

Vanda jennae O'Byrne & Vermeulen

ORIGIN/HABITAT: Sulawesi. This epiphytic orchid was discovered in Central Sulawesi where it occurs on scrub-trees in grassy mountain valleys at about 3950 ft. (1200 m).

CLIMATE: Station #97072, Donggala, Sulawesi, Indonesia, Lat. 0.7S, Long. 119.7E. at 20 ft. (6 m). Temperatures are calculated for an elevation of 3950 ft. (1200 m). Record extreme temperatures are not available for this location.

N/HEMISPHERE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
F AVG MAX	76	76	76	77	77	75	75	75	76	76	76	75
F AVG MIN	61	61	62	62	63	62	62	61	62	62	62	62
DIURNAL RANGE	15	15	14	15	14	13	13	14	14	14	14	13
RAIN/INCHES	2.6	2.4	1.9	2.6	2.2	2.0	1.8	2.2	2.3	2.5	3.1	3.2
HUMIDITY/%	N/A											
BLOOM SEASON	N/A											
DAYS CLR	N/A											
RAIN/MM	66	61	48	66	56	51	46	56	58	64	79	81
C AVG MAX	24.5	24.4	24.4	25.0	25.0	23.9	23.9	23.9	24.4	24.4	24.4	23.9
C AVG MIN	16.1	16.1	16.7	16.7	17.2	16.7	16.7	16.1	16.7	16.7	16.7	16.7
DIURNAL RANGE	8.4	8.3	7.7	8.3	7.8	7.2	7.2	7.8	7.7	7.7	7.7	7.2
S/HEMISPHERE	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN

Cultural Recommendations:

LIGHT: 2500-3500 fc. Light should be filtered or diffused, and plants should not be exposed to direct midday sun. Strong air movement should be provided at all times.

TEMPERATURES: Throughout the year, days average 75-77F (24-25C), and nights average 61-63F (16-17C), with a diurnal range of 13-15F (7-8C).

HUMIDITY: Averages are not available for this location, but records from nearby stations in the region indicate probable values near 80% year-round.

WATER: Rainfall is light to moderate throughout the year, but additional moisture from heavy dew frequently is available. Cultivated plants should be watered often while actively growing, but drainage should be excellent with good aeration around the roots at all times. Conditions around the roots should never be allowed to become stale or soggy.

FERTILIZER: 1/4-1/2 recommended strength, applied weekly when plants are actively growing. Many growers prefer to use a balanced fertilizer throughout the year; but others use a high-nitrogen fertilizer from spring to midsummer, then switch to one high in phosphates in late summer and autumn.

REST PERIOD: Growing conditions should be maintained all year. Water may be reduced somewhat for plants grown in the dark, short-day conditions common in temperate-latitude winters, but they should not be allowed to dry out completely.

GROWING MEDIA: The requirements for this recently described species are not known. Presumably, plants should be grown in a similar manner to other *Vanda* species where plants usually are grown in hanging pots or slatted wooden baskets filled with a very open, fast draining medium. Some are grown with only enough open chunky medium, such as charcoal, wine corks, or large cork chips, to anchor the plant until it becomes established. The roots should grow and hang down as far as they choose and should not be trimmed to make things look neat. For most vandas, growers indicate that anything more than minimum root trimming can set the plant back 2-3 years.

Plant and Flower Information:

PLANT SIZE AND TYPE: A monopodial epiphyte with growths up to 79 in. (200 cm) tall that roots mostly from the base of the stem.

STEM: Up to 79 in. (200 cm) long by 0.8 in. (2 cm) in diameter. The erect stem occasionally branches near the base and is enclosed by persistent leaf sheaths.

LEAVES: 13 in. (34 cm) long by 1.7 in. (4.2 cm) wide. The strap-shaped green leaves are overlapping at the base, V-shaped over the basal one-third, sharply keeled on the lower side. Leaves are unequally bilobed at the apex, usually truncate to bluntly triangular but rather variable in shape with lobes sometimes notched or toothed. The major lobe is blunt to rounded, while the minor lobe is bluntly rounded to oblique. There is a short, sharply abrupt projection in the sinus between these lobes.

INFLORESCENCE: 6-8 in. (16-21 cm) long. The arching flower spike has a cream-colored peduncle and emerges from the leaf axil. Flowers are loosely arranged along the apical half of the spike, each one carried on a cylindrical pedicellate ovary that is cream-colored, 1.8 in. (4.5 cm) long, and decurved at the base of the 6-winged ovary.

