

Christmas Begonias in Six Months

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The Christmas begonia varieties Marjorie Gibbs, Mellior and Lady Mac have commonly been propagated from leaves of the salable plants, taken before the plants are disposed of for the Christmas trade. These leaf cuttings are rooted and ready for 2 1/2 or 3 inch pots about January 20.

The small plants require care and bench space for approximately eleven months before they are finished and ready for sale.

We have learned (Cornell Bulletin #787) that these begonias normally set flower buds about October 10. The addition of artificial light before October 10 keeps the plants in a vegetative condition indefinitely.

The growing period of begonias has been reduced to six months from the normal nine or ten months. We had finished well branched, fully flowered plants for Christmas which could be used as 4 inch plants or 2 or 3 combined to make excellent six and seven inch pans.

This was done by carrying over a few well developed stock plants from Christmas. They were given additional light (60 watts for 4 hours on 5 foot centers and 3 feet above the plants) each night after Christmas.

Our first leaf cuttings were made on March 3, 1947. About 200 leaf cuttings were taken from medium-sized leaves. These were stuck in #2 grade Vermiculite in flats with wick watering (Cornell Bulletin #793). These cuttings were given additional light immediately (60 watts for 4 hours). The additional light on stock and cuttings can safely be discontinued March 15. The days are long enough by this date for vegetative growth of begonias under natural daylength.

This propagation was well rooted and potted into 3 inch pots on April 24. Ninety-five per cent were good enough to carry along. The plants finished large, well flowered 5 inch pots for Christmas.

On May 3, 1947 another propagation of leaf cuttings were taken from these same stock plants and given the same treatment as the March propagation. Plants from this propagation finished well branched and well flowered in 4 inch pots for Christmas.

By June 26 we were tired of seeing the old stock plants around. We stripped them of all the tip cuttings available and stuck these tip cuttings in the same manner as the two previous propagations.



Left to right: leaf cutting - March 3, leaf cutting, - May 3, terminal cutting, June 26.

On July 28, 1947 95% of the cuttings were well rooted. They were potted directly into 4 inch pots. The begonia plants from the three propagations were all pinched September 3, 1947.

The 4 inch plants grown from the June 26th propagation of tip cuttings were slightly larger and better branched than the leaf cuttings taken on May 3, 1947.

All plants were grown at 60°F minimum night temperatures. The 4 inch plants were surface watered. The 5 inch plants were in constant water level automatic watering. They were compared to similar plants surface watered. (See pictures)

Leaf Cuttings	Stuck	3"	4"	5"	Pinched	Fin-ished
200	3/3	4/24	6/23	9/18	9/3	184
100	5/3	7/8	9/23		9/3	95
Tip cuttings	6/26		7/28		9/3	

REMEMBER TO MAKE
RESERVATIONS FOR
THE FOREMEN AND
GROWERS SCHOOL
FEBRUARY 18 & 19

The Short Course

The meetings were covered by John Dick, Editor of the Florists Exchange and by John Seeley for the Florist's Review. We suggest you read the report in the trade papers. Many new ideas were presented and much helpful information disseminated. Dr. Blauvelt's work with Parathion is reported in this issue.

Dr. Baker's discussion of California floriculture was published in the last issue of the Bulletin. His discussion of disease-free propagating stock and seeds showed the need for propagators to use the utmost care in handling seeds and cuttings to make certain disease is not carried on or in them. If the propagator does not sell disease-free stock the grower who follows all the practices recommended for disease control is unable to produce a perfect crop even at high cost for disease control.

Mr. Seeley's discussion of soil aeration and the application of this to florist crop production and automatic watering shows the great range of oxygen supply in soil which roses tolerate and the injuries arising from oxygen deficiency. Not only the oxygen content of the soil air but the rate of change of soil air is important.

Dr. MacDaniels showed by charts and slides the structure of a plant and how it works.

Harold Gray showed how the location of heating pipes affected heat distribution and how automatic ventilation coupled with automatic heat can produce a uniform temperature night and day. Binks nozzles were found of little value in cooling and humidifying the air in a greenhouse in summer. Running water over the roof enabled him to drop the temperature considerably. The drop in temperature also increased relative humidity.

Year around chrysanthemums have become a reality. As with all other crops it requires less time to obtain a thirty-inch stem in summer than in winter. This information will come to you gradually. Many new angles to crop production have made themselves known through this program. The same variety was flowered each month for 18 months.

Professor Fossum told us the florist receives 1/4 of one cent from each dollar of spending money of the public. History shows us the gross income to retail florists maintains this relationship constantly. If national income increases as the predictors think our business will likewise increase at the rate of 1/4 of one cent per dollar of increase in national income.

Dr. Davidson explained the relationship of time of year to nutrient absorption. He recommended the use of water soluble fertilizers rather than dry fertilizers.

Dr. Dimock presented the information on stunt of chrysanthemums, gladiolus diseases and Parzate as a fungicide which looks like it

might replace Fermate.

Grading by weight per flower and weight per spray was presented by Dr. Post as a means of establishing standard grading of all flowers in the market. We will have a story for you on this in the next issue of the Bulletin.

Many questions were asked at the Bull Session. In addition to the questions much new plant material, methods of packing, equipment and troubles were displayed.

Perhaps you would be interested to know how well your state was represented.

The score of paid registrations follows:

Alabama	1	Missouri	2
California	7	New Hampshire	1
Canada	19	New Jersey	10
Colorado	2	New York	174
Connecticut	4	North Carolina	2
Illinois	5	Norway	1
Indiana	3	Ohio	6
Iowa	1	Pennsylvania	35
Maryland	3	Texas	2
Massachusetts	22	Washington D.C.	2
Michigan	7	West Virginia	3
Minnesota	7	Wisconsin	1
		TOTAL.....	320

The constitutional changes were passed at the meeting. This automatically transfers the President to Vice President at the close of his Presidency and permits the board to fill vacancies created.

Meeting of The Directors

The Board of Directors of the New York State Flower Growers met the night before the Short Course to discuss the developments within the departments serving you. Man power is yet a limiting factor in rapid development of the work. The increase in appropriations and fellowships which are operating have greatly speeded the program.

Professor Fossum presented his plan for development of the fact finding in our business. His findings to date and the cooperation he is receiving from the United States Census Bureau are very encouraging.

Weight Grading Approved

The Board of Directors approved the plan of grading pompons, carnations, snapdragons and other flowers by weight per flower. The proposed plan for such grading to obtain standard, uniform grades of all cut flowers was presented by Dr. Post as a preview to the plan presented to the group on the tour.

Your editor,

Kenneth Post