

## pack trials 2005

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# Breeding Breakthroughs

*Not just a new color or a competing line,  
these crops have the potential to change the market.*

By Carrie Burns, Catherine Evans and Bridget White

Throughout our Pack Trials trip we try to think like you — the grower — by asking the kinds of questions we think you want to know the answers to: “will this finish quickly, how much PGR costs will I incur, how much bench space will this take up, will it be easy to ship, etc.” So when the three of us sat down to decide what we were going to cover from this year’s exhibits we were overwhelmed with the possibilities and real improvements exhibited by some of the new varieties...enough so to change the way we cover Pack Trials.

Instead of lumping together all of our featured varieties, we decided to set apart those introductions that we think will truly make a difference in your world. We didn’t set limits on the number of varieties that could be included, and you’ll see that not every breeder is covered. We stuck to our principles and covered only those varieties that embodied all of the positive traits we were looking for; five made the cut. Look for the seed varieties that are “Breeding Breakthroughs” in next month’s coverage.

As we said, there were many varieties that were amazing; these five aren’t by any means the only varieties worth mentioning; you can find the other great Pack Trials introductions on page 38.

### BRACTEANTHA

The Brilliance bracteantha series from Bodger (breeding by Benary) was one of those crops that made all of us say wow when we walked into the greenhouse. It should have since they have been working on this series for 2½ years to get the right habit — a natural upright habit that showcases the flowers instead of the foliage. Most bracteantha are a pain when it comes to holding flowers above the foliage. This series is an exception, even without starvation and PGRs. The large, bright flowers sit naturally on top of the foliage, making for the presentation we’ve been waiting for in this crop.

Two colors make up the Brilliance series: ‘Brilliance Yellow’ has golden yellow flowers, and ‘Brilliance Lemon’ has pastel yellow flowers. Both are excellent for 6-inch production and grow to 20 inches. A 6-inch at one plant per pot will take 8-10 weeks to finish, and a 10- to 12-inch at multiple plants per pot will also take 8-10 weeks. Temperature requirements are 55-65° F nights and a minimum of 60° F days. Allowing day temperature to reach 70° F is no problem. Ample airflow will assist in even temperatures, and keeping foliage dry eliminates disease problems. Extremely high light will stress plants and may yellow foliage. A soft pinch once the plants are established after transplant will create needed branching for full plant development and shorten plant frame. Apply fungicide spray for Botrytis after any pinching or mechanical trimming.

Feed using a balanced fertilizer with a lower phosphorus ration at 200-250 ppm nitrogen. In a soilless mix, additional iron may be required. Use of calcium and potassium nitrate as nitrogen source is recommended to prevent a soft or leafy plant. Regardless of its good genetics, even this plant will stretch with excessive moisture, low light and over-fertilization.



‘Brilliance Yellow’

### CALITUNIA

One of the exciting things we saw at Danziger “Dan” Flower Farm was the first introduction of a calibrachoa/petunia cross. The plant, Calitunia, has calibrachoa flowers and a petunia body. At this time, Danziger only introduced one color, Purple, to see how the market would respond, but they say more colors are in the works. It will be very interesting to see future colors, especially if Danziger can connect the colors of calibrachoa with the performance of petunias. If so, this will solve a big problem for growers and blow open the market.

Calitunia has the high and low temperature range and the mounding habit of petunia. Yet it has the flower form, vibrant color and profuse blooming power of calibrachoa, without issues of pH sensitivity. This plant is vigorous like a petunia, with a faster finish time.

Calitunia will perform from early spring to fall in USDA Hardiness Zones 9-11. A 4-inch pot with one plant per pot will finish in 4-7 weeks; a 6-inch pot with 1-2 plants per pot will finish in 6-10 weeks; and a 10-inch hanging basket with 3-4 plants will finish in 7-11 weeks.

Pinching is optional; however, if you decide to do it, pinch about four weeks after rooting, while plants are still in liner trays. Calitunia prefers high light intensities with full sun. Day temperatures should be 65-75° F and night temperatures 45-55° F.

Fertilization should include a constant feed with a balanced fertilizer at 250-300 ppm nitrogen with average micronutrients and additional iron-chelate. You should maintain pH at 5.5-6.0.



