

Ohio State University Extension Gateway Learning Gardens 2005 Herbaceous Ornamental Field Trial Results

Pamela J. Bennett

Introduction

Clark County Extension Master Gardener volunteers have evaluated annuals at the OSU Extension Clark County office site in Springfield, Ohio, since 1995. Carolyn Allen and Barbara Brown are Master Gardener volunteer co-chairs of the project. The field trial plots are located in the Gateway Learning Gardens and are planted and maintained by volunteers. Approximately 40 volunteers work on this project, from starting plugs and seeds in the greenhouse to planting and weeding the plots.

The plots are typical of the west-central Ohio area; the soil is predominantly clay with a pH of 7.3. The current plots were established in the fall of 1996. The beds were tilled to a depth of 14", and 2" of compost was added. Compost was added when new beds were established; additional compost is added every three years. Compost was last added to all beds in the fall of 2002. There is approximately 5,000 square feet of bed space in full sun and approximately 1,000 square feet in shade.

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The selection of plants to be trialed in the garden varies from year to year. The selection is based on entries from seed companies, performance in prior years, current trends, and industry recommendations. Data presented in this report reflect the growing conditions of 2005. The purpose of the evaluation is to provide growers, landscapers, and homeowners a guide for plant selection for Ohio.

Method

The plants were started from seeds, plugs, or cuttings, depending on the species, according to the recommended starting dates. They were planted in the plots on May 19, 2005. There were six plants of each variety in a row spaced 1.5' apart; rows were spaced 2' apart. Trailing or vining plants were spaced 2' apart with 4' between rows. Osmocote™ (14-14-14) fertilizer was incorporated into the soil prior to planting at the labeled rate. Beds were hand weeded as needed throughout the season.

Irrigation was applied during dry periods so that plants received at least 1" of water per week. (See the section on Weather Information for details.) No additional applications of fertilizer were made.

The plants were not deadheaded or pruned during the growing season. No insecticides or fungicides were applied. No mulch was used; volunteers weeded the plots as needed. Plants were grown in full sun, unless otherwise indicated. (Note, the plants in bold type in the list were those in the shade house). The material for the shade house provided 70% shade.

Three people conducted visual evaluations in June, July, August, and September. The entire row was given a visual rating from 1 to 5. If there were less than 3 plants remaining in one row at any time during the evaluation, the variety was dropped from the trials, and the result is listed as "dead." A rating of 5 was considered to be excellent, and a rating of 1 was considered to be poor. The three individual evaluation ratings were averaged for the monthly rating figure. The monthly evaluations (June-September) were averaged for the overall rating for each variety.

Weather Information

Precipitation and temperatures for May were below average. The annuals were planted under good soil conditions; plants were irrigated in the first weeks in order

to establish a good root system. Annuals were slow to take off in May due to cooler temperatures. Temperatures were above normal in June, July, August, and September. In 2005, there was a total of 26 days over 90°F compared to 0 days in 2004, 3 days in 2003, and 30 days in 2002.

This growing season was drier than normal. Supplemental irrigation was necessary in order to provide 1" of water per week; it was used the entire season. Weather conditions for this growing season as well as normal average temperatures and precipitation are shown in Table 1.

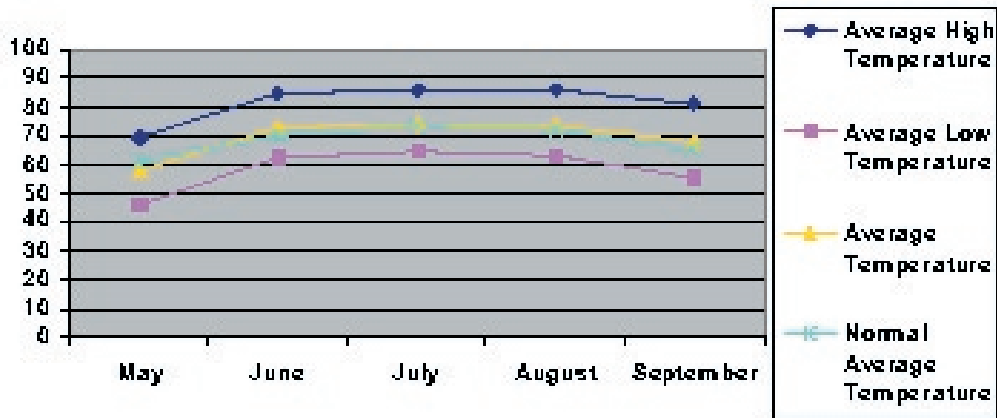
Results

Following are the varieties in the 2005 field trials and their monthly ratings and overall rating. They are in order of highest to lowest overall rating. The plants listed in BOLD are those varieties that were grown under the shade structure (70% shade cloth).

