V. Kasem’s Delight x V. Yip Sum Wah), R. F. Orchids, 26 F1 and 30 total progeny, 34 AOS awards (4 FCCs, 15 AMs, 13 HCCs, 1 AQ, 1 CCM).



Vanda Rothschildiana
‘Bird Sellers’ FCC/AOS
Jan 1965



Vanda Yip Sum Wah
‘Flame’ FCC/AOS
May 1988, NS 6.0 cm

Vanda Yip Sum Wah (V. Pukele x V. curvifolia), 1965, Roy T. Fukumura, 304 F1 and 1209 total progeny, 108 AOS awards (1FCC, 44 AMs, 59 HCCs, 1 CCE, 1 JC, 3 CCMs). Select major progeny are: **V. Guo Chia Long** (V. Memoria Madama Pranerm x V. Yip Sum Wah), 19709, Patamakom, 81 F1 and 171 total progeny, 5 AOS awards (1 AM, 3 HCCs, 1 JC); **V. Tubtim Velvet** (V. Jenny Donald x V. Kultana Gold), 1989, T. Orchids, 74 F1 and 134 total progeny, 1 AM/AOS award; **V. John De Biasse** (V. Kasem’s Delight x V. Yip Sum Wah), R. F. Orchids, 26 F1 and 30 total progeny, 34 AOS awards (4 FCCs, 15 AMs, 13 HCCs, 1 AQ, 1 CCM); **V. Fiftieth State Beauty** (V. Yip Sum Wah x V. Meda Arnold), 1970, R. Perreira, 19 F1 and 20 progeny, 38 AOS awards (23 AMs, 15 HCCs).

Vanda Onomea (V. Rothschildiana x V. sanderiana), 1948, Tani, 93 F1 and 2853 total progeny, 40 AOS awards (3 FCCs, 19 AM, 15 HCCs, 1 CCE, 2 CCMs). Select major progeny are: **V. Doctor Anek** (V. Fuchs Delight x V. Ponpimol), 1988, A. Arayangura, 150 F1 and 252 total progeny, 2 AM/AOS awards; **V. Gordon Dillion** (V. Fuchs Delight x V. Ponpimol), 1988, A. Arayangura, 150 F1 and 252 total progeny, 2 AM/AOS awards; **V. Jennie Hashimoto** (V. sanderiana x V. Onomea), 1954, E. Iwanaga, 84 F1 and 742 total progeny, 45 AOS awards (20 AMs, 23 HCCs, 2 CCMs); **V. John De Biasse** (V. Kasem's Delight x V. Yip Sum Wah), R. F. Orchids, 26 F1 and 30 total progeny, 34 AOS awards (4 FCCs, 15 AMs, 13 HCCs, 1 AQ, 1 CCM).

'Major' Hybrids (Inter-genera, Top seven genera based on number of members):

Papilionanda (Papilionanthe x Vanda) – 935 members, this is the genus that is often referred to as 'semi-terete' vandas since they are cross between the strap leaf Vandas and the terete Papilionanthes. Although it has been genus has been bred extensively, it has not been well received by the judges with fewer percentage of grexes being awarded than either parent grex. I suspect that this is due to the anticipation from judges for a more vanda type form from this grex. The two grexes used the most in breeding as well as the two that have received the most awards are:



Vanda Onomea
'Walcrest' FCC/AOS
Oct 1970, NS 12.7 x 13.3 cm



Pda. Josephine van Brero

Papilionanda [Pda.] Josephine van Brero (V. insignis x Ple. teres), 1936, van Brero, 180 F1 and 378 total progeny, no awards. Major progeny: **Pda. Mimi Palmer** (Pda. Tan Chay Yan x V. tessellata), 1963, 60 F1 and 100 total progeny, 4 AOS awards (1 AM, 3 HCCs); **Pda. Corneels Cilliers** (Pda. Mimi Palmer x V. Doctor Anek), 2008, Kultana, no progeny, 8 AOS awards (6 AMs, 2 HCCs).



Van. Merv. L. Velthuis
'Orchidglade Snowcap' AM/AOS
May 1991, NS 9.1 x 7.8 cm

Papilionanda [Pda.] Mevr. L. Velthuis (Pda. Miss Joaquim x V. sanderiana), 1945, Chevalier, 81 F1 and 118 total progeny, 4 AOS awards (2 AMs, 2 HCCs). Major progeny; **Van. Fuchs Ocean Spray** (Van. Lou Sneary x Rhy. coelestis), 1992, R. F. Orchids, 1 F1 progeny, 6 HCC/AOS awards.



Pda. Nellie Morley
'Toyomi Nonaka' AM/AOS
Jul 1975, NS 10.0 cm

Papilionanda [Pda.] Nellie Morley (Pda. Emma van Deventer x V. sanderiana), 1952, Morley, 20 F1 and 41 total progeny, 58 AOS awards (24 AMs, 34 HCCs). Major progeny: **Pda. Evelyn Ritter** (Pda. Nellie Morley x V. Tom Ritter), 2014, A. Hongsilp, 6 F1 and 8 total progeny, 2 AOS awards (1, FCC, 5 AMs, 1 HCC).



Pda. Yuet Yeng Lim
'Karen' AM/AOS
Mar 1962

Papilionanda [Pda.] Yuet Yeng Lim (Pda. Maurice Restrepo x V. sanderiana), 1959, Lim Chooi Seng, 3 F1 progeny, 13 AOS awards (4 AMs, 9 HCCs. No major progeny.



Van. Five Friendships
'Sweetheart' FCC/AOS
Aug 1998, NS 2.4 x 2.1 cm



Van. Pine Rivers
'Claudia' AM/AOS
Mar 2019, NS 4.5 x 4.0 cm



Aranda Razzmatazz
'Pottsy's Freckles' HCC/AOS
Feb 2017, NS 5.8 x 6.3 cm

Vandachostylis (Rhynchostylis x Vanda) – 533 members, many grexes have been used for breeding (17 grexes with 10 or more F1 progeny) and have received awards (19 grexes with 10 or more awards). The two grexes used the most in breeding as well as the two that have received the most awards are:

Vandachostylis [Van.] Five Friendships (Van. Seng x Van. Prapin), 1990, Suksamran, 28 F1 and 51 total progeny, 4 AOS awards (1 FCC, 2 HCCs, 1 CCM). Major progeny: **Van. Five Friendships Pretty** (Van. Five Friendships x Rhy. coelestis), 1994, 10 F1 and 11 total progeny, 1 AM/AOS award; **Van. Crownfox Magic** (V. Tubtim Velvet x Van. Five Friendships), 1998, R. F. Orchids, 2 F1 progeny, 9 AOS awards (5 AMs, 4 HCCs).

Vandachostylis [Van.] Lou Sneary (V. falcata x Rhy. coelestis), 1970, Hajime Ono, 24 F1 and 27 total progeny, 29 AOS awards (7 AMs, 4 HCCs, 3 JCs, 1 AQ, 14 CCMs). Major progeny; **Van. Fuchs Ocean Spray** (Van. Lou Sneary x Rhy. coelestis), 1992, R. F. Orchids, 1 F1 progeny, 6 HCC/AOS awards.

Vandachostylis [Van.] Pine Rivers (V. Peggy Foo x Rhy. coelestis), 1989, M. & J. Rivers, 19 F1 and 20 total progeny, 23 AOS awards (15 AMs, 7 HCCs, 1 CCM). Major progeny: **Perreiraara Mu Qi Malisa Wendy** (Van. Pine Rivers x Aer. lawrenceae), 2014, A. Hongsilp, no progeny, 2 AOS awards (1 AM, 1 HCC).

Aranda (Arachnis x Vanda) – 479 members, limited breeding, only 12 grexes have been used 5 or more time in breeding:

Aranda [Aranda.] Christine (Arach. hookeriana x V. Hilo Blue), 1963, Federal Orchids, 58 F1 and 73 total progeny, 2 AM/AOS awards. Major progeny: **Aranda Dianah Shore** (Aranda Christine x V. Yip Sum Wah), 1980, Mak Chin On, no progeny, 4 AM/AOS awards; **Aranda Chark Kuan** (Aranda Christine x V. Cholburi), 1976, Lum Chin Orchids, 6 F1 progeny, 2 AOS awards (1 AM, 1 HCC).

Aranda [Aranda.] Razzmatazz (Aranda Khaw Phaik Suan x V. Guo Chia Long), 1998, J. Majewski, no progeny, 8 AOS awards (1 AM, 7 HCC).



Van. Lou Sneary
'McLellan M2598' AM/AOS
Oct 2013, NS 3.6 x 4.0 cm



Aranda Christine
'White Spot' AM/AOS
Sep 2018, NS 7.8 x 7.8 cm



Renantanda Sunrise
'Ruby Red' AM/AOS
May 2018, NS 3.3 x 4.8 cm



Aeridovanda Renee Gerber
'Leilani' AM/AOS
Jun 2004, NS. 6.0 x 6.0 cm

Renantanda (Renanthera x Vanda) – 358 members, limited breeding and awards.
Renantanda [Rntda.] Sunrise (V. falcata x Ren. imschootiana), 1967, C. Suddhipaca, 1 F1 progeny, 6 AOS awards (2 AMs, 2 HCCs, 2 CCMs).

Vandaenopsis (Phalaenopsis x Vanda) – 254 members, limited breeding and awards:

Vandaenopsis [Vdnps.] Irene Dobkin (Phal. Doris x V. miniata), 1968, Fredk. L. Thornton, 45 F1 and 49 total progeny, 18 AOS Awards (10 AMs, 7 HCCs, 1 CCM).

Aeridovanda (Renanthera x Rhynchostylis) – 244 members with 16 grexes either having one or two progeny. Grex with most awards:

Aeridovanda [Aerdv.] Renee Gerber (V. Bonanza x Aer. lawrenceae), 1990, R. F. Orchids, no progeny, 8 AOS awards (6 AMs, 1 HCC, 1 AQ).

Paravanda (Paraphalaenopsis x Rhynchostylis) – 145 members with 18 grexes either having three or less progeny, highest award total of three. Grex with most awards:

Paravanda [Ps.] Estrellita Rosada (Pps. Laycockii x V. Varut Fuchsia), 2010, E. Perez, no progeny, 2 AOS awards (1 AMs, 1 HCC).



Vdnps. Irene Dobkin
'Malibu' AM/AOS
Oct 1981, NS 5.0 cm



Paravanda Estrellita Rosada
'Edwin's Dream Girl' AM/AOS
Jan 2016, NS 8.0 x 8.0 cm

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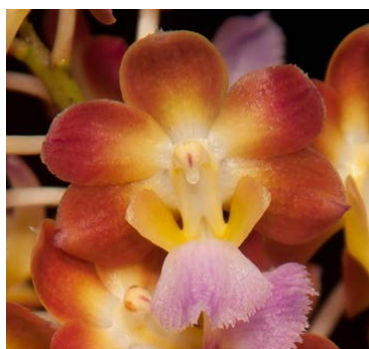
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Interesting Tidbits

The Table below list the top 16, based on number of members, intergeneric crosses made with Rhynchostylis and the number of crosses that exist:

V Contained in 96 Genera:						
#	Composition	Name	Abbrev.	Members	Flowers	Nat.Spr
2	Ple x V	Papilionanda	Pda	935	11.5	8.1
2	Rhy x V	Vandachostylis	Van	541	24.1	4.4
2	Arach x V	Aranda	Aranda	479	16.9	8.3
2	Ren x V	Renantanda	Rntda	358	40.3	5.6
2	Phal x V	Vandaenopsis	Vdnps	252	16.5	5.5
2	Aer x V	Aeridovanda	Aerdv	244	25.5	5.2
2	Pps x V	Paravanda	Pv	145	14.6	6.0
2	V x Vdps	Vanvanda	Vvd	51	19.7	8.5
3	Aer x Rhy x V	Perreiraara	Prra	46	35.2	3.7
3	Arach x Ren x V	Holtumara	Holtt	46	43.1	7.1
3	Ple x Rhy x V	Vanchoanthe	Vct	36	14.5	5.2
3	Ple x Ren x V	Mayara	May	34	43.5	6.3
2	Holc x V	Vandoglossum	Vg	31	14.7	5.4
2	Lsa x V	Luisanda	Lsnd	29	8.2	4.1
3	Aer x Arach x V	Burkillara	Burk	28	17.0	8.4
3	Ren x Rhy x V	Joannara	Jnna	22	36.8	4.5



Prra. Bangkok Sunset
'Morright' AM/AOS
Oct 2015, NS 2.4 x 2.4 cm

As the table above points out, there's been extensive use of Rhynchostylis in intergeneric breeding with 96 genera generated. The five genera with the most members were discussed in the main body, below are the four of next genera that have received awards recently and / or recently registered that have caught the judges' eye.

Perreiraara [Prra.] (Aerides x Rhynchostylis x Vanda), 46 members, first member registered in 1976, 9 members have received awards, three members have progeny.

Vandoglossum [Vg.] (Holcoglossum x Vanda), 31 members, first member registered in 1897 (not new but has caught the judges' eye, most recent award 2018), 5 members have received awards, 2 member has progeny.

Trichovanda [Trcv.] (Trichoglottis x Vanda), 20 members, first registered in 1948, 6 members have received awards, 1 member has progeny.

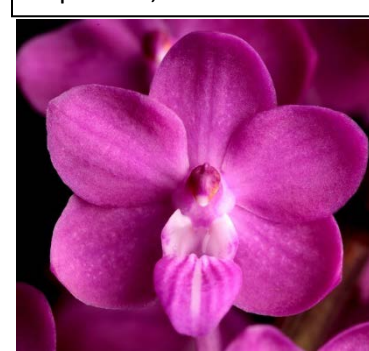
Seidenanda [Snn.] (Seidenfadenia x Vanda), 19 members, first member registered in 1971, 8 members has received awards, no member has any progeny.



Vg. Yawi's Taiwan Queen
'Diamond Orchids' AM/AOS
Apr 2018, NS 7.4 x 7.0 cm



Trichovanda Thai Velvet
'Meechai' AM/AOS
Jun 2015, NS 7.0 x 6.7 cm



Snn. Andrew's Pink Glory
'Tropical Storm' AM/AOS
Jun 2013, NS 2.5 x 2.4 cm

Species Data Sheet

Vanda tessellata (Roxb.) Hook. ex G.Don in J.C.Loudon, Hort. Brit.: 372 (1830)

[VAN-da tess-sel-LAY-tah]

Vanda tessellata is an intriguing species whose native habitat extends from Sri Lanka in the south to northern India and its neighbors at elevations around 1500 meters. It is a medium to large sized, cool growing epiphyte with a climbing stem carrying linear, narrow, conduplicate, tridentate apically leaves. Vanda tessellata blooms mainly in late spring and summer. The sub-erect, 6 to 10" [15 to 50 cm] long inflorescences typically bear about six to twelve flowers of heavy substance whose natural spread is generally about 2 or more inches (5 cm). The petals and sepals usually are rather narrow and undulating, but a few choice clones have wider and flatter flower segments. on a inflorescence carrying 5 to 12 flowers.

Cultivars of V. Tessellata come in more colors than do any other species in the Vanda genus. Most commonly, the color of the petals and sepals is a tessellated olive-brown of a faintly smoky complexion, but on some other color forms it is yellow or caramel-brown or pink, and there is even a rare dark violet color form that appears to be almost black. The mid-lobe of the lip of most of the color forms is purple. The exotic smoky hue of the petals and sepals of most of the color forms, together with the wide range of colors, see selected pictures below for some of the variation as captured by awarded cultivars, attracted hybridizers to experiment with the species in their breeding programs. The long-lived flowers are scented; the description of the scent has ranged from being perceived as "pleasing" to "musky" and described as fragrant grape to lilac scented.