‘Calitunia Purple’

### HELIOTROPE

Heliotrope is not exactly a revolutionary crop; it’s been around forever. Still, we heard quite a few rumblings during our trip about Selecta First Class’s ‘Basket Marino’ semi-trailing heliotrope. That’s right; it actually mounds and trails instead of standing upright, and that’s what makes it a breeding breakthrough. According to Selecta, this is the first trailing heliotrope on the market. ‘Basket Marino’ also received high praise in Selecta’s post-Pack Trials survey. And that was enough for us.

‘Basket Marino’ has a vigor in-between the two existing Selecta varieties ‘Compact Marino’ and ‘Marino 2000’, making a really nice mounding, semi-trailing hanging basket that is sure to attract a lot of attention at retail in coming years. It makes great 4-inch pots, as well as baskets; has a medium vigor; finishes fast because of its early flowering; emits a vanilla scent; and produces extremely vivid violet flowers. The foliage is medium green and small. It branches very well and is easy to grow. No PGRs are needed in most of the country, but in the Southeast or during summer it may



‘Basket Marino’

be necessary. ▶

## NEMESIA

The Sunsatia nemesia series was introduced for 2004, and it caught our attention then. So why are we covering it again? Proven Winners has been hard at work on the Sunsatia series, addressing its main detractor: habit. And the habit of the two newest colors — Mango, a medley of purple, gold, yellow and creamy white and Raspberry, a pretty pink/red — is exactly what they have been working toward and what we've all been wanting. The new Sunsatias are very upright and strong branching; these plants will not break apart in the middle or flop over. They hold their shape much better than the others in the series, and according to PW, breeding work is continuing to improve existing varieties.



'Sunsatia Mango'

Sunsatia works well in 4- to 6-inch pots, gallons, combination pots, hanging baskets and landscapes, and plants are often covered in blooms so much that the foliage is not even seen. Finish height is 6-10 inches, and plants need to be spaced 10-12 inches apart.

Finish time for 4- to 5-inch is 4-6 weeks; for 6-inch or 1-gal. is 5-7 weeks; an 8-inch requires 7-9 weeks; and 10- to 12-inch pots require 10-12 weeks. For 6-inch and smaller plants pinch at transplanting only. For hanging baskets and pots larger than 6-inches soft-pinch at planting, with additional pinches as needed. Sumagic (uniconazol, Valent Professional Products) at 5-10 ppm is effective at controlling growth, as are cold temperatures.

A note of warning: Air circulation and proper water management are critical for healthy and salable plants.

## VINCA

The new Nirvana vinca series from Fischer USA has been the talk of the town as far as vincas go. We remembered hearing about it back at OFA last July, so we were excited to see it, especially when we heard Goldsmith breed-

ers have been working on it for more than a decade. Marketed under the Goldfisch brand, Nirvana is a tough vinca bred to be aerial Phytophthora resistant. Though Fischer reported some production problems back at the beginning of the year, they have assured us that those have been remedied, and the product should be in full supply for the 2005/2006 season. If the early university trials are any indication, this series might be the most significant advancement in vinca breeding to date.

Nirvana thrives under high temperatures and relatively dry conditions, so a porous media that drains rapidly should be used. Select a media that has a minimal pre-plant charge of nutrients, as vincas do not like elevated ammonium and phosphorus levels. Media pH should be 5.4-5.8. Thielaviopsis may develop on vinca as black lesions on the roots.

Alternate moisture levels, but avoid overhead irrigation. Provide good air movement and ventilation to encourage rapid drying of foliage during the day and reduce condensation on leaves at night.

Feed 100-150 ppm nitrogen calcium nitrate. Avoid ammonium-based fertilizers under low light and/or short-day conditions. Media EC should be 1.0-1.5. Leaching every 3-4 waterings is recommended.

Temperature should be kept at 65-68° F nights and 75-85° F days. Low temperatures in combination with wet conditions will produce chlorotic or albino new growth, while older leaves may turn yellow.

Pinching and growth regulators are not needed due to a naturally branching habit; however, pinching can be done on large containers. 



'Nirvana Lavender with Eye'

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