

GROWERTALKS

Culture Notes

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Florel on Pot Mums?

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Some growers successfully use Florel growth regulator on garden mums to prevent premature budding and encourage fuller growth. So what, if any, benefits can be achieved by using it on pot mums? Can we get more branching, fuller plants, a better-quality product?

We decided to find out.

Spanning the course of three years and testing a broad range of pot mum varieties, 12 trials have been completed in Ontario, Canada. The location was selected for its broad weather conditions, from dark, cold winters to warm, bright summers.

We selected 10 to 20 varieties of pot mums for each trial. Unrooted cuttings were directly stuck into 6-in. pots and propagated. Sixteen to 17 days after sticking the cuttings, six pots of each variety were sprayed with Florel at 500 ppm (2 ml/l) and six pots were not sprayed. When ready, the trial was pinched and moved to short days.

Upon flowering, the number of breaks per cutting was counted, and general differences in flowering response, plant height, volume and uniformity recorded.

The biggest differences in treatments were seen in the trials that flowered in the winter, and the least differences were observed in summer-flowering crops.

Statistical analysis of the branching data showed a wide range of responses to the Florel application. Some varieties in certain seasons produced up to one more break per cutting on the Florel-treated plants. On the other hand, there were also varieties with up to one less break per cutting. About half the varieties tested showed no difference in branching.

In general, many of the Florel-treated pot mum varieties were shorter, displayed less volume and were slower to flower than the non-treated plants. Some varieties were affected severely and displayed an uneven bud set or didn't bud at all. Other pot mum varieties produced vegetative stolon growth from below the soil, which grew up above the plant canopy causing very uneven plants. These differences were most evident in the

winter trials flowering in January and March.

We did identify some pot mum varieties that tolerated the application of the Florel brand growth regulator, and a few even produced an additional break. Unfortunately, the additional branch did not translate into a better quality product.

Our trials indicate there is no positive benefit from the use of Florel in pot mum production.

Tips for a great crop

Most importantly, get the crop off to a great start. Giving the right inputs during the first three to four weeks makes all the difference. Also keep in mind these important points:

- Maintain a minimum soil temperature of 68 to 70F (20 to 21C) day and night during rooting.
- Fertilize at 300 ppm N using a balanced mix during propagation and with every irrigation during establishment.
- Provide 4,000 to 6,000 foot-candles of light as soon as the cuttings are rooted.
- Don't pinch the cuttings before roots have reached the bottom of the pot.
- Space the pots out before the breaks are an inch long to allow light into the canopy. This helps reduce early stretch and helps push the breaks out.
- Leaf expansion after pinching is a good sign that you are on track for a great crop. **GT**

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