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Efficacy of A-Rest™ or Bonzi™ on *Clerodendrum thomsoniae* as a Flowering Potted Plant

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BACKGROUND

An application of A-Rest™ (ancymidol) or Bonzi™ (paclobutrazol) has been recommended either as a spray or a drench to control growth of *Clerodendrum thomsoniae*.

Recommendations suggest 6 to 50 ppm sprays that will reduce plant growth by 40% when compared to controls. They also increased flowering. The objectives of this study were to determine the efficacy of: a) A-Rest™ (ancymidol) at 100 or 200 ppm sprays; b) Bonzi™ (paclobutrazol) at 100 or 200 ppm sprays; c) A-Rest at 0.5 or 1.0 mg a.i./pot drench; and d) Bonzi™ at 0.5 and 1.0 mg a.i./pot drench.

MATERIALS & METHODS

Terminal rooted cuttings of *C. thomsoniae* with 4-6 leaf pairs were planted in May 2004 (latitude 30.43N) using one per 6-inch container filled with a mixture of Promix. All plants received ambient light levels in a greenhouse with temperature set points of 86° F day/73° F night. Plants were fertilized at ever irrigation with Peters™ 20-10-20 at the rate of 200 ppm N.

Two weeks after transplanting, central leaders were pinched. PGR treatments were applied after two weeks of vegetative growth. Measurements were recorded 49 d after PGR applications.

RESULTS

A-Rest™ and Bonzi™ reduced internode length of *C. thomsoniae* (Table 1) and had minimal effect on days to flower, number of laterals (average 3), or number of leaves (average of 50). A-Rest™ and Bonzi™ drenches at the rate of 1.0 mg a.i./pot were effective in reducing internode lengths (Figures 1 and 2). At this rate, A-Rest™ and Bonzi™ reduced internode length by an average of 2.4 inches.

Figure 1. Effect of control, A-Rest™ (ancymidol) 0.5 or1.0 mg a.i./pot drench on *C. thomsoniae.*

Figure 2. Effect of control, Bonzi™ (paclobutrazol) 0.5 or 1.0 mg a.i./pot drench on *C. thomsoniae.*

Table 1. Growth parameters (means n=6) for *C. thomsoniae* as affected by A-Rest™ (ancymidol) or Bonzi™ (paclobutrazol) as sprays or drenches.

Treatment	Growth Response	
	Days to Flower	Internode Length (inches)
Spray (ppm)		
Control	23ab[z]	3.2a
A-Rest 100	23ab	2.4b
A-Rest 200	31a	1.6bc
Bonzi 100	20b	2.0bc
Bonzi 200	21b	1.2c
Drench (mg a.i./ pot)		
Control	19b	3.2a
A-Rest 0.5	20b	1.2c
A-Rest 1.0	20b	0.8c
Bonzi 0.5	19b	1.6c
Bonzi 1.0	17b	0.8c

Letters within column indicate significant difference.

CONCLUSIONS

Optimal growth control of *C. thomsoniae* was achieved by applying Bonzi™ and A-Rest™ drenches at a rate of 1.0 mg a.i. /pot or a Bonzi™ spray at 200 ppm. The treatments should be applied two weeks after the plants were pinched. The plants were considered acceptable for marketing as flowering potted plants. If desired, lower rates of both PGRs could be used to produce larger plants.

IMPACT TO THE INDUSTRY

1. Bonzi™ and A-Rest™ drenches at a rate of 1.0 mg a.i. /6-inch pot or a Bonzi™ spray at 200 ppm provided optimum growth control.

2. The PGR treatments should be applied two weeks after pinching.

3. Days to flower, number of laterals, and number of leaves were not affected by any of the PGR applications evaluated.

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