A REVIEW OF POINSETTIA PROBLEMS - 1967 Dr. J. W. Love

The weather during the fall of 1967 could truly have been described as outstanding for production of good poinsettias. Yet, with the abundance of good light, the North Carolina poinsettia crop could have been described as subpar. The reasons are many, but they could be attributed to one common factor - neglect.

While it has been customary for growers to propagate their own plants, (starting as early as June) the temptation to take as many cuttings as possible is more factual than ficticious. This temptation exemplifies the first sign of poor planning. Several factors that contributed to the problems encountered in North Carolina are listed below:

SPACING: Growers usually know the total number of square feet of bench area that is available for poinsettia production. Often the rules of proper spacing are disregarded in early October after panning is started. It would be in keeping with proper production practices to decide now on the number of pans required of various blooms for your particular trade. Providing other cultural practices are adhered to, properly spaced plants are usually good quality plants.

<u>GROWTH RETARDANTS</u>: Many growers have used growth retardants as a cure-all for all of their poinsettia height problems in recent years. There are many variables that determine whether good height control is achieved i.e., spacing, concentration and frequency of application of growth retardants, light available for plant growth, temperature, and nutrition.

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Do not try to make the growth retardant do the impossible! Single stem crops should not be propagated before August 15 in North Carolina. Pinched plants should not be propagated before July 15. Through manipulation of propagation dates, growth retardant use can result in finished plants of good commercial height.

LIGHT: A height problem can be accentuated by too much shade on the glass. All shade should be removed by November 1. Yet, many growers leave a heavy shade on the glass through the growth of the whole crop. Good glass-cleaning agents are now available that require the minimum of labor to apply. One exception to shade removal might pertain to those growers producing poinsettias under fiberglass. Our experience has been that too much light is provided and a light shading is necessary.

VARIETIES: With the introduction of numerous poinsettia cultivars, it is a real temptation for growers to produce some plants of each cultivars. It has been recognized experimentally that most cultivars differ in lighting, fertilization, propagation and temperature requirements. Most growers would be wise to perfect the cultural requirements for one poinsettia cultivar before experimenting with others.

DISEASE: Poinsettia diseases continue to claim an unusually large number of plants each year. Sanitation in the strictest form must be the practice of poinsettia growers! Several new fungicides have caused some growers to neglect this phase of production. One of the first disease problems that North Carolina growers face each year is Southern bacterial stem rot. Those of you that have experienced this malady know the seriousness of it. There is no bactericide that is effective for its control; so sterilization of bench, containers and soil is imperative. Cuttings should be taken from healthy stock plants. Workers should wash their hands periodically in LF-10 (3 oz. per gal.). Rogue any plants suspected of being diseased.

THIELAVIOPSIS can be prevented by proper adjustment of soil pH and night temperature. Do not use chrysanthemum soil but one that has been adjusted to a pH of 4.5 to 5.0. The disease can be reduced by growing plants above 60°F.

RHIZOCTONIA stem rot can be prevented through the use of sterilized soil and one application of Terraclor (3/4 pound of 70% WP per 100 gallons) upon completion of the panning operation. Similarly, Pythium root rot can be avoided by use of sterilized soil and the application of Dexon at (4 oz. 70% WP per 100 gallons) at 3-week intervals.

SOLUBLE SALTS: Since most growers use an injection method of fertilization, proper watering practices must be followed. Each year some growers experience root damage of poinsettia plants from high soluble salts. Enough water should be applied to insure leaching at each irrigation! Failure to do so may result in complete loss of roots. If roots are lost late in the growing season, quality is definitely impaired. Soluble salts should be routinely checked with a solubridge. If detected early enough, leaching with clear water will reduce the salt level to a safe range.

ECONOMICS: The economics of poinsettia production has been the topic of many discussions at grower meetings. A re-evaluation of pricing of various sized plants may be in order for a number of poinsettia growers. Remember, there is a fixed cost attached to each square foot of growing area in your greenhouse. Consequently, multiple bloom plants will require more space and should correspondingly be priced according to the space used during production. Some growers should consider using the multiple-stem, pinched plant. The cost of production will automatically be reduced since fewer 2 1/4"-plants are needed for panning. Again, research has demonstrated that graceful, large-flowered plants can be produced from such pinched plants.

INSECTS: While there are several insects that are troublesome to poinsettias, the one insect that appears to be a potential threat is the fungus gnat. The mature fly has to be controlled, otherwise more and more eggs will be laid. Several leading entomologists are now recommending that the poinsettia soil should be drenched with Lindane (one quart of 20% EC Lindane per 100 gallons with 1/2 pint (8 fluid ounces) of this solution be applied to a 6-inch pot) to control the larvae. This recommendation also includes drenching soil beneath the bench, aisles and areas outside the greenhouse.

Attention to details will help insure quality poinsettia plants for you in December.

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