

Vanda hastifera Rchb. f

SYNONYMS: *Renanthera trichoglottis* Ridley is now considered a synonym of *Vanda hastifera* var. *hastifera*. *Vanda gibbsiae* Rolfe is now considered a synonym of *Vanda hastifera* var. *gibbsiae* (Rolfe) Cribb & Wood.

ORIGIN/HABITAT: Borneo. Found in Kalimantan Barat near Pontianak, in Sabah in the Kinabatangan District, and in Sarawak in the Kuching area. This orchid grows as a lowland epiphyte in coastal and hill forests near sea level and has also been found as a mangrove epiphyte on offshore islands.

CLIMATE: Station #96583, Pontianak, Kalimantan, Borneo, Lat. 0.0N, Long. 109.3E, at 13 ft. (4 m). The record high temperature is 96F (36C), and the record low is 68F (20C).

N/HEMISPHERE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
F AVG MAX	87	89	89	89	90	90	89	90	90	89	88	87
F AVG MIN	74	76	75	75	75	75	74	74	75	75	75	74
DIURNAL RANGE	13	13	14	14	15	15	15	16	15	14	13	13
RAIN/INCHES	10.8	8.2	9.5	10.9	11.1	8.7	6.5	8	9	14.4	15.3	12.7
HUMIDITY/%	85	85	84	84	82	81	79	82	83	87	86	87
BLOOM SEASON												*
DAYS CLR @ 7AM	1	1	1	3	2	4	5	1	2	1	1	2
DAYS CLR @ 1PM	0	0	1	0	0	0	1	1	1	0	1	0
RAIN/MM	274	208	241	277	282	221	165	203	229	366	389	323
C AVG MAX	30.6	31.7	31.7	31.7	32.2	32.2	31.7	32.2	32.2	31.7	31.1	30.6
C AVG MIN	23.3	24.4	23.9	23.9	23.9	23.9	23.3	23.3	23.9	23.9	23.9	23.3
DIURNAL RANGE	7.3	7.3	7.8	7.8	8.3	8.3	8.4	8.9	8.3	7.8	7.2	7.3
S/HEMISPHERE	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN

Cultural Recommendations:

LIGHT: 3500-4500 fc. Plants require very bright conditions. Light should be somewhat filtered or diffused and somewhat short of burning the foliage, and plants are probably healthier if not exposed to direct midday sun. Strong air movement should be provided at all times.

TEMPERATURES: Throughout the year, days average 87-90F (31-32C), and nights average 74-76F (23-24C), with a diurnal range of 13-15F (7-8C).

HUMIDITY: Near 85% most of the year, dropping to near 80% in late spring and summer.

WATER: Rainfall in the habitat is heavy all year with no dry season. Cultivated plant should be watered heavily while actively growing, but the roots must dry rapidly after watering.

FERTILIZER: 1/4-1/2 recommended strength, applied weekly when plants are actively growing. Many growers 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 should be reduced somewhat in winter if plants are growing in the dark, short-day conditions common in temperate latitudes, but they should never dry out completely. Fertilizer should be reduced if water is reduced.

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, 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. Growers indicate that anything more than minimum root trimming can set the plant back 2-3 years. Good air movement around the roots at all times seems to be very important.

MISCELLANEOUS NOTES: The bloom season shown in the climate table is based on reports from the habitat, but growers report that plants in cultivation may bloom almost continuously.

Plant and Flower Information:

PLANT SIZE AND TYPE: A large, up to 39 in. (100 cm) monopodial epiphyte with a somewhat scrambling growth habit. Older plants may have one or more new growths superposed on the leafless basal part of the stem to form a small cluster of plants.

STEM: Up to 39 in. (100 cm) long. The stem is enclosed by the distichous, overlapping, longitudinally folded bases of the leaves which persist on the lower part of the stem even after the leaves have fallen.

LEAVES: 6-8 in. (15-20 cm) long by 0.8-1.0 in. (2.0-2.5 cm) wide. Numerous strap-shaped leaves with overlapping bases are rather crowded and distichously arranged on the stem. Young leaves are 3-toothed at the apex, but they become unequally 2-toothed as they become older. The leaves are curved-arching with their tips usually somewhat below horizontal.

INFLORESCENCE: Up to 3 in. (8 cm) long. The erect flower spikes emerge along the leaf axils toward the apex of the stem, and 1-2 are often produced simultaneously at regular intervals during the year. Each flower is carried on a white-cream pedicellate ovary that is 1.6-2.0 in. (4-5 cm) long.

FLOWERS: 4-6 per inflorescence. The fragrant, fleshy blossoms are 1.8-2.0 in. (4.5-5.0 cm) across and remain open for up to 10 days. The sepals and petals are cream to pale yellow and are unevenly blotched with brownish red. The lip has white lateral lobes, and the midlobe has sides and the top of the apex that are shiny, waxy cream-colored while the underside of the apex is purple to brownish purple. The midlobe has sides and earlike appendages that are rather densely covered with white hairs. The spoon-shaped, reflexed sepals and petals have rather narrow bases, broaden toward the apex where they have rounded or bluntly pointed tips, and have undulate, somewhat incurved margins. The dorsal sepal is up to 1 in. (2.5 cm) long by 0.4 in. (0.9 cm) wide. The lateral sepals are 0.8 in. (2 cm) long by 0.4 in. (1 cm) wide. The petals are about 0.8 in. (2 cm) long by 0.3 in. (0.8 cm) wide. The 3-lobed lip is about 0.8 in. (2 cm) long, including the spur, and is attached to a short column-foot. The obliquely oblong lateral lobes near the base are 0.2-0.3 in. (0.6-0.8 cm) long by 0.1-0.2 in. (0.3-0.4 cm) wide and have 0.1 in. (0.2 cm) long earlike appendages at the base that are covered with hairs. The midlobe is 0.2-0.3 in. (0.6-0.7 cm) long and is narrowed at the base and curves up to the egg-shaped apical lobe which has a notch in the center of the apical margin giving it a hooflike appearance. The lower margins of the midlobe are covered with hairs. The spur at the base of the lip is about 0.2 in. (0.6 cm) long and is slightly flattened. The column is about 0.3 in. (0.7 cm) long and has a very short, indistinct foot.

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