

Get Your *Echinacea* off to an Early Start

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Growers often ask me this time of the year, how do I enhance basal branching of *Echinacea*? With *Echinacea* liners arriving over the next few weeks, this e-Gro Alert is to update you on the value of using Configure (BA, Fine Americas, Inc.) to improve the basal branching and pot fill of this popular crop.

Since *Echinacea* branching has been very responsive to Configure, it is being used as a regular best management tool by many *Echinacea* producers. Typically one treatment with 300 to 600 ppm Configure doubles the number of basal branches (Figure 1).



Figure 1. *Echinacea* 'Doubledecker' treated with 600 ppm Configure (b, right) at two weeks after transplanting plugs had twice as many basal branches as untreated plants (a, left) at four weeks after treatment.



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At 300 to 600 ppm spray applications, Configure applied about two weeks after potting increased basal branching of several *Echinacea* cultivars (Table 1). The older seed-propagated cultivars, like White Swan and Ruby Star were more responsive than the newer selections, Fragrant Angel and Merlot, or the interspecific hybrid, Tiki Torch, which exhibit stronger apical dominance. Although branching of ‘Harvest Moon’ is very responsive, it also exhibits strong apical dominance of the flowering stalk (Figure 2).

However, our research indicates that earlier treatment results in earlier pot fill. *Echinacea* ‘White Swan’ plants treated with 600 ppm

Table 1: *Echinacea* cultivars treated with a single foliar spray of 600 ppm Configure (6-BA, Fine Americas, Inc.) showed increased basal branching relative to untreated controls at four to six weeks after treatment.

Cultivar	Number of basal branches	
	Control	Configure (600 ppm)
Magnus	3.8	6.6*
White Swan	2.4	11.4*
Doubledecker	1.2	4.6*
Ruby Star	4.4	11.2*
Sundown	1.4	5.1*
Harvest Moon	2.2	7.3*
Hot Papaya	4.4	6.3*
Milkshake	3.8	11.0*
Merlot	1.3	2.9*
Fragrant Angel	2.6	4.4*
Tiki Torch	1.7	4.1*

*Significantly different from Control, paired t-test, p< 0.05

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Configure on the day of potting or one week after potting had more basal branches and more complete pot fill than untreated plants at four weeks after potting. In fact, these plants, grown in quart pots, were already salable at four to six weeks after treatment (Figure 3).

Furthermore, applying Configure in the liner flat and again within a week after potting resulted in a greater number of branches



Figure 2. *Echinacea* 'Harvest Moon' treated with 600 ppm Configure (right) had 3x the number of basal branches as untreated plants (left) at four weeks after treatment but treated plants still exhibited strong apical dominance in the flowering shoot. Photo at six weeks after treatment.

for a variety of herbaceous perennial crops. Typically we like to see about two weeks between the treatments.

Make sure that the liners are actively growing when you apply the Configure treatment. Unless you have information on a sensitive cultivar, we recommend using 600 ppm Configure spray applications. We have seen some spotting and leaf crinkling in a few applications, not consistent with cultivar, but the damage is not evident on finished plants.

Key Points for Applying Configure to *Echinacea*

- Make the first application when liners have broken dormancy and are actively growing.
 - Liners should have 2 to 4 leaves at the time of spray applications (Figure 4).
- Repeat application within one week after potting.
- Use the recommended spray application volume (1 gallon per 200 square feet) to thoroughly wet leaves.
 - Good coverage is critical since Configure is primarily taken up by the leaves and, for *Echinacea*, the buds in the basal crown as well. Another reason for good coverage is that Configure does not readily translocate out of the leaves to other plant parts.



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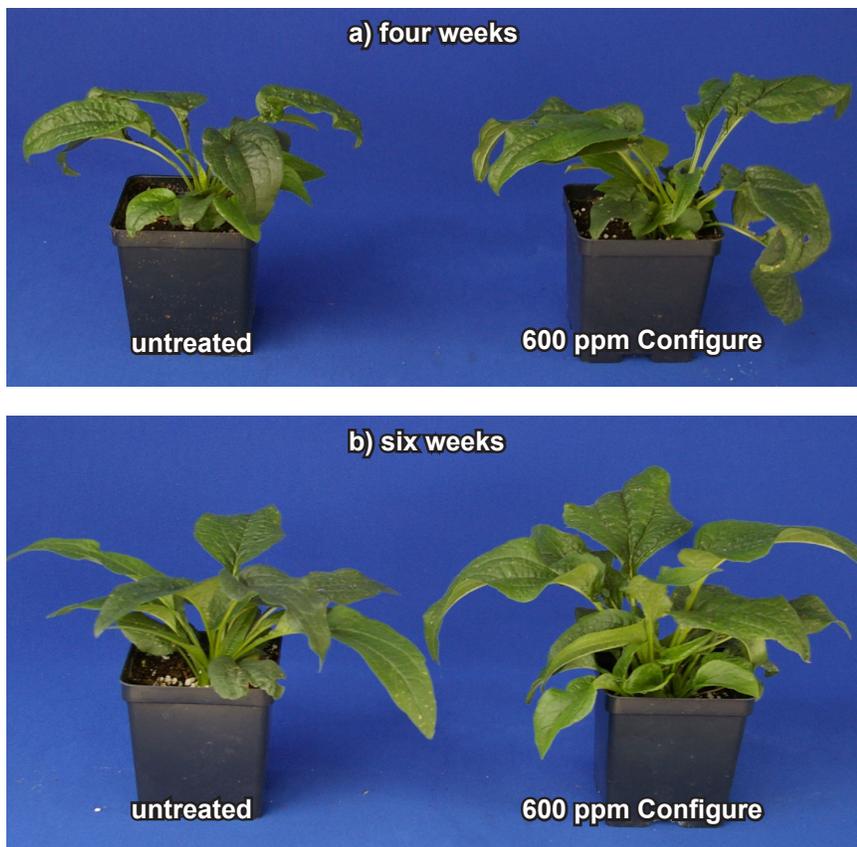


Figure 3. *Echinacea* ‘White Swan’ plants treated with 600 ppm Configure (right) on the day of potting had more basal branches and more complete pot fill than untreated plants (left). Photo at a) four weeks after potting or b) six weeks after potting.



Figure 4. Wait to make your first Configure application until the liners have broken dormancy and are actively growing. Make first application when most of the liners have 2 to 4 new leaves. (Photo by Paul Westervelt, Saunders Brothers Nursery)

- Apply Configure foliar sprays when plants are under low stress conditions.
 - Plants should ALWAYS be treated with PGRs under low stress conditions, but products like Configure are absorbed best under low drying conditions, e.g., early or late in the day, cloudy days, or under high humidity. Do not irrigate overhead within four hours of Configure application.
 - Add a good surfactant to your spray solution.
 - The Configure label permits but does not require additional surfactants. While we have found excellent results without
- it, others have successfully used Capsil with Configure. Use a surfactant labeled for your crop and follow label directions.
- Keep records of your applications and results.
 - Always keep notes to aid in improving your results with subsequent crops.
- In summary, Configure has a true niche in production of *Echinacea* by improving basal branching, which improves plant appearance and quality and provides more rapid pot fill. Be prepared to make your Configure applications as the liners come in this spring.