

## **Applying Pre-Germination Sprays of Plant Growth Regulators to Avoid Stretching of Bedding Plant Seedlings<sup>©</sup>**

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Plant growth regulators (PGRs) are used extensively in bedding plant production to grow compact plants. Some of the more rapidly germinating seed are already too stretched out by the time germination is complete and the first PGR application is sprayed.

Applying a heavy spray, or spray, immediately after sowing, and before the seed germinates, is a technique that can reduce early stretching of seedlings. *Cosmos*, *Tagetes* (marigold), *Calendula*, *Lobularia* (alyssum), *Dahlia*, and *Zinnia* can be treated with an early PGR application.

Trials should be done to determine which regulators and rates to use, since soil, greenhouse conditions, irrigation, and fertilization all affect the results. There may also be varied reactions to the PGR between colors. The regulator should be one that can be taken up by the roots, like Bonzi<sup>®</sup>, A-Rest<sup>™</sup>, and Sumagic<sup>®</sup>.

We achieve good results with a 5 to 10 ppm treatment. Lower rates are used during fall and winter, when temperatures and light levels are lower.

A pre-germination PGR application may also increase the crop time of the plug.

