



St. Augustine Orchid Society

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The Battle for Dominance

Primary *Brassavola nodosa* Hybrids

by Sue Bottom, sbottom15@gmail.com

When hybridizers pick up a toothpick, they have a vision for what they are trying to create. Thoughts such as melding colors together, improving the flower form, making the stem stronger, or unlocking hidden traits might be their motivation. Hybridizers are only limited by their imagination... and the genes of the orchids they are trying to combine.

In a primary hybrid, two species are bred together and the offspring each inherit half their genes from the pollen parent and half from the pod parent. The expectation is that the progeny will be intermediate between the parents, in plant size, flower size, color, etc. This is not always the case, as Courtney explains in his book *American Cattleyas*:

When a hybrid is made, traits from one parent often mask those from the other. Some genes are dominant and dictate what offspring will be like no matter what characteristics were possessed by the other parent, while other genes are recessive and disappear whenever they are matched with another type. Still other genes are additive so that the more copies a plant has the more that trait will be concentrated.



Brassavola nodosa, grown and photographed by Janis Croft

Brassavola nodosa has many dominant characteristics. This delightful, easy to grow plant flowers multiple times a year with a citrusy fragrance when it is dark outside, luring moths to the flower. The plants have narrow, hard leaves with a central longitudinal groove. The flowers have narrow sepals and petals that are pale green to off-white. The lip starts out tubular but opens into a wide heart shape. The lip is typically pure white with fine dark spotting in the throat. It grows well in the summer heat, blooming from May through October.

You can always tell a *nodosa* hybrid when you see one. *Brassavola nodosa* is dominant for shape in both the plant and the flower form. The hybrid flowers are often described as being star-shaped. The flower color is usually determined by the other parent, although the color may be more muted in the progeny. The tendency for spots in the lip of the flower is usually passed on and magnified in the offspring. *B. nodosa* hybrids typically have large spotted lips, some with other unusual markings. The hybrids tend to inherit the vigor and fragrance of the *nodosa* parent.

When bred with other species in the *Brassavola* genus, you have an intrageneric battle for dominance in that each of the species tends to dominate for plant and flower form. With the small flowered *subulifolia*, you get the very floriferous Little Stars. With the pendent growth habit of *flagellaris*, you get Maria Del Carmen that is best grown on a mount. With the fringed and long tapered lip of *cucullata* (now recognized as being *appendiculata*), you get the weird and wonderful Yaki. Most of the flowers are light green with a white lip.



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B. Little Stars
(*nodosa* x *subulifolia*)
Photo by Terry Bottom



B. Maria Del Carmen
(*nodosa* x *flagellaris*)
Photo by Allen Black



B. Yaki 'Black's Best'
(*nodosa* x *cucullata*)
Photo by Allen Black



Cattleya mossiae 'Pretty in Pink'
Photo by Allen Black



Bc. Mikayla Black
(*B. nodosa* x *C. mossiae*)
Photo by Allen Black

Perhaps surprisingly, there are not too many well known primary hybrids made with the unifoliate labiate cattleyas. Novelty hybridizer Allen Black used *Cattleya mossiae*, a spring blooming Cattleya that imparts high flower count and its lip color in its hybrids, like *Bc. Mikayla Black*.

Laelia purpurata is one of the Brazilian cattleyas that have been recategorized as a *Cattleya*. It has a variety of color forms and is dominant for a spring blooming season as well as lip form and color. The lovely *Bl. Morning Glory* produces a multitude of flowers having an unusually full lip for a *nodosa* hybrid



Laelia purpurata
Photo by Terry Bottom



Bl. Morning Glory
(*B. nodosa* x *L. purpurata*)
Photo by Terry Bottom



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Cattleya bowringiana
Photo by Dr. Tom Ott



Bc. Maikai 'Louise' AM/AOS
(*B. nodosa* x *C. bowringiana*)
Photo by Bob Schimmel

Cattleya bowringiana is one of the Central American cattleyas that have been recategorized as a *Guarianthe*. It is used to produce deeply colored clusters of flowers. This is exactly what you get in the pink, heavily spotted *Bc. Maikai*.

Many bifoliate cattleyas have been used in *nodosa* hybridizing. *Cattleya loddigesii* is a spring bloomer dominant for color. The hybrid *Bc. North Miami* is a floriferous, small flowered pale pink.



Cattleya loddigesii
Photo by Fred Clarke



Bc. North Miami
(*B. nodosa* x *C. loddigesii*)
Photo by Terry Bottom



Laelia milleri 'Harry Polk'
HCC/AOS
Photo by Keith Davis



Bf. Richard Mueller
'Orchidheights' HCC/AOS
(*B. nodosa* x *L. milleri*)
Photo by Courtney Hackney

The rupicolus laelias (now recategorized as cattleyas) are dominant for their bright colors and high number of smallish flowers with small lips. *Laelia milleri* has brilliant red-orange flowers that produce the orange spotted *Bf. Richard Mueller* when mated with *B. nodosa*.



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Epidendrums tend to overwhelm their intergeneric hybrids. *Epidendrum ciliare* is dominant for flower shape, size, and growth habit. The hybrid with *nodosa* is *Bepi*. Sylvia White, and it looks like a very good *ciliare*, with hardly a trace of the *nodosa*.



Epidendrum ciliare
Photo by Terry Bottom



Bepi. Sylvia White 'HEB' HCC/AOS
(*B. nodosa* x *Epi. ciliare*)
Photo by Linda Stewart



Diacrium bicornutum
Photo by Michael Blietz



Bdia Colmanii
(*B. nodosa* x *Diama. bicornutum*)
Photo by Lois Cinert

Diacrium bicornutum (now considered a *Caularthron*) is a sequential bloomer. It tends to block the expression of most pigments so its hybrids are often pastel colored. With *nodosa*, the result is star-shaped spotted white flowers.

Primary hybrids are great fun. You can see the characteristics of both the pod and pollen parents in the offspring. It is fun to see how one quality dominates and another fades away. *Brassavola nodosa* is a great grower in its own right, and when you add in the hybrid vigor from breeding it with other species, you get plants that quickly grow into specimens. The *Brassavolas* hybrids are favorites amongst the orchid hobbyists throughout the orchid world.

Citations and Additional Reading:

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