

Vanda roeblingiana Rolfe

ORIGIN/HABITAT: The Philippines and the Malay Archipelago. In the Philippines, this orchid was found on Luzon in Bontoc Province and near Baguio in Benguet Province. Plants normally grow on the trunks of medium-sized trees, particularly oaks, at about 5250 ft. (1600 m).

CLIMATE: Station #98328, Baguio, Philippines, Lat. 16.4N, Long. 120.6E, at 4962 ft. (1512 m). Temperatures are calculated for an elevation of 5250 ft. (1600 m), resulting in probable extremes of 83F (28C) and 45F (7C).

N/HEMISPHERE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
F AVG MAX	71	72	75	76	75	74	70	70	70	72	73	73
F AVG MIN	54	55	57	59	60	60	59	59	59	59	58	56
DIURNAL RANGE	17	17	18	17	15	14	11	11	11	13	15	17
RAIN/INCHES	0.9	0.9	1.7	4.3	15.8	17.2	42.3	45.7	28.1	15.0	4.9	2.0
HUMIDITY/%	83	83	83	85	89	90	93	93	92	89	86	84
BLOOM SEASON						*	**	**	*			
DAYS CLR	N/A											
RAIN/MM	23	23	43	109	401	437	1074	1161	714	381	124	51
C AVG MAX	21.7	22.2	23.9	24.4	23.9	23.5	21.2	21.1	21.1	22.2	22.8	22.8
C AVG MIN	12.2	12.8	13.9	15.0	15.6	15.6	15.0	15.0	15.0	15.0	14.5	13.4
DIURNAL RANGE	9.5	9.4	10.0	9.4	8.3	7.9	6.2	6.1	6.1	7.2	8.3	9.4
S/HEMISPHERE	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN

Cultural Recommendations:

LIGHT: 3000-4000 fc. Plants reportedly grow well when exposed to almost full sunlight. In the habitat, however, heavy summer cloud-cover dramatically reduces light, so some shading is recommended for cultivated plants during the middle of the day in summer. Strong air movement is recommended at all times. Long, deep green leaves indicate light levels are too low. Short, pale yellow-green leaves that remain somewhat creased and do not open fully indicate light is too high.

TEMPERATURES: Summer days average 70-74F (21-24C), and nights average 59-60F (15-16C), with a diurnal range of 11-14F (6-8C). The warmest days occur during the clear spring weather before the rainy season starts. Spring days average 75-76F (24C), and nights average 57-60F (14-16C), with a diurnal range is 15-18F (8-10C).

HUMIDITY: 90-95% from late spring into autumn, dropping to 80-85% for the rest of the year.

WATER: Rainfall is very heavy from late spring into autumn. Amounts then diminish causing a 2-3 month winter dry season. Cultivated plants should be watered often while actively growing, but their containers must have perfect drainage, and conditions around the roots should never be allowed to become stale or soggy. Water should be gradually reduced in autumn allowing the new growth to mature before the winter rest.

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: Winter days average 71-73F (22-23C), and nights average 54-56F (12-13C), with a diurnal range of 17F (9C). Rainfall is low for 2-3 months in winter, but additional moisture is available from heavy dew and late-night mist. Cultivated plants should be watered less in winter, but they should not dry excessively or remain dry for long periods. Fertilizer should be reduced or eliminated until new growth starts in spring and heavier watering is resumed.

GROWING MEDIA: Plants are usually grown in hanging pots or slatted wooden baskets filled with a very open, fast draining medium. Plants sometimes 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 be allowed to grow and hang down as far as they choose, and they should not be trimmed to make things look neat. Growers indicate that anything more than minimum root trimming may set the plant back 2-3 years. Good air circulation around The roots require good air circulation at all times.

MISCELLANEOUS NOTES: The bloom season shown in the climate table is based on cultivation records. In the habitat, these plants bloom in late summer and early autumn.

Plant and Flower Information:

PLANT SIZE AND TYPE: A relatively large monopodial epiphyte to 20-28 in. (50-70 cm) tall.

STEM: Stems usually do not branch.

LEAVES: 8-12 in. (20-30 cm) long by 1.2-1.6 in. (3-4 cm) wide. The closely set leaves are arranged in 2 ranks. They are rather leathery, linear, folded longitudinally, and taper to a slender, unequally bilobed tip.

INFLORESCENCE: 7-12 in. (18-30 cm) long. The inflorescence, which emerges from the stem at the base of a leaf, is horizontal to ascending.

FLOWERS: 8-15 per inflorescence. Blossoms are fragrant and rather long-lasting. Sepals and petals are yellowish with irregular, usually interrupted reddish-brown longitudinal stripes and clear yellow margins. The 3-lobed lip has whitish or yellowish sidelobes that are streaked with red or red-brown. The midlobe is primarily red-brown with some yellow markings. Each flower is carried on a slender pedicellate ovary that is about 1.6 in. (4 cm) long. Flowers are about 2 in. (5 cm) across. The oblong sepals and petals, which are 0.8-0.9 in. (2.0-2.3 cm) long by about 0.4 in. (1 cm) wide, have rounded tips and a clawed base. The 3-lobed lip is about 0.6 in. (1.6 cm) long, with the spur about 0.2 in. (0.45 cm) long. 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 oblong to spearhead-shaped 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. Each apical lobe is about 0.3 in. (0.75 cm) long. The club-shaped column is about 0.3 in. (0.8 cm) long.

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