



University of Florida

Report from Spring Trials:



Helichrysum and Vinca

Learn how to control these popular component plants, as well as which cultivars have the best landscape performance.

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At the University of Florida trials, a section focuses on some of the component plants often used in mixed containers. For 2002, we selected *Vinca major* and *Helichrysum*. The idea was to come up with basic production guidelines for these crops based on southern cultivation and also to evaluate their field performance for landscape use. Both of these crops are vigorous in production and often get too large before sale. We wanted to determine early plant growth regulator treatments that would help keep them under control. We also wanted to take a look at them under southern landscape conditions to see what their true season was under the South's high heat and humidity.

HELICHRYSUM

Helichrysum comes from South Africa and is an old-fashioned plant, recently overhauled and put into specialty annual production. There are several forms on the market, but all have a felted leaf surface and usually a rich gray color. The standard form, sold as *Helichrysum petiolare*, is the most common, but there are variegated and lime green forms. A separate species with smaller leaves and a more prostrate form is sold as mini or petite licorice. All of these plants are great for combinations and work well with most mixed basket recipes; however, in mixed containers, they may have a tendency to outgrow other plants, so early PGR applications could be helpful.

Growers have several chemical options to control excessive growth on *Helichrysum*. As an example from this year's trials, we treated *Helichrysum* with liner soaks and drenches to 4-inch material. We are learning that if liners are treated before transplanting, growers save money on the amount of chemical they use and gain control over early stretch. The liner grows out of the liner root ball when transplanted, and the effects of the PGR wear off. Liner soaks are a quick, easy and effective way to control growth. The rates discussed in this article are for plants grown in Florida; other growers should make adjustments according to their growing conditions.

Liner Soak. *Helichrysum* White, Petite, Lemon and Splash liners (EuroAmerican Propagators) were soaked in Bonzi dilution at 0, 2, 4, 8 and 16 ppm. Each root ball was soaked for 30 seconds and planted into a 4-inch container on January 25. These plants were fertilized every watering with 150 ppm of 20-10-20. Data and pictures were taken at five weeks after planting.

The four *Helichrysum* varieties used in this trial responded differently to the Bonzi liner soak. *Helichrysum* White responded well to the 2-ppm treat-

ment and had reduced plant length of 42 percent, which produces a salable, attractive plant. A higher rate of 8 ppm was effective control for *Helichrysum* Petite and reduced plant length by 26 percent. Lemon and Splash are much less vigorous; as a result, our lowest treatment of 2 ppm was still too much chemical. The big message is *know your cultivars* — not all *Helichrysum* need PGRs, and northern growers will use less chemical than southern growers.

Bonzi Drench. We evaluated Bonzi drench applied to 4-inch plants. *Helichrysum* 'Licorice' (Ball Floraplast) were planted on January 24 and fertilized at every watering with 150 ppm of 20-10-20 fertilizer. The plants were pinched one time at four weeks from planting and treated one week later on March 1 with Bonzi drenches at 0, 1, 2, 4 and 8 ppm using two fluid ounces of solution per pot. At time of treatment, plant size (average of width and height) was measured at 3.5 inches. Final data was collected three weeks later.

Bonzi at 2 ppm gave the best results, and plant size was held to 32 percent of untreated plants. After the 2-ppm drench, plants grew four inches, showing that plant growth was slowed but did not stop. Higher concentrations were too strong for quality production, and plants looked stunted. A rate of 1 ppm might work well under cooler production situations.

Field trials. The trial gardens are in full sun; soil was amended with mushroom compost and mulched with cypress mulch. Plants were planted



Vinca major with Bonzi liner soak. Moving from left to right, plants have received 0, 1, 2, 4 and 8 ppm. (All photos courtesy of Rick Schoellhorn)



Helichrysum 'White Licorice'. The plant on the left is the control; the plant on the right has had a Bonzi drench of 2 ppm.

at one plant per one sq. ft. spacing and fertilized with Osmocote 18-6-12 at six grams incorporated per plant.