The supplier for each variety is listed in the table; the supplier key is at the end of the text. The plants are listed in order of Overall Rating from highest to lowest. A rating of 5 is the highest; a rating of 1 is the lowest.

Table 1. Weather Conditions for the 2005 Growing Season, Clark County.

| Temperature | May | June | July | August | September |
|----------------------------------|------|------|------|--------|-----------|
| 2005 average high temperature F° | 69.7 | 84.9 | 85.9 | 86.1 | 81.4 |
| 2005 average low temperature F° | 45.9 | 62.5 | 64.5 | 62.9 | 55.9 |
| 2005 average temperature F° | 57.9 | 73 | 74.5 | 73.6 | 67.9 |
| Normal average temperature F° | 61.3 | 70.3 | 73.8 | 72 | 65.2 |
| Precipitation | | | | | |
| Normal average rainfall (inches) | 4.58 | 4.16 | 4.08 | 3.5 | 2.99 |
| 2005 rainfall (inches) | 2.25 | 2.73 | 1.55 | 3.38 | 3.15 |
| Days over 90°F | 0 | 9 | 5 | 12 | 0 |



Acknowledgment

Ohio State University Extension and Master Gardeners of Clark County would like to thank the following for their support: Clark County Engineers, Springfield Township, Clark County Fairgrounds staff, Clark County Commissioners, National Trails Parks and Recreation District, and the following companies who participated in the trials.

- Keift Seeds
<http://www.keiftseeds.com/>
- PAS – PanAmerican Seed®
<http://www.panamseed.com/>
- Proven Winners® - PW
<http://www.provenwinners.com/>
- S – Sahin
<http://www.sahin.nl/>
- SAK - Sakata® Seed Corporation
<http://www.sakata.com/>

Suppliers

- BS – BallSeed® Company
<http://www.ballseed.com/>
- JP – Jackson & Perkins Wholesale
<http://www.surfinia.com/>

Table 2. Clark County 2005 Field Trial Ratings.