Vanda tessellata
'Mary Motes' FCC/AOS
Mar 1995, NS 6.4 x 6.2 cm



'Your Eye' HCC/AOS



'Garrett's Ol' Blue' AM/AOS



'Crownfox Green' AM/AOS



'Fuchs Indigo' FCC/AOS

The species originally was known as Vanda roxburghii and serves as the type species for the entire Vanda genus. The species has long been in cultivation. It was the first Vanda cultivated in England; Sir Joseph Banks flowered it in the autumn of 1819.

Judge using the Vanda scale or the General scale depending on the general flower shape.

Used in the Malayasian Penninsula as a cure-all by drinking the juice from the compressed plant.

There also appears to be some an issue with mistaken identity due to comment include in the award description of cultivar 'Alice Motes'. The comment is '... side lobes spotted fuchsia, distinctly pointed nearly to end of column bespecaak it a genuine V. tessellata ...', see photo.

Synonyms / Varieties / forms:

Synonyms – None (in recent times)

Numerous color forms have been found in nature and have been developed in cultivation.

The form with green sepals and petals with a white lip is often referred to as an 'alba' form, but it is not officially recognized, consequently it is a horticultural variety at this time.

Awards:

Below are AOS awards that Vanda tessellata has received:

	FCC	AM	HCC	AQ	AD	JC	AQ	CCE	CCM	CHM	CBM	TOTAL
AOS	2	23	5					1	1	2		34
Year(s) Awarded	1994-1995	1971-2019	1990-2019					2012	1997	1984-2009		



Vanda tessellata
 'Alice Motes' AM/CHM/AOS
 Jul 2009, NS 5.8 x 5.5 cm
NOTE: "... side lobes ... distinctly pointed..."

This species has received 34 awards since initially being shown in 1971 with 2 cultivars receiving FCCs, the highest flower quality award from AOS.

Breeding Characteristics:

Although Vanda tessellata is not among the historical top six species used in hybridizing vandas, its progeny represents around 8.6% of all Vanda hybrids. However, in the 2010s Vanda tessellata has most F1 progeny (49 F1 progeny) with V. coerulea (52 F1 progeny) in second and V. sanderiana third (27 F1 progeny). Vanda tessellata breeding attributes are: relatively small plant, vegetative vigor, many color forms, tessellation, bright blue to violet to pink lip, and a pleasant fragrance. The table below list the V. tessellata progeny registered per decade and awards associated with the grex (per OrchidWiz 6.2).

	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010	Total
Reg	1	0	0	0	0	10	39	78	70	78	89	160	193	718
Assc Awds	6	0	0	0	0	1	3	22	24	63	124	118	79	440
F1	1	0	0	0	0	8	6	21	26	23	13	52	49	199
AA	6	0	0	0	0	1	1	9	17	19	9	59	27	148
F2	0	0	0	0	0	2	27	23	12	27	30	45	85	251
AA	0	0	0	0	0	0	2	1	0	13	50	40	33	139
F3	0	0	0	0	0	0	6	26	12	6	12	18	23	103
AA	0	0	0	0	0	0	0	10	0	1	15	3	7	36

First thing to notice is the gap between the first and next registered hybrid. After looking into this, I've determined that the 1897 cross of V. Amoena is a synonym for the natural hybrid V. x amoena and consequently the first V. tessellata primary hybrid did not occur until 1941. Also, V. Violeta (V. coerulea x V. tessellata) is the correct name for this hybrid cross and was registered in 1959 by E. De Saram. The AOS has awards for both V. Violeta and V. Amoena.

The first registered hybrid with *Vanda tessellata* was in 1941 and breeding interest has shown a slow but steady upswing since.

Breeding has been roughly equally divided between intra (350 *Vanda* crosses) and inter-genera (368 all others).

'Major' Hybrids (Intra-genera):

Vanda [V.] Violeta (*V. coerulea* x *V. tessellata*) (Will include *V. Amoena*, registered in 1897, progeny all progeny registered after 1950, *V. Violeta* not recognized in OrchidWiz), 1959, E. De Saram, 17 F1 and 29 total progeny, 7 AOS awards (3 AMs, 3 HCCs, 1 CCM). No major progeny

Vanda [V.] Emily Notley (*V. Memoria T. Iwasaki* x *V. tessellata*), 1943, Gillmar, 17 F1 and 113 total progeny, no awards (No photo available). Major progeny; **V. Princess Mikasa**, see below.

Vanda [V.] Caroline J. Robinson (*V. tessellata* x *V. tricolor*), 1945, Shipman, 16 F1 and 46 total progeny, no AOS awards.

Vanda [V.] Princess Mikasa (*V. Royal Sapphire* x *V. coerulea*), 1983, Orchid Society Thailand, 13 F1 and 15 total progeny, 13 AOS awards (5 AMs, 7 HCCs, 1 CCE, no major progeny.

Vanda [V.] Memoria Louis Hatos (*V. John De Biase* x *V. tessellata*), 2002, R. Hatos, 2 F1 progeny, 16 AOS awards (5 AMs, 11 HCCs). No major progeny.



Vanda Caroline J. Robinson



Vanda Memoria Louis Hatos
'Purple Passion' AM/AOS
Sept 2019, 6.6 x 6.4 cm



Vanda Violeta
'Alice Motes' AM/AOS
Jul 2016, 8.1 x 8.5 cm



Vanda Princess Mikasa
'Blue' AM/AOS
May 2013, 9.5 x 9.4 cm

'Major' Hybrids (Inter-genera, 2 highest number of awards, 2 highest number of progeny):

Vandachostylis [Van.] Colmarie (*Van. Sri-Siam* x *Rhy. gigantea*), 1994, Kultana, 4 F1 and 5 total progeny, 26 AOS awards (20 AMs, 5 HCCs, 1 CCM). No major progeny

Vandachostylis [Van.] Crownfox Magic (*V. Tubtim Velvet* x *Van. Five Friendships*), 1998, R. F. Orchids, 2 F1 progeny, 9 AOS awards (5 AMs, 4 HCCs). No major progeny.



Vandachostylis Colmarie
'Valley Isle' AM/AOS
Jan 2019, NS 4.4 x 3.9 cm



Vandachostylis Crownfox Magic
'Dulce', AM/AOS
Aug 2017, 6.0 x 6.0 cm



Papilionanda Mimi Palmer
'Garrett's Super Mimi' AM/AOS
Oct 2019, NS 6.2 x 6.2 cm

Papilionanda [Pda.] Mimi Palmer (Pda. Tan Chay Yan x *V. tessellata*), 1963, Gem Nursery, 60 F1 and 100 total progeny, 5 AOS awards (2 AMs, 3 HCCs). Major progeny: **Pda. Arjuna** (Pda. Mimi Palmer x *V. tessellata*), 1982, F. Bangerter, 11 F1 and 14 total progeny, 6 AOS awards (4 AMs, 2 HCCs); **Pda. Motes Toledo Blue** (*V. tricolor* x Pda. Mimi Palmer), 1991, Motes, 7 F1 progeny, 6 AOS awards (1 AM, 4 HCCs, 1 CCM); **Pda. Corneels Cilliers** (Pda. Mimi Palmer x *V. Doctor Anek*), 2008, Kultana, no progeny, 8 AOS awards (6 AMs, 2 HCCs); **Pda. Batram** (Pda. Mimi Palmer x *V. denisoniana*), 1985, B. Thoms, 2 F1 progeny, 8 AOS awards (6 AMs, 2 HCCs).

Vandachostylis [Van.] Five Friendships (Van. Seng x Van. Prapin), 1990, Suksamran, 28 F1 and 51 total progeny, 4 AOS awards (1 FCC, 2 HCCs, 1 CCM).

Major progeny: **Van. Crownfox Magic** (see above);

Van. Five Friendships Pretty (Van. Five Friendships x *Rhy. coelestis*), 1994, Five Friendships, 10 F1 and 11 total progeny, 1 AM/AOS award.



Van. Five Friendships
'Sweetheart' FCC/AOS
Aug 1998, NS 2.4 x 2.1 cm

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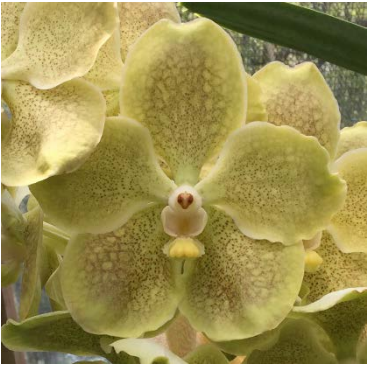
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Award Descriptions (Apr 2020)



Vanda Virescent Gold – Quality Award Description

(V. Krailerk White x V. tessellata)

Twelve slightly open flat flowers on a 22 inch (64 cm) inflorescence; sepals and petals light lime, faint dark red tessellation, finely spotted dark red centrally; lip ivory, midlobe bright yellow distally; column white; anther cap red brown; substance moderate-firm; texture matte.

Aeridovanda [Aerdv.] Supatra Delight – Quality Award Description

(V. Krailerk White x Aer. lawrenceae)

Fourteen full round flowers on two inflorescences, longest 25 inch (64 cm) base color white; sepals and petals blush rose-lavender apically; lip yellow-ivory, midlobe rose centrally to dark rose distally, side lobes blush rose-lavender apically, basal margin dark red; column white; anther cap dark rose; substance moderate-firm; texture glistening.



Papilionanda [Pda.] Chao Praya Violet – Cultural Award Description

(Pda. Mamo x V. tessellata)

Seventy-two and eighth buds on six up to 19 in (48 cm) long inflorescences presented on a clean robust plant with ten keikis in a 15 in (38 cm) wood slat basket; sepals and petals pink-lavender, transitioning to lavender distally; dorsal sepal flat centrally, margins undulated, spotted lavender basally convescing to faint tessellation distally; petals twisted, margins undulated, spotted lavender; lateral sepals spotted lavender convescing to tessellation, margins undulated; lip white, midlobe recurved dark lavender distally spotted in distinct dark red radial lines, side lobes distinct spotted dark red lines, central overlay orange-red in a 'W' shape; column and anther cap white; substance firm; texture matte.



Vanda Alexander Hatos – Quality Award Description

(V. Fuchs Saffron x V. tessellata)

Nineteen full yellow flowers on one 23 in (58 cm) inflorescence, distinct bright red blotches basally surrounds the column; dorsal blotched red convescing to tessellation distal quarter; petals round, blotched red convescing to tessellation distal quarter; lateral sepals blotched red convescing to tessellation distal half; lip yellow, midlobe overlaid light red distally; column and anther cap yellow; substance translucent waxy; texture matte.



Vanda Chang Siew Fong – Quality Award Description

(V. tessellata x V. Rose Davis)

Twelve open flowers and three buds on one 28 in. (71 cm) inflorescence; sepals and petals white blushed light yellow-green, dorsal sepal and petals centrally blushed along mid vein light purple, looks smokie; lip white, midlobe overlaid light greenish grey, side-lobes light yellow superior margin, light purple basally; column white, anther cap light creamy yellow; substance firm; texture matte.



Species Data Sheet

Vanda falcata (Thunb.) Beer, Prakt. Stud. Orchid.: 317 (1854)

[VAN-da FAL-kah-ta]

Vanda falcata, fu-ran [fuuran]] (wind orchid), has a rich history in Japan prior to being introduced to the West by Carl Peter Thunberg in 1784. The earliest writings of this species dates back to to 1600s and has been cultivated by the Japanese warrior class for centuries. At one time anyone who was not a member of the samurai (warrior) class was forbidden even to posses a plant. Unusual varieties were highly treasured by the rich and noble rank. These selected varieties wer named and highly collected. These select forms were no longer fu-ran, but were now called fukiran [or fuukiran], which translates as “orchid of the rich and noble.”

Vanda falcata is found in Japan, Korea, eastern China and the Ryukyu Islands, as a cool to cold growing epiphyte. This small plant, up to 6 in. (15 cm) tall, grows on deciduous trees that provide shady summers and almost full sun in the winter. Its short, monopodial, complanate stem is enveloped basally by conduplicate leaf bases carrying coriaceous, distichous, fleshy, conduplicate, linear-falcate leaves. The blooms occur on a racemose, axillary, to 2/3/4" [7 cm] long, laxly several flowered inflorescence that appears in early summer through fall with nocturnal, fragrant (jasmine to vanilla scented) typically all white to pink flowers with a natural spread of 1.0 in. (2.5 cm). The sepals and petals are subsimilar, linear-oblong to linear-lanceolate. The tri-lobed lip recurved, side-lobes erect, with a long filiform spur at it's base, and a short, winged, fleshy column.

Vanda falcata will grow in a wide variety of media, ranging from coarse bark to the traditional medium of sphagnum moss. They can also be grown mounted if preferred, however they will need to be watered more frequently. Pots can range from clay to plastic.

In Japan, there are Vanda falcata pots and a society, All Nippon Fuukiran Orchid Society [ANFOS]. When the ANFOS judges judge a plant, the pot is judged to be suitably matched to the plant being evaluated.

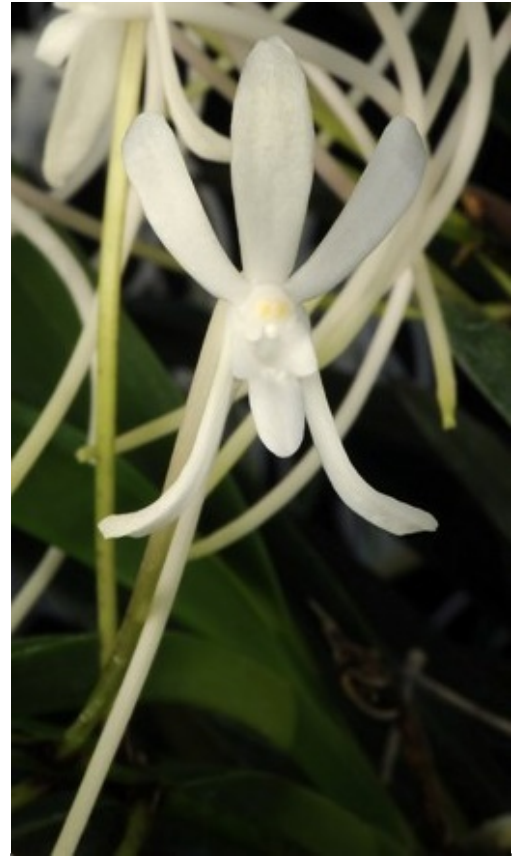
In Japan, they use New Zealand sphagnum moss and clay pots. Moss, when it is not over packed provides both humidity and air circulation around the roots. The big mound of sphagnum you see under a formally mounted Neo is hollow. The ball is formed around a bottle or an inverted pot to create a large air pocket for the roots' health.

A North American grower uses a light wrapping of sphagnum around the roots and tucks the plant into a plastic net pot to ensure excellent air movement around the roots.

Typically, plants in sphagnum are repotted every year to maintain the integrity of the moss. The best time to repot is in the spring, when there is new active root growth.

Synonyms / Varieties / forms:

Synonyms – Neofinetia falcata: The Neofinetia genus was absorbed into the genus Vanda around 2013.



Vanda falcata
'Paul Gripp' FCC/AOS
Sep 2018, NS 2.7 x 3.2 cm

Varieties / forms – As one would expect for any species where unusual varieties were highly treasured for over 400 years, numerous color forms and leaf variations have been found in nature and propagated. (I will barely touch surface high points with this report.) Only those varieties of *Vanda falcata* that display outstanding characters earn the title fuukiran, while more ordinary varieties remain simply fuuran. Every year the All Nippon Fuukiran Orchid Society publishes a beautifully designed Meikan, a chart that establishes the rank of every cultivated fuukiran recognized by the society. While there are over 2,200 varieties of *Vanda falcata*, only about 200 are registered on the Meikan.



