We have been working on branching of herbaceous perennials for more than 15 years. Some things have worked better than others, but one of the best examples is the use of benzyladenine (6-BA) on echinacea. We finally have a labeled and effective 6-BA product for use on perennials: Configure from Fine Americas, Inc. (www.fineamericas.com).

Configure is currently labeled in most of the United States. The label details its use on hosta, echinacea and Christmas cactus. The use of 6-BA on hosta and Christmas cactus has a long history of efficacy and improved branching and flowering. The problem has been the inadequacy of the label and inconsistent availability of the material. Now, you can find full details on application rates and timing on the Configure label.

However, the real success story of Configure is its use on echinacea. Many of the newer echinacea cultivars are very slow to fill out the pot, with only one or two basal branches arising from the crown. We have trialed Configure on five cultivars, and Paul Pilon of Perennial Solutions Consulting (www.perennial-solutions.com) has trialed about that many more (and different) cultivars. We are consistently finding a significant increase in the number of basal branches with rates as low as 300-ppm Configure.

Results with Echinacea ‘Doubledecker’

We tested echinacea ‘Doubledecker’, which is poorly branched in spring production. About two weeks after potting size 72 plugs in late spring, we treated the plants with a foliar spray of Configure at rates of zero, 300, 600, 900 or 1,200 ppm. Increased branching was obvious two weeks after application. With a single application of 300-ppm Configure, we more than doubled the number of basal breaks of ‘Doubledecker’, going from 1.6 branches per control plant to 4.2 branches on the treated plants eight weeks after treatment.

A single treatment of 1,200 ppm further increased branch number to 6.8 per treated plant (see table 1). Furthermore, the branches were “normal” in appearance and continued to grow and develop normally. Plant height was reduced moderately, probably because of the dilution of resources with the additional branches. And there was some delay in flowering, four to seven days, especially with the

Enhance Branching of Echinacea with PGRs

Trials of several cultivars in spring and fall showed promising results for a popular 6-BA product.

By Joyce Latimer and John Freeborn

Figure 1a. Echinacea ‘Doubledecker’ control plant at four weeks after treatment.

Figure 1b. Echinacea ‘Doubledecker’ plant, four weeks after treatment, with 300-ppm Configure.

Figure 1c. Echinacea ‘Doubledecker’ plant, four weeks after treatment, with 1,200-ppm Configure.

Figure 2. (left to right) Echinacea ‘Doubledecker’ plants, eight weeks after treatment, with zero, 300-, 600-, 900- or 1,200-ppm Configure.
higher rates. There was no phytotoxicity seen on any of the treated plants.

‘White Swan’ and Other Results
Results with ‘White Swan’ were similar under the same conditions as described above except that ‘White Swan’ was allowed to establish in the pot for three weeks to resume active growth. This cultivar branched more freely than ‘Doubledecker’, but like ‘Doubledecker’, increased branching was obvious two weeks after treatment with Configure. Eight weeks after treat-
ment, control plants had 3.8 branches per plant while plants treated with a single foliar spray of 300-ppm Configue had nine branches per plant. Higher rates increased the branching of ‘White Swan’ with 12.8 branches on plants treated with 900-ppm Configue. This really improves pot fill and final plant appearance. Again, plant height was moderately reduced, but there was little delay in flowering.

Additional studies conducted in the fall found similar results with ‘Magnus’ and ‘Ruby Star’. ‘Magnus’ is not as poorly branched as some of the echinacea cultivars, with 3.8 branches on control plants versus 7.2 branches on plants treated with 300-ppm Configue as counted four weeks after treatment. ‘Ruby Star’ treated in the fall with 300-ppm Configue had 9.4 branches per pot as compared to control plants with five branches, six weeks after treatment.

**The Bottom Line**

In general, we are seeing a doubling of the number of basal branches per pot with Configue at rates in the 300- to 600-ppm range. Summer-potted plants can be treated in the fall, while still actively growing, or the following spring after growth resumes. Spring-planted plugs should be well established in the pot (two to three weeks after potting) before treatment.

Configue has not been this effective on all perennials, but we have seen little phytotoxicity or distortions on other perennials treated at the label rates.

So, Configue is definitely a tool that you should add to your PGR toolbox if you are growing perennials. Watch for more research. 

---

**Figure 3a.** Echinacea ‘White Swan’ control plant, six weeks after treatment.

**Figure 3b.** Echinacea ‘White Swan’ plant, six weeks after treatment, with 300-ppm Configue.

**Figure 3c.** Echinacea ‘White Swan’ plant, six weeks after treatment, with 900-ppm Configue.
results as we survey the responses of other perennials to Configure.

Acknowledgements: The authors wish to thank Yoder-Greenleaf for the donation of plant materials; Fine Americas, Inc. for financial support; and Riverbend Nursery in Riner, Va., for providing plant material and on-site support for one of the research trials.

Dr. Joyce Latimer is a professor and extension specialist for greenhouse crops, and John Freeborn is the manager of the Floriculture and Controlled Environment Horticulture Center in Virginia Tech University’s department of horticulture. For more information, contact her at (540) 231-7906 or jlatime@vt.edu, or visit www.floriculture.vt.edu.

LearnMore
For more information related to this article, go to www.gpnmag.com/lm.cfm/gp040801

Figure 4. (left to right) Echinacea ‘White Swan’ plants, eight weeks after treatment, with zero, 300-, 600-, 900- or 1,200-ppm Configure.

Figure 5. (left to right) Echinacea ‘Ruby Star’ plants, eight weeks after treatment, with zero, 300-, 600-, 900- or 1,200-ppm Configure.