## Effect of B-Nine and Bonzi on 'Munchkin' Sunflowers

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Potted sunflowers could make a profitable potted flowering plant due to short crop time, ease of propagation and large, attractive flowers. However, sunflowers can become disproportionately large relative to their container size, especially when grown in a greenhouse. Potted pollenless 'Munchkin' sunflower seed were planted on 24 January 2002 into 806 cell packs and transplanted on 14 February into 6-inch diameter pots using a Fafard 4P. Plants were fertigated with 200 ppm N from Scotts 20-10-20 fertilizer. B-Nine at 2,000 or 8,000 ppm or Bonzi at 2 or 4 mg a.i./pot were applied on 22 February. B-Nine was applied as a spray to the point of runoff and Bonzi was applied as a drench using 6 fl. oz. solution per pot. Data were collected at anthesis when the petals were at a 90° or greater angle from the center of the flower and included height (from media surface), plant diameter (average of two measurements, one perpendicular to the other) and flower diameter.

The 'Munchkin' sunflower made an attractive potted flowering plant. The pollen-less characteristic reduced the

messiness associated with some other cultivars. The foliage was dark green, plentiful and large. The lateral buds opened up well and extended the postharvest life. As with all other potted sunflowers, postharvest is still relatively short compared to many other common potted flowering plants.

B-Nine at 2,000 or 8,000 ppm had no effect on potted sunflowers (Fig. 1). In contrast, 8,000 ppm B-Nine was effective on controlling height of 'Pacino' and 'Teddy Bear' sunflowers in previous work. Bonzi at either 2 or 4 mg a.i./pot was effective in controlling height to 91% or 83% of controls, respectively. Plant diameter was also shorter (92% and 85% of controls, respectively, with 2 or 4 mg). Unfortunately, flower diameter was 12% smaller and crop time was increased by 4 to 5 days. The height control was sufficient to make the plants more compact and attractive. Growers would need to consider if the delay in flowering from Bonzi application is acceptable relative to the increase in plant quality.

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Fig. 1. Effect of B-Nine and Bonzi on 'Munchkin' sunflower. Note that the 4 and 2 mg treatments were drenches (in mg of active ingredient per pot) and the B-Nine applications were foliar sprays (in ppm).