Vanda falcata (Ryunotsume)
'Flora Peculia' JC/AOS
Aug 2018

(... spurs 0.1 x 5.5cm, curved down and forward, flushed pale lilac along the middle, pale chartreuse on tip; ...)



Vanda falcata (Momoyamanishiki)
'Flora Peculia' JC/AOS
Jun 2019

(... variegation expressed in longitudinal white stripes, more prominent on new growths, making them appear almost albino, base of newer growths dark magenta...)



Vanda falcata (Shutenno)
'CofO Pink Ice' AM/AOS
May 2016, NS 1.8 x 6.5 cm

(... purple inflorescences; pedicels deep purple, fading to pink distally; ...)

Each of the color forms has a Japanese varietal name.

Shutenno or Shojou is pink.

Hisuiis green

Kibana is yellow

The somewhat controversial yellow forms (as well as the solid dark pink and orange forms) have been suspected to have *Ascocentrum* genes in the background. There are peloric varieties that have two spurs or three spurs. There is also the variety Hoshiguruma with three sepals and petals, no lip and no spurs.

There are double forms that have multiple sepals and petals. For leaf variations, there are bean leaf, needle leaf and princess leaf. There are many variegated leaf patterns, with the two major forms being marginal and tiger variegation. Lastly for plant forms, size ranges from miniature ones that mature at just 2 inches (5 cm) across to the large Amani Island form which grows to 8 inches (20 cm) tall and wide.



Vanda falcata (Jou-Mou-Maru)
'Malenkay' JC/AOS
Aug 2019

(... leaves 1.5cm by 0.5cm, bean-shaped, tightly arranged in two ranks on one stem (tsuke), brown leaf bases tightly overlapped like a kimono; awarded for rarity and educational value for micro plants, which only grow one leaf a year per growth.)



Vanda falcata (Soubiryu)
'Flora Peculia' JC/AOS
Jun 2019

(... two identical white lips fused at center side lobes, ... ; commended for the unique feature of double lips and double nectaries.)

Awards:

Below are AOS awards that *Vanda falcata* has received:

	FCC	AM	HCC	AQ	AD	JC	AQ	CCE	CCM	CHM	CBM	TOTAL
AOS	1	28	20			14		6	21	15		105
Year(s) Awarded	2018	1977-2019	1994-2017			1981-2019		2001-2019	1972-2018	1994-2014		

This species has received 105 awards, the second most AOS awards behind *Vanda sanderiana*, since initially being shown in 1968 with 1 cultivar receiving an FCC, the highest flower quality award from AOS. There are many JCs and CHMs reflecting the long history of collecting 'unusual' varieties in Japan.

Breeding Characteristics:

Vanda falcata has not been used much in hybridizing vandas, its progeny represents around 2.5% of all *Vanda* hybrids. However, in the 2010s *Vanda falcata* has the fourth most F1 progeny (26 F1 progeny) with *V. tessellata* the most (53 F1 progeny), *V. coerulea* (52 F1 progeny) in second and *V. sanderiana* third (27 F1 progeny). *Vanda tessellata* breeding attributes are: flower shape is very dominant, color, dwarf and compact plant habit, free flowering with multiple inflorescences, fragrance, and temperature tolerance. The table below list the *V. tessellata* progeny registered per decade and awards associated with the grex (per OrchidWiz 6.2).

V. falcata	1950	1960	1970	1980	1990	2000	2010	Total
Registered	0	19	22	46	24	36	66	213
Associated Awards	0	65	42	20	34	45	29	235
F1 Progeny	0	13	9	23	14	15	26	100
Associated Awards	0	55	42	14	25	26	13	175
F2 Progeny	0	6	10	11	7	16	31	81
Associated Awards	0	10	0	6	9	19	15	59
F3 Progeny	0	0	3	12	3	4	5	27
Associated Awards	0	0	0	0	0	0	1	1

First thing to notice is the relative constant use of *V. falcata* with two relative peaks, one in 1980s and the other occurring presently in all generations.

The first registered hybrid with *Vanda tessellata* was in 1960 and breeding interest has shown a slow but steady upswing since.

Breeding has been roughly one third intra (70 *Vanda* crosses) and two thirds inter-genera (143 all others). *Vandachostylis* has the most grexes with 56.

'Major' Hybrids (Intra-genera):



Vanda Premier

Vanda [V.] Premier (*V. falcata* x *V. lamellata*), 1960, Masao Yamada, 11 F1 and 15 total progeny, no awards. No major progeny

Vanda [V.] Peaches (*V. falcata* x *V. curvifolia*), 1962, E. Iwanaga, 10 F1 and 23 total progeny, 7 AOS awards (1 AM, 4 HCCs, 2 CCMs). No major progeny.

Vanda [V.] Virgil (*V. tessellata* x *V. tricolor*), 1945, Shipman, 16 F1 and 46 total progeny, no AOS awards.

Vanda [V.] Cherry Blossom (*V. falcata* x *V. ampullacea*), 1961, E. Iwanaga, 2 F1 and 4 total progeny, 19 AOS awards (4 AMs, 9 HCCs, 1 JC, 5 CCMs). No major progeny.

Vanda [V.] White Crane (*V. sanderiana* x *V. falcata*), 2006, Exotic Orchids, no progeny, 12 AOS awards (5 AMs, 5 HCCs, 1 AQ).

Vanda [V.] Twinkle (1960) (*V. falcata* x *V. miniata*), 1960, Masao Yamada, 3 F1 progeny, 6 AOS awards (1 HCC, 5 CCMs).



Vanda Peaches
'Kultana' HCC/AOS
Sep 2009, 3.0 x 3.5 cm



Vanda Virgil
'Elizabeth' HCC/AOS
Apr 2012, 5.4 x 6.3 cm



Vanda Twinkle (1960)
'Pixie Star' HCC/AOS
Aug 2008, 2.9 x 3.3 cm



Vanda Cherry Blossom
'Carmela' AM/AOS
May 2019, 2.9 x 3.4 cm



Vanda White Crane
'Hyeland' AM/AOS
Jul 2019, 5.0 x 7.9 cm

'Major' Hybrids (Inter-genera):



Vandachostylis Lou Sneary
'Sukanya' JC/AOS
May 2019, NS 2.7 x 3.4 cm

Vandachostylis [Van.] Lou Sneary (*V. falcata* x *Rhy. coelestis*), 1970, Hajime Ono, 24 F1 and 27 total progeny, 26 AOS awards (7 AMs, 4 HCCs, 1 AQ, 3 JCs, 14 CCM). Major progeny: **Van. Fuchs Ocean Spray** (*Van. Lou Sneary* x *Rhy. coelestis*), 1992, R. F. Orchids, 1 F1 progeny, 6 HCC/AOS awards.

Vandachostylis [Van.] Pinky (*V. falcata* x *Rhy. gigantea*), 1990, M. Kobayashi, 1 F1 progeny, 9 AOS awards (9 AMs, 5 HCCs, 1 CCE, 1 CCM). No major progeny.

Renantanda [Rntda.] Sunrise (*Pda. falcata* x *Ren. imschootiana*), 1967, Sak. Takagi, 1 F1 progeny, 6 AOS awards (2 AMs, 2 HCCs, 2 CCMs). No major progeny.

Vandachostylis [Van.] Walnut Valley (2007) (*Van. Charm* x *V. Virgil*), 2007, Carter & Holmes, 1 F1 progeny, 10 AOS awards (3 AMs, 6 HCCs, 1 CCM). No major progeny.

Vandachostylis [Van.] Rosyleen (*Van. Lilac Blossom* x *V. Peaches*), 1969, J. Rumrill, 12 F1 progeny, no awards.

Vandachostylis [Van.] Charm (*V. falcata* x *Van. Tham Yuen Hae*), 1987, Takaki O. N., 8 F1 and 9 total progeny, 3 AOS awards (2 HCCs, 1 AD). No major progeny.



Vandachostylis Pinky
'Diamond Giant' AM/AOS
Feb 2018, 5.0 x 4.0 cm



Van. Rosyleen



Van. Charm
'Blue Pacific' HCC/AOS
Aug 2010, NS 3.9 x 3.6 cm



Renantanda Sunrise
'Ruby Red' AM/AOS
May 2018, NS 3.3 x 4.8 cm



Van. Walnut Valley
'Millie Wiegman' AM/AOS
May 2010, NS 4.0 x 5.0 cm

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Award Descriptions (May 2020)



Vanda Savannah Kate Hector – Quality Award Description

(*V. falcata* x *V. tessellata*)

Eight heavily recurved open flowers on a 22 inch (64 cm) inflorescence; dorsal sepal white, erect basal half lightly dusted salmon, obtuse oblong; lateral sepals white, basal half lightly dusted salmon, obtuse spatulate, quarter turn twist basally; petals white, lightly dusted salmon, obtuse spatulate; lip white, midlobe lightly dusted light lavender, spur 1.6 inches (4 cm) long; column white; anther cap light yellow-brown; substance firm; texture matte.

Vanda Hsinying Starlight – Quality Award Description

(*V. falcata* x *V. Lion Star*)

Five stellate yellow flowers and two buds on one 19-inch (48 cm) inflorescence; sepals and petals linear acute; lip midlobe slightly reflexed, spur 3.5 in. (9 cm); column and anther cap light yellow; substance moderate-firm; texture glistening.



midlobe slightly reflexed, spur 3.5 in. (9 cm); column and anther cap light yellow;

Vandachostylis [Van.] Lululace – Cultural Award Description

(*Van. Lou Sneary* x *V. ampullacea*)

One hundred thirty-two pink-lavender flowers and eighteen buds on four inflorescences up to 21 in (53 cm) long presented on a clean robust plant with two keikis in a 8 inch (20 cm) wood slat basket; sepals and petals obtuse oblong; lip pink-lavender, midlobe recurved, spur 1 inch (2.5 cm); column light pink-lavender; anther cap yellow overlaid rose; substance firm; texture diamond dust.



Vanda Joy Irene – Quality Award Description

(*V. Lou Sneary* x *V. Pralor*)

Fifteen open flowers on one 18 inch (46 cm) inflorescence; sepals and petals spatulate, pink-salmon, lightly overlaid lavender distally; lip pink-salmon, midlobe overlaid lavender; column pink-salmon, lightly overlaid lavender, spur 0.9 inch (2.3 cm); anther cap pink-lavender, old rose highlights; substance translucent waxy; texture diamond dust.



Holcovanstylis [Hvs.] Pauka'a Pearl – Quality Award Description

(*V. Fuchs Cream Pull* x *Holc. subulifolium*)

Fourteen open heavily recurved white flowers on one 28 in. (71 cm) inflorescence; dorsal sepal erect, obtuse oblong; lateral sepals obtuse spatulate, quarter turn twist basally; petals obtuse spatulate, quarter turn twist basally; lip white, midlobe obtuse, side-lobes and centrally spotted lavender; column white; anther cap light creamy yellow; substance firm;

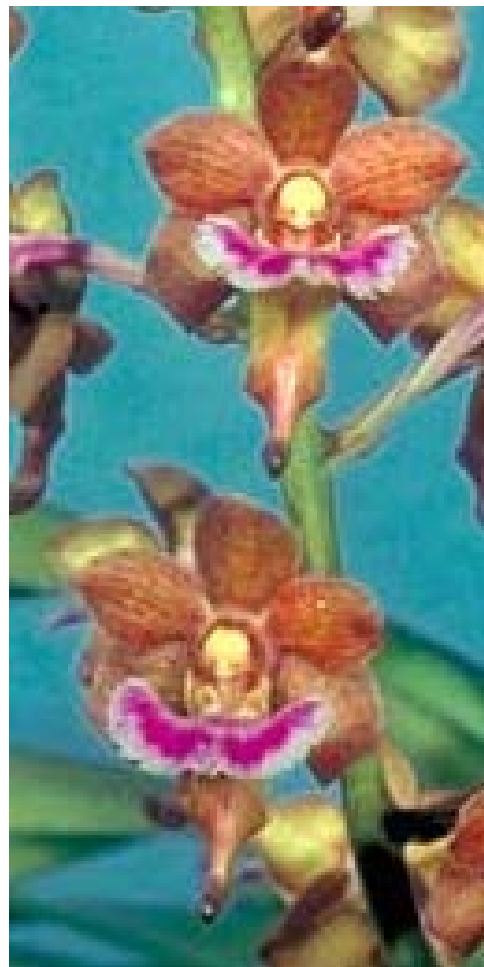
texture matte.

Species Data Sheet

Vanda flabellata (Roxb.) Hook. ex G.Don in J.C.Loudon, Hort. Brit.: 372 (1830)

[VAN-da fla-bel-LAH-ta]

Vanda flabellata is a miniature found in Southeast Asia in lowland broad-leaved evergreen and semi-deciduous forests edges or sparse woods at elevations of 200 to 1700 meters. It is a small to medium sized, hot to cool growing epiphytic species that requires partial sun. The short stem carries many, lorate, curved, keeled, bilobed apically leaves. Plants will flower in late spring through early summer with a stem height of 2 inches (5 cm) and a plant width of 4 inches (10 cm) or less. Fully mature specimens are not more than double this size. Typical inflorescences are 4 to 10" [10 to 25 cm] long, pendant, lax, 3 to 15 flowered inflorescence carrying fragrant flowers. Well-grown plants can produce two or more inflorescences of nearly 20 flowers each. Individual flowers are slightly more than 1 inch (2.5cm) and are frequently full formed with little or no fenestration (open windows between the sepals and petals). The base color of the sepals and petals is pale coppery bronze with a slight greenish cast. Faint mottling of rose



Vanda flabellata
'Gotterer' AM/AOS
Jun 1980, NS 2.8 cm

is visible in many clones. The exceptionally large, ¾-inch-wide (1.8-cm-wide) lip is starkly contrasting: pure white overlaid with bright rose-purple.

Judge using the General scale since the lip is a dominate floral feature.

The specific epithet flabellata (from the Latin flabellatus meaning shaped like a small fan) derives from this feature.

Synonyms / Varieties / forms:

Synonyms – None (in recent times)

Albinistic forms exist with pale greenish sepals and petals with a white lip is often referred to as an 'alba' form, but it is not officially recognized, consequently it is a horticultural variety at this time.



Vanda flabellata
'Robert' CHM/JC/AOS
Jun 2017, NS 2.3 x 3.5 cm

Awards:

Below are AOS awards that Vanda flabellata has received:

	FCC	AM	HCC	AQ	AD	JC	AQ	CCE	CCM	CHM	CBM	TOTAL
AOS		1	1			1				1	1	34
Year(s) Awarded		1980	1986			2017				2017	1966	

This species has received 5 AOS awards since initially being shown in 1966, not many considering the potentially positive breeding attributes.

Breeding Characteristics:

Although *Vanda flabellata* is not among the historical top six species used in hybridizing vandas, its use will probably be increasing due to market demand for smaller plants. *Vanda flabellata* breeding attributes are: miniature and compact plant habit, large colorful lip, fully form flowers, and the green color (especially the 'alba' form) and red spots of the sepals and petals emerges in appealingly hybrids. The table below list the *V. flabellata* progeny registered per decade and awards associated with the grex (per OrchidWiz 6.2).

	1950	1960	1970	1980	1990	2000	2010	Total
Registered	0	1	20	20	45	30	45	161
Assc Awds	0	0	25	24	18	19	18	104
F1 Progeny	0	1	13	5	6	5	5	35
Assc Awds	0	0	14	2	1	0	0	17
F2 Progeny	0	0	7	9	6	5	5	32
Assc Awds	0	0	11	22	5	16	3	57
F3 Progeny	0	0	0	5	20	10	18	53
Assc Awds	0	0	0	0	10	2	8	20

Outside of the initial use in the 1970s, one notices that the use of *V. flabellata* and its progeny have been relative constant.

