

JAPANESE GEORGIA LILY RESPONSE TO A-REST® Progress Report

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Japanese Georgia lily bulbs (7 to 9 cm) were potted on October 4, 1972, in 6-inch plastic pots. The bulbs were not cold-treated before potting. After potting, the bulbs were left outdoors until February 22, 1973; they were then moved into a greenhouse for finishing at a 65° to 68° F night temperature.

On January 16, when the plants were still outdoors and were 4 to 6 inches tall, part of the experimental lot was treated with A-Rest® either as a foliage spray to the point of run-off or as a soil drench. These first treatments are referred to as 1-X in table 1. Some plants were re-treated on January 30; the dual treatments are called 2-X.

There were six pots in each treatment. Foliage sprays were used at the rate of 17 to 21 ml of solution per pot per application. Soil drenches were applied at 200 ml per pot.

On April 18 (four days before Easter Sunday), plant height above the pot rim was measured, and number of leaves per plant, total flower buds, and buds in flower were counted. Table 1 shows these data, expressed as an average of six pots.

RESULTS

In three treatments—25 ppm foliage spray (2-X), 50 ppm foliage spray (1-X), and 0.25 mg soil drench per pot (2-X)—plant height was 50 percent of the untreated control. These two spray treatments did not reduce the number of leaves or flower buds, nor did they cause as much delay in flowering as did the drench treatment.

The 0.50 mg soil drench per pot (1-X) reduced plant height to about 65 percent of

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the untreated control. This treatment did not reduce the average number of flower buds produced per plant and, of all the chemical treatments, caused the least delay in flowering.

Two treatments—the 50 ppm foliage spray (2-X) and the 0.50 mg soil drench per pot (2-X)—reduced plant height to about 35 percent of the untreated control.

CONCLUSIONS

Treating Japanese Georgia lilies with A-Rest® causes some delay of flowering. This delay should not seriously affect timing of lilies for market. In this experiment, a single soil drench of A-Rest® at the rate of 0.50 mg per pot did not reduce bud count and only slightly delayed flowering. This treatment reduced plant height by an average of 10 inches.

Two 25 ppm A-Rest® foliage sprays, 14 days apart, or a single 50 ppm spray caused greater height reduction. All these treatments produced good marketable plants.

It is interesting to note that a soil drench of 0.50 mg per pot requires about half the amount of the A-Rest® product as two 25 ppm foliage sprays or a single 50 ppm spray, using 20 ml of solution per pot. Based on a report by Hasek, Sciaroni, and Farnham in

the September 9, 1971, *Florists' Review*, 15 ml foliage spray per pot may be sufficient material for comparable results.

The results presented here are a progress report and should not be considered a University of California recommendation.

TABLE 1. Average Plant Height and Number of Leaves, Buds, and Flowers per Plant for Japanese Georgia Lilies Treated with A-Rest®

Treatments*	Per Plant (April 18, 1973)			
	Height (cm)	Number of leaves	Total buds and flowers	Buds in flower
Foliage sprays:				
25 ppm (2-X)	34	57	10.8	1.0
50 ppm (1-X)	34	52	10.3	1.3
50 ppm (2-X)	25	50	9.7	0.1
Soil drenches:				
0.25 mg/pot (2-X)	34	51	9.0	0.5
0.50 mg/pot (1-X)	44	55	10.2	2.9
0.50 mg/pot (2-X)	26	43	8.5	0.0
Untreated control	68	60	10.0	6.2

* (1-X) = single application on January 16, 1973; (2-X) = application on January 16 and again on January 30. Foliage sprays at rate of 17 to 21 ml solution per pot. Soil drenches at rate of 200 ml per pot.

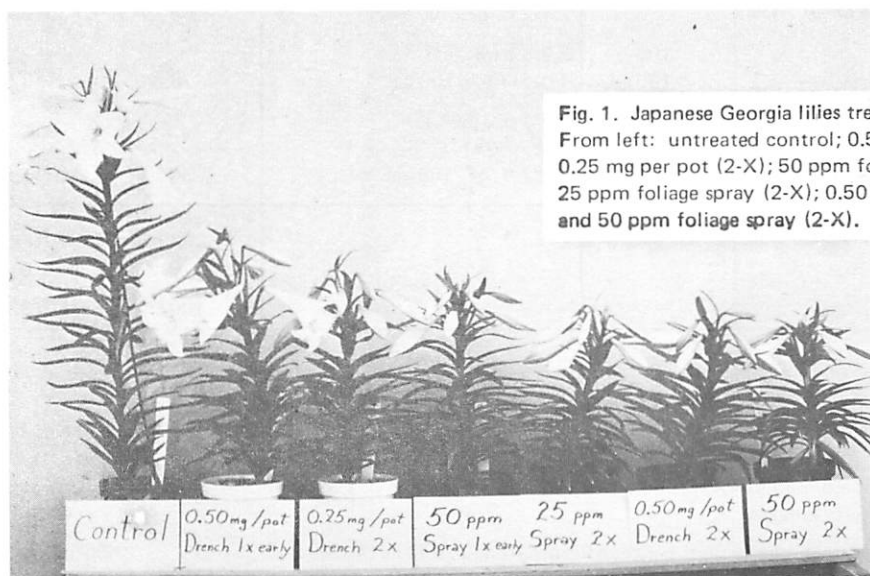


Fig. 1. Japanese Georgia lilies treated with A-Rest®. From left: untreated control; 0.50 mg per pot (1-X); 0.25 mg per pot (2-X); 50 ppm foliage spray (1-X); 25 ppm foliage spray (2-X); 0.50 mg per pot (2-X); and 50 ppm foliage spray (2-X).