



Red Fox Purple petunia (Dummen USA)

Elite Performer:

A greenhouse production trial for bacopa, petunia, verbena and scaevola.

By Jim Barrett and Erika Berghauer



Big Lavender Falls bacopa (Selecta First Class)

The Elite Performer Trial by FloraStar is designed to determine those varieties that are the easiest and best in greenhouse production. The production trials are conducted at the University of Florida, and this is the first independent program to compare and evaluate varieties in a production format instead of landscape. The entries are also included in the landscape trials at North Carolina State University, Pennsylvania State University, Colorado State University and the University of Florida to ensure that each variety does actually perform in the landscape as well as on the bench.

Each crop is grown according to general production guidelines for that crop. The crops are grown in both 10-inch baskets and 4½-inch pots, and there are both January and March plantings. Judging is based on specific characteristics important to that particular crop, such as time to flower, growth habit, number and/or size of flowers and marketability.

The best varieties are designated Elite Performers. This award level is reserved for only those varieties that are the easiest to grow, have excellent marketability and perform well in different situations and container sizes. Merit Awards are given to a second group of varieties that also have many good characteristics and are very good choices for growers.

We are very grateful to the FloraStar Board of Directors for their cooperation and support in conducting these trials and for selecting the winners based on our evaluations. Also, it is important to recognize the breeder companies who took the risk of entering their varieties in an independent production trial. The companies entering varieties this year were Ball FloraPlant, Dummen USA, Ernst Benary of America, PlantHaven and Selecta First Class.

BACOPA

Bacopa are popular in combination containers but are not used as often for monoculture baskets or smaller containers. Many current commercial varieties have small flowers and do not produce adequate flowers on top of a basket. In this trial, one cutting was used in 4½-inch pots and four in 10-inch baskets. The plants were pinched at planting and sprayed with Florel at 500 ppm 10 days after planting. A 3-ppm Bonzi drench was applied 2-3 weeks later. The only entry in the trial was 'Big Lavender Falls', and we grew five other commercial varieties as comparisons. Ratings for these varieties are shown in Table 1, page 28.

Elite Performer Winner. Big Lavender Falls bacopa from Selecta First Class is a distinct improvement over current bacopa varieties. It has a very uniform growth habit and is well branched. The light lavender flowers are larger than any of the comparisons and cover the entire container. It is not as vigorous as 'Giant Snowflake' but vigorous enough to fill out a basket, as can be seen in the accompanying picture, left. It is easily controlled with growth

variety information

regulators. Because of the flower size and number of flowers, Big Lavender Falls will do well in mixed containers also.

VEGETATIVE PETUNIA

There are many different petunia varieties. They tend to be very vigorous and require a lot of growth regulators. Most varieties are also trailing types that are difficult to grow at close spacing. Many of the upright or semi-upright varieties are also vigorous and will grow up and then fall over when

Table 1. *Bacopa* ratings.

Variety name	Flower size	Uniformity of color on top of basket	Overall appearance	Finish time
Entry				
Big Lavender Falls	5	5	5	Early
Comparisons				
Bridal Showers	1	2	2	Late
Giant Snowflake	4	4	5	Early
Glacier Blue	2	4	2	Early
Lavender Showers	1	3	2	Late
Lilac King	3	3	3	Late
<i>Rating scale: 1=poor or small, 2=below average, 3=average, 4=above average, 5=superior</i>				

they become too large. For this trial, we told the breeders we were looking for varieties with a mounding growth habit that was easy to grow; there were two entries. The trial included four other commercial varieties for comparisons, as shown in Table 2, below.

For each variety, we planted one cutting in 4½-inch pots and four in 10-inch baskets. Cuttings were pinched at planting, and sprayed with B-Nine at 2,500 ppm two and one half weeks after planting. If needed, a Bonzi drench at 4 ppm was applied about four weeks after planting. Both of the petunia varieties entered are very good for both 4½-inch and basket use and are improvements over the comparison varieties.

Elite Performer Winners. 'Fame Electric Purple' from Selecta First Class has medium vigor and is well branched to produce a mounding growth habit that can be controlled easily with growth regulators. It is very uniform in shape, and the average-size flowers cover the top of the container uniformly. Fame Electric Purple is a good variety for an early finish time. It fills in a basket quickly and flowers quickly but is not too vigorous. This variety is versatile and would do well in combination containers also, since it will not out-grow other plants like many other petunias do. One small distract-

Table 2. *Vegetative petunia* ratings.

Variety name	Flower size	Uniformity of color on top of basket	Overall appearance	Finish time
Entry				
Fame Electric Purple	3	5	5	Early
Red Fox Purple	2	5	5	Ave.
Comparisons				
Cascadia Purple Bicolor	1	3	2	Late
Suncatcher Purple	2	2	3	Early
Supertunia White	3	3	3	Early
Supertunia Royal Velvet	3	4	4	Early
<i>Rating scale: 1=poor or small, 2=below average, 3=average, 4=above average, 5=superior</i>				



Fame Electric Purple petunia (Selecta First Class)

tion is that the edges of the flower petals curve backwards slightly, but this should not be a problem with consumers.

'Red Fox Purple' from Dummen USA also makes an attractive plant. It is very uniform, compact and well branched with a mounding habit. This plant is well suited to growers who do not like to use much growth regulator, and it is very easy to produce in either a 4½-inch container or 10-inch basket. The flowers are slightly smaller than average but uniformly cover the top of the container.