The first registered hybrid with *Vanda tessellata* was in 1941 and breeding interest has shown a slow but steady upswing since.

Breeding has been roughly equally divided between intra (48 *Vanda* crosses), *Vandachostylis* (*Vanda* x *Rhynchostylis*, 57 crosses) and other inter-genera hybrids (56 crosses).

'Major' Hybrids (Intra-genera):

Vanda [V.] Vieng Ping (1973) (*V. flabellata* x *V. denisoniana*), 1973, C. Suddhipaca, 13 F1 and 88 total progeny, 2 AOS awards (1 AM, 1 HCC). Some of the major progeny: **Van. Luke Thai**, see below; **Van. Jade Magic** (*V. Thonglor* (1971) x *Van. Luke Thai*), 1994, Brighton Orchids, 10 F1 progeny, no awards; **V. Jiad**, see below.

Vanda [V.] Jiad (*V. Vieng Ping* (1973) x *V. Madame Kenny*), 1978, J. Rujivarananthachai, 9 F1 and 24 total progeny, 1 HCC/AOS award. No major progeny.

Vanda [V.] Mickey Carmichael (*V. Vieng Ping* (1973) x *V. Thailand Gold*), 1987, T. Orchids, no progeny, 1 HCC/AOS award.



Vanda Vieng Ping
'Mike' AM/AOS
Jul 1994, 3.7 x 3.4 cm



Vanda Jiad
'Lemon' HCC/AOS
Sep 1987, NS 5.8 cm



Vanda Mickey Carmichael
'Jonca' HCC/AOS
Jun 1986, 5.2 cm

'Major' Hybrids (Inter-genera, Vandachostylis):

Vandachostylis [Van.] Luke Thai (V. Vieng Ping (1973) x Rhy. coelestis), 1983, T. Orchids, 14 awards (7 AMs, 6 HCCs, 1 JC), 22 F1 and 57 total progeny. Some of the major progeny: **Van. Jade Magic** (V. Thonglor (1971) x Van. Luke Thai), 1994, Brighton Orchids, 10 F1 progeny, no awards; **Van. Ben Mianmanus**, see below.

Vandachostylis [Van.] Thai Noi (Ryn. coelestis x V. flabellata), 1973, C. Suddhipaca, 11 F1 and 28 total progeny, 12 AOS awards (6 AMs, 3 HCCs, 1 JC, 1 CCE, 1 CCM). Major progeny: **Perreiraara Bangkok Sunset**, see below.

Vandachostylis [Van.] Ben Mianmanus (Van. Evergreen Magic x V. tessellata), 2015, Banjong Orchids, 1 F1 progeny, 6 AM/AOS awards. No major progeny.



Vandachostylis Luke Thai
'Judy's Surprise' AM/AOS
Oct 2019, NS 3.0 x 2.5 cm



Vandachostylis Ben Mianmanus
'Garrett's Brown Sugar' AM/AOS
Sep 2019, NS 5.5 x 5.5 cm



Vandachostylis Thai Noi
'Purple Passion' AM/AOS
Aug 2007, NS 2.6 x 2.2 cm

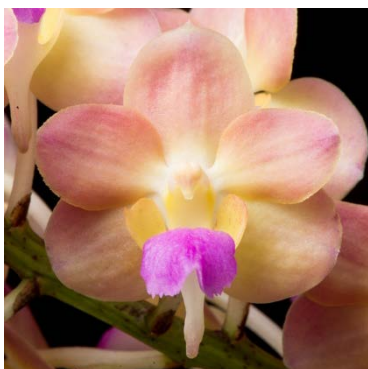
'Major' Hybrids (Inter-genera, All others):

Perreiraara [Prra.] Bangkok Sunset (Van. Thai Noi x Aer. houlettiana), 2008, S. Paripoonnanon, 14 F1 progeny, 14 AOS awards (9 AMs, 5 HCCs). Some of the major progeny: **Wrna. Tango Fire**, see below

Papilionanda [Pda.] Malibu Gold (Pda. Josephine Van Brero x V. Luke Nok), 1973, Freed, 2 F1 progeny, 8 AOS awards (1 AMs, 5 HCCs, 1 CCM, 1 JC). No major progeny.

Aeridovanda [Aerdv.] Arnold Sanchez (V. Vieng Ping (1973) x Aer. lawrenceae), 1984, R. F. Orchids, no progeny, 4 AOS awards (2 AMs, 2 HCCs).

Waironara [Wrna.] Tango Fire (V. Tubtim Velvet x Van. Five Friendships), 1998, R. F. Orchids, 2 F1 progeny, 9 AOS awards (5 AMs, 4 HCCs). No major progeny.



Prra. Bangkok Sunset
'Karina' AM/AOS
Jun 2018, NS 3.3 x 3.8 cm



Pda. Malibu Gold
'Maty' HCC/AOS
Feb 1981, NS 5.5 cm



Aerdv. Arnold Sanchez
'Denise' AM/AOS
Mar 2000, NS 4.5 x 4.5 cm



Wrna. Tango Fire
'Ruby's Fire' AM/AOS
May 2019, NS 3.7 x 3.6 cm

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Grove delineates some general Ascocenda qualities that are very helpful in evaluation of a cross at the judging table.

The Qualities of Ascocendas

Many of the ascocendas being exhibited today are hard to distinguish from vandas. Their flowers look like vandas in shape and often approach their size. When ascocendas first began to appear on the market in large numbers in the late 1960s, they often colloquially were called "miniature vandas" because of their smaller flower size. In most of today's ascocendas, however, the number of Vanda ancestors considerably exceeds the number of Ascocentrum ancestors, and, as a result, the descendants often approximate vandas in size and shape, and even in the smaller number of flowers. That is not always so, but it seems increasingly to be the case. Not everyone is of the opinion that this has been a desirable development. Some enthusiasts think that the smaller, more brightly colored, and more numerous flowers of the earlier Ascocenda hybrids, such as Ascda. Meda Arnold and Ascda. Yip Sum Wah, have a special charm lacking in some of the large-flowered ascocendas. Fortunately, most collections have room for both types.

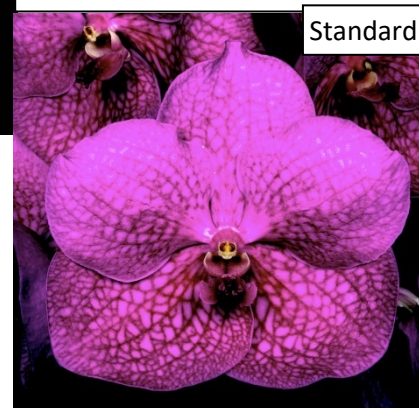


Vanda Yip Sum Wah
'Joan' AM/AOS
May 2015, NS 7.2 x 7.4 cm
21 flwrs, 8 buds, 1 infl



Vanda Meda Arnold
'Penn Valley' AM/AOS
Jul 2009, NS 6.6 x 5.5 cm
17 flwrs, 1 infl

Vanda Christa Collins
'Starburst Beauty' AM/AOS
Jan 2020, NS 13.4 x 13.05 cm
10 flwrs, 1 infl



Vanda Starrlyn's Play
'Moon Mist' AM/AOS
Dec 2004, NS 10.1 x 10.0 cm
10 flwrs, 1 infl

KRV comment: As one can see from the three above examples (three 'Ascocendas', two classic F1s and one large F3) and a recent awarded standard Vanda Hybrid) one can easily see why the early 'Ascocendas' were referred to as "miniature vandas" as well as the increase in number of flowers per inflorescences. By the third generational cross Vanda Starrlyn's Play one can also see that cultivars were appearing that looked like standard vandas. Color preference is personal and will not be comment on but F1 generation 'Ascocendas' do appear to generally have brighter colors and uniform tessellation.

The most outstanding quality of ascocendas indisputably is the combination of intense color and sparkling texture. An increased number of flowers is another desirable quality of ascocendas, even though this gain is accompanied by a reduction in flower size relative to that of vandas.

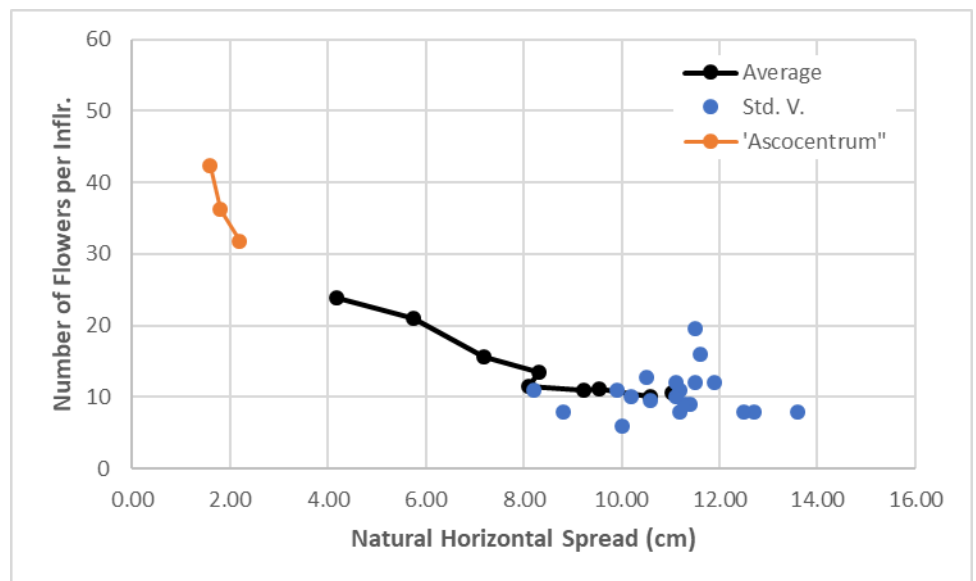
KRV comment: A table of the over 2,100 *V. curvifolia* hybrids was created with generational data. From this table there were 648 grexes that were awarded and from this awarded data number of flowers per inflorescence and natural spread (Note: Table modified to reflect the most recent 'Ascocentrum' parent generational, number modification included in summary table) was added. From this table the following summary table and accompanying graphs were determined.

Title/generation	curvifolia	miniata	ampullacea	F1	F2	F3	F4	F5	F6	F7	F8	Std. V.
Num. Flrs. / Inflr.	31.8	42.3	36.2	24.01	21.09	15.65	13.42	11.57	11.06	11.17	10.15	10.53
Natrl. Spr (cm) (Avg.)	2.2	1.6	1.8	4.19	5.75	7.18	8.31	8.09	9.24	9.54	10.60	11.04
Grexes				131	713	599	315	176	77	72	14	20
Awd grexes or mod. Gen. data	648	53	2	49	254	190	77	49	18	9	2	20
Percentage of Awd grexes				37.4%	35.6%	31.7%	24.4%	27.8%	23.4%	12.5%	14.3%	100.0%



The first three columns are the 'Ascocentrum' species used in the over 2,100 hybrids along with associated flower count and natural spread. From this table besides *V. curvifolia* being used in all 648 crosses, *V. miniata* was used in 53 and *V. ampullacea* in 2. At the far right is data associated with the 20 most awarded and/or registered 'Standard' Vandas. The Vandas selected were based on being progeny of the standard five species (*V. sanderiana* dominant, *V. coerulea*, *V. tricolor*, *V. luzonica*, and *V. dearie*; primary hybrids were not included) that have been used in breeding of 'Standard' Vandas. I know this is not enough data for a valid data but I stopped at 20 since this quantity is between the F5 and F6 quantities in the table and it will give a least I idea of what the numbers are for a 'Standard' Vanda.

The Columns headed up by F1 thru F8 are the eight generations of Vanda with *V. curvifolia* in their background, that is 'Ascocendas.' Looking across the Number of Flowers per Inflorescence (Num. Flrs. / Inflr.) row, it is observed that the average flower count starts at 24.01 for the first generation, F1, of *V. curvifolia* progeny down to 11.57 in the fifth generation, F5. From the fifth generation on it appears that the number of flowers is in the vicinity or maybe a little higher that the 'Standard' Vandas. Natural Spread is another story, since even in the seventh generation (only nine grexes so far) it appears that the average natural spread is still approximately 1.5 cms smaller than the 'Standard' Vandas.

To look into this further, the data will be presented graphically. The graph below will look at the 'Ascocendas' that have been used, the average trends discussed above, and data associated with the 'Standard' Vandas. The three orange dots on the left side of the graph represent the 'Ascocendas'. The data represented by the black dots and line is the average generational data for the *V. curvifolia* progeny starting with the F1 data at point 24.01 flowers per inflorescence and 4.19 cm natural spread, ending with the F8 data point. The 'zig' in the average line between the F4 and F5 data points is not expected. It may be due to small sample size (77 F4 grexes and 49 F5 grexes), subliminal change in the judges mind since the

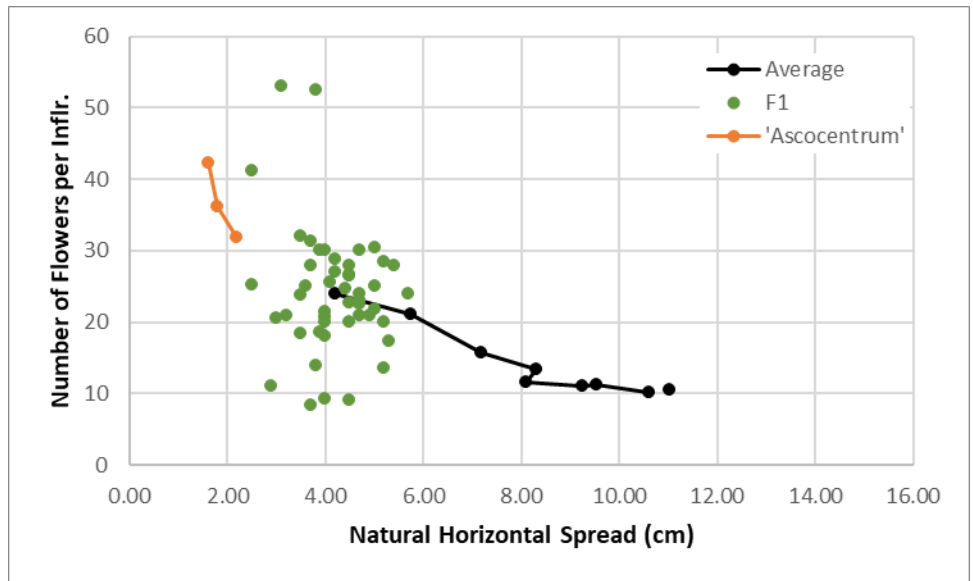


plants are approaching Standard Vandas in size and shape, or something else. The *V. curvifolia* generational data was modified to correspond any *Ascocentrum*. There were 53 grexes where *V. miniata* was the most recent *Ascocentrum* and two where *V. ampullacea* was the most recent *Ascocentrum*. The black data point to the far right that is not associated with the black line is the average data point for the 20 'Standard' Vandas. The blue points are the selected 'Standard' Vandas. Some of the extreme represented data points are: *V. Inboriboon* 'Isabel Nattinee' HCC/AOS (*V. Kasem's Delight* x *V. Sarojini*), represented by the data point with the

			
Vanda Inboriboon 'Isabel Nattinee' HCC/AOS Mar 2012, NS 8.2 x 8.2 cm 11 flwrs, 1 infl	Vanda Louis Wolfson 'Florence' AM/AOS Mar 2016, NS 10.0 x 11.2 cm 5 flwrs + 1 bd, 1 infl	Vanda Mem. Elmis Aguilar 'Florence' AM/AOS Sep 2015, NS 11.5 x 10.8 cm 30 flwrs + 9 bds, 2 infl	Vanda Misty Pace 'Crownfox' FCC/AOS Mar 2019, NS 13.6 x 14.3 cm 8 flwrs, 1 infl

smallest natural spread; *V. Louis Wolfson* 'Florence' AM/AOS (*V. Crownfox Keylime* x *V. Scott Thompson*), represented by the data point with the fewest flowers; *V. Memoria Elmis Aguilar* 'Memoria Elmis Aguilar' AM/AOS (*V. Taveesuksa* x *V. Thailand Gold*), represented by the data point with the most flowers; *V. Misty Pace* 'Crownfox' FCC/AOS (*V. Marina Rivera* x *V. Liz Letzler*), represented by the data point with the largest natural spread. Based on the summary table and the graphical data the following can be said about awardable 'Standard' Vandas: typically there are 10.5 flowers per inflorescences with typical range of 8 to 13 flowers per inflorescences; the typical natural spread is 11 cm with a typical range of 9 to 13 cm; values outside of this range do occur. Prior to further discussion on the 'Standard' Vandas data, similar plots for some of the *Ascocendas* should be reviewed.

