

## **PROPAGATION OF AFRICAN VIOLETS**

Propagation is done by leaf, seed, sucker and peduncle reproduction.

### **Leaf**

Propagation of African violets to gain more plants of the same variety is normally done by leaf propagation. In fact, everyone seems to know that African violet babies come from leaves. This fact makes African violets relatively unique in the plant world as species which can be propagated by leaf are uncommon.

To propagate the variety you have chosen you must take a leaf from the parent plant. Take the leaf from one of the middle ranks of leaves. Leaves from the outer row are too old and feeble to give you many plantlets. Those closer to the centre are too immature. Snap off the leaf close to the base of the stem. Then take a clean, sharp knife and cut the stem about 3-4 cm. (1-1/2 in.), less for the small varieties, from the base of the leaf at a 45 degree angle to the stem so that the cut surface faces the same general direction as the top surface of the leaf.

Old-fashioned water rooting is not recommended. Roots will grow in water, but these roots are weak and must be totally replaced by the plantlets when they are transplanted to soil. Medium to coarse grade vermiculite and perlite mixed and a little activated charcoal added is an excellent rooting medium. Fill a small pot with such a medium, moisten it, make a hole for your leaf and tamp the medium around it. Keep the medium evenly moist with the same fertilized water solution you use for your plants and you will soon have a clump of plantlets.

When the plantlets are ready to pot you may break up this clump and put each plantlet in its own pot of soil. Some growers specify an actual height that the plantlet should achieve before you break up the clump; others express this height as a ratio of the plantlet's height to that of the mother leaf. No need to be so complex. A plantlet should have four clearly developed leaves before you attempt the operation. Few with less will survive. Tools for this surgery can include sharp knives but some only use their fingers. Experience will tell you which works best for you. There are no rules except to ensure that each plantlet takes its own root system. When growing plantlets from a variegated leaf be patient. These plantlets are usually all white at first. Wait until the little leaves show substantial green which slowly appears. An all white plantlet will not survive.

### **Seed**

Almost all flowering plants produce seed and African violets are no exception. Why do we not use seed to reproduce these beautiful varieties? We will not get the replicas of the parent that we want. These beautiful hybrids do not come true to the parent from seed. However, this very variability of seed-produced offspring is very important as it is through crossing varieties and producing new plants from the seed

that the hybridizers develop their new varieties. Growing plants from seed is not difficult except for the fact that the seed is incredibly tiny and hard to work with and the seedlings are similarly tiny and need patience in their care until a larger, more familiar size is reached. Moreover, the success ratio in obtaining satisfactory new varieties is low. Some hybridizers say only one in one hundred varieties grown this way is sufficiently good enough to keep; others say it is one in one thousand! Now you can understand why we propagate the successful varieties by leaf to achieve replicas of the desirable varieties.

### **Sucker**

Chimeras, the plants with pin-wheel striped blossoms, must be reproduced using suckers to get a replica of the parent plant. They do not come true to the parent plant by leaf propagation. A sucker is a branch of the parent plant that will occasionally appear in a leaf axil of the plant. When sufficiently large, four leaves usually, these suckers can be cut from the parent and rooted in rooting medium. In no time they will grow into a new plant identical to the parent.

### **Peduncle**

Sucker propagation as described is fine if we do not want to make too many copies of the parent, but chimeras are very much in demand so another method is used to obtain plantlets. It is called peduncle propagation. The peduncle is the main blossom stem of the plant. If you look closely at a peduncle you will see it has two small leaves just below the point where the individual blossom stalks branch off. In the axil of each leaflet there is a very tiny sucker. These suckers can be induced to grow into larger suckers with which we can work by cutting the blossom stem about 6 mm. (1/4 in.) below the leaflets and cutting off all the branching blossom stems about 3 mm. (1/8 in.) above the leaflets. The remaining leaflets and their tiny piece of stalk are rooted in rooting medium. If conditions are right, the almost invisible suckers will expand and eventually turn into little plantlets which may be cut from the stalk and rooted.

© 2002 African Violet Society of Canada.