'White Licorice' (EuroAmerican Propagators), 'Licorice Vine' (HMA) and *Helichrysum Licorice* (Ball Floraplant) were trialed. All lines did equally and showed vigorous early season growth, reaching 2 ft. high x 3 ft. wide. For early season color, this form was excellent. However, as soon as summer evening rains began in late June, all began to show signs of Botrytis and insect damage.

'Licorice Splash' (EuroAmerican Propagators) and 'Variegated Licorice' (HMA) were the variegated forms evaluated, and 'Lime Licorice' (HMA) and 'Lemon Licorice' (EuroAmerican Propagators) were the green forms trialed. All of these cultivars did poorly in full sun and never achieved a good look. Green forms scorched, and variegated forms showed reduced vigor, scorching, stunted growth and a reversion to solid leaves as the season progressed. These plants needed a little protection and probably would have done best in partly shaded plantings.

Several *Helichrysum microphylla* cultivars were trialed: 'Mini Licorice' (HMA) and 'Petite Licorice' (EuroAmerican). Again, not much difference between the two cultivars. Great early season performance and strong color in the landscape although not as bright as the larger-leaved forms. Both cultivars began flowering in June, and this really detracts from appearance. Foliage problems set in with warm nights and rains.

VINCA MAJOR

Vinca major is a challenging crop for three reasons: It grows quickly and becomes tangled with other plants; it requires several shearings to keep it under control; and long branches that hang over the pot

make shipping difficult. By using PGRs, growers can reduce stem length, which can make for a higher-quality product.

Liner Soak. In our spring trials, four cultivars — *Vinca major* 'Expoflora', 'Variegata' and 'Maculata' and *Vinca minor* 'Illumination' — were treated with a

Bonzi liner soak. On January 25, entire root balls of plugs were submerged for 30 seconds in 0, 1, 2, 4 and 8 ppm Bonzi dilution. The plants were potted into 4-inch pots and fertilized every watering with 150 ppm of 20-10-20. Data was collected after five weeks.

Variegata and Maculata were the

most vigorous. A liner soak of 2 ppm Bonzi reduced the cascade length by 23 percent compared to untreated plants. Maculata required only 1 ppm of Bonzi to reduce elongation by 21 percent. At higher rates, Maculata appeared over-regulated.

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Illumination and Expoflora do not require any plant growth regulators. Bonzi did not have any effect on Illumination; the plants grew as though untreated, while Expoflora appeared to develop at a manageable rate without treatment.

Vinca has a running habit, and as with many plants of this type, using PGRs cannot control growth once stems begin to hang over the edge of the pot. With all the varieties we trialed, once the branches were pointing down, all bets were off on control.

Field trials. Variegata (HMA & EuroAmerican Propagators), ‘Wojo’s Jem’ (Wojo’s Greenhouse), Maculata (HMA) and Expoflora (HMA) were the *Vinca majors* trialed. We really didn’t expect *Vinca major* to do well in full sun, but these cultivars surprised us by growing luxuriantly and quickly covering their plots. Maculata, both lines of Variegata and Expoflora all showed similar vigor and growth habit. Wojo’s Jem took almost twice as long to cover its plot but was beautiful when it got there. None of the cultivars flowered throughout the summer, and all have rated consistently high marks throughout the season and were still impressive in late July.

The only *Vinca minor* trialed was Illumination (EuroAmerican Propagators). Without comparison varieties, it’s a bit difficult to give summaries, but we were unable to keep lower leaves on this plant even in our greenhouse studies. The plant has a striking yellow variegation and is distinctively different from the other Vinca in the trial. However, under full sun in the landscape, all variegated leaves scorched, and there was some reversion to solid green. This cultivar definitely needs shade in production and you should avoid over watering, as it is not a vigorous plant under Florida conditions. 

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