| Plant Name | Series | Cultivar | Source | June | July | Aug | Sept | Overall Rating |
|-------------------|----------------|--------------------------|-----------|-------------|-------------|-------------|-------------|----------------|
| Petunia | Supertunia® | 'Vista Bubblegum' | PW | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 |
| Ageratum | Artist™ | 'Alto Blue' | PW | 5.00 | 5.00 | 4.67 | 5.00 | 4.92 |
| Euphorbia | | 'Diamond Frost' | PW | 4.67 | 5.00 | 5.00 | 5.00 | 4.92 |
| Ornamental Millet | | 'Jester' | PAS | 4.67 | 5.00 | 5.00 | 5.00 | 4.92 |
| Ocimum basilicum | | Experimental basil | S | 4.67 | 5.00 | 5.00 | 5.00 | 4.92 |
| Gaura | Stratosphere | 'White' | PW | 4.67 | 5.00 | 5.00 | 5.00 | 4.92 |
| Nemesia | | 'Compact Pink Innocence' | PW | 5.00 | 5.00 | 4.67 | 4.67 | 4.83 |
| Petunia | Supertunia® | 'Vista Fuchsia' | PW | 4.67 | 4.67 | 5.00 | 5.00 | 4.83 |
| Petunia | Supertunia® | 'Blush Pink' | PW | 4.67 | 5.00 | 5.00 | 4.67 | 4.83 |
| Vinca | Titan™ | 'Blush' | BS | 4.33 | 5.00 | 5.00 | 5.00 | 4.83 |
| Ageratum | Artist™ | 'Blue Violet' | PW | 5.00 | 5.00 | 5.00 | 4.33 | 4.83 |
| Petunia | Easy Wave® | 'Blue' | PAS | 4.33 | 5.00 | 5.00 | 5.00 | 4.83 |
| Petunia | Madness | 'Salmon Morn' | BS | 4.00 | 5.00 | 5.00 | 5.00 | 4.75 |
| Ageratum | Artist™ | 'Blue' | PW | 4.67 | 5.00 | 5.00 | 4.33 | 4.75 |
| Coleus | | 'Pink Chaos' | PW | 4.33 | 5.00 | 5.00 | 4.67 | 4.75 |
| Ornamental pepper | | 'Black Pearl' | PAS | 4.00 | 5.00 | 5.00 | 5.00 | 4.75 |
| Petunia | Supertunia® | 'Mini Pastel Pink' | PW | 4.67 | 4.33 | 5.00 | 5.00 | 4.75 |
| Petunia | Surfinia® | 'Patio Blue' | JP | 4.67 | 4.67 | 4.67 | 5.00 | 4.75 |
| Vinca | Titan™ | 'Polka Dot' | BS | 4.00 | 5.00 | 4.67 | 5.00 | 4.67 |
| Petunia | Supertunia® | 'Cotton Candy' | PW | 5.00 | 4.67 | 4.67 | 4.33 | 4.67 |
| Petunia | Surfinia® | 'Blue Veined Improved' | JP | 4.33 | 4.33 | 5.00 | 5.00 | 4.67 |
| Vinca | Cooler™ | 'Red Improved' | BS | 3.33 | 5.00 | 5.00 | 5.00 | 4.58 |
| Heuchera | Dolce™ | 'Licorice' | PW | 4.00 | 4.67 | 4.67 | 5.00 | 4.58 |
| Lamium | | 'Pink Chablis' | PW | 4.67 | 5.00 | 3.67 | 5.00 | 4.58 |
| Ageratum | Artist™ | 'Purple' | PW | 5.00 | 5.00 | 5.00 | 3.33 | 4.58 |
| Coleus | | 'Sedona' | PW | 4.67 | 5.00 | 4.67 | 3.67 | 4.50 |
| Vinca | Pacifica | 'Red Dark' | BS | 3.33 | 5.00 | 4.67 | 5.00 | 4.50 |
| Vinca | Pacifica | 'White Pure' | PAS | 3.00 | 5.00 | 5.00 | 5.00 | 4.50 |
| Diascia | Flying Colors™ | 'Red' | PW | 5.00 | 5.00 | 3.00 | 5.00 | 4.50 |
| Nemesia | Sunsatia™ | 'Raspberry' | PW | 5.00 | 5.00 | 3.67 | 4.33 | 4.50 |
| Petunia | Surfinia® | 'Lavendar Lace' | JP | 4.33 | 4.33 | 4.67 | 4.67 | 4.50 |
| Vinca | Pacifica | 'Rose Halo' | PAS | 3.33 | 4.67 | 4.67 | 5.00 | 4.42 |
| Vinca | Titan™ | 'Burgundy' | BS | 3.00 | 5.00 | 4.67 | 5.00 | 4.42 |
| Ageratum | High Tide™ | 'Blue' | BS | 4.33 | 4.67 | 4.00 | 4.67 | 4.42 |
| Anagallis | | 'Wildcat™ Orange' | PW | 5.00 | 5.00 | 4.00 | 3.67 | 4.42 |
| Angelonia | Serena™ | 'Lavender' | PAS | 3.00 | 5.00 | 5.00 | 4.67 | 4.42 |
| Angelonia | Serena™ | 'White' | PAS | 3.00 | 5.00 | 5.00 | 4.67 | 4.42 |
| Coleus | Drop | 'Strawberry' | PW | 3.67 | 5.00 | 4.33 | 4.67 | 4.42 |
| Heuchera | | 'Mocha Mint' | PW | 3.33 | 4.67 | 4.67 | 5.00 | 4.42 |

Table 2 (continued). Clark County 2005 Field Trial Ratings.

