## Vanda javierae Tiu ex Fessel & Lückel

**ORIGIN/HABITAT:** Philippines. This newly described orchid is found in a small area in the mountains of central Luzon. The plants grow as epiphytes, usually near water, at about 3950 ft. (1200 m).

CLIMATE: Station #98328, Baguio, Luzon, Philippines, Lat. 16.4N, Long. 120.6E, at 4962 ft. (1512 m). Temperatures are calculated for an elevation of 3950 ft. (1200 m), resulting in probable extremes of 87F (31C) and 49F (10C).

N/HEMISPHERE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
F AVG MAX	75	76	79	80	79	78	74	74	74	76	77	77
F AVG MIN	58	59	61	63	64	64	63	63	63	63	62	60
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	N/A											
DAYS CLR	N/A											
RAIN/MM	23	23	43	109	401	437	1074	1161	714	381	124	51
C AVG MAX	23.9	24.4	26.1	26.7	26.1	25.7	23.4	23.3	23.3	24.4	25.0	25.0
C AVG MIN	14.4	15.2	16.3	17.4	18.0	18.0	17.4	17.4	17.4	17.4	16.9	15.7
DIURNAL RANGE	9.5	9.2	9.8	9.3	8.1	7.7	6.0	5.9	5.9	7.0	8.1	9.3
S/HEMISPHERE	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN

## **Cultural Recommendations:**

LIGHT: 2000-2500 fc. Light should be somewhat filtered or diffused, and plants should not be exposed to direct midday sun. Banks (1998) reported that he grows this species with more shade and water than is provided for most Vandas. Strong air movement should be provided at all times.

**TEMPERATURES:** Summer days average 74-78F (23-26C), and nights average 63-64F (17-18C), with a diurnal range of 11-14F (6-8C).

**HUMIDITY:** 90-95% in summer and early autumn, dropping to near 85% for the remainder of the year.

**WATER:** Rainfall is very heavy from late spring into autumn. Amounts then drop fairly rapidly to a winter dry season that lasts 2-3 months. Cultivated plants should be watered heavily while actively growing, but their roots must be able to dry rapidly after watering. Water should be reduced in autumn.

**FERTILIZER:** A balanced fertilizer mixed at 1/4-1/2 recommended strength should be applied weekly during periods of active growth. Many growers recommend using a fertilizer lower in nitrogen and higher in phosphorus during late summer and autumn to promote better blooming the next season and to allow the new growths to harden before winter.

**REST PERIOD:** Winter days average 75-77F (24-25C), and nights average 58-60F (14-16C), with a diurnal range of 17F (9-10C). Rainfall in the habitat is low for 2-3 months in winter, but additional moisture is available from heavy dew and mist. Water should be reduced for cultivated plants in winter, but they should never remain without water for very long. In most growing areas, a light, early morning misting every few days should provide sufficient moisture to meet the plant's needs while allowing the necessary winter rest. Fertilizer should be reduced when water is reduced.

GROWING MEDIA: Little has been written about the cultural requirements of this recently described species, but we have assumed it should be grown the same as other Vanda species. Vandas are usually grown in hanging pots or slatted wooden baskets filled with a very open, fast-draining medium. Some are grown with only enough chunky medium such as charcoal, large cork chips, or wine corks to anchor the plant until it attaches to the container. Many growers prefer relatively large chunks of treefern 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 several years. Continuous air movement around the roots is critically important.

**MISCELLANEOUS NOTES:** This species is closely related to Vanda roeblingiana Rolfe, and the two are reported by Banks (1998) to be found in the same habitat, although other sources indicate Vanda roeblingiana grows at somewhat higher elevations.

## **Plant and Flower Information:**

**PLANT SIZE AND TYPE:** A moderately sized monopodial epiphyte that reaches about 14 in. (35 cm) in height.

**STEM:** Up to 14 in. (35 cm) long.

**LEAVES:** Up to 8 in. (20 cm) long by 1 in. (2.5 cm) wide. Numerous closely spaced, leathery leaves with overlapping bases are arranged distichously on the upper part of the stem.

**INFLORESCENCE:** Upright.

**FLOWERS:** Up to 8 blossoms with good shape are carried on each inflorescence. The flowers are 2.4 in. (6 cm) across and are pure white except for some pale pinkish brown markings at the base of the lip. The flowers have spoon-shaped sepals and petals which are about 1.2 in. (3 cm) long. The dorsal sepal is about 0.4 in. (1 cm) wide, the somewhat wider lateral sepals are about 0.6 in. (1.5 cm) wide, and the petals are up to 0.8 in. (2 cm) wide. The lip is fan-shaped and large for a Vanda.

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

Philippine Orchid Review 6(2): 16. 1984. Die Orchidee 41(4): 146. 1990.

Banks, D. 1998. Vanda javierae and Paraphalaenopsis. (In an internet posting to Orchid Discussion Online, Banks reported that this orchid was first discussed by Danny Tiu in the Philippine Orchid Review in 1984 but it was not formally described until1990 in Die Orchidee by Fessel and Lueckel.) Kew Data Base. 2007. http://apps.kew.org/wcsp/home.do

Kew Data Base. 2007. http://apps.kew.org/wcsp/home.do