

# *Vanda lamellata* var. *boxallii*

By Martin Motes/Images by Greg Allikas

*VANDA LAMELLATA* IS A COMPACT and elegant species. Wide-ranging across the Indonesian and Philippine archipelagoes and as far north as Taiwan and the southernmost Japanese islands, it occurs in several color forms. The species was described by John Lindley in 1838 based upon Philippine specimens. H.G. Reichenbach in 1881 described the horticulturally superior form, variety *boxallii*, as a separate species. Although this specific rank is no longer accepted, further DNA analysis may prove Reichenbach correct. *Vanda lamellata* var. *boxallii*, unlike most other forms of the species, has deeply furrowed leaves differing from the broad flat leaves of the species throughout most of its range. Such distinct variance in vegetative features often betrays an underlying genetic difference. All of the varieties of *V. lamellata* possess the distinctive blades (laminae) on the midlobe of the lip; these laminae vary considerably in height and length but are certainly a highly successful adaptation to insect pollination. This extremely wide-ranging species may, by a future botanist, be shown to be several species that have converged on a common pollinator. All varieties of *V. lamellata* have cylindrical columns. This feature and DNA evidence places the species in section *Roeblingiana* along with *Vanda barnesii*, *Vanda javierii*, *Vanda roeblingiana* and *Vanda sanderiana*.



Martin Motes

*Vanda lamellata* in all of its forms is a vigorous grower, frequently producing four or more sets of leaves per year. Typically, plants bloom out of each of the leaf axils on spikes carrying 30 or more 2-inch (4.5-cm) or slightly larger flowers. When plants flower successively, *V. lamellata* can be in flower for much of the year because the flowers last up to six weeks. Not infrequently, *V. lamellata* can produce all of its yearly production of flowers at once, making a spectacular display of six to eight flower spikes. This phenomenon happens mostly in the fall and mostly with the variety *boxallii*. This profusion of flowers is another reason for the popularity of variety *boxallii* in cultivation.



The individual flowers of *V. lamellata* var. *boxallii* are also pleasing aesthetically than the typical variety. The pale clear yellow of the petals and dorsal sepal is contrasted with the lateral sepals, which are boldly marked with vertical bars of cinnamon red on their outer edges. The lip, in contrast, is solid rosy violet. Occasionally in some cultivars, pale marks of cinnamon red are present at the apices of the dorsal

[1] *Vanda lamellata* var. *boxallii* 'Memoria Joseph Genovese', CCM/AOS grown by David Genovese is an excellent example of what the species can do when grown well and flowered in the fall. When awarded in November of 2010, the plant carried 320 open flowers and ten buds on 16 very robust inflorescences.

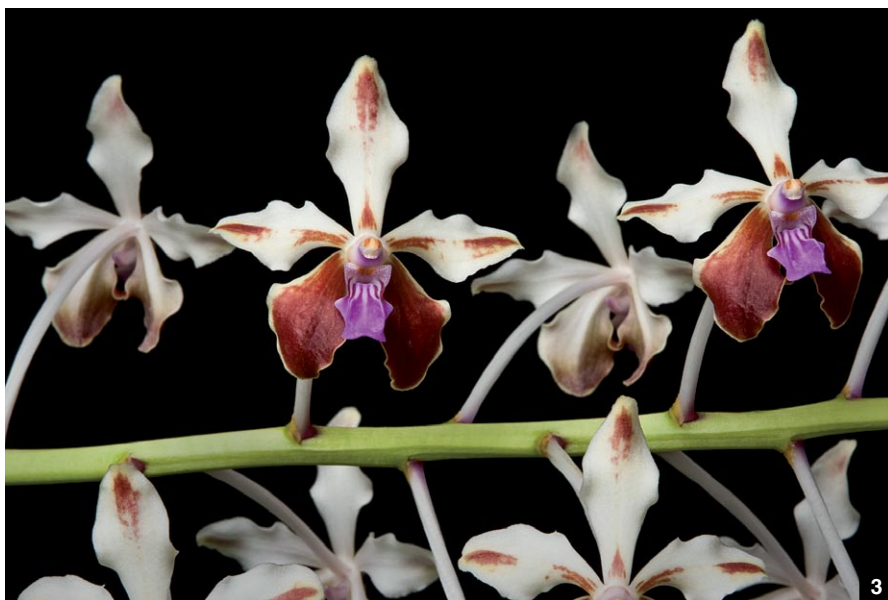
sepal and the petals. This ornamentation is quite distinct in the cultivar “Margaret” AM/AOS. The cultivar “Rose” AM/AOS brings this desirable coloration to the fullest manifestation with a boldly marked dorsal sepal and petals with a vertical bar of mahogany red. Moreover, the lateral sepals are entirely saturated with color. When these highly colored forms, which appeared in the same shipment of plants from the Philippines, were crossed, a new standard of large deeply colored long-stemmed *V. lamellata* var. *boxallii* was achieved. This accomplishment was acknowledged by an Award of Quality. Hopefully the availability of vastly improved strains of *V. lamellata* var. *boxallii* in cultivation will relieve collection pressure on the wild populations.