The table at the right is for the first generation, F1, progeny of which there are 49 awarded grexes. The average natural spread is 4.19 cm and number of flowers is 23.9 per inflorescence. The typical natural spread ranges 3.0 cm to 5.5 cm while the number of flowers ranges from 17 to 33 flowers per inflorescence. Being a primary hybrid there are outliers from this typical range when one parent or the other dominates. When the Ascocentrum parent dominates you will tend to have more flowers, up to



50+, and / or small size flowers, 2.5 cm. While if the Standard Vanda is dominate fewer flowers, as low as 8 flowers, and / or larger flowers, almost 6 cm. Below are four grexes selected around the average data point: V. Aroonsri Beauty 'Joan's Orange Amazement' AM/AOS (V. Yip Sum Wah x V. curvifolia); V. Koh Man 'Wiliama' AM/AOS (V. Manila x V. curvifolia); V. The Ishom Girls 'Samantha' HCC/AOS (V. Memoria Lyle Swanson x V. curvifolia); V. Tropicana 'Malibu' AM/AOS (V. Betsy Sumner x V. curvifolia).



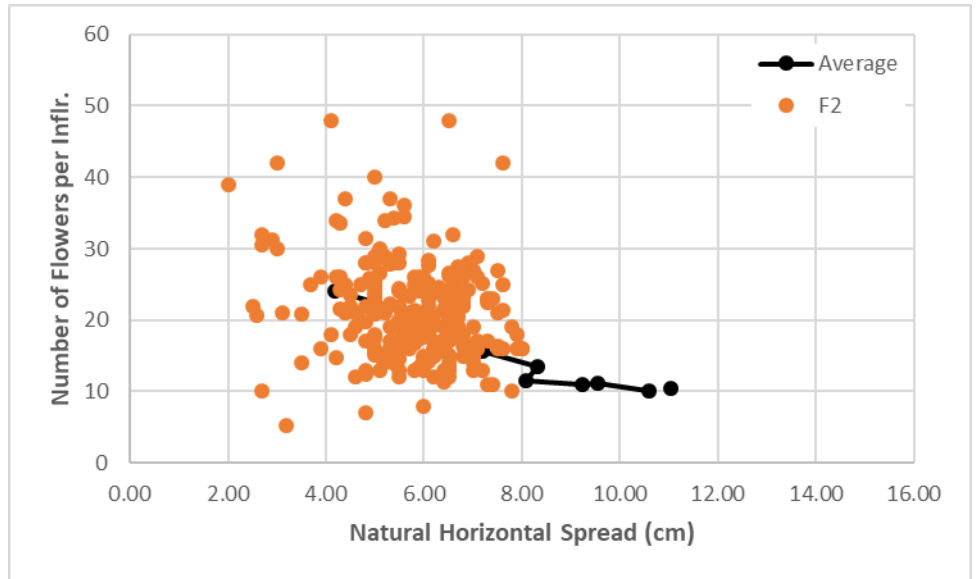
Vanda Aroonsri Beauty
'Joan's Orange Amazement' AM/AOS
Sep 2012, NS 4.0 x 3.7 cm
24 flwrs, 1 bd, 1 infl

Vanda Koh Man
'Wiliama' AM/AOS
Aug 1978, NS 3.5 cm
25 flwrs, 1 infl

Vanda The Ishom Girls
'Samantha' HCC/AOS
Oct 2004, NS 4.2 x 4.1 cm
19 flwrs, 8 bds, 1 infl

Vanda Tropicana
'Malibu' AM/AOS
Feb 2011, NS 4.3 cm
22 flwrs, 4 bds, 1 infl

The table at the right is for the second generation, F2, progeny of which there are 254 awarded grexes. The average natural spread is 5.75 cm and number of flowers is 21.1 per inflorescence. The typical natural spread ranges 3.5 cm to 7.5 cm while the number of flowers ranges from 11 to 30 flowers per inflorescence. Of all the *V. curvifolia* generations, this one appears to have the greatest in both number of flowers 5 to 48 flowers per inflorescence and natural spread from 2 to 8 cm. Below are five selected grexes that reflect this wide range: *V. Jim Mettler 'Norma's Delight'* HCC/AOS (*V. Sagarik Gold* x *V. Guo Chia Long*), a statistical average F2 grex; *V. Ramsey 'L'Chaim'* HCC/AOS (*V. Thananchai* x *V. Memoria Choo Laikeun*), a statistical average F2 grex; *V. Lorraine Wills 'Mag'* AM/AOC (*V. Dona Rome Sanchez* x *V. Meda Arnold*), an F2 grex with both a high flower count and natural spread; *V. Blue Eyes 'David Made It'* HCC/AOS (*V. Peggy Foo* x *V. Gordon Dillon*), among the largest F2 natural spread awarded; *V. Color Burst 'Marge Soule'* HCC/AOS (*V. falcata* x *V. Sidhi Gold*), F2 grex with the smallest natural spread.



Vanda Lorraine Wills
'Mag' AM/AOC
Sep 1998, NS 6.5 x 5.8 cm
48 flwrs, 1 infl



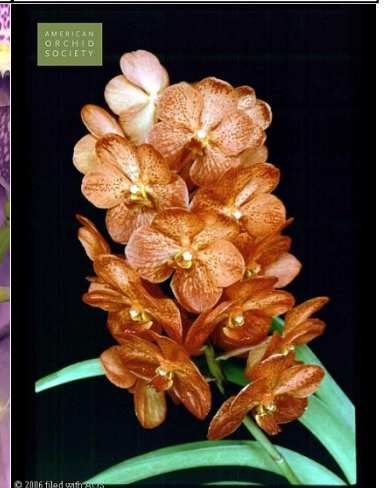
Vanda Jim Mettler
'Norma's Delight' HCC/AOS
Sep 1998, NS 6.1 x 5.8 cm
19 flwrs, 1 infl



Vanda Color Burst
'Marge Soule' HCC/AOS
Sep 2006, NS 2.0 x 3.2 cm
39 flwrs, 1 infl

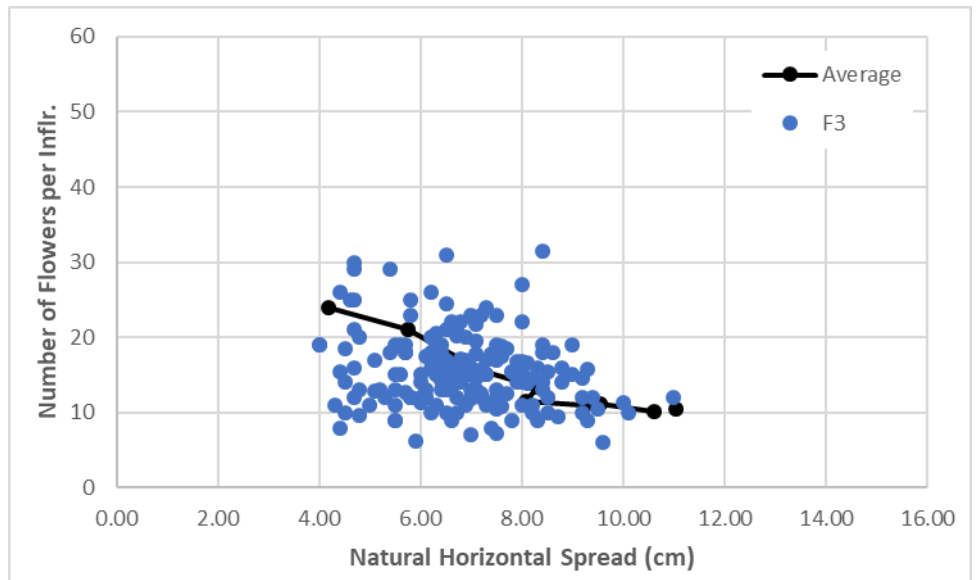


Vanda Blue Eyes
'David Made It' HCC/AOS
Jul 2019, NS 8.0 x 8.2 cm
12 flwrs, 4 bds, 1 infl

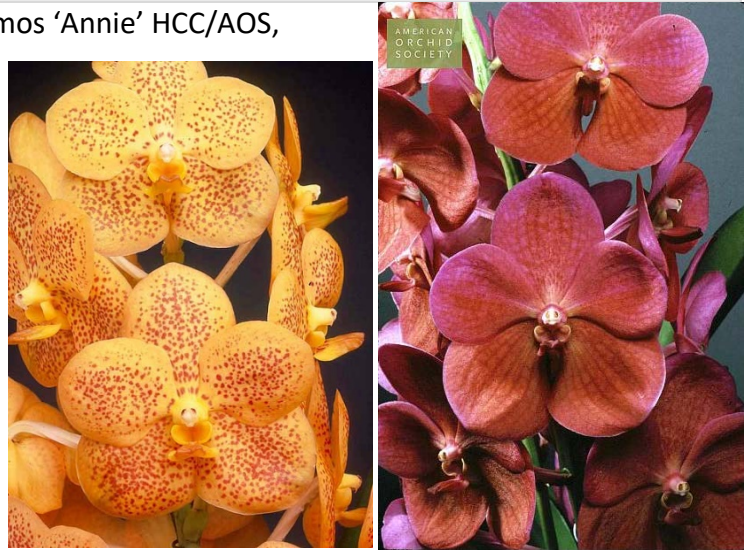


Vanda Ramsey
'L'Chaim' HCC/AOS
Apr 1996, NS 5.5 x 6.0 cm
26 flwrs, 4 bds, 1 infl

The table at the right is for the third generation, F3, progeny of which there are 190 awarded grexes. The average natural spread is 7.18 cm and number of flowers is 15.7 per inflorescence. This is the first generation in which there starts to appear to be a boundary on both minimum natural spread and maximum and minimum flower count for awarded grexes. The typical natural spread ranges 4.0 cm to 9.5 cm while the number of flowers ranges from 7 to 26 flowers per inflorescence. Below are five selected grexes that reflect this wide range:

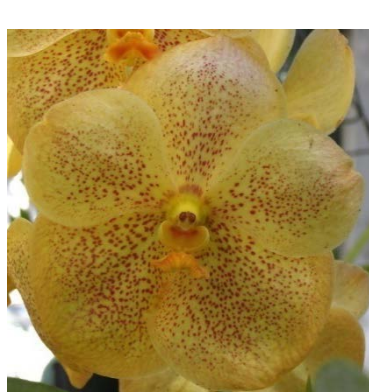


Below are five selected grexes that reflect this wide range: V. Victor Ramos 'Annie' HCC/AOS, statistical average grex; V. Victor Ramos 'Annie' HCC/AOS, a statistical average grex; V. Alberta Rubio 'Midnight Delight' AM/AOS (V. Aileen Garrison x V. Doctor Anek), F3 grex with the largest spread; V. Fuchs Galaxy 'Vernon Kedodeaux' AM/AOS (V. Thonglor (1974) x V. Piswong), F3 grex with the most flowers; V. Fab-A-Lus 'Norma's Delight' HCC/AOS (V. John De Biase x V. flabellate); awarded grex with the smallest natural spread; award grex with the fewest flowers.



Vanda Victor Ramos
'Annie' HCC/AOS
Dec 2002, NS 7.0 x 7.0 cm
16 flwrs, 1 infl

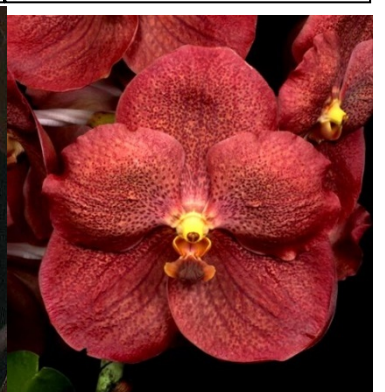
Vanda Fuchs Galaxy
'Vernon Kebodeaux' AM/AOS
Feb 1997, NS 8.6 x 9.0 cm
22 flwrs, 16 bds, 1 infl



Vanda Jack Duncan
'Jack Duncan' HCC/AOS
Sep 2017, NS 9.6 x 11.0 cm
6 flwrs, 1 infl

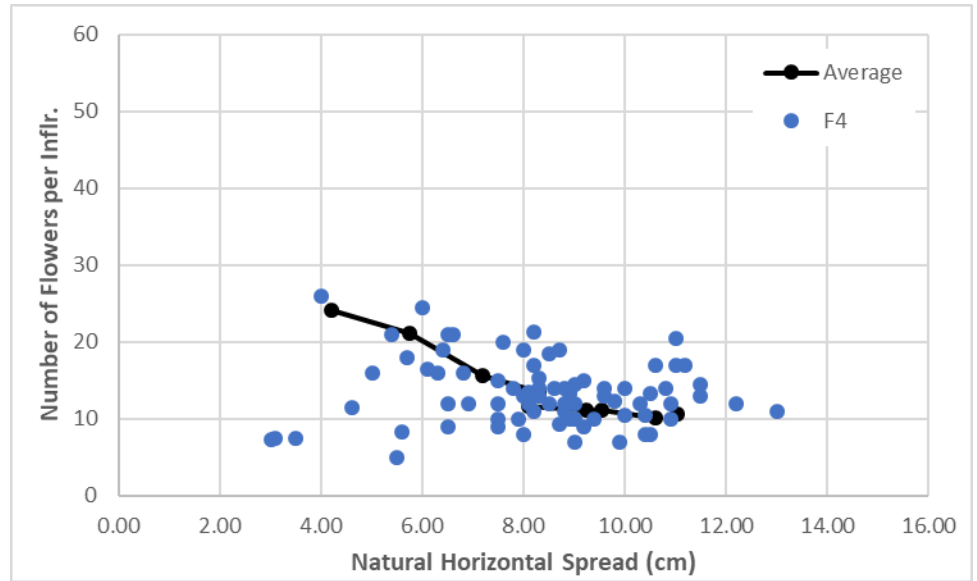


Vanda Fab-A-Lus
'Norma's Delight' HCC/AOS
Oct 1999, NS 4.0 x 4.2 cm
16 flwrs, 3 bds, 1 infl



Vanda Alberta Rubio
'Midnight Delight' AM/AOS
Apr 2014, NS 12.8 x 13.5 cm
14 flwrs, 3 bds, 1 infl

The table at the right is for the third generation, F4, progeny of which there are 77 awarded grexes. The average natural spread is 8.31 cm and number of flowers is 13.4 per inflorescence. The number of flowers per inflorescence is further reduced with a wider range in the natural spread. The typical natural spread ranges 6.0 cm to 11 cm while the number of flowers ranges from 7 to 20 flowers per inflorescence. Below are five selected grexes that reflect this wide range: V. Kasem's Jewel 'Krull-Smith' HCC/AOS, F4 statistical average grex; V. Crownfox Delicious 'Marmalade' AM/AOS (V. Crownfox Yellow Jacket x V. Fuchs Sunset), one of the awarded F4 grexes with the most flowers; V. Menehune Charm 'Karlene' HCC/AOS (V. Blue Tahourdin x V. falcata), the awarded F4 grex with the smallest natural spread; V. Thongtong Classic 'Seagrove' AM/AOS (V. denisoniana x V. Malini), award F4 grex with the fewest flowers per inflorescence; V. Melida Demorizi 'Teresa Helena' AM/AOS (V. Tony Viggiani x V. Ray Rodriguez), the F4 grex with the largest natural spread.