| Plant Name | Series | Cultivar | Source | June | July | Aug | Sept | Overall Rating |
|--------------------------|-------------------------|----------------------------|-----------|-------------|-------------|-------------|-------------|----------------|
| Pulmonaria | Gaelic™ | 'Spring' | PW | 3.33 | 5.00 | 4.33 | 5.00 | 4.42 |
| Ornamental Millet | | 'Purple Baron' | BS | 5.00 | 5.00 | 4.00 | 3.67 | 4.42 |
| Petunia | Easy Wave® | 'Red' | PAS | 4.00 | 4.67 | 4.67 | 4.33 | 4.42 |
| Gaura | Stratosphere | 'Pink Picotee' | PW | 3.67 | 4.67 | 4.67 | 4.67 | 4.42 |
| Herb Lavender | | 'Lavance' | BS | 3.33 | 4.33 | 5.00 | 5.00 | 4.42 |
| Petunia | Surfinia® | 'Wild Plum' | JP | 4.33 | 4.67 | 4.33 | 4.33 | 4.42 |
| Verbena | Temari® | 'Sakura Pink' | JP | 3.33 | 5.00 | 4.33 | 4.67 | 4.33 |
| Begonia | Emperor | 'Soft Pink' | SAK | 3.67 | 4.67 | 4.00 | 5.00 | 4.33 |
| Impatiens | Stardust | 'Cherry' | PAS | 3.67 | 4.67 | 4.33 | 4.67 | 4.33 |
| Coleus | Drop | 'Brown Sugar' | PW | 3.67 | 4.67 | 4.33 | 4.67 | 4.33 |
| Helenium | | 'Dakota Gold' | BS | 4.33 | 5.00 | 4.00 | 4.00 | 4.33 |
| Impatiens hawkeri | Infinity™ | 'Ruby Flash' | PW | 2.67 | 5.00 | 4.67 | 5.00 | 4.33 |
| Petunia | Surfinia® | 'Giant Blue' | JP | 3.33 | 4.33 | 4.67 | 5.00 | 4.33 |
| Verbena | Tapien™ | 'Lilac' | JP | 4.00 | 5.00 | 5.00 | 3.00 | 4.25 |
| Vinca | Pacifica | 'Really Red' | PAS | 2.67 | 4.67 | 4.67 | 5.00 | 4.25 |
| Ageratum | High Tide™ | 'White' | PAS | 4.67 | 4.33 | 3.67 | 4.33 | 4.25 |
| Coleus | Drop | 'Chocolate' | PW | 3.67 | 5.00 | 3.67 | 4.67 | 4.25 |
| Begonia | Emperor | 'Rose Halo' | SAK | 3.33 | 4.00 | 4.33 | 5.00 | 4.17 |
| Lantana | | 'Tropical Fruit' | PW | 2.67 | 5.00 | 4.33 | 4.67 | 4.17 |
| Impatiens | Fanciful | 'White' | BS | 4.00 | 4.33 | 4.67 | 3.67 | 4.17 |
| Angelonia | Angelface® | 'Pink' | PW | 2.67 | 4.67 | 4.33 | 4.67 | 4.08 |
| Verbena | Temari® | 'Patio White' | JP | 3.67 | 5.00 | 4.67 | 3.00 | 4.08 |
| Impatiens | Dazzler | 'Violet Improved' | BS | 4.33 | 4.00 | 4.33 | 3.67 | 4.08 |
| Carex trifida | | | S | 3.67 | 4.33 | 4.33 | 4.00 | 4.08 |
| Mecardonia | | 'Gold Flake'™ | PW | 2.67 | 4.00 | 4.33 | 5.00 | 4.00 |
| Coleus | Giant Exhibition | 'Palisandra' | S | 4.00 | 5.00 | 4.00 | 3.00 | 4.00 |
| Euphorbia | | 'Helena' | PW | 3.00 | 5.00 | 3.00 | 5.00 | 4.00 |
| Petunia | Madness | 'Lavender Glow' | BS | 3.33 | 3.67 | 4.00 | 4.67 | 3.92 |
| Geranium | Black Velvet | 'Scarlet improved' | S | 4.00 | 4.67 | 3.67 | 3.33 | 3.92 |
| Lavandula multifida | | 'Origano' | S | 4.00 | 5.00 | 3.33 | 3.33 | 3.92 |
| Sutera | | 'Giant Snowflake®' | PW | 4.00 | 4.67 | 2.33 | 4.67 | 3.92 |
| Begonia | Emperor | 'Red' | SAK | 2.67 | 4.00 | 4.00 | 5.00 | 3.92 |
| NG Impatiens | Infinity™ | 'Crimson' | PW | 2.67 | 5.00 | 4.33 | 3.33 | 3.83 |
| Torenia | Catalina™ | 'Midnight Blue' | PW | 3.67 | 4.33 | 3.33 | 4.00 | 3.83 |
| Leucanthemum | | 'Broadway Lights' | PW | 2.67 | 4.67 | 4.67 | 3.33 | 3.83 |
| Begonia | Emperor | 'Pink' | SAK | 2.67 | 4.00 | 3.67 | 5.00 | 3.83 |
| Begonia | Emperor | 'White' | SAK | 3.00 | 3.67 | 3.67 | 5.00 | 3.83 |
| Impatiens | Dazzler | 'Burgundy Improved' | BS | 4.33 | 4.00 | 4.00 | 3.00 | 3.83 |

