BEDDING PLANT PLUGS

General Information

GENERAL INFORMATION

A-Rest Solution Plant Growth Regulator is for use on ornamental plants grown in containers in nurseries, greenhouses, shadehouses and interiorscapes. Use of A-Rest effectively reduces internode elongation, resulting in a more desirable compact plant. Growth regulation effects produced by A-Rest are the result of inhibition of gibberellin biosynthesis. When used as directed, A-Rest produces no phytotoxic effects.

FACTORS AFFECTING PLANT RESPONSE TO A-REST

There are many factors that can affect a plant’s response to A-Rest. They include proper application, environmental conditions, plant/container size and cultural practices. These factors can affect the amount of A-Rest that is required for the desired plant height.

- Cultural Practices may affect the plant’s response to A-Rest. Plants which are grown at close spacing or in small pots and using high water and fertility levels may require an increase in the amount of A-Rest needed. The media in which the plants are grown can reduce the effectiveness of plant growth regulator drench applications. The effectiveness of an A-Rest drench application will be reduced in growing media that utilizes a high amount of pine bark.

- Different Varieties or Cultivars within a given plant species may require a higher or lower rate of A-Rest. Varieties that are taller and more vigorous generally require more A-Rest than do the naturally short, less vigorous varieties. Growers should consult with plant and seed suppliers for vigor and other growth characteristics for newly released varieties.

- Temperature can be the overriding factor in determining the amount of A-Rest needed. Stem elongation increases with increased temperatures. Growers in warm climates will need to use higher rates and/or more applications compared to those in cooler climates. The amount of A-Rest needed and the number of applications may also vary depending on the time of year, with higher rates and/or more

applications needed during warmer months.

APPLICATION TECHNIQUES

Plants absorb A-Rest through both foliage and roots. A-Rest may be applied as a spray or as a drench to achieve the desired plant height control. Split or sequential applications under certain conditions allow greater treatment flexibility and may be desirable.

Spray Application

A-Rest applied as a foliar spray is absorbed through plant foliage and is then translocated to the terminal where it reduces internode elongation. A-Rest reaching the growing media as runoff from foliar treatments or over-spray will result in additional growth regulation from root uptake.

When applying as a spray, the following should be noted:

- Do not use wetting agents in combination with A-Rest as crop injury may occur.

- Avoid uneven application or over-application to prevent irregular or excessive growth control.

- Use of the highest recommended application rates may cause a slight delay (two to five days) in flower development on some species.

- Do not allow spray drift to contact non-target plants.

1. Bench Area sprays: This method is generally used for plants in small containers or that are spaced closely. Dilute A-Rest to the required concentration using the spray preparation guidelines described in Table 1. Apply uniformly at a rate of one (1) gallon of spray per 200 sq. ft. of bench area.

2. Individual Plant sprays: Mix the spray solution with the amount of A-Rest and water to achieve the desired concentration (ppm) in Table 1. Spray individual plant foliage to the point of runoff. Care should be taken to apply an equivalent amount of spray volume to plants of the same size and species or cultivar. Uniformity in plant response is generally more difficult with individual plant sprays than bench area sprays.

3. sequential spray Applications: Using sequential applications may provide more

uniform growth regulation. In general, sequential spray applications are to be applied using 50 - 100% of the lower recommended rate. Growers in cooler climates may have to use lower rates. With some species, for example chrysanthemums and azaleas, individual lateral shoots may outgrow other laterals causing non-uniform plant appearance. This results when individual laterals do not receive enough chemical when spray is applied. The use of sequential applications will help reduce this problem.

DRENCH APPLICATIONS

Drench treatments of A-Rest will provide treatment accuracy for consistently uniform results. A-Rest is readily absorbed by the roots and translocated to the terminals. Growing media should be moist, but not wet at the time of treatment. Best results are obtained when moisture content allows the drench treatment to become well distributed and retained entirely within the pot. This may be achieved by watering the plants the day before treating.

Response may be variable if part of the treatment is lost to flow-through or if growing media is too dry to allow for even distribution of the treatment. Generally, a volume of 2 fl. oz. (60 mL) is required to treat a 4-inch pot or 4 fl. oz. (120 mL) for treatment of a 6-inch pot (Table 2). Dilute A-Rest to the required concentration using the method described in Table 1. When applying as a drench, theuse of pine bark in potting soil mix may reduce the effectiveness of drench treatments.

GENERAL INFORMATION

Pesticide supply tanks are recommended for the application of these products. See label instructions for dilution use rates and timing of applications. Agitate prior to use. Since the material is used in an injections proportioner the pesticide is to be applied continuously for the duration of the water application. Agitate prior to use.

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DETERMINING OPTIMUM RATES

The amount of A-Rest required for an optimum growth response will vary among growers and will depend upon several factors: the final desired height, length of control desired, pot size, stage of growth, method of application, season and varietal response. Species-specific cultural practices such as watering, potting

media, fertilization and temperature and light conditions will also affect the growth response to a given dosage. Therefore, growers should establish specific application rates based on small-scale treatments under actual use conditions and keep records as to plant species and variety sensitivity before A-Rest is applied to a large number of plants.

Limitations, Restrictions, and Exceptions

BEDDING PLANT PLUGS

Foliar applications of A-Rest are effective in controlling the height and strengthening the stem of bedding plant plugs. The rate of A-Rest for bedding plant plugs will be much lower than the rate for a more mature bedding plant. The grower should determine the optimum rate for the species grown under their cultural and environmental conditions by running trials on a small number of plants. A recommended starting rate range is 5 - 10 ppm. Applications to bedding plant plugs should begin when the plants have reached the 1 to 2 true leaf stage.

Method
Foliar spray
Rates
field_rates 0

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Restricted Entry Interval

12 hours

Timings
When the plants have reached the 1 to 2 true leaf stage.