

Vanda luzonica Loher ex Rolfe

SYNONYMS: Vanda tricolor Ames, not Lindley.

ORIGIN/HABITAT: The Philippines. Originally found in the mountains near the west coast of Luzon in Zambales Province, this orchid also grows near Manila in Bulacan and Rizal Provinces. Plants grow on the trunks and branches of trees in virgin forests at medium elevations.

CLIMATE: Station #98427, Manila, Luzon, Philippines, Lat. 14.5N, Long. 121.0E, at 74 ft. (23 m). Temperatures are calculated for an elevation of 2300 ft. (700 m), resulting in probable extremes of 94F (34C) and 51F (10C).

N/HEMISPHERE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
F AVG MAX	79	81	84	86	86	84	81	80	81	81	80	79
F AVG MIN	62	62	64	66	68	68	68	68	68	67	65	63
DIURNAL RANGE	17	19	20	20	18	16	13	12	13	14	15	16
RAIN/INCHES	0.9	0.5	0.7	1.3	5.1	10.0	17.0	16.6	14.0	7.6	5.7	2.6
HUMIDITY/%	77	73	70	68	71	81	84	86	87	84	82	79
BLOOM SEASON							*		*	**	*	*
DAYS CLR @ 8AM	6	9	14	14	10	3	2	1	1	6	7	6
DAYS CLR @ 2PM	3	6	10	10	8	2	1	1	0	2	2	3
RAIN/MM	23	13	18	33	130	254	432	422	356	193	145	66
C AVG MAX	26.1	27.2	28.9	30.0	30.0	29.1	27.3	26.7	27.2	27.2	26.7	26.1
C AVG MIN	16.7	16.5	17.6	18.7	19.8	19.8	19.8	19.8	19.8	19.3	18.1	17.0
DIURNAL RANGE	9.4	10.7	11.3	11.3	10.2	9.3	7.5	6.9	7.4	7.9	8.6	9.1
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 never be exposed to full mid-day sun. Strong air movement should be provided at all times.

TEMPERATURES: Summer days average 80-84F (27-29C), and nights average 68F (20C), with a diurnal range of 12-16F (7-9C). The warmest temperatures occur in spring during the clear weather at the end of the dry season. Spring days average 84-86F (29-30C), nights average 64-68F (18-20C), and the diurnal range is 18-20F (10-11C).

HUMIDITY: 80-85% in summer through most of autumn, dropping slowly to near 70% in late winter and spring.

WATER: Rainfall is moderate to heavy from late spring through autumn, but amounts diminish rapidly causing a 3-4 month winter, dry season. Cultivated plants should be watered often while actively growing, but the roots must dry rapidly after watering. The potting medium should never become stale or soggy. Water should never lodge in the growing apex of the stem, the entire terminal growing-point may rot. Water should be gradually reduced in late autumn.

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 79-81F (26-27C), and nights average 62-63F (17C), with a diurnal range of 16-19F (9-11C). Exact habitat elevation has not been reported, however, so actual conditions in the habitat in winter may be a little cooler than indicated above. Rainfall in the habitat is low in winter and early spring, but some moisture is usually available from heavy dew and night-time mist. Water should be reduced for cultivated plants in winter, particularly those grown in the dark, short-day conditions common in temperate latitudes, but they should never be completely without water for long periods. Brief early-morning mistings every few days provide sufficient moisture in most growing areas. Fertilizer should be reduced until heavier watering is resumed in spring.

GROWING MEDIA: Plants are usually 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 or large cork chips, to anchor the plant until it attaches to the container. Many growers prefer relatively large chunks of tree-fern fiber or coarse fir bark mixed liberally with broken crock and/or charcoal. Others successfully use only broken crock, cracked brick, chunks of volcanic pumice, vermiculite, or even coarse sand. Plants are sometimes placed in an empty clay pot and allowed to grow with nothing around the roots but air. Plants grown in this manner should be tied or wedged firmly in place until new root growth has anchored them to the side of the pot. However the plants are grown, their roots need to grow and hang down as far as they choose. They should never be trimmed to make things look neat. Vanda growers report that anything more than minimum root trimming may set the plant back 2-3 years. Continuous air movement around the roots is critically important.

MISCELLANEOUS NOTES: The bloom season shown in the climate table is based on cultivation records. In the habitat, plants in the mountains of Zambales Province bloom in spring; but in Manila, they bloom in winter. *Vanda luzonica* is rare in cultivation and almost extinct in nature. We urge anyone who growing it successfully to pollinate the plant and propagate the seed.

Plant and Flower Information:

PLANT SIZE AND TYPE: A large, often rangy, 48 in. (122 cm) monopodial epiphyte.

STEAM: The stems tend to be lanky and bend or twist as they become longer with age. Numerous aerial roots are produced along the lower portion of the stem. Plants sometimes branch profusely from the base.

LEAVES: 10-16 in. (25-40 cm) long by 0.8-1.2 in. (2-3 cm) wide. Each stem has many dark green, strap-shaped, leathery leaves which are unequally bilobed at the apex. They are carried in 2 rows. Leaves usually arch gracefully but may twist a little because of their length. The stem is hidden by the overlapping bases.

INFLORESCENCE: To 16 in. (40 cm) long. The horizontal to arching inflorescence is borne in the axil of the leaves. Blossoms are carried on a white pedicel and loosely arranged on each inflorescence.

FLOWERS: 10-25. The waxy, long-lived, very fragrant flowers are 2.5-3.0 in. (6.4-7.5 cm) across. Sepals and petals are shortly clawed at the base, very broad, flat, and rounded at the tips. They are white with more or less well-developed, irregular blotches of vivid crimson or magenta-purple near the tips. The 3-lobed lip, which is bright magenta-red or magenta-purple, is marked with 6 darker longitudinal lines. The spur and column are white.

REFERENCES: These cultural notes are written by Charles and Margaret Baker
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