

## **HYBRIDIZATION**

The wide variety of blossom and foliage types now seen are the result of the efforts of hybridizers and growers who have saved successful new mutant plants.

### **Hybridization – Some Key Dates:**

- 1926 - Armacost & Royston, Los Angeles, import seed.
- 1935 - Armacost & Royston release first 10 varieties to market.
- 1939 - First double-blossomed plant, a mutant, appears.
- 1942 - First true pink blossom appears from seed.
- 1943 - First true white blossom appears from seed.
- 1951 - First miniature hybridized by Frank Tinari.
- 1952 - First white-edged blossom appears.
- 1953 - First star blossom (equal size petals) appears.
- 1954 - First pink double hybridized by Lyndon Lyon.
- 1957 - First trailing African violets hybridized.
- 1960 - Crown variegation appears.
- 1961 - Mosaic variegation appears.
- 1967 - "Tommie Lou" variegation appears.
- 1974 - First miniature trailing African violet hybridized by Lyndon Lyon.
- 1992 - First yellow blossomed plants hybridized.

As we reach the 110th anniversary of the discovery of African violets in the wild, we have an amazingly wide colour selection in African violets with many shades within the colours. Moreover, there are plants with white edges, coloured edges, dots and streaks in different colours or hues, just to name a few of the variations. There is also a wide variety of leaf shades (to say nothing of shapes) including the white, pink and cream variegates. We could not say the same of the wild species violets which characteristically had blue flowers, green leaves — usually dark green.

How then did the incredible variety of African violet cultivars come about if the species parentage was so simple and so pretty but plain? The answer is the hybridizer or hybridizers for there have been, are and will be many of them. While the name "hybridizer" sounds ominous it is really just a person like you or us who has a penchant for hybridizing. And hybridizing is the art or science of crossbreeding plants of genetically dissimilar species or varieties to produce offspring that are very different in appearance and growth habit. We owe this wonderful palette of colour to the dedicated men and women who have worked patiently with their favourite plant over many decades.

### **Blossom Types and Colours**

In the beginning hybridizers crossbred African violet species with some basic similarities to get more robust offspring with better but still basic blue blossoms. Of course, they hoped to bring some colour variety to their chosen plant. They had to wait for a while to let the plant reveal its genetic secrets gradually and to betray its tendency to produce sports or mutants exhibiting desirable characteristics.

It is reported that wine-reds, whites and pinks appeared very early in trays of plants grown from seed in Germany. However, our heritage of varieties in these colours comes from the American hybridizers working in the 1930's and 1940's. To these colours were added ultimately the harder to achieve coral pink and coral red. The latest colour discovery has been yellow. For many years violet-lovers have been hoping to have the palette available broadened to include the remaining part of the spectrum, specifically yellow and true red as opposed to the wines, burgundies and fuchsias so common in violet blossoms. What a surprise they got a few years ago when Nolan Blansit introduced them to the first true yellows. Still the newborn of the colour family, yellow is hard to find.

In addition to increasing the colour range, hybridizers have also come up with multi-coloured blossom types, bloom edged in contrasting colours, striped and spotted blooms. Other characteristics they have tackled include petal count, blossom count, blossom shape, and so on.

### **Leaf Types and Variegation**

Leaf-type has also been varied by the hybridizers. There is a natural variance in violets in the shade of green, the colour of the leaf back and so on. Hybridizers have taken advantage of this to produce varieties with intensely dark green leaves with red backs, for example. The biggest happening in regard to leaves, however, was the development of variegation. A variegated leaf is basically a green leaf with markings in white, pink or some other contrasting colour. Many houseplants have had a variegated variety for some time; some variegates even occur in nature. The African violet was not among these for a long time. A few variegated baby plants showed up from time to time but the variegation was unstable.

What a surprise Mrs. Tommie Lou Oden had one day when she found a variegated baby plant growing in a clump of new plants from a mother leaf of an old variety called "White Pride". Knowing that variegated violets had a bad reputation, Mrs. Oden propagated her plant through many generations. To her surprise the variegation was stable. The plant was ultimately registered with the African Violet Society of America and named, appropriately, "Tommie Lou". "Tommie Lou" is the (many times over) great-grandmother of every plant you see in this show exhibiting the leaf-edge type of variegation. Note that she is the "grandmother", never the "grandfather" as variegation is a characteristic passed on through the female-line only.

There are two other types of variegation seen less frequently. One is mosaic variegation, often called "Lillian Jarrett" variegation, which presents a mosaic of white dots and splashes on the leaves. The other is called crown variegation. A crown-variegated plant has a white or light-coloured centre crown surrounded by increasingly darker green leaves at the edge. The young leaves become greener as they age and progress to the outer rows of leaves.

### **Size and Types of Plants**

Hybridizers have also brought us different sizes of plants and plants with a trailing growth habit. Some of the wild species have a smaller size. By crossbreeding these with the standard size hybrids

which had been developed they came up with the whole range of miniature and semiminature African violet varieties you see in this show. These have been a great boon to growers with limited space as they can fit a large number of these small plants into the space occupied by a few standards. They are not short-changed on bloom or beauty. Many of the small plants are extremely floriferous and the range of the bloom type and colour equals that of the standards.

The trailing growth habit has been added to the modern varieties of the African violet again by going back to the species and crossing those that had a trailing growth habit with certain of the modern varieties and thereby transferring the modern blossom types to a plant which grow into a gratefully trailing multi-crowned plant.

### **Chimeras**

Finally, the most spectacular of all African violet blossoms are found on the plants we call chimeras. These are the pinwheel-striped blooms which draw more gasps of delight and amazement than any other type. Chimeras are genetic freaks which have turned up in the hybridization and propagation processes. Occasionally a chimera will turn up as a small plant grown from seed by the hybridizer. It may also turn up as a sport in a batch of new baby plantlets grown by leaf propagation. Chimeras are accidents and the hybridizer cannot really plan for one. However, their presence among African violet varieties is still the product of the hybridizer's work.

© Copyright 2002, African Violet Society of Canada.