

## The Trouble with Dendrobiums

By Clair Ossian, PhD

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All orchids offer their particular difficulties to judges, but dendrobiums present several inherently troublesome challenges. *The American Orchid Society Handbook on Judging and Exhibition*, 11<sup>th</sup> Edition, states, “the genus *Dendrobium* is extremely large and diverse so that general criteria for all species and hybrids cannot be stated” and continues by suggesting three archetypes:

- *Dendrobium nobile*, judged by *Cattleya* standards
- Forms resembling *Dendrobium phalaenopsis*, compared to the genus *Phalaenopsis*
- Dendrobiums with relatively equal petals and sepals

For the third group, the *Handbook* suggests using the *Dendrobium* point scale after deciding whether there is “an improvement over the ancestral species,” whatever that suggestion might mean in useful terms. The unfortunate current state of *Dendrobium* taxonomy makes the 3<sup>rd</sup> *Handbook* suggestion nearly useless in practice.

Practical examination of this problem respects the fact that the genus *Dendrobium* is indeed very large; the number of valid species is not known with certainty, even to specialists. Some species were even so poorly defined in type descriptions as to be indeterminate. Great morphological variation in flowers and growth habit led taxonomists to erect Sections that subdivide the genus, though most Sections are still poorly understood and loosely defined. The last attempted genus-wide synopsis was Kranzlin’s monograph (1910), a bold study widely criticized but never replaced by newer reviews. Kranzlin’s work is out of date and flawed, hard to find, and written in German and Latin, but still remains the only general reference to the genus.

One practical judging approach is to ask taxonomists to review the *Dendrobium* Sections for use as judging guides. We could then erect reasonable *Handbook* guidelines for judging categories as *Phalaenanthe* (*Dendrobium phalaenopsis*-types), *Ceratobium* (also known as *Spatulata* or “antelope”-types), *Latourea* (forms like *Dendrobium forbesii* and *spectabile*); *Callista* (*Dendrobium lindleyi*-types); *Dendrobium* (many taxa including what used to be called *Nigrohirsutae*), and a broadly-based “Novelty” species category. Until taxonomic clarification takes place, this remains a potential future solution.

More immediately practical approaches involve variations on the *Handbook* suggestions. Shape and configuration should be primary considerations, with color employed as a secondary tool. Dividing dendrobiums into at least four shape categories would suggest:

- *Dendrobium phalaenopsis*-shaped flowers (flowers more or less shaped like standard *Phalaenopsis* blossoms)
- “Antelope-shaped” flowers (petals obviously longer and more slender than sepals, resembling *Dendrobium gouldii* or *Dendrobium strebloceras*)

- Rounded shapes (to include *Dendrobium nobile* types, *Callista* species and other forms with full, rounded or closed shapes)
- An “other than above” category for all the delightfully different and obscure species and hybrids.

Treat hybrids the same as species — judging them in the most logical overall-shape category. Most hybrids seen in judging are intersectional, where strict taxonomic categories may not work. We might use predominant breeding influences of hybrids parents as judging criteria, but these critical data are too seldom known with certainty on the judging floor. Novel intersectional hybrids will bring new problems as these become commonly grown (i.e., *Cattlista* x *Phalaenanthe* or *Pedilonum* x *Phalaenanthe* hybrids have already been registered).

Once appropriate shapes are defined, secondary categories should be based on color within three obvious potential systems:

- Flower base color
- Overlay color (seen in patterns, blushing or color other than base tints)
- Overall color impression

Whichever system is used, make it very evident and obvious for exhibitors, avoiding unfortunate problems of misclassified entries.

The simple approaches presented here will work with dendrobiums. Straightforward systems of shapes and color categories will make exhibition easier, simplify plant entry at shows, and greatly ease the judge’s task as he or she attempts to evaluate this most diverse of all commonly grown genera.