Consider Sumagic for Your Easter Lilies

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The article on Easter lilies in the last issue of the Bulletin resulted in inquiries into recommendations for Sumagic on lilies. If you are currently using A-Rest in your Easter lily production, you should consider testing Sumagic this coming spring on a small scale. Both Sumagic and A-Rest are effective on Easter lilies as either a spray or a substrate drench.

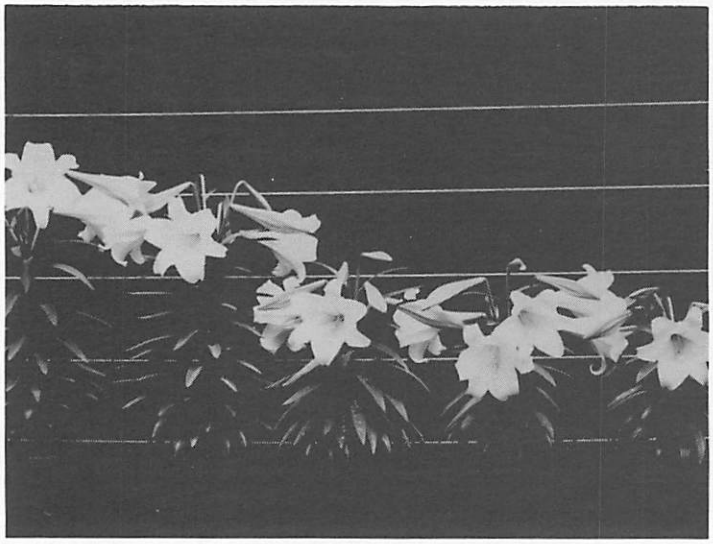

Figure 1. (L–R) Unsprayed control, and plants sprayed once with 15 ppm Sumagic at 1, 2, 3, or 4 quarts per 100 square feet.

When used as a spray, both should be applied at 1/2 gallon per 100 ft2 of bench area. If you apply more or less volume without adjusting the concentration, you may be unhappy with the resulting height (Figure 1). Remember that the dosage of chemical received per pot is the product of the solution concentration times the volume applied per pot. Both are important in predicting chemical activity! The recommended range of A-Rest sprays is 33-66 ppm; the Sumagic recommendation is 10-30 ppm (Figure 2). If you want to experiment with Sumagic, a good starting point would be 10 or 15 ppm applied when the shoots are 3" tall. A second application will probably be necessary; apply when shoots are 6" tall. As shown in Figure 2, the amount of light plants receive drastically affects plant height. The poorer the light conditions, the greater the need for height control.

When used as a drench, both A-Rest and Sumagic lose efficacy and are less effective if bark is present in the substrate. Therefore, a drench is not the proper application method if your substrate has bark as an ingredient. The recommended dosage for an A-Rest drench is 0.25-0.50 mg/6" pot; the Sumagic recommendation is 0.03-0.06 mg/6" pot (Figure 3). Use 0.06 mg as an

Figure 2. (L–R) Plants grown under 70% shade, full sun, 70% shade + 1 spray 10 ppm Sumagic, full sun + 1 spray 10 ppm Sumagic, 70% shade + 2 sprays 10 ppm Sumagic, and full sun + 2 sprays 10 ppm Sumagic.

experimental treatment this spring, if you normally apply A-Rest drenches.

One of the major reasons to consider Sumagic is its cost relative to A-Rest (Tables 1 and 2). It is common to hear of growers who have applied more than 10¢ worth of A-Rest per pot on a lily crop. Granted, this is not the case every year or for every grower, but on a relative scale, Sumagic is less expensive than A-Rest.

As with any cultural change such as trying a new substrate or a new pesticide, test Sumagic on only a small portion of your crop. However, treat enough plants to have confidence in your results. Also remember that spacing, lighting, and temperature can affect stretching. For a true test, use a representative bench in your greenhouse, not the back corner.

Figure 3. (L–R) Control; sprayed with 50 ppm A-Rest twice; or drenched with 0.03, 0.06, or 0.12 mg Sumagic. Picture courtesy of P. Allen Hammer, Department of Horticulture, Purdue University.

Table 1. Chemical costs per pot for A-Rest and Sumagic sprays on Easter lilies in 6" pots at pot-to-pot and 8" center spacings.

	Spacing	
Chemical/concentration	Pot-to-pot	8" centers
A-Rest*		
25 ppm	2.1¢	3.8¢
33 ppm	2.8¢	5.0¢
50 ppm	4.3¢	7.6¢
66 ppm	5.6¢	10.0¢
Sumagic**		
5 ppm	0.3¢	0.5¢
10 ppm	0.6¢	1.0¢
15 ppm	0.9¢	1.6¢
20 ppm	1.2¢	2.1¢
25 ppm	1.5¢	2.6¢
30 ppm	1.8¢	3.1¢

*Based on a purchase price of $59/quart of Sumagic.
**Based on a purchase price of $45/quart of A-Rest.

Table 2. Chemical cost per pot for A-Rest and Sumagic drenches.

Chemical/dosage	Cost per pot
A-Rest*	
0.25 mg/pot	4.5¢
0.50 mg/pot	9.0¢
Sumagic**	
0.03 mg/pot	0.37¢
0.06 mg/pot	0.75¢

*Based on a purchase price of $59/quart of Sumagic.
**Based on a purchase price of $45/quart of A-Rest.