Summer Bifoliates – Lc. Allen Condo

by Sue Bottom, sbottom15@hotmail.com



Keith Davis' favorite photo of 'Joe's Beauty' with 52 blooms, next to grandson Bentley.

The summer bifoliates are things of beauty, with their cluster of flowers held high above the plant, often with delightful spotting. They bloom freely during the hot, humid summer months when few other cattleyas strut their stuff. Once they reach maturity, they tend to be big, vigorously growing plants with boldly colored flowers. The big summer bifoliates species most commonly seen or used in hybridizing are Cattleya leopoldii, guttata and bicolor.

Courtney talks about this group as multiflora cattleyas in his book *American Cattleyas*:

A multiflora cattleya is one where the inflorescence is the focus of hybridizing instead of the individual flower. Typically there are more than seven flowers on a single inflorescence arranged as a mass instead of as a series of individual flowers... Multifloras are separated

from all other groups discussed because the form of each individual flower, although important, is not the focus of the hybrid. The perfect multiflora cattleya has a mass of flowers with each flower fully open and barely coming in contact with other flowers in the inflorescence so that from all sides there are no large gaps between flowers. The form of each individual flower should be as closed (petals and sepals overlapping) as possible, given the parentage. The arrangement of flowers on the stem is more important than individual flower form."



Lc. Summerland Girl 'Orchidglade' (C. leopoldii x Lc. Grandee) photo courtesy of Fred Clarke



C. Mrs. Mahler 'Mem. Fred Tompkins' AM/AOS (C. bicolor x C. guttata)

Lc. Allen Condo was the brainstorm of the late Joe Grezaffi, a much admired Florida hybridizer. He used Lc. Summerland Girl 'Mid-Florida' AM/AOS as the pod parent and C. Mrs. Mahler 'Mem. Fred Tompkins' AM/AOS as the pollen parent.



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From Courtney's American Cattleyas:

"When C leopoldii was hybridized with the tetraploid Lc Grandee 'Jules Furthman', Lc Summerland Girl resulted with form resembling its C leopoldii parent, but intense color was added by the complex Lc Grandee... Joe Grezaffi registered Lc Allen Condo (Lc Summerland Girl x C Mrs. Mahler) to produce hybrids that magnified the C leopoldii... combined with characteristics of the other parents to make exceptional and unique multiflora hybrids. Some of this grex resembles giant versions of C leopoldii, while others add the C bicolor lip to deep bronze petals and sepals. No two clones were exactly the same, yet all were beautiful in their own right."



Lc. Allen Condo 'Hackneau' HCC/AOS



Lc. Allen Condo 'Joe's Beauty'



Lc. Allen Condo 'Sunset Valley Orchids' photo courtesy of Fred Clarke



Lc. Allen Condo 'Rosemarie' photo courtesy of Courtney Hackney



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Allen Condo has received 12 awards from the American Orchid Society including two FCC's, and nine AM's and one HCC. OrchidWiz lists the statistical genetic make-up of Allen Condo as 28% bicolor, 25% guttata, 25% leopoldii, 19% dowiana and 3% tenebrosa. These percentages would be true across the entire population of Allen Condos, but not within each individual cultivar.

The progeny of a sib cross are expected to be more variable than those in the original cross. With a sib cross, each individual plant receives one set of chromosomes from each parent, but these sets of chromosomes become unlinked in the process so the individual alleles are inherited randomly rather than in a complete set. As Courtney explains:

"The only hybrids that always contain a specific proportion of chromosomes from one parent are primary hybrids, a cross between two species... When two species are used to make a primary hybrid each seed gets one set of chromosomes from each parent. Exactly half the genes come from each species. If the primary hybrid is crossed with itself or to a sibling all possible re-assortments are possible because chromosomes from each species do not stick together, they sort independently... with only four pairs of chromosomes, 0.4% of all seeds from a selfing or sib cross would have 100% of its genes from one of the original parent species."



Lc. Allen Condo 'K#1' ('Joe's Beauty' x Hackneau')

Some hybridizers have started line breeding Allen Condo, the first step being a sib cross between progeny of the original cross by Joe Grezaffi. This inbreeding is used to concentrate desirable traits, where a cultivar is selected for its color, shape, or stem arrangement and then mated with a similarly select variety. Another benefit is the potential for unlocking some recessive genes that may be present in the parents. Keith Davis crossed 'Joe's Beauty' with 'Hackneau' and the first of these have started to open. Dave Off crossed the two FCC cultivars 'Joe' and 'The Bob' as well as 'Bob' and 'Hackneau'.

Fred Clarke sent some pollen from his Lc. Summerland Girl 'Orchidglade' wondering if I had anything blooming that might improve the stem, and we settled on Lc. Allen Condo 'Joe's Beauty'. This is a backcross, a combination of the parent (Lc. Summerland Girl) with its own hybrid offspring (Lc. Allen Condo). Hybridizers sometimes use a backcross to retrieve a recessive trait that may be masked in the hybrid but will be expressed in a proportion of the offspring from the backcross. This backcross has been registered as Lc. Summer Condo and it is starting its second year of blooming, just beginning to show its full potential. The offspring so far seem to favor the Summerland Girl parent. It may take several bloom cycles for these plants to display their clusters of reddish flowers to their best advantage.



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Lc. Summer Condo '#1' second bloom



Lc. Summer Condo '#2' first bloom



Lc. Summer Condo '#3' second bloom



Lc. Summer Condo '#4' first bloom



Lc. Summer Condo '#5' first bloom



Lc. Summer Condo '#6' first bloom

Paul Bechtel wrote in the Awards Quarterly:

"We could liken the entire mass of judged orchids to an iceberg. Those of high quality to which awards are given would ride above the waterline, above the submerged plants which are not. One significant AOS award, rarely given, has the singular ability to make us readjust the level of quality we distinguish with our awards: Award of Quality."

Lc. Allen Condo should have this prestigious Award of Quality, given to a hybridizer or exhibitor of a population of siblings that far exceeds expectations. Many grexes may show only an occasional individual that excels in quality. Far fewer result in a high number of superior cultivars that can earn the Award of Quality. When Dave Off brought the required twelve blooming plants of Lc. Allen Condo to the Ninth Cattleya Symposium, the judges declined to grant an AQ because the plants were not all fully in bloom, arghhh! Of course, there are at least three sib crosses of Lc. Allen Condo, and each of these could be eligible for an AQ if Keith or Dave want to continue the quest!

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Joe Grezaffi surrounded by the Lc. Allen Condos brought by Dave Off to the Cattleya Symposium for a possible Award of Quality – photo courtesy of Dave Off.

Citations and Additional Reading:

Bechtel, Paul G. Award Quality, published in March 1999 Awards Quarterly, accessed online 7/16/22: https://www.aos.org/AOS/media/Content-Images/PDFs/Judges%20Forum/Bechtel Paul AwardofQuality Word.pdf

Hackney, Courtney. T., 2004. *American Cattleyas Species and Outstanding Clones that Define American Hybridizing*. Self Published. USA. 45 – 52, Hybridizing Strategies and Orchid Genetics, 123-126, Multiflora Cattleyas and Novelties.