Streptocarpus *

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Streptocarpus, commonly called the Cape Primrose, is being recognized for its potential as a four inch flowering pot plant. It is easily propagated, few pest problems are encountered, minimal maintenance is involved, and spring and summer sales are good.

Streptocarpus originated in South Africa and is very popular in Europe. It has been gaining in popularity in the United States amongst top growers over the past decade (Blazich, 1979). Breeding in Germany and England has created outstanding cultivars. The Weismoor Hybrids and the Nymph Series are commonly used in Streptocarpus production. Colors range from violet and blues to pink and white.

Streptocarpus is a part of the same family (Gesneriaceae) as African Violets and Gloxinias and can be sold in a similar manner. Unlike many other plants, four options exist to produce the Cape Primrose. The four methods are: seed, leaf cuttings, simple division and tissue culture. They are generally propagated from leaf cuttings or seeds. Tissue culture is more difficult because it requires special techniques and equipment (Blazich, 1979). Division of plants is not difficult but it is time and spacing consuming.

When propagating by seed, it is important to consider the sowing dates since these determine the approximate flowering dates which vary with the time of year (Freeman, 1983). One should allow four to five months for a spring sowing and five to six months for winter crop. The seeds should be sown on the surface of a light medium such as a sphagnum peat moss and should not be covered. The seeds are light sensitive, and require light to germinate but must be kept from direct sunlight. Do not allow the seeds to dry out. It is essential to provide the seeds with intermittent mist to aid in germination (Aimone, 1985). Germination will take place between 16^{o} - 24^{o}C (61^{o}-75F) with faster results at the higher temperature. Once the seedlings have come up (15 to 24 days), they may remain in the flat until some crowding exists (Freeman, 1983; Aimone, 1985). With Streptocarpus, this is a common practice since they do not adjust well to repotting (Aimone, 1985). After potting in 4", the proper spacing is pot to pot for about three weeks. A final spacing of 6 x 8" is best. These spacing requirements also apply to plants grown from leaf cuttings.

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The more commonly practiced method of propagating Streptocarpus is by leaf cuttings. There are three procedures: one involves the leaf tips, another by removing the mid vein and lastly keeping the midvein intact (Aimone, 1985). Of these practices, the one more widely used is removing the mid-vein. This procedure consists of selecting a mature leaf of medium length and cutting it down the center, carefully removing all of the midrib. The two leaf halves are then dipped in a fungicide and then into a hormone powder such as Hormodin #1. This usually enhances the development of plantlets (Blazich, 1979). The two leaf sections should then be placed into a 1:1 peat moss : vermiculite mix, cut edge down and maintained at a temperature of 70°F. Mist is not required for cuttings and they should take root in two weeks. If the cuttings aren't placed too deeply in the medium, they root readily and plantlets will soon form. After the plantlets are large enough to handle (approximately 2-3 months), they are transplanted. The number of plantlets produced ranges anywhere from 35 to 50 from one leaf. If the leaf is still in good condition, it may be used again for another planting (Larson, 1980). From start to finish, production from leaf cuttings takes approximately five to six months.

Crown rot and Botrytis are the two main diseases of Streptocarpus (Aimone, 1985). Crown rot may be controlled with Banrot at 8 oz per 100 gal of water. For Botrytis, treated with Daconyl 2787 at 1.5 lb per 100 gal of water. Streptocarpus have relatively few pest problems. The few pests encountered are cyclamen mite which infest the crown of the plant, mealy bug and scale which attack the leaves, and aphids which prefer the flower spikes.

The medium should be disinfested, light and well-aerated because Streptocarpus has a shallow root system (Aimone, 1985). The pH should be 6.0 - 6.8. Some of the successful root media are as follows: a fertilized peat; peat and perlite, 1:1; peat, sand, and perlite, 1:1:1; and soil, peat, and perlite, 1:1:1, (P. Larson, 1978).

The optimum light intensity is 1500 - 2000 foot candles. If insufficient light is provided, a slow down or inhibition of flowering will occur. Too high an intensity will cause scalding or yellowing on the upper leaves (Widmer, 1975). It is necessary to provide shade to avoid the high light of the summer months. It has been shown that an increase in the photoperiod to 12 or 16 hours in the winter has increased the growth and flowering of the plant.

The temperature requirements for this crop are relatively basic. Streptocarpus are grown with a minimum

night temperature of 60^{o} - 65^{o}F and a day temperature of 65^{o} - 75^{o}F. They may be grown at cooler temperatures but the production time is longer. They will tolerate temperatures as low as 40^{o}F.

Proper watering is important. Avoid excessive watering. Streptocarpus can be grown slightly on the dry side. They can be adversely affected by cold water which may cause spotting of the leaves. For best results use room temperature water.

Streptocarpus are light feeders so there is little need for much fertilizer (P. Larson, 1978). A fertilizer such as 20-20-20 can be used at 100 - 150 ppm nitrogen weekly.

Streptocarpus has the potential of being a very popular flower in the industry. This may be attributed to: ease of propagation, low fertilization requirements, resistance to disease, few pest problems, growth at lower light, tolerance to temperature and ultimately, consumer satisfaction. These factors help reduce the cost of production, enhancing Streptocarpus' desirability and popularity.