FLOWERS: 5-8 per inflorescence. The spreading, fragrant blossoms are 1.8-2.1 in. (4.5-5.4 cm) across and are rather thick and fleshy. The spatulate sepals have a claw at the base that is very short and thick and a blade that is broadly elliptic with decurved margins. The dorsal sepal is erect, is 0.9 in. (2.4 cm) long by 0.6 in. (1.6 cm) wide, with the claw measuring 0.2 in. (0.4 cm) long by 0.2 in. (0.5 cm) wide. The blade of the dorsal sepal has irregular margins and a rounded apex. The lateral sepals are obliquely descending, are 0.9 in. (2.4 cm) long by 0.7 in. (1.7 cm) wide, with a claw that measures 0.2 in. (0.4 cm) long and wide. They have blades that are unequally elliptic with irregular margins and a bluntly pointed apex. The obliquely spreading petals are spatulate, 1.0 in. (2.5 cm) long by 0.7 in. (1.9 cm) wide, and have a thickened claw that is 0.2 in. (0.4 cm) long by 0.2 in. (0.5 cm) wide. The blade of the petals is egg-shaped to elliptic and has a rounded apex. The 3-lobed lip is 0.7 in. (1.9 cm) long, is about 0.4 in. (1.1 cm) wide across the lateral lobes when they are spread, and is spurred at the base. The midlobe is very mobile. The almost square lateral lobes are extended but rise at an oblique angle and are about 0.1 in. (0.3 cm) long. The backwall at the lip base is similar in size to the lateral lobes and has 2 thickened, vertical, verrucose bands, with the opening to the spur located between them. The spur at the base of the lip is oblong, about 0.2 in. (0.4 cm) long, is laterally compressed, is verrucose on the inside, and is rounded at the apex. The pendent, fiddle-shaped midlobe is slightly decurved in the middle and measures about 0.6 in. (1.6 cm) long. The lateral lobes are egg-shaped, sparsely covered with short hairs, have a rounded apex, and have lateral margins that are decurved. The lobule at the apex of the midlobe is 0.2 in. (0.6 cm) wide across its blunt apex and 0.1-0.2 in. (0.3-0.4 cm) wide across its base, or 0.2 in. (0.5 cm) wide across the base if flattened. The margins of the base curve strongly downward. There are 2 keels at the junction of the spur and the midlobe, and 3 low keels that extend from the base of the midlobe to about the center of the apical lobule. The stout column is about 0.2 in. (0.5 cm) long with prominent lateral ridges at the base and a blunt apex.

Culture Notes from Donor: Parent plant: Temperature range I (60-83°F). The climate where this plant grows is fairly typical for mountain valleys in Sulawesi; heavy rain during the monsoon, which normally starts in October/November and ends in March or April, and mostly dry for the rest of the year, with light rain once or twice a week and heavy mists on most mornings. Temperatures during the dry season: the early-morning low is usually about 17°C, rarely as low as 15°C, and the mid-afternoon maximum is usually around 25°C, rarely reaching 30°C. Temperatures during the monsoon would be several degrees cooler. Humidity is high in early morning but drops rapidly during the day. Light levels are high and the plants receive only light shade. The valleys are quite windy, with the tree branches in constant motion.

Comments: Parent plant: The "Candystripe Vanda" grows on scrub trees in grassy valleys in the mountains of Sulawesi. When found in July 2004 it was thought to be the "lost" species *Vanda arcuata* J. Smith which was described in 1907, but now it has been recognized as a new species *Vanda jennae* O'Byrne & Vermeulen - this plant is the type specimen. See the Malayan Orchid Review, the article "Vanda arcuata and its relatives" in which the 3 species in the *V. arcuata* group are discussed, and the formal description of *Vanda jennae* O'Byrne & Vermeulen is made. The full reference is: MOR 39: 85-89, 91 (2005). In addition to the large candy-striped flowers, it has a mobile lip and a smell similar to hyacinths. Very large plant.

The Candystripe Vanda can be found growing in large numbers in 2 valleys in the mountains at about 1200 metres altitude. The valley floors are covered in grassland with short scrub-trees, and these trees are where the Candystripe Vanda grows. The grass grows to just above head-height, and the lowest tree branches just skim the top of the grass plants, so as you fight your way through the coarse grass the Vanda plants are flowering about a metre above your head. The climate is fairly typical for mountain valleys in Sulawesi; heavy rain during the monsoon, which normally starts in October/November and ends in March or April, and mostly dry for the rest of the year, with light rain once or twice a week and heavy mists on most mornings. Temperatures during the dry season: the early-morning low is usually about 17°C, rarely as low as 15 °C, and the mid-afternoon maximum is usually around 25 °C, rarely reaching 30 °C. Temperatures during the monsoon would be several degrees cooler. Humidity is high in early morning but drops rapidly during the day. Light levels are high and the plants receive only light shade. Both valleys are quite windy, with the tree branches in constant motion.

REFERENCES: These cultural notes are written by Charles and Margaret Baker
ORCHID SPECIES CULTURE <http://www.orchidculture.com/>

O'Byrne, P. and J. Vermeulen. 2005. *Vanda arcuata* and its relatives. Malayan Orchid review 39: 85-91.