

BEDDING PLANT PRODUCTION

HENRY ISHIDA

Union Nursery (Gardena, California)

We are primarily producers of bedding plants. We use the U. C. system of soil propagation. Soil is mixed in 2 transit type concrete mixers and steam sterilized in the mixers. One basic soil mix is used throughout the nursery. Soil is dispensed into flats through a vibrator type of dispenser.

All up to date methods of moving and handling flats are utilized as handling is one of the largest items of expense.

We use conventional greenhouses, plastic houses and saran shade houses for growing. One innovation on our saran houses, we have them rigged so that the saran in 20' strips can be quickly taken down. This eliminates the necessity of moving the flats and saves much labor.

Accurate production and sales records are kept so that production may be closely regulated to the season.

Pest control is contracted to a specialist, who comes once a week to keep everything under control. Weeds are controlled using weed oil sprayed on through 3 gallon Hudson sprayers. An automatic clock controlled sprinkler system has been installed through much of the nursery. This has been quite successful and eliminates most of the hand watering.

Feeding is done on a constant basis through the water system. Supplemental feeding is made as necessary. Blood meal is applied to much of this material prior to delivery to sustain it while on the dealer's bench.

DISCUSSION

QUESTION: Why is more direct seeding not done to eliminate the cost of transplanting?

MR. ISHIDA: Because the economics do not work out. Too much space is tied up over too long a period of time. Also seeds do not germinate uniformly and uniform growth is difficult to maintain.

QUESTION: Why are prices on bedding plants in other areas outside southern California lower than those in California, when production methods in southern California are more efficient?

MR. ISHIDA: Growers in other areas are not aware of their actual costs. Most grow other crops and only produce bedding plants for a short period in spring. Probably their other crops are subsidizing the bedding plants.

Discussion on the influence of light on the growth of bedding plants was held. Mr. Norton of Seattle stated that research was under way in their area to see what could be done by artificial light to improve the quality. They have so many periods of cloudy or overcast days that it can affect the quality of the plants. No results are ready for publication at this time. New light sources are being developed and probably much informa-

tion will be available in the future. Much research on this subject needs to be done.

Air pollution was discussed briefly and is a real problem, affecting many plants. Dr. Spaulding of the University of California stated many lawn grasses are adversely affected by smog.

Discussion of the benefits of additional CO₂ to greenhouses was mentioned. It is too early to make any definite statements at this time although some benefits are thought to occur. Economical systems need to be available.

GROWING BEDDING PLANTS

I. E. EDWARDS

Edwards Nursery (Visalia, California)

We grow about 40,000 flats of bedding plants and ground covers. The soil mix essentially is a U. C. mix—8 parts sand—2 parts peat—2 parts fir bark, plus additives. Starting pH is approximately 6½. Our water contains some lime and magnesium so the pH naturally goes up. All mixes are steamed to 190° F. Nitrogen is added before steaming. Ammonium Nitrate is fed using a Smith measure mix after transplanting.

Our houses are plastic, mostly poly and some mylar. All are heated with suspended blowers. Houses are designed so that most of the condensation goes outside. All growing houses are drive thru using Electric trucks.

Seed Storage: Pansy, Viola, Larkspur and most perennials are stored in a refrigerator at approximately 40°F. Others are at room temperature and refrigerated in summer. Getting back to soil mixes, our seed soil is essentially the same as the planting mix except no bark is used.

Due to our dry climate, moisture at germination is our big problem especially in the fall. Most of the critical seed are sown in furrows made by using a lath. Sterilized sand is used for seed cover. We have found Calendula must be kept very wet until germination.

QUESTION: How do you control drip in plastic houses?

MR. EDWARDS: Houses have a 6-12 pitch. At the plate line there is ¾" opening to allow the condensation to run through and drip off at the eave line outside.

QUESTION: How do you cover seed flats?

MR. EDWARDS: We cover seed flats with sterilized sand and sterilized muslin. Begonias are covered with plastic and muslin.

FRIDAY MORNING SESSION

October 16, 1964

MODERATOR: Mr. Richard C. Maire