Table 2 (continued). Clark County 2005 Field Trial Ratings.

| Plant Name | Series | Cultivar | Source | June | July | Aug | Sept | Overall Rating |
|---------------|------------------|---------------------------|--------|------|------|------|----------------------------------|----------------|
| Lobelia | Laguna™ | 'Compact Blue W/ Eye' | PW | 5.00 | 4.33 | 3.33 | 2.67 | 3.83 |
| Coleus | Giant Exhibition | 'Limelight' | S | 4.00 | 4.33 | 4.00 | 3.00 | 3.83 |
| Angelonia | Angelface® | 'Dresden Blue' | PW | 2.67 | 4.00 | 4.00 | 4.33 | 3.75 |
| Anisodentia | | 'Little Lady' | PW | 4.33 | 3.67 | 3.67 | 3.33 | 3.75 |
| Dianthus | Dynasty | 'Orchid' | BS | 4.33 | 4.00 | 3.33 | 3.33 | 3.75 |
| Thunbergia | | 'African Sunset' | S | 3.00 | 3.67 | 4.33 | 4.00 | 3.75 |
| Nemesia | Sunsatia™ | 'Mango' | PW | 4.67 | 4.00 | 3.67 | 2.67 | 3.75 |
| Petunia | Easy Wave® | 'Shell Pink Improved' | BS | 2.67 | 4.00 | 4.33 | 4.00 | 3.75 |
| Calibrachoa | Million Bells® | 'Lavender' | JP | 4.33 | 4.00 | 4.33 | 2.33 | 3.75 |
| Torenia | Catalina™ | 'Blue' | PW | 3.33 | 4.67 | 3.33 | 3.33 | 3.67 |
| Dianthus | Dynasty | 'Pink Magic' | BS | 4.00 | 3.67 | 3.33 | 3.33 | 3.58 |
| Laurentia | | 'Beth's Blue' | PW | 4.00 | 4.67 | 3.00 | 2.67 | 3.58 |
| Sutera | Glacier | 'Blue' | PW | 4.33 | 4.67 | 2.00 | 3.33 | 3.58 |
| Torenia | Catalina™ | 'Purple' | PW | 3.67 | 4.67 | 3.00 | 3.00 | 3.58 |
| Coreopsis | | 'Sunfire' | PAS | 3.33 | 4.33 | 3.00 | 3.67 | 3.58 |
| Pentas | Butterfly | 'Pink' | BS | 1.33 | 3.67 | 4.33 | 5.00 | 3.58 |
| Pentas | Butterfly | 'Light Lavender Improved' | BS | 1.33 | 3.67 | 4.33 | 5.00 | 3.58 |
| Impatiens | New Guinea | Experimental NG | BS | 2.67 | 4.00 | 3.33 | 4.00 | 3.50 |
| Sutera | Snowstorm® | 'Ice Blue' | PW | 4.00 | 5.00 | 1.67 | 3.33 | 3.50 |
| Petunia | Surfinia® | 'Rose Vein' | JP | 3.33 | 3.67 | 3.33 | 3.67 | 3.50 |
| Sutera | Snowstorm® | 