Vanda Crownfox Delicious 'Marmalade' AM/AOS
Jan 2011, NS 6.0 x 5.5 cm
45 flwrs, 4 bds, 2 infls



Vanda Kasem's Jewel 'Krull-Smith' HCC/AOS
Nov 1984, NS 8.2 cm
13 flwrs, 1 infl



Vanda Thongtong Classic 'Seagrove' AM/AOS
May 2012, NS 5.5 x 5.0 cm
10 flwrs, 2 infls

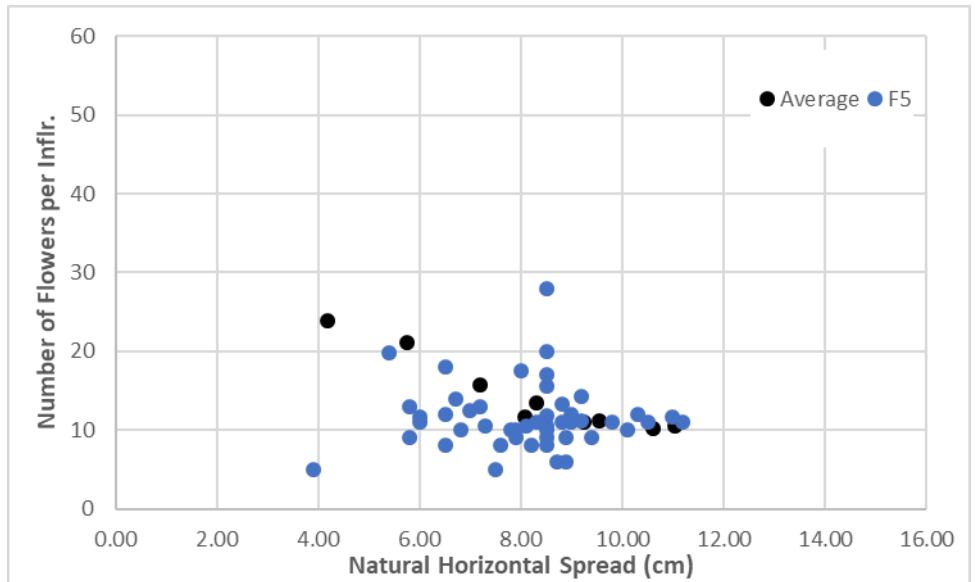


Vanda Menehune Charm 'Karlene' HCC/AOS
Nov 2011, NS 3.0 x 4.3 cm
8 flwrs, 14 bds, 3 infls



Vanda Melida Demorizi 'Teresa Helena' AM/AOS
Feb 2018, NS 13.0 x 13.2 cm
11 flwrs, 1 infl

The table at the right is for the third generation, F5, progeny of which there are 49 awarded grexes. The average natural spread is 8.09 cm and number of flowers is 11.6 per inflorescence. The number of flowers per inflorescence is further reduced with a reduced range in the natural spread (possible related to small number of awarded grexes). The typical natural spread ranges 5.5 cm to 10 cm while the number of flowers ranges from 8 to 14 flowers per inflorescence. Below are four selected grexes that reflect this range: V. Muang Thong 'White Diamond' HCC/AOS (V. Tubtim Velvet x V. Nakornsawan Belle), F4 grex with the statistical average number of flowers and natural spread; V. Tere Montilla 'Redland Spots' AM/AOS (V. Bennett Tapley x V. Tubtim Velvet), awarded F5 grex with the most flowers; V. Motes Lemon Tart 'Karina Motes' HCC/AOS (V. cristata x V. Miami Snowdrop), awarded F5 grex with the smallest natural spread; V. Fran Boros 'Susanna Coffey' AM/AOS (V. Fuchs Port Royal x V. Doctor Anek), awarded F5 grex with the largest natural spread.



Vanda Motes Lemon Tart
'Karina Motes' HCC/AOS
Dec 2015, NS 4.4 x 4.2 cm
5 flwrs, 1 infl



Vanda Tere Montilla
'Redland Spots' AM/AOS
Apr 1994, NS 8.5 x 8.6 cm
14 flwrs, 11 bds, 1 infl



Vanda Muang Thong
'White Diamond' HCC/AOS
Oct 2006, NS 7.5 x 8.3 cm
9 flwrs, 1 infl



Vanda Fran Boros
'Susanna Coffey' AM/AOS
Feb 2008, NS 11.2 x 11.7 cm
11 flwrs, 1 infl

The arrangement of the flowers is superior, on the whole. Roundness and flatness of flower shape are further qualities transmitted by ascocentrums. Their sepals and petals are of approximately the same size, and, while their flowers are slightly cupped overall, the individual parts are not twisted or recurved, unlike the flowers of many of the Vanda species. Plates 49 through 63 illustrate these fine qualities.

KRV Comment: These traits can be seen in F1 grexes pictured above (in included below). The arrangement tends to form tight floral clusters, in some cases too tight. The round flower shape with approximately equal sepals and petals are evident through five generations (not in some F1 Vanda species but it is obvious that the influence is there). Some slight cupping is observed in some the F1 grexes, but obviously the judges prefer the flowers to be flat.



Vanda Aroonsri Beauty
'Joan's Orange Amazement' AM/AOS
Sep 2012, NS 4.0 x 3.7 cm
24 flwrs, 1 bd, 1 infl

Vanda Koh Man
'Wiliama' AM/AOS
Aug 1978, NS 3.5 cm
25 flwrs, 1 infl

Vanda The Ishom Girls
'Samantha' HCC/AOS
Oct 2004, NS 4.2 x 4.1 cm
19 flwrs, 8 bds, 1 infl

Vanda Tropicana
'Malibu' AM/AOS
Feb 2011, NS 4.3 cm
22 flwrs, 4 bds, 1 infl

The pedicels of Ascocentrum blossoms tilt upward, displaying the individual blooms attractively. This highly desirable characteristic often is passed on to the Ascocenda hybrids and overcomes the tendency toward overly long pedicels and downward-tilting flowers that is evident in some vandas-an undesirable trait inherited from certain of their species-ancestors.



Vanda Nilsa Rosa Rosa
'Julio David' CCM/AOS
Oct 2015, NS 9.2 x 11.5 cm
44 flwrs, 4 infls

KRV Comment: One of the effects of overly long pedicels in Vandas are inflorescences that do not appear to be full, as shown in the first enlargement of Vanda Nilsa Rosa Rosa above. When this is passed on to its progeny, the results is an 'open' inflorescences such as Vanda Aroonsri Beauty above.






The downward-tilting flowers is illustrated in the second enlargement of Vanda Nilsa Rosa Rosa, note the 90-degree bend in pedicel right at base of the flower. When looking at the F1 examples above, Vanda Aroonsri has a much reduce bend and even less in Vanda Tropicana.

Vandas sometimes do not have as straight and erect a flower stalk as one would wish, whereas ascocentrums generally have straight, erect stalks and often transmit this fine feature to their Ascocenda hybrid progeny.

KRV Comment: This is usually difficult to observed the natural inflorescence shape in awarded pictures, but by looking at the pictures on the prior page, generally what one finds are that the Vanda inflorescences are usually tied up while the inflorescences of the early Generational ascocentrums do not require support.

Finally, ascocendas bloom on rather small, compact plants, and at an early age. The cultural requirements of ascocendas are the same as those described for vandas in Part II of this book, and the plants need no special treatment. They are easy to cultivate and bloom in nearly all situations, provided they are given a reasonable amount of warmth, humidity, and light. Every greenhouse should include some ascocendas.

KRV Comment: Plant size does not really have a standardized method and the only awarded plants that has any information on plant size are the cultural awarded plants. The information that I was able to find is below (not many Ascocendas / Vandas received cultural awards). It appears that ascocentrums influence on plant size is minimal around the fourth / fifth generation. The other item that was noticed was that

		<p>F1 - Pollen Vanda Yip Sum Wah 'Flame' CCM/AOS Sep 2009, NS 6.0 x 5.9 cm "... 77-cm high by 77-cm wide nine-growth plant grown in a slotted 35-cm basket; longest growth 90-cm long ..."</p>	
<p>Vanda curvifolia 'Potts's Scarlet Beauty' CCM/AOS May 2013, NS 2.0 x 1.7 cm "... 19cm tall; robust 47-cm tall plant with four keikis to 17cm tall grown ..."</p>	<p>F1 - Seed No cultural awards</p>	<p>F2 - Pollen Vanda John De Biase '4N Orchids' CCE/AOS Nov 2019, NS 7.6 x 7.6 cm "... 14 beautifully arranged inflorescences to 30cm tall, subtended by numerous as yet unflowered keikis, all spanning 2m tall and 1.3m wide..."</p>	<p>Vanda Nilsa Rosa Rosa 'Julio David' CCM/AOS Oct 2015, NS 9.2 x 11.5 cm "... upright inflorescences borne on a 136-cm tall by 78-cm wide plant ..."</p>
	<p>F2 - Seed No cultural awards</p>		
<p>F3 - Seed Vanda Princess Mikasa 'Indigo' CCE/AOS Nov 2001, NS 10.5 x 9.9 cm "... 14 inflorescences borne on a robust plant 128 cm high by 124 cm wide..."</p>	<p>F3 - Pollen No cultural awards</p>		



Vanda curvifolia
 'Potsy's Scarlet Beauty'
 CCM/AOS
 May 2013, NS 2.0 x 1.7 cm
 "... 19cm tall; robust 47-cm
 tall plant with four keikis to
 17cm tall grown ..."



F4 – Pollen and Seed
 Vanda Crownfox Delicious
 'Marmalade' AM/CCM/AOS
 Jan 2011, NS 6.0 x 5.5 cm
 "... 80-cm tall plant with two
 keikis ..."

F4 – Pollen and Seed
NO PHOTO
 Vanda Fuchs Charm
 'In the Pink' CCM/AOS
 Oct 1988, NS 8.0 cm
 "... 99 cm tall from top of
 basket to top of bloom
 stem..."



Vanda Nilsa Rosa Rosa
 'Julio David' CCM/AOS
 Oct 2015, NS 9.2 x 11.5 cm
 "... upright inflorescences
 borne on a 136-cm tall by 78-
 cm wide plant ..."

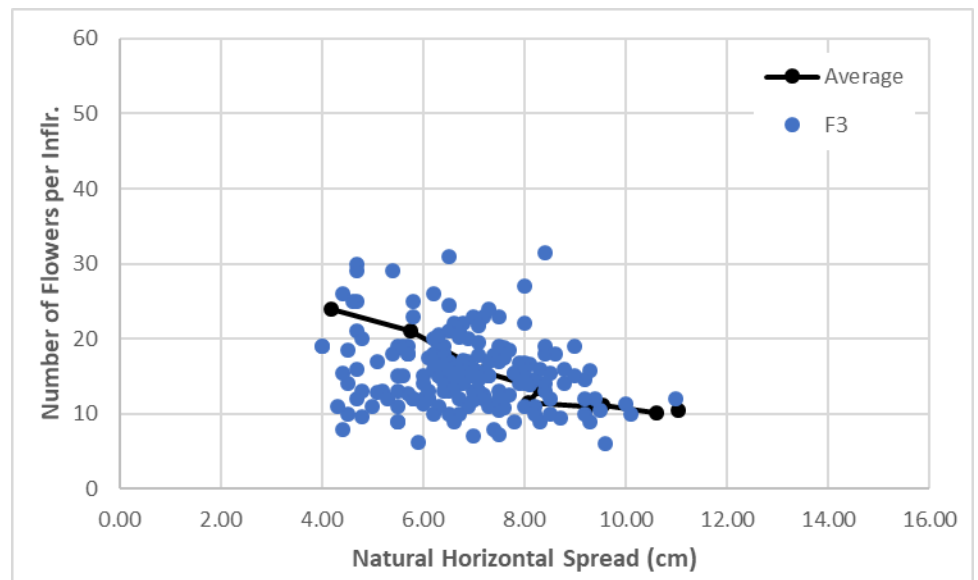
Ascocentrums were initially used to provide the pollen in crosses, not until the third generation was it becoming common for Vanda Curvifolia progeny to be the seed (mother) plant.

Summary:

- ‘Ascocendas’ due look like “miniature vandas” both florally and plant habit.
- Generally ‘Ascocendas’ have more flowers per inflorescences.
- F1-F3 generations of ‘Ascocendas’ generally have brighter colors and uniform tessellation (and sometimes spots).
- Table below shows the average multi-generational influence of ascocentrums

Title/generation	curvifolia	miniata	ampullacea	F1	F2	F3	F4	F5	F6	F7	F8	Std. V.
Num. Flrs. / Inflr. (Avg.)	31.8	42.3	36.2	24.01	21.09	15.65	13.42	11.57	11.06	11.17	10.15	10.53
Natrl. Spr (cm) (Avg.)	2.2	1.6	1.8	4.19	5.75	7.18	8.31	8.09	9.24	9.54	10.60	11.04
Grexes				131	713	599	315	176	77	72	14	20
Awd grexes or mod. Gen. data	648	53	2	49	254	190	77	49	18	9	2	20
Percentage of Awd grexes				37.4%	35.6%	31.7%	24.4%	27.8%	23.4%	12.5%	14.3%	100.0%

- Although the above table are averages there can be considerable spread, see typical F3 graph
- Superior arrangement of the flowers.
- Roundness and flatness of flower shape, slight cupping can occur, but from a judging point of view is pointable. (not twisted or recurved).
- Sepals and petals are of approximately the same size
- The pedicels tilt upward, displaying the individual blooms attractively.
- F1 / F2 generations tend to have inflorescences that are straight and erect.
- The ascocentrum inherited compact growth habit appears to be gone by around the F4 to F5 generation.



References:

- <https://op.aos.org/award>
- OrchidWiz.Database x6.2, update: March 2020
- Motes, M. R.; *Vandas – Their Botany, History, and Culture*, 1997
- Grove, D. L.; *Vandas and Ascocendas – and Their Combinations with Other Genera*, 1995

Species Data Sheet

Vanda roeblingiana (Roxb.) Hook. ex G.Don in J.C.Loudon, Hort. Brit.: 372 (1830)

[VAN-da tess-sel-LAY-tah]

Vanda roeblingiana is a cool growing monopodial epiphyte found in the mountains on the Philippine Island of Luzon and penninsular Malaysia in montane forests on medium sized tree trunks, particularly oaks, at elevations above 5200 ft (1500 meters) in heavy shade. The fact that it is cool growing may become useful breeding trait, but presently makes it temperamental in areas where other vandas are usually grown. It is a relatively large plant at 20 to 28 in. (50-70 cm) height and rather leathery leaves that are 8-12 in (20-30 cm) long by 1.2-1.6 in (3-4 cm) wide. The long lasting, sweetly fragrant flowers occur on an axillary, horizontal to ascending, 7 to 12" [17 to 30 cm] long, several to many [8 to 15] flowered inflorescence during the summer. The yellow approximately 2 in (5 cm) flowers are overlaid (in varying density between cultivars) with glossy mahogany brown are interesting, but the lip is what catches your eye. No other Vanda species approaches Vanda roeblingiana in the ornateness of its lip. The 3-lobed lip is about 0.6 in. (1.6 cm) long, with the spur about 0.2 in. (0.45 cm) long and a calli that consist of 3 low ridges. The erect, rather square to oblong lateral lobes are about 0.2 in. (0.5 cm) long by 0.1 in. (0.25 cm) wide. The midlobe is broadly clawed at the base and about 0.4 in. (1.1 cm) across at the apex. It is divided into 2 lobes, which are covered with fine hairs and fringed along the apical margins. (Could the fringed lip could make this species the Brassavola digbyana of the Vanda alliance.)



