REVISED

# SUMAGIC® ADVISOR

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## Growers Can Reap Benefits from Sumagic® Summer Perennial Applications

*By Lauren Daniel*

Perennials are one of the fastest growing crops in the nursery and greenhouse industries. As a result, growers are looking for new tools to help them produce quality plants at a higher quantity. One of the emerging methods is the use of plant growth regulators (PGRs) on perennials. Widely used on annuals, growers are beginning to see the benefits that a summer PGR application can offer, including maintaining perennial crop value beyond the summer season.

### Testing *Sumagic* Perennial Applications

Dr. Joyce Latimer, professor and greenhouse crops extension specialist at Virginia Tech, has worked with Sumagic® Plant Growth Regulator since 1990 and has tested it on more than 150 perennial cultivars.

"Our goal has been to find *Sumagic* rates that are effective in controlling plant growth during the production phase," Latimer said. "This gives growers a stockier plant, the size of which is more proportional to the size of the container, and growers can fit more plants into the shipping racks."

With *Sumagic,* Latimer saw good growth control as well as increased stress tolerance.

"The perennials that we tested with *Sumagic* were tougher, more stress tolerant than untreated plants," Latimer said. "An increased stress tolerance means that plants maintain better quality when subjected to drought or heat stress during shipping and handling."

Paul Pilon, owner of Perennial Solutions Consulting, began testing *Sumagic* on perennials seven years ago. He observed reduced plant height and improved quality characteristics with *Sumagic* applications, allowing growers the ability to ship more plants per load to retail sites while maintaining plant quality and prolonging the shelf life. Pilon prefers *Sumagic* over other PGRs because of its level of activity and effectiveness on a broad variety of plant species, including the roughly 200 perennial genera he has tested.

"Today, the majority of my PGR applications involve *Sumagic,*" Pilon said. "For perennials, I look for a 20 to 30 percent reduction in plant

Three applications of *Sumagic* at 5 ppm to *Coreopsis grandiflora* 'Early Sunrise' at seven-day intervals.


Photo provided by Paul Pilon, Perennial Solutions Consulting
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height, and *Sumagic* consistently delivers this type of growth control."

Latimer also cites *Sumagic*'s consistency as a major benefit for perennial growers.

"*Sumagic* gives a very linear response," Latimer said. "It gives the grower a better feel for how the plant will respond and is effective on a wide range of perennials at low rates."

## *Sumagic* Rates and Timing

Latimer and Pilon both agree that *Sumagic*'s ability to work at lower rates makes it ideal for summer applications when the perennials can be potted up for sale the following spring.

"One grower I work with was pruning her summer perennials every week," Latimer said. "Once she started making weekly applications of *Sumagic* at low rates she was able to reduce her pruning to once a month."

Pilon recommends multiple applications of *Sumagic* at lower rates because it allows the plant to experience a cumulative growth control effect while not over restricting the plant once it is in the landscape. This gives a grower the flexibility to sell the plant immediately or hold it over until the next spring.

"In Michigan, I use an average beginning rate of five parts per million (ppm) of *Sumagic,*" Pilon said. "I generally apply it two to three weeks after transplant and follow up with the second application, if necessary, seven to 10 days later and evaluate the need for a third application seven to 10 days after that."

Latimer recommends a similar program for growers using *Sumagic,* but notes that Southern growers may need to test *Sumagic* at a higher rate to see the same performance as Northern growers because of the higher temperatures in the South.

## Growing Demand for *Sumagic* Applications

As the demand grows for perennials to maintain their quality from year to year, Pilon expects that more growers will use *Sumagic.*

"Because this demand as well as the need to produce more plants per square foot to maximize profitability is increasing, I think that growers are becoming more and more aware of the benefits of summer applications of *Sumagic,*" Pilon said.

Application rates and timing will vary for growers based on their location and growing conditions. Pilon and Latimer encourage growers to build their comfort level with *Sumagic* perennial applications by experimenting with the product on a small scale first.

For more information about Valent's Professional Products, Valent U.S.A. Corporation or our full product line, call 800-89-VALENT (898-2536), or visit the Valent Professional Products Web site at www.valentpro.com.

## *SUMAGIC* RATE TABLE (SUMMER PERENNIALS)

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| PLANT | STATE | *SUMAGIC* RATE* (PPM) | *SUMAGIC* RATE* (FL. OZ./GAL.) |
|---|---|---|---|
| Agastache rugosa | Michigan | 10 | 2.56 |
| Astilbe arendsii | Michigan | 5 | 1.28 |
| Campanula carpatica | Michigan | 2.5 | 0.64 |
| Coreopsis grandiflora | Michigan | 10 | 2.56 |
| Delphinium grandiflorum | Michigan | 5 | 1.28 |
| Digitalis purpurea | Michigan | 10 | 2.56 |
| Heuchera x hybrida | Michigan | 5 | 1.28 |
| Lamium maculatum | Michigan | 5 | 1.28 |
| Lavandula angustifolia | Michigan | 5 | 1.28 |
| Leucanthemum x superbum | Michigan | 5 | 1.28 |
| Nepeta faassenii | Michigan | 10 | 2.56 |
| Phlox paniculata | Michigan | 10 | 2.56 |
| Rudbeckia fulgida | Michigan | 10 | 2.56 |
| Scabiosa columbaria | Michigan | 5 | 1.28 |
| Veronica spicata | Michigan | 5 | 1.28 |

*The rates listed in this table are most applicable to the growing conditions in Michigan during average summer conditions and may need to be adjusted for your location and growing conditions. When applying *Sumagic* at these rates, usually two to three applications applied seven days apart are recommended to achieve adequate levels of height control.