## **AGRICULTURAL EXTENSION SERVICE · UNIVERSITY OF MINNESOTA**

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## CYCLAMEN GIBBERELLIC ACID TREATMENT

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Proper application of gibberellic acid (GA) to cyclamen plants provides earlier, more uniform flowering. Both quantity and concentration applied influence the results. One should apply 8 ml of a GA solution with a nonionic wetting agent to the crown (not the leaf canopy) of the plant 45 to 60 days before the desired bloom date. This rate is equivalent to:

2 fluid ounces to 7 plants (29.6 ml = 1 fl oz)
1 quart (32 fluid ounces) to 115 plants (946 ml = 1 qt)
1 gallon (128 fluid ounces) to 470 plants (3785 ml = 1 gal)
or
1 liter (1000 milliliters) to 125 plants
4 liters (4000 milliliters) to 500 plants

Don't drench with excessive quantities as the plants may "overract." A 25 ppm GA solution is recommended for most cultivars. A 10 ppm GA solution is recommended for F-l cultivars such as Gypsy, Merry Widow, Rosamunde and Swan Lake. If you have not applied GA to cyclamen previously, try it on a portion of the crop the first year to become familiar with the process.

One commonly available commercial product is a liquid formulation with a 0.0875% GA content. It may be diluted as follows:

Desired concentration	Quantity to add per		
	Liter	Quart	Gallon
10 ppm	12 ml	11 ml	43 ml
25 ppm	29 ml	27 ml	108 ml

l teaspoonful = 5 ml

1 tablespoonful = 15 ml

Example: If you wish to spray 110 F-1 hybrid plants, you will need approximately 1 quart of a 10 ppm spray. Mix 11 ml of the commercial GA product plus an appropriate wetting agent and enough water to make 1 quart of spray material. Then insert the spray nozzle below the leaf canopy and wet the crown of the plant. You may wish to make a trial run with water to become accustomed to the quantity of spray that should be applied.

Gibberellic acid products should be refrigerated for maximum shelf life.

## GA TABLETS

Although the liquid formulation previously mentioned is easiest to use, some persons have GA tablets. Each tablet usually contains 4 grams of gibberellic acid. The quantity of solution that can be prepared is largely controlled by the tablet content. Dilution ratios are as follows:

Desired concentration	l Tablet in	坛 Tablet in	Ml of stock solution <sup>*</sup> in l gallon
5 ррш.	200 gal	50 gal	19
10 ppm	100 gal	25 gal	38
25 ppm	40 gal	10 gal	95
100 ppm	10 gal	2.5 gal	380
250 ppm	4 gal	1 gal	95.0

\*Stock solution prepared by dissolving 1 GA 4-gm tablet in 1 gallon of water. 1 fluid ounce = 29.6 ml. Store stock solutions in a refrigerator, but do not save for more than a few days.