Vanda roeblingiana
'Burnt Wood' AM/AOS
Aug 2000, NS 4.8 x 4.5 cm

Judge using the Vanda scale or the General scale depending on the general flower shape.

Synonyms / Varieties / forms:

Synonyms – None (in recent times)

Varieties / forms – None

Awards:

Below are AOS awards that Vanda tessellata has received:

	FCC	AM	HCC	AQ	AD	JC	AQ	CCE	CCM	CHM	CBM	TOTAL
AOS		2	2						1		1	6
Year(s) Awarded		2000-2018	1990-1991						1992		1958	

This species has received 6 awards since initially being shown in 1958, obvious not a frequent award winner and rarely seen in cultivation.

Breeding Characteristics:

Although Vanda roeblingiana has been known since 1958, it has rarely been used by hybridizers with only 13 primary grexes, see table below. None of the progeny have received awards and pictures are only available for 4 of the grexes. Based on these pictures, the only possible characteristic that is passed on to the progeny is the mahogany brown overlay.

	1940	1950	1960	1970	1980	1990	2000	2010	Total
Reg	0	3	2	0	2	3	2	1	13
Assc Awds	0	0	0	0	0	0	0	0	0

'Major' Hybrids (None, grexes with pictures):

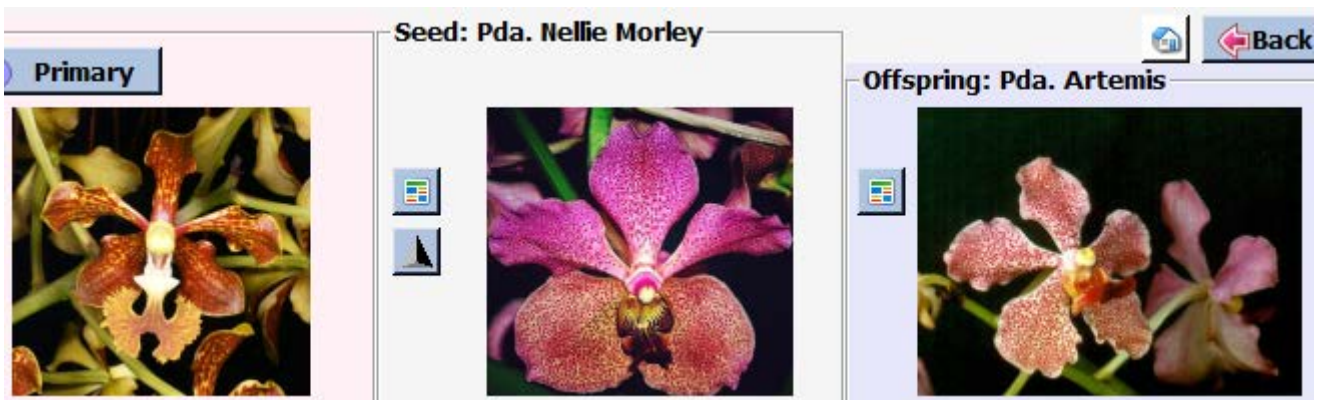
Vandachostylis [Van.] Lanky (Van. Rosyleen x V. roeblingiana), 1982, J. Rumrill, noprogeny, no awards



Vanda [V.] Iron Maiden (V. dearei x V. roeblingiana), 1986, H. Wallbrunn, no progeny, no awards



Papilionanda [Pda.] Artemis (Pda. Nellie Morley x V. roeblingiana), 1994, J. Rumrill, no progeny, no awards.



Vanda [V.] David Negrotto (*V. limbata* x *V. roeblingiana*), 1994, E. Christenson, no progeny, no awards.



References:

www.orchidspecies.com

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

<https://op.aos.org/award>

<http://plantsoftheworldonline.org/?q=Vanda+roeblingiana>

OrchidWiz.Database x6.2, update: March 2020

Motes, M. R.; *Vandas – Their Botany, History, and Culture*, 1997

Grove, D. L.; *Vandas and Ascocendas – and Their Combinations with Other Genera*, 1995

AOS Bulletin, Dec 1958, *Creating Vanda Hybrids: Unraveling a Rainbow – 6 Other Species, Other Dreams*,
Motes, M.; Vol. 57(12), pp. 1341-1350.

Award Descriptions (Jun 2020)



Vandachostylis [Van.] Jade Magic – Quality Award Description

(V. Thonglor (1971) x Van. Luke Thai)

Twelve slightly cupped flowers on a 22 inch (64 cm) inflorescence; sepals and petals yellow, faint red-violet tessellation distally, distinct red-violet blotches basally surrounds the column; lip yellow, tri-lobe, side lobes mustard, midlobe dark red-violet, recurved slightly; column yellow; anther cap egg yolk yellow; substance moderate-firm; texture matte.



Vanda [V.] Vieng Sawan – Quality Award Description

(V. Vieng Ping (1973) x V. denisoniana)

Eight full, slightly cupped, round yellow flowers on one 25 inch (64 cm) inflorescence; sepals and petals lightly spotted dark yellow along the veins; lip yellow, tri-lobe, midlobe dark yellow distally; column and anther cap yellow; substance moderate-firm; texture matte.

Vanda [V.] Keereeboon – Cultural Award Description

(V. Jiad x V. Rasri)

Thirty-eight slightly cupped round yellow flowers and nine buds on four up to 22 in (64 cm) long inflorescences presented on a clean robust plant with two keikis in a 15 in (38 cm) wood slat basket; sepals and petals slightly darker broad picotee; lip yellow, tri-lobe, centrally bright dark yellow, midlobe recurved yellow green; column light yellow; anther cap white; substance firm; texture matte.



Vandachostylis [Van.] Lanky – Quality Award Description

(Van. Rosyleen x V. roeblingiana)

Eleven widely space, slightly recurved, stellate flowers on one 28 in (71 cm) inflorescence; sepals and petals greenish cream, heavily spotted reddish brown; lip white, midlobe overlaid light reddish brown distally with slightly darker spots; column white; anther cap yellow; substance waxy; texture slight sheen.



Vanda David Negrotto – Quality Award Description

(V. limbata x V. roeblingiana)

Twelve flat flowers on one 27 in. (69 cm) inflorescence; sepals and petals greenish yellow, overlaid brown red leaving a thin greenish yellow picotee, spatulate, margins undulating; lip white, tri-lobe, midlobe overlaid lightly red violet basally, red brown distally, waist centrally, fringed margins distally, side-lobes stripped red violet; column and anther cap cream; substance hard; texture waxy.



Building Block Data Sheet

Vanda Yip Sum Wah (Vanda Pukele x Vanda curvifolia)

Roy T. Fukumura, 1965



Vanda Yip Sum Wah
'Flame' FCC/AOS
May 1988, NS 6.0 cm

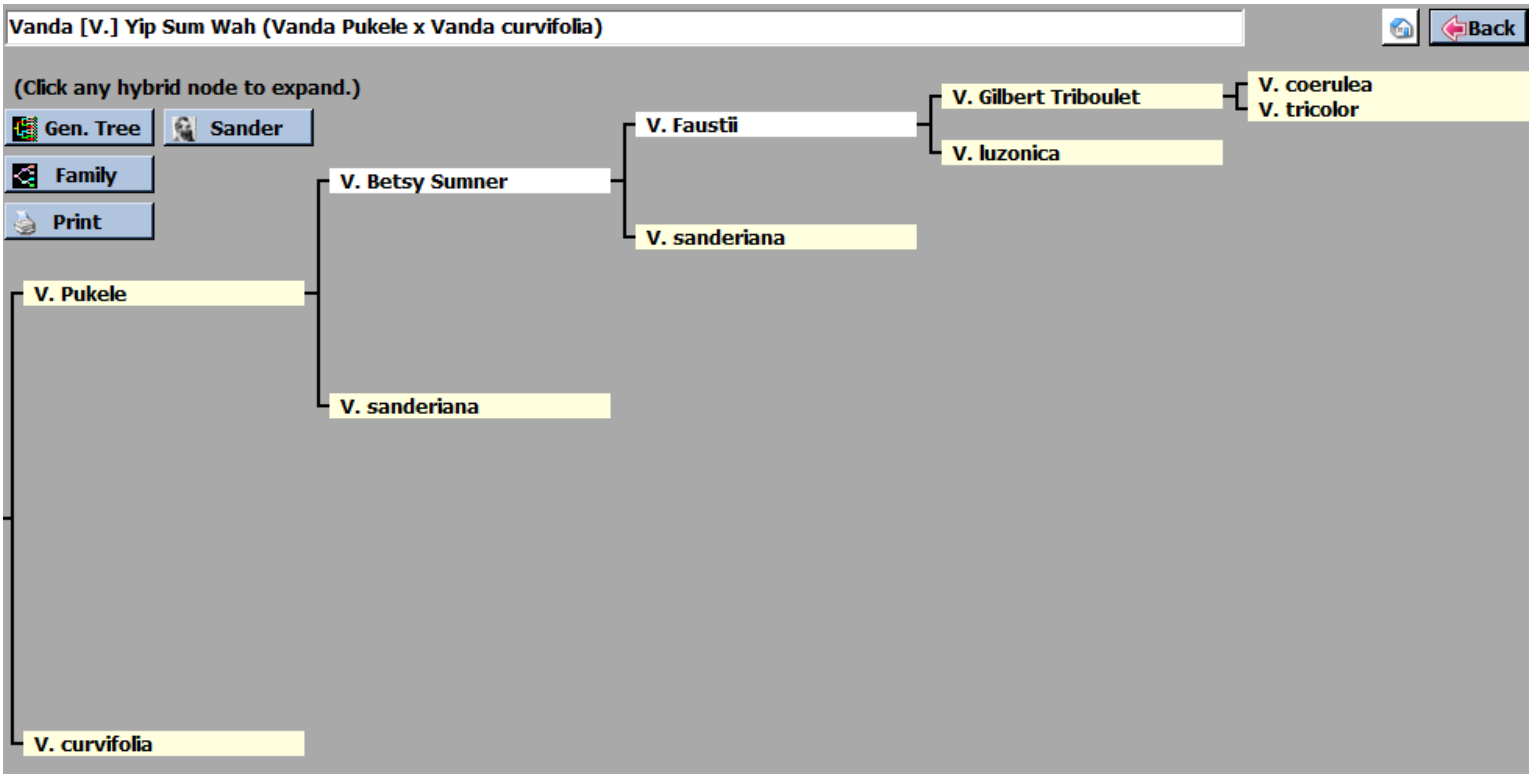
Vanda Yip Sum Wah is a cross between Vanda Pukele and Vanda curvifolia made in 1965 by Roy T. Fukumura. It is widely considered the start of 'miniature Vandas.' It is primarily red with a darker red tessellation, although light chartreuse, orange, and pink base color varieties have been awarded.

As of Dec. 2019, it has received 109 AOS awards (1 FCC, 44 AMs, 60 HCCs, 1 JC, 3 CCMs). It has been used as a primary parent 304 times and has a total of 1209 progeny thru six generations. A review of genus Vanda reveals that Vanda Yip Sum Wah has more F1 progeny than any other hybrid. Among crosses made in roughly time frame few have more progeny, Vanda Meda Arnold (cross made in 1950 and another 'miniature Vanda' foundation cross, but originally made with V. Rothschildiana as the pod parent, aka.



Vanda Yip Sum Wah
'Joan' AM/AOS
May 2015, NS 7.2 x 7.4 cm
(Most recently awarded cultivar)

tends to have larger plants) being the main exception with 1657 total progeny (~33% more). Two other key exceptions are V. Sun Tan registered in 1972, seven years after V. Yip



Sum Wah, (progeny includes V. Kasem's Delight, V. Doctor Anek, V. Madame Rattana, and V. Sunray) with 1652 total progeny, 28 primary crosses and V. Tananchai in registered 1968 with 1325 total progeny, 93 primary crosses.

The species in V. Yip Sum Wah background includes five of the six vanda species commonly used in Vanda breeding. The species not included is V. dearie. The specific crosses are in the family tree above, while the percentages associated with each species is shown at the right.

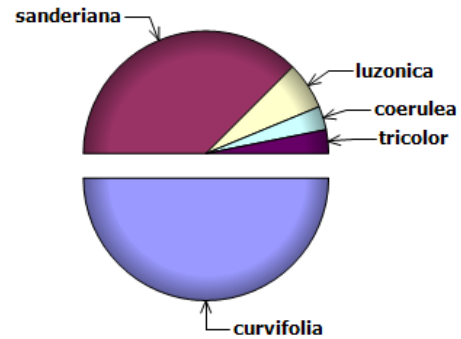
Vanda Yip Sum Wah has also caught the judges eye with the most AOS awards, 108 awards. V. Rothschildiana receiving the second most AOS awards, 98 awards. Details included in section below.

Breeding Characteristics:

Vanda Yip Sum Wah has been a very successful parent with 304 F1 progeny and 1209 total progeny, with Vandachostylis [Van.] Precious (Rhy. coelestis x V. Yip Sum Wah) registered in 1969 by R. K. Mizuta, subsequent breeding is shown in the table to the right. There was an initial surge in breeding with the peak in F1 crosses being registered in 1970s. The use V. Yip Sum Wah as a primary parent has experienced a constant downward slope since. Of all the generations, F1 progeny receive the most awards per grex. This trend is

Genetic Composition: 5 Species								
Gen.	Genus	Name	Nds	Share.	Awds	Offs.	Flwrs.	N.Spr.
1	V	curvifolia	1	50.0%	32	172	31.8	2.2
2	V	sanderiana	2	37.5%	191	376	14.4	9.4
4	V	luzonica	1	6.3%	24	71	14.4	5.8
5	V	coerulea	1	3.1%	81	341	13.3	10.4
5	V	tricolor	1	3.1%	49	137	13.0	6.0

Vanda Yip Sum Wah



V. Yip Sum Wah	1950	1960	1970	1980	1990	2000	2010	Total
Register Crosses	0	1	20	20	45	30	45	161
Assoc. Awards	0	0	25	24	18	19	18	104
Register F1 Crosses	0	1	101	81	69	36	16	304
Assoc. F1 Awards	0	31	279	199	80	15	10	614
Register F2 Crosses	0	0	35	95	131	92	59	412
Assoc. F2 Crosses	0	0	11	53	142	125	32	363
Register F3 Crosses	0	0	0	12	64	83	79	238
Assoc. F3 Crosses	0	0	0	3	35	47	34	119

supported by the prior report on 'Grove delineates some general Ascocenda qualities...'. The peak in F2 crosses clearly peaked in 1990s and the peak in F3 crosses has probably peaked around the 2000-2010s time frame.

On the next page(s) is a chart showing some of the key V. Yip Sum Wah breeding lines and crosses, cross with the top 11 F1 progeny and crosses with the top ten awards (per OrchidWiz 6.2, March 2020 update) . An observation is that most of the crosses are first generation. This could be due to V. Yip Sum Wah being a relatively new cross (registered in 1965), key breeding lines are not 'visible' by this technique, F1 crosses are a key to awards, or some other reason.

