

# POINSETTIA POINTERS

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The normal date of bud initiation in most parts of New York is around October 10 and plants should be well established in small pots or pans before this date.

By later propagation, shorter plants can be obtained. To be safe, the last propagation should be stuck no later than the first week in September.

If plants are pinched, it should be done 4 to 5 weeks before the date of bud initiation. Artificial light should be used from September 15 to October 10 to prevent premature budding. Artificial light supplying 10 foot candles at the top of the plant for two hours in the middle of the night will insure vegetative growth.

After potting, the minimum night temperature should be 60°F. Temperatures lower than this can cause delay and exaggerate the harmful effects of root rot organisms, while temperatures above 65°F can result in delay and poor bract color. With reds, bract color will be more intense if the temperature is maintained at 60°F toward the end of the growing period. If timing permits and the plants are free of root rot, temperatures below 60°F for the last week before sale will improve color; however, it must be borne in mind that Thielaviopsis root rot can cause a rapid loss of leaves if it is present, and the reduction in temperature will hasten this loss.

As mentioned earlier, the normal date of bud initiation is October 10; however, exceptionally cloudy or bright weather can affect the length of day and change this date. For this reason it is recommended that lights be used until October 10 to delay bud initiation and black cloth be pulled for two weeks after this date. Growers who must have plants ready for the early market must start short days earlier. Those growers who have found it necessary to provide black cloth shade throughout the growing season because of street lights, auto lights, etc. need only pull cloth for 40 days after October 10 since recent experiments have shown that 40 short days are enough to insure development of the bracts.

For maximum cutting production, poinsettia stock plants should be watered often and regularly. Peat moss should be used in the potting soil and good drainage provided to prevent waterlogging and inadequate aeration. A night temperature of 70°F, with day temperatures ten degrees higher, are best. Weekly applications of soluble fertilizers are needed to maintain nutrient levels high enough to insure maximum cutting production if plants are watered daily.

Only strong cuttings should be taken and at least two leaves should remain below each cut to maintain the stock plant. Four to six inch cuttings are adequate and should not be trimmed. Spacing 2 x 6 inches is

satisfactory. Some shade may be necessary during the first week after sticking, but full light after this initial period will induce quicker rooting and prevent excessive elongation. Cuttings should be potted as soon as roots appear in order to prevent root injury and stretching. Strict management of the cuttings, and possible later propagation, depending on individual conditions, are necessary to avoid tall plants since plants free of root rot grow very vigorously.

Cuttings may be rooted equally well in any common rooting medium, but it is absolutely essential to completely sterilize all media, flats, if used, benches in which the cuttings are stuck or on which flats or pots rest, and all tools and work surfaces used to prepare and handle the rooting media and potting soil. These strict measures are also necessary when the cuttings are potted or panned. If more than one crop of cuttings is rooted in a bench, the medium and the bench should be freed of all fallen leaves and other refuse and sterilized between crops. It is also necessary to sterilize all benches upon which the crop is to be finished. Soil-borne disease organisms can cause serious loss in the cutting bench. Rhizoctonia stem rot is one very destructive disease in cutting benches which can be controlled by the use of Terrachlor (PCNB) at the rate of 1 pound of 75% wettable powder per 100 gallons applied to 400 square feet. However, rots caused by Pythium and Thielaviopsis are also very common and very serious and these organisms are not controlled by Terrachlor. These organisms may cause severe losses in the cutting bench, or infections may be initiated which may later cause leaf yellowing, leaf drop or loss of the crop. It is therefore essential that a complete sanitation and sterilization program be followed. Although soil drenches have been recommended for root rot control, our experience has indicated that they may usefully supplement a sterilization program, but not replace it.

After cuttings are potted, a regular fertilization program should be followed. Nitrogen deficiency will cause reduced growth, leaf yellowing and leaf drop. If cuttings are watered heavily and daily as they should be, a high analysis soluble fertilizer at the rate of 1 1/2 pounds per 100 gallons per 400 square feet should be applied weekly. As the plants become pot bound, this rate can be increased to 3 pounds per 100 gallons. With less frequent watering, fertilizer applications should be made less often. The following nutrient levels should be maintained: Nitrogen, 20 to 30 ppm, phosphorus, 4 to 5 ppm and potassium, 20 to 20 ppm. Here again plant height must be considered since proper watering and fertilization will result in vigorous growth of disease-free plants. Individual growers must consider all factors which influence stretching with a view to their own conditions and manage the crop accordingly.

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Your Editor,

*Richard C. Anderson*