The flower colors for Red Fox Purple and Fame Electric Purple are very similar. Both make attractive finished plants and are easy to grow at closer spacing. Red Fox Purple is more compact and requires less growth regulator; the basket in the accompanying picture (page 26) only had the initial B-Nine spray and was not drenched. It is probably a little better in smaller containers. Fame Electric Purple flowers about one week earlier and is probably a better choice for baskets since it fills in the basket quicker.

SCAEVOLA

Scaevola are good for combination containers but are difficult to grow in smaller containers or as a single plant basket. Most have a growth habit that is too trailing, and they do not branch very well. Two scaevola numbered varieties were entered into the trial, and we grew three comparison varieties. The entries had better branching than the comparisons, and one had a better mounding habit; however, both entries were late in flowering and did not produce enough flowers, there were no awards given in the scaevola trial.

VEGETATIVE VERBENA

Most vegetative verbenas are trailing, vigorous and difficult to produce at close spacing or in smaller containers. In Elite Performer evaluations, we were looking for varieties with a better semi-upright or mounding habit that would make these plants easier to produce. There were 10 varieties entered, and we also grew two popular commercial varieties as comparisons.

For each variety, we used one cutting in the 4½-inch container and three cuttings in each basket. Cuttings were pinched at planting. About 10 days after planting, we sprayed the plants with either Florel at 300 ppm or a tank mix of B-Nine at 2,500 ppm and Cycocel at 1,250 ppm. The tank mix provided greater size control. We did not spray to prevent or control mildew, and near the end of the spring crop there was a significant mildew outbreak. There was a considerable difference in the varieties' sensitivity to mildew, which is shown in Table 3, page 30, along with the other rating.

Unfortunately none of the varieties fit our criteria adequately to be really easy to grow (I guess that is why they call them verbenas). While there were no Elite Performer awards given, three verbena varieties did receive Merit Awards for being very good and better than the others.

Merit Awards. 'Aztec Red Velvet' from Ball FloraPlant has a uniform, medium vigor and spreading growth habit. The large flowers are a bright true red with a light cream center. It makes a very attractive plant and is highly resistant to mildew.

'Lascar Blue' from Selecta First Class is uniform and well branched with a spreading growth habit. It is slightly vigorous but produces lots of flowers that cover the top of the container early. Mildew resistance is good.

'Red Fox Deep Purple' from Dummen USA has the best growth habit of the varieties in the trial. The plants are uniform, have medium vigor and are semi-upright, which makes them easier to grow in 4½-inch containers and baskets. Red Fox Deep Purple has large flowers with a rich purple color and keeps color on top of the basket. The variety's weakness is its sensitivity to mildew. ♦



Lascar Blue verbena (Selecta First Class)

variety information

Others. 'Lascar Hot Rose' from Selecta First Class has a uniform and spreading growth habit with medium vigor. The flower color is very distinctive, but it is late flowering. Also, it does not keep flowers on top of the basket.

'Lascar Violet' from Selecta First Class is a trailing, uniform plant with less vigor. Flower size is slightly smaller than average, and it is below average for displaying color on top of the basket. Flower color is unstable with a purple striping.

'Lascar Lavender' from Selecta First Class has a vigorous, trailing growth

Table 3. Vegetative verbena ratings.

Variety name	Flower size	Uniformity of color on top of basket	Overall appearance	Sensitivity to mildew	Time to finish
Entry					
Aztec Red Velvet	5	3	4	5	Ave.
Lascar Blue	2	5	5	4	Early
Red Fox Deep Purple	5	5	5	1	Ave.
Lascar Hot Rose	4	3	3	3	Late
Lascar Lavender	2	2	2	4	Ave.
Lascar Violet	2	2	2	4	Ave.
PH Pink Verbena	5	4	2	4	Ave.
Red Fox Orange	3	5	5	1	Early
Red Fox Purple	3	4	4	2	Early
Red Fox Red	4	3	2	3	Ave.
Comparisons					
Variety #1	5	4	4	5	Late
Variety #2	1	5	4	1	Ave.
Rating scale: 1=poor or small, 2=below average, 3=average, 4=above average, 5=superior					



Red Fox Deep Purple verbena (Dummen USA)

habit. The flower size is slightly smaller than average with a below average color display.

'PH Pink' from PlantHaven is un-uniform. Most plants are very upright, but some are very prostrate. It is quite vigorous and difficult to grow. Florel provided some growth control, but Sumagic was not effective. However, the scented flowers are an interesting characteristic.

'Red Fox Orange' from Dummen USA is very uniform with medium vigor and a spreading growth habit. Many average-size flowers open on top of the basket for a uniform color display. It is sensitive to mildew.

'Red Fox Purple' from Dummen USA has a vigorous, spreading growth habit. Branching is average. The flowers are early and average in size to give an above average display of color on top of the basket. The disadvantage of this variety is that its flower color is very similar to Red Fox Deep Purple, which is a stronger variety with a better growth habit.

'Red Fox Red' from Dummen USA is uniform and trailing in growth habit. The high vigor makes it difficult to grow in both container sizes. Larger than average flowers are dark red in color. GPN

Jim Barrett is professor of floriculture and Erica Berghauer is trials coordinator at the University of Florida, Gainesville, Fla. They can be reached by phone at (352) 392-1831 or E-mail at jbarrett@mail.ifas.ufl.edu.

LearnMore

For more information related to this article, go to www.gpnmag.com/lm.cfm/gp070402