Species marked with a * are used the most in hybridization					Progeny F1/Total	AOS Awards								Total
Kew Name	Parent 1	Parent 2	Year	Hybridizer		FCC	AM	HCC	JCAD	AQ	CCE	CCM	CHM	
V. Guo Chia Long*	V. Memoria Madame Pranerm	V. Yip Sum Wah	1970	Patamakom	81/171		1	3	1					5
V. Kulwadee Fragrance	V. Gordon Dillon	V. Guo Chia Long	2004	Sujit Sutthawas	21/24		2	2						4
V. John De Biase	V. Kasem's Delight	V. Yip Sum Wah	1983	R. F. Orchids	26/30	4	15	13		1	1			34
V. Madame Kenny*	V. Yip Sum Wah	V. Boonchoke	1973	V. Kenny	35/362									0
V. Jenny Donald	V. Memoria Madame Pranerm	V. Madame Kenny	1980	T. Orchids	1/135			1						1
V. Tubtim Velvet	V. Jenny Donald	V. Kultana Gold	1989	T. Orchids	74/134			1						1
Van. Viboon Velvet	V. Tubtim Velvet	Rhy. coelestis	1992	T. Orchids	1/1		9	5			1			15
Van. Prapin	V. Madame Kenny	Rhy. coelestis	1990	T. Orchids	12/93									0
Van. Five Friendships	Van. Seng	Van. Prapin	1990	Suksamran	28/51	1		2			1			4
Arand. Khaw Phaik Suan	Arach. Ishbel	V. Madame Kenny	1979	K. Boonchoo	25/33									0
V. Duang Porn	V. Thananchai	V. Yip Sum Wah	1973	K. Siriyakorn	31/86		1	3						4
V. Fuchs Sunset	V. Duang Porn	V. Kultana Gold	1985	R. F. Orchids	23/45		1	2						3
V. Crownfox Sunshine	V. Fuchs Sunset	V. Fuchs Sunshine	1997	R. F. Orchids	1/5		1							1
V. Crownfox Yellow Sapphire	V. Crownfox Sunshine	V. Fuchs Gold	2001	R. F. Orchids	1/4		15	4		1				20
V. Buddy Choo	V. Yip Sum Wah	V. sanderiana	1970	Choo Cheng Choong	22/23		7	7			1			15
V. Fiftieth State Beauty	V. Yip Sum Wah	V. Meda Arnold	1970	R. Perreira	19/20		23	15						38
V. Suk Sumran Beauty	V. Gordon Dillon	V. Yip Sum Wah	1983	S. Oun-Anong	4/4		14	15						29
V. Bicentennial	V. Bonanza	V. Yip Sum Wah	1977	Roy T. Fukumura	2/2		17	11						28
Van. Precious	Rhy. coelestis	V. Yip Sum Wah	1969	R. K. Mizuta	9/13	1	15	9	1		1			27
V. Araya	V. Onomea	V. Yip Sum Wah	1970	Chareonngam	12/16		5	15						20

Awards:

V. Yip Sum Wah	FCC	AM	HCC	AQ	JC	CCM	CCE	CHM	CBM	TOTAL
AOS	1	44	59		1	3				108
Year(s) Awarded	1988	1967-2015	1966-1991		1975	1973-2009				

Vanda Yip Sum Wah has received many AOS awards, 105 quality awards and 3 cultural awards, with the first award an HCC/AOS being given in 1966 and the latest an AM/AOS in 2015. The cultivar 'Flame' exhibited by Roy T. Fukumura of Kahului, Maui, Hawaii received an FCC/AOS in 1988 with the following comment in the description "...flowers well spaced on an erect stem with two very unusual branches on this outstanding Ascocenda."

Notable Progeny: More than 100 Total Progeny:

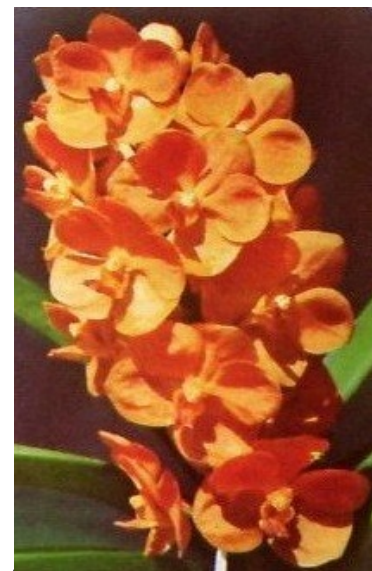
V. Madame Kenny (V. Yip Sum Wah x V. Boonchoke), 1973, V. Kenny, 35 F1 and 362 total progeny, no awards.

Some of the major progeny are: **V. Tubtim Velvet**, see below; **Van. Five Friendships** (Van. Seng x Van. Prapin), 1990, Suksamran, 24 F1 and 51 total progeny, 4 AOS awards (1 FCC, 2 HCCs, 1 CCM); **Arand. Khaw Phaik Suan** (Arach. Ishbel x V. Madame Kenny), 1979, K. Boonchoo, 25 F1 and 33 total progeny, no AOS awards; **Van. Viboon Velvet** (V. Tubtim Velvet x Rhy. coelestis), 1992, T. Orchids, 1 F1 progeny, 15 AOS awards (9 AMs, 5 HCCs, 1 CCM); **Van. Crownfox Magic** (V. Tubtim Velvet x Van. Five Friendships), 1998, R. F. Orchids, 2 F1 progeny, 9 AOS awards (5 AMs, 4 HCCs); **V. Muang Thong** (V. Tubtim Velvet x V. Nakornsawan Belle), 1994, T. Orchids, 13 F1 and 17 total progeny, 3 AOS awards (1 AM, 2 HCCs).



V. Guo Chia Long
'Spotty' AM/AOS
Sep 1991, NS 5.1 x 5.0 cm

V. Guo Chia Long (V. Memoria Madame Pranerm x V. Yip Sum Wah), 1970, Patamakom, 81 F1 and 171 total progeny, 5 AOS awards (1 AM, 3 HCCs, 1 JC). Some of the major progeny: **V. Kulwadee Fragrance** (V. Gordon Dillon x V. Guo Chia Long), 2004, Sujit Sutthawas, 21 F1 and 24 total progeny, 4 AOS awards (2 AMs, 2 HCCs); **V. Betty May Steel** (V. Tubtim Velvet x V. Guo Chia Long), 2002, A.



V. Madame Kenny

Steel, 14 F1 and 15 total progeny, 1 HCC/AOS award; **V. Fuchs Baby Doll** (V. Gold Buttons x V. Guo Chia Long), 1993, R. F. Orchids, 7 F1 and 8 total progeny; **V. Crownfox Golden Daw** (V. Fuchs Harvest Moon x V. Guo Chia Long), 1997, R. F. Orchids, 3 F1 progeny, 8 AOS awards (4 AMs, 4 HCCs); **V. Ken Kone** (V. merrillii x V. Guo Chia Long), R. F. Orchids, 1 F1 progeny, 9 AOS awards (8 AMs, 1 HCC).

V. Tubtim Velvet (V. Jenny Donald x V. Kultana Gold), 1989, T. Orchids, 74 F1 and 134 total progeny, 1 HCC/AOS award. Some of the major progeny: **V. Betty May Steel** (V. Tubtim Velvet x V. Guo Chia Long), 2002, A. Steel, 14 F1 and 15 total progeny, 1 HCC/AOS award; **V. Muang Thong** (V. Tubtim Velvet x V. Nakornsawan Belle), 1994, T. Orchids, 13 F1 and 17 total progeny, 3 AOS awards (1 AM, 2 HCCs); **Van. Viboon Velvet** (V. Tubtim Velvet x Rhy. coelestis), 1992, T. Orchids, 1 F1 progeny, 15 AOS awards (9 AMs, 5 HCCs, 1 CCM); **Van. Crownfox Magic** (V. Tubtim Velvet x Van. Five Friendships), 1998, R. F. Orchids, 2 F1 progeny, 9 AOS awards (5 AMs, 4 HCCs).

Notable Progeny: More than 35 awards:

V. John De Biase (V. Kasem's Delight x V. Yip Sum Wah), 1983, R. F. Orchids, 26 F1 and 30 total progeny, 35 AOS awards (4 FCCs, 15 AMs, 13 HCCs, 1 AQ, 1 CCE, 1 CCM). Some major progeny: **V. Memoria Louis Hatos** (V. John De Biase x V. tessellata), 2002, R. Hatos, 2 F1 progeny, 14 AOS awards (4 AMs, 10 HCCs); **V. Bartholomew Martin** (V. Motes Goldpiece x V. John De Biase), 2006, Motes, no progeny, 5 AM/AOS awards; **Van. Fuchs Precious Jewel** (V. John De Biase x Rhy. coelestis), 1993, R. F. Orchids, 1 F1 progeny, 5 AOS awards (3 AMs, 2 HCCs).

V. Fiftieth State Beauty (V. Yip Sum Wah x V. Meda Arnold), 1970, R. Perreira, 19 F1 and 20 total progeny, 38 AOS awards (23 AMs, 15 HCCs). Some of the major progeny: **V. Fuchs Orangeade** (V. denisoniana x V. Fiftieth State Beauty), 1983, R. F. Orchids, no progeny, 1 AM/AOS award.

V. Suk Sumran Beauty (V. Gordon Dillon x V. Yip Sum Wah), 1983, S. Oun-Anong, 4 F1 progeny, 29 AOS awards (14 AMs, 15 HCCs)



V. Tubtim Velvet
'August' HCC/AOS
Mar 2016, NS 14.3 x 15.0 cm

V. John De Biase
'Angela' FCC/AOS
Jul 2003, NS 6.5 x 6.3 cm

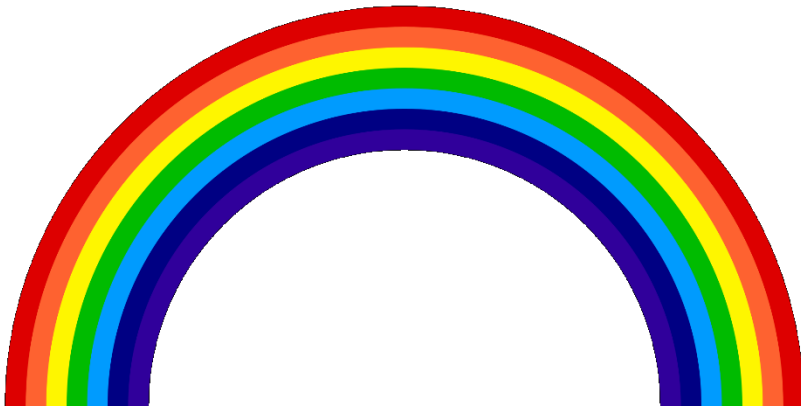
V. Fiftieth State Beauty
'Two-Tone Magenta' HCC/AOS
Feb 2016, NS 5.5 x 6.0 cm

V. Suk Sumran Beauty
'Bubblicious' AM/AOS
Oct 2013, NS 6.8 x 6.7 cm

References:

<https://secure.aos.org/aqplus/SearchAwards.aspx>
OrchidWiz.Database x6.2, update: March 2020

Vanda Rainbow Table



(Assign likely color of progeny from each of the major species)

From the earlier section on Vandas two paragraphs relate to this topic, the first is:

“The genus *Vanda* has been hybridized roughly equally intra-genera (4734 hybrids) and inter genera (3564 hybrids). Among this group of ~8300 hybrids, six species are involved with probably about 90% of the hybrids. These six species are, in order of percent of total number of hybrids: *V. sanderiana* (81.8%), *V. coerulea* (73.8%), *V. tricolor* (63.2%), *V. luzonica* (54.6%), *V. dearei* (49.9%), *V. curvifolia* (40.2%). The next species is *V. tessellata* whose progeny represent 8.6% of all vanda progeny. A quick snapshot of what each species brings follows:

- V. sanderiana* – Large flat round flowers held well above the plant in a pleasant cylinder, color pattern
- V. coerulea* – Blue colored flowers, large flower size, long erect inflorescence, + flower count, tessellation
- V. tricolor* (primarily var. *suavis*) – Solid color flowers sometimes with a white picotee, + flower count
- V. luzonica* – breeds pink to red progeny (suppresses yellows and browns)
- V. dearei* – Yellow progeny
- V. curvifolia* – Small plant size, brilliant red color, increase flower count but small flowers, erect inflorescence
- V. tessellata* – Large flower size, color range (creamy white – yellow – pink – red – purple – almost black)”

And the second was after the select hybrids table:

The final item by the above table are the various lines:

- V. Rothschildiana* – Appears somewhere in the background of most of today’s *Vanda* hybrids.
- ‘Yellow’ *Vanda* Lines – Breeding started with *V. Memoria T. Iwasaki* (*V. dearei* x *V. tricolor*) and a sibling *V. Memoria G. Tanaka* (*V. dearei* x *V. Memoria T. Iwasaki*) which led to influential *V. Thananchai*, foundation for concolor ‘yellow’ vandas. The other successful line of breeding ‘yellow’ vandas with a *V. sanderiana* masking was the *V. Ellen Noa* (*V. dearei* x *V. sanderiana*) and resulting crosses *V. Waipuna* (*V. Ellen Noa* x *Rothschildiana*), *V. Eisenhower* (*V. Ellen Noa* x *sanderiana*), and the cross of siblings (*V. Memoria Madame Pranerm* (*V. Waipuna* x *V. Eisenhower*)).
- ‘Pink’ *Vanda* Lines – Is represented above by the *V. manila* (*V. luzonica* x *V. sanderiana*), sibling *V. Bill Sutton* (*V. Manila* x *V. coerulea*) to *V. Diane Ogawa* (*V. Hilo Blue* x *V. sanderiana*) line of breeding. But the major line for present day ‘pink’ vandas has been in the *V. Lenavat* (*V. Joan Rothsand* x *V. sanderiana*) especially the *V. Thospol* (*V. Lenavat* x *V. Rothschildiana*) such as the pink forms of *V. Kasem’s Delight* (*V. Thospol* x *V. Sun Tan*).
- ‘Blue’ *Vanda* Lines – Many of the ‘Blue’ *Vanda* lines are the same as the ‘pink’ *Vanda* lines since *V. coerulea* includes both color forms.

Pictures of some representative crosses follows:

Red: *V. curvifolia* progeny

Orange: *V. curvifolia* progeny

Yellow: *V. dearei*

Green: *V. vietnamica* progeny



Vanda Yip Sum Wah
'Joan' AM/AOS
May 2015, NS 7.2 x 7.4 cm

Vanda Banjong Delight
'Adkins Neptune' AM/AOS
Aug 1994, NS 5.7 x 6.2 cm

Vanda Eisenhower
'Huelo Sun' AM/AOS
Aug 2016, NS 10.0 x 12.0 cm

Vanda Hawaiian Verde
'Valley Isle' AM/AOS
Jun 2015, NS 6.0 x 5.4 cm

Green: *V. tessellata* progeny

Blue: *V. coerulea* progeny

Violet, Red-Violet: *V. coerulea* progeny



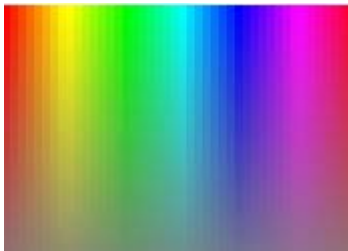
Vanda Marge Howe
'Sasha's Pixie' HCC/AOS
Jul 2004, NS 6.5 x 7.5 cm

Vanda Pakchong Blue
'Devera' HCC/AOS
Feb 2007, NS 11.1 x 11.1 cm

Vanda Kasem's Delight
'Purple Blue' AM/AOS
Feb 1992, NS 10.2 x 11.2 cm

Vanda Pure's Wax
'Purple Spots' AM/AOS
Sep 2017, NS 13.2 x 13.0 cm

Violet-Red: *V. coerulea* progeny



Vanda Fuchs Violetta
'Crownfox' AM/AOS
Sep 2003, NS 11.5 x 11.0 cm

