



By Erik Runkle



The PGR Ancymidol

A -Rest and Abide are two plant growth retardants (PGRs) that contain the active ingredient ancymidol. They aren't as commonly used in floriculture as most other PGRs, which could be attributed to ancymidol's cost. However, there are some potential upsides to this PGR including its intermediate strength and moderate residual effect relative to other PGRs. When effective at low rates, it can be a cost-effective option, particularly for high-value crops such as ornamental plugs and liners.

Ancymidol was first registered for use in 1973. The first product on the market was A-Rest (SePRO) and more recently Abide (Fine Americas) became available. Both products have the same concentration (0.0264 percent) and university tests at Florida, Michigan State and Purdue showed similar plant responses when the same rates and volumes of ancymidol were applied (Figure 1). These products are labeled for commercial use of container-grown ornamental plants in greenhouses, nurseries, and shadehouses. They are not labeled for use on any food crops including vegetable transplants. The restricted entry interval (REI) is 12 hours.

A-Rest and Abide are generally stronger than daminozide products (B-Nine and Dazide) and chlormequat chloride products (Cycocol and Citadel) and provide a longer-lasting response. However, the response isn't as long-lasting as paclobutrazol (Bonzi, Piccolo, Paczol) or uniconazole (Sumagic and Consise) products. This intermediate strength can be desirable because the overdose potential is fairly low. In addition, phytotoxicity from ancymidol is extremely rare.

Ancymidol is effective when applied as a spray, sprench, drench, or liner/plug dip, indicating that it is absorbed by

shoots and roots. Once applied, it is quickly absorbed (usually within 30 minutes) and then translocated through the plant. The primary uses of A-Rest and Abide are on plugs and liners, when only an intermediate period of efficacy is desired, and on potted flowering bulbs such as lilies and tulips. The following are application guidelines but, as with all PGRs, conduct your own small-scale trials to determine appropriate rates for desired responses.

- When applied as a foliar spray, common applications rates on plugs are 5 to 15 ppm (2.4 to 7.3 fl. oz. per gallon), although lower rates (3 to 5 ppm) are often used on sensitive crops such as begonia and pansy. When applied to crops after transplant, higher spray rates (15 to 30 ppm) are typically required to achieve desirable results. The typical spray volume is 2 quarts per 100 sq. ft.

- Sprenches are heavy sprays (at least 1 gallon per 100 sq. ft.) in which some of the solution penetrates the surface of the media to provide a longer-lasting response than a spray. Typical sprench rates are about 1/2 to 1/3 of spray rates, depending on the volume applied (lower rates when more solution is applied).

- When applied as a drench or liner/plug dip, typical rates are 1 to 4 ppm. The standard drench volumes are the same as with other PGRs (e.g., 2 oz/4-inch pot, 4-5 oz/6-inch pot). Although drenches can provide very desirable results, they are not very common in large-scale commercial production because of cost.

For more information, read the product labels and consult with PGR technical specialists and university extension educators. Always follow label instructions including the personal protection requirements for applicators. 

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Figure 1. A single spray application of A-Rest or Abide inhibited extension growth of pansy and begonia seedlings. The rate applied (7.5 ppm) might have been a little higher than desired.

