

## Species Awards: To Gems From the Jungle or to the Handiwork of Man?

By Ernest Hetherington

Published in Awards Quarterly, Vol. 17, No. 1, 1986, pages 29-32

Every orchid that has been described once grew in the wild, whether the species remained insignificant, identified only by a taxonomist then pressed on a herbarium sheet or whether it was a famous form of a species that went on to sire a race of hybrids. Fine orchid cultivars are of great beauty and are as rare as the finest diamond. These exceptional orchids have always been rare, but now they are almost non-existent. Of course, the thrill of orchid collecting remains. There are still orchids to be found in many regions of the world. But the treasures are gone. We still can hope to discover a spectacular new species. But seldom does this become a reality.

Almost beyond our perception, we have been entering into a new era of the species. As with a strong tide, first there was a ripple, a gentle indication of the direction of flow. This new era of the species did not come completely unheralded. There was vanguard. Now, however, waves of magnificent species cultivars crash onto the shores of our vision, startling our eyes. We wonder where they came from and how they relate to the treasured species we have coveted and searched for over the generations. These new treasures are the superior "hybrid strains" of the species that have been created by selfing and sibling-crossing superior cultivars of a species. Each time we blink, there seems to be more. Can we compare these great numbers of particularly fine "species" with that occasional fine plant that comes out of the jungle by chance? No, we cannot. This is the point we must remember when assigning awards to orchid species. We are looking at what essentially are populations of hybrids and not nature's flip of the coin.

The practice of selfing or sibling-crossing cultivars of a desirable species is not new. It long has been recognized that this concept of selective breeding is the way to obtain superior populations. From these, superior cultivars are selected for further breeding. Harry Rapella of Inglewood, California, gained fame (at least in the local orchid-growing community) for the generations of selfings and sibling crossings of *Cattleya mossiae*. He raised five (and perhaps seven) generations of this species. They were so far superior to the jungle-collected plants of this species that the value of what he had done could be seen clearly. Concurrent with the work done by Rapella on *Cattleya mossiae* was the work on "hybrid" strains of *Cattleya labiata*, first developed by Armacost & Royston then continued by Joseph Urmston. Armacost & Royston raised two populations of seedling *Cattleya labiata* plants. Urmston then bred selected cultivars of these to make his famous U14 strain. Many years ago, one of these seedling plants from Urmston *Cattleya labiata* strain was submitted for

judging. It was magnificent, large, shapely, and very dark. It was rejected for judging because he was told that it was not a *Cattleya labiata* but a hybrid from *Cattleya labiata*. In time, some of these were resubmitted and did receive awards for such cultivars as 'Aruba', 'Martinique', and 'Curacao'.

What other well-known *Cattleya* species have been selfed? *Cattleya bicolor* 'Green Magic' is one. The resulting progeny probably were all tetraploids. The blue *Cattleya trianae* 'Blue Bird' was selfed 25 or 30 years ago. The resultant seedlings were all blue. Some of these have been selfed for another generation. Where the original cultivar of *Cattleya trianae* 'Blue Bird' is, we can only guess. Perhaps it no longer is in cultivation. Sibling strains of *Cattleya warscewicii* have been raised, as have many generations (perhaps as many as seven) of the white *Cattleya mossiae* var. *wagneri*.

In the genus *Paphiopedilum*, we find selfed and sibling strains of *Paph. rothschildianum*, *Paph. bellatulum*, and *Paph. niveum*. Surely one of the most famous and notable selfed strains in this genus is the famous *Paphiopedilum callosum* 'Sparkling Burgundy', FCC/AOS. What magnificent vinicolor cultivars have come from this cultivar! And what splendid parents some of them have been.

In the genus *Phalaenopsis*, the species *Phal. schilleriana* surely has been selfed and sibling-crossed. There is a tetraploid strain of this species reported to have been selfed for four or five generations.

Those who have raised orchids for some years will remember the magnificent strains of *Vanda sanderiana* that were made in Hawaii a number of years ago. One strain in particular, exhibited by Takumi Kono of Hilo, Hawaii, was truly magnificent. How far superior were these to jungle-collected plants? There is no comparison.

We also can point out Prof. Rapee Sagarik's splendid red strain of *Rhynchostylis gigantea*. This red "Foxtail Orchid" is absolutely spectacular.

We have examined a number of selfed and sibling-crossed strains in a few orchid genera of major horticultural importance. We also have seen that this clearly is the only way to obtain high quality in a quantity of plants. Now we must ask the question, "How does this relate to the way we have been judging various cultivars of the species over the years?" Perhaps the question should be asked without offering an answer. On the other hand, perhaps a first attempt at an answer should be made. I shall try the latter.

First, we must recognize that the Certificate of Botanical Recognition and the Certificate of Horticultural Merit still have validity. Plants will be submitted that have come from the jungles and deserve botanical recognition or recognition for their horticultural potential. However, we must recognize that in the species of major horticultural importance we are

going to be viewing these "hybrid" populations. The chance superior jungle form is seldom found. Whole groups of cultivars will be submitted from the selfed populations, all of which will be of superior quality. In fact, some will be so similar that we wonder if we should give each one the same high award. Perhaps, as we view these magnificent large groups of species, they should be treated as hybrids. We must search carefully for the ones which approach the standards of perfection within the type. We will have to draw a fine line.

We must become more critical and ask, "Are the flowers larger? Are they of clear coloring? Do they have unusual coloring?" We shall ask the same questions about strains of many species.

We have examined awards to jungle-collected species and cultivars of selfed and sibling-crossed strains. There is a third category to which we must direct our attention. This is composed of the populations of tissue-cultured species that will appear in increasing numbers on our judging tables. If we have a plant of *Laelia pumila* before us without its cultivar name, shouldn't we at least be told if it is a meristem propagation? The judging form asks the exhibitor to list any previous awards the plant has won. We at least must know if that cultivar got a First Class Certificate or lesser award in some other area six months ago. It is difficult enough to judge the great variety put before us without having to engage in guessing games.