The virtues of *V. lamellata* var. *boxallii* have not been lost on hybridists. The striking two-toned color pattern and masked lateral sepals were obviously appealing but other qualities beckoned as well. The species has very long, erect flower spikes, often nearly two feet (over 50 cm) long. The numerous flowers are placed well apart on the inflorescence, giving each flower its own space in a neatly symmetrical arrangement. This feature has the potential to overcome one of the most frequent flaws in *Vanda* hybrids: the crowding on the stem in which flowers tend to eclipse one another. The other flaw in many hybrids that is alleviated by the introduction of *V. lamellata* genes is the tendency of many hybrids to carry their flowers on inflorescences that do not exceed the foliage. *Vanda lamellata* lifts these heads high in its hybrids. The species’ free flowering habit makes it accessible to hybridists throughout the year, and its propensity to behave primarily as a short-day plant makes it particularly suited to crosses involving the spring-blooming *Vanda* species of section *Ascocentrum*. Not surprisingly, the first hybrid with section *Ascocentrum*, *Vanda* Portia Doolittle (*lamellata* × *curvifolia*) utilized the species.

*Vanda lamellata* var. *boxallii* has such an affinity of color pattern to the beautifully masked *V. sanderiana* that crosses to its hybrids were desirable. *Vanda* Motes First Light (*lamellata* × *Rasri Gold*) produced an abundance of 3-inch (7-cm) golden yellow flowers with masked lateral sepals beautifully displayed on long inflorescences held high above the foliage. *Vanda* Shades of Amber produced larger flowers (nearly 4 inches [9.3 cm]) of more intense color. In addition to the masking from both parents this hybrid possesses the clear markings of the superior *V. lamellata*



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[2] *Vanda lamellata* var. *boxallii* ‘Diya Ling’, AM/AOS grown by Plantio la Orquidea is an example of a strain of the species with a yellow base color.

[3] *Vanda lamellata* var. *boxallii* ‘Karina’, HCC/AOS grown by Motes Orchids, from the AQ strain, displays more white base color with more intense markings.

[4] *Vanda* Portia Doolittle ‘Orchid Acres’, AM/AOS was the seminal hybrid made with *Vanda lamellata* var. *boxallii* and species in what was then known as *Ascocentrum*. This cultivar was grown and exhibited by Orchid Acres.



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*Vanda Motes 'Goldpiece 'Mary Motes'*, AM/AOS  
grown by Motes Orchids



*Vanda Karina Schmid Lucioni 'Mary Motes'*, AM/AOS  
grown by Motes Orchids



*Vanda Thai Pagoda* grown by Greg Allikas

parent in its petals and dorsal sepal.

Hybrids between *V. lamellata* and spring-blooming *Vanda* species and their hybrids are exceptionally free-flowering. One of the earliest successful hybrids from *Vanda curvifolia* lines is *V. Khun Nok* (*lamellata* × Madame Panni). The intensity of color, striking patterns and long stems made these popular with orchid growers and judges. Several were awarded in the early nineties. A subsequent hybrid with *Vanda merrillii*, *V. Thai Pogoda* (*Khun Nok* × *merrillii*) was also recognized by AOS for its rich color and glossy texture. Use of the improved strains of *V. lamellata* var. *boxallii* as a parent produced hybrids such as *V. Marty Brick* (*lamellata* × Motes Mandarin) with larger, more numerous flowers on longer stems in a range of color from pink to bronze. *Vanda* Motes Sunspots (*lamellata* × Motes Sunbeam) produced large spotted and tessellated flowers on similarly long stems.

Hybrids between *Vanda lamellata* var. *boxallii* and the progeny of spring-blooming *Vanda garayii* have also been highly successful. Crossed to the deeply colored, long-stemmed *V. Motes Goldenrod*, the result was *V. Motes Ginger Hot* (*Motes Goldenrod* × *lamellata*). This hybrid is notable for its intense golden red flowers perfectly arranged and perfectly spaced on long, heavily flowered spikes. When crossed to the highly successful *V. Udomchai*, *V. lamellata* var. *boxallii* yielded *V. Fulford's Gold* which improved on the beautiful *V. Udomchai* in color, flower count and, most crucially, stem length. The ability of *V. lamellata* to improve flower count, stem length and arrangement is nowhere more evident than in the exquisite *V. Karina Schmid Lucioni* (*Crownfox Inferno* × *lamellata*). A particularly long-stemmed cultivar was chosen to mate with the *V. lamellata* and resulted in the anticipated beautifully arranged golden flowers, each occupying its own space.

The most successful *V. garayii* hybrid to date using *V. lamellata* was produced from the most successful *V. garayii* hybrid ever, *V. Motes Goldpiece*. *Vanda* Motes Burning Sands (*lamellata* × *Motes Goldpiece*) yielded progeny in a range of color from pink to golden orange. All display the distinct masking of both their *V. sanderiana* and *V. lamellata* ancestries. All are large-flowered (3.5 inch [7.5 cm]) with perfect, symmetrical arrangement. The numerous flowers are carried on long, erect spikes held well above the foliage.

*Vanda lamellata* and its hybrids are all free-flowering colorful plants that should find a home in any orchid collection. When



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full-grown these plants might occupy considerable space on a windowsill, but their vigor, ease of culture and abundant, frequent displays of distinctive color would lead few to begrudge them the space.

*Martin Motes, PhD, a Fairchild Tropical Gardens research associate, has received scores of American Orchid Society awards. His hybrids garnered gold, silver and bronze medals at the 18th World Orchid Conference in Dijon, France, where Vanda Mary Motes (Blue Grig × tessellata) won the trophy for Best Vanda in Show. He is an accredited AOS judge and author of three books and numerous articles. Motes, in collaboration with David Roberts, PhD, and Lauren Gardiner, PhD, of the Royal Botanic Gardens, Kew, is working on a monograph of the genus Vanda. His wife, Mary Motes, is author of the memoir of Yugoslavia, Kosovo, Kosova, and the cult, best-selling comic novel Orchid Territory. 25000 Farmlife Road, Redland, Florida 33031 (email martinmotes@gmail.com)*



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[5] *Vanda* Marty Brick 'Mary Motes', HCC/AOS grown by Motes Orchids

[6] *Vanda* Motes Sunspots 'Mary Motes', HCC/AOS grown by Motes Orchids

Editor's note: Recent molecular analyses, the work of Dr. Lauren Gardiner, have reduced the genus *Ascocentrum* to synonymy with a more diverse genus *Vanda*. The former species of *Ascocentrum* form a section in *Vanda* (section *Ascocentrum* referred to in Dr. Motes' article) characterized by, among other characters, small plant habit and predominantly bird pollination. As a result of this taxonomic change, all hybrids of *Ascocentrum* are now registered as hybrids of *Vanda* and *Ascocenda* is synonymous with *Vanda*.

The Indochinese species very commonly called *Ascocentrum miniatum* (*Vanda miniata*) in horticulture is actually properly known as *Vanda* (*Ascocentrum*) *garayi*, named to honor Dr. Leslie Garay. The true *Vanda miniata*, found only in western Malaysia, is a very different, rarely cultivated species. In addition to being confused with *V. garayi* from Thailand and the proximate areas of Burma (Myanmar), Laos and perhaps Cambodia, *V. miniata* has been confused with *V. aurantiaca* from the Philippines. The hybrid registration database has been corrected to reflect the correct parentage of hybrids that formerly listed *Ascocentrum miniatum* in their background.