
GROW THE YOUNG PLANT!

Kennard S. Nelson Columbus, Ohio

Given the right growing conditions, that young plant will develop into a fine finished product - and in short order. Abuse the young plant, and the results will be more than evident in the crop that you harvest.

Through the years, in too many instances, we have allowed ourselves to believe that the young plant can wait until it is convenient for us to start giving it some attention. If it is really necessary to neglect the plant at some stage, invariably it would be better to do it later in the growth of the plant. The young plant is very responsive. This response is beneficial to you only if you have provided some good active growing conditions.

<u>Chrysanthemum.</u> The mum growers were among the first to realize the benefits of doing a job of growing the young plant. In most instances mums are now directbenched and grown actively for the duration of the crop. If it is necessary to pot before benching, it is generally recognized that a period of 2 or 3 weeks in the small pots is acceptable - but no longer. Be sure to pinch the mum in the growth that is new since planting. This soft pinch will develop a large leaf immediately below the pinch and strong breaks will result. This, of course, assumes that the general growing conditions are suitable. The fertilizer situation must be right. A lack of nitrogen in the early stages of mum growth will stunt the plant, and there is no making up for it at a later time. In spite of adequate nitrogen later in growth, the crop will flower on very short stems.

<u>Rose.</u> Most rose growers will tell you that grafted rose plants can be held for a good long time before planting. This often means that grafted rose plants are held from February to May in small pots before they are planted. Of course in the next breath this same rose grower will tell you that production from grafted plants is never good that first year.

It is the same with own-root roses. If they are held in small pots for several weeks before benching, the plants get hard and the first year growth and production is disappointing. However, if either a grafted or an own-root plant is grown actively in the early stage, in much the same way a mum cutting is grown, excellent results will be obtained.

The rose reacts to a soft pinch in the same fashion that the mum does. With the rose, however, that means that the new shoot must be pinched early before it develops a great deal. That is the only way to pinch in soft rose wood. If you delay, the wood becomes increasingly harder. The early pinch on a rose will produce large leaves and the new stem will usually be of larger diameter than the parent shoot. This is a very useful tool for building a rose plant - producing longer stemmed roses and heavier stems.

<u>Carnation</u>. You no doubt have noticed that some carnation cuttings form flower buds shortly after planting, and they do not form a good branched plant. This comes from taking cuttings from stems that are too far advanced in growth. Although you cannot see or feel the buds, they have started to form and then develop rapidly after the cutting is made. Start growing the young carnation plant right by taking good young cuttings.

Good results can be obtained with young carnation plants handled in several different manners. Usually, however, the best results come from direct benching of cuttings. This is based primarily on the fact that plants placed in pots or bands do not get watered or fertilized as well, and too often the plants are hard by the time that they are finally planted. Growth is then slower and breaks are fewer.

<u>Snapdragon</u>. Grow the snap seedlings at 60 degrees. You will get faster growth and better quality seedlings.

Transplant from the seed flats as soon as the plants can be handled. At that time the seedling leaf will be well developed and the next two sets of leaves will just be visible. If you have not handled them this rapidly before, you will guarantee that so small a plant will not make it. After you have done it a couple times, you will have no substitutes. The resulting growth is fast and of good quality. Depending on the time of the year, the length of time in the seed flat should average about four weeks.

Direct planting of snaps from the seed flat to the bench is best, and with few exceptions single-stem snaps are more profitable.

Foliage Plants. These require a warm house - give them 70 to 75 degrees. Moist air is fine, but soggy soil is disastrous. Use a light, porous soil mixture; water sparingly; use a small pot. Over-potting provides too much soil for the size of the plant and soil stays too wet and is poorly aerated.

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Here is an example of what can be done with proper handling. It is generally considered that pothos is very nearly impossible to start in the Northern states during the winter. Yet, a Canadian grower produces them the year around with excellent results. True enough, he does provide the temperature and the good soil mixture, but in addition to that he does not give them their first watering until after they produce new root growth. This will be about 10 days after potting.

<u>African Violets and Gloxinias.</u> A study that we made a few years ago demonstrated the importance of uniform temperature and light for African violets and gloxinias. These plants were grown under fluorescent light in a basement. In such a structure it is relatively easy to maintain uniform conditions.

It was generally accepted that these plants did best at about 1,000 footcandles of light in the greenhouse. With our equipment we could not provide more than 600 footcandles under fluorescent light in the basement. Yet, this 600 footcandles was provided for the entire lighting period and actually the plants received a greater total quantity of light than those in the greenhouse that got 1,000 footcandles at the brightest time of the day.

Depending entirely on steam heat in the basement structure it was possible to provide a uniform 65 to 70 degree temperature.

It may not be possible for you to have a large enough area under fluorescent light to finish these plants, but in the early stages they do not require much space and there could be an advantage in growing the young African violets and gloxinias in fluorescent light.

<u>Lily.</u> Storing the lily bulbs in too warm a place before potting can cause a great delay in flowering and fewer flowers. If you cannot pot the bulbs on arrival, place them in a refrigerator.

Just any old soil is not good enough for the lily. For good root growth use a light, porous soil. If you use sand in the soil mixture, be sure that it is coarse. If coarse sand is not available, try the horticultural grade of perlite.

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The lily flower starts to form about the time the stem emerges from the soil. You can expect that the conditions provided from that time on will affect the growth and flowering of the plant materially. The fertilization program should start then and continue at regular intervals.

<u>Bedding Plants.</u> For the best job of seed germination it is necessary to keep the seeds constantly moist and warm. A uniform 70 degrees is suitable for most seeds.

A 55 to 60 degree night temperature and regular fertilization are necessary to grow good quality bedding plants in the shortest time. Grown actively this way they will really take-off fast for the customer, too.

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If you have had trouble getting your petunias to branch, some work done by the USDA should help you. Researchers found that at least some of the petunia varieties branch only in short days. In long days they flower early on a single stem. For your late sowings - say for March and on - short days should help. Try the black cloth treatment on a portion of your crop for about 40 days in the same fashion as you shade mums.

Looking back over the comments made on growing the various young plants, it should be clear that timeliness with any of these crops is of utmost importance. Being human, most of us need some assistance in remembering to take care of these many small but very important details. Usually making notations on the calendar or some other daily reference is helpful.

Of course, the best thing is to get that crop out where it can really be observed. Plants in small pots occupy a small space and do not talk back to anyone regardless of the treatment. They are easy to ignore and left to make their own way in life.

<u>Grow the Young Plant!</u> It is merely the matter of providing the proper temperature and light, fertilizing and watering regularly, and pinching at the right stage. Keep the young plant in active growth. The only way this can be done is to take care of these needs on time. There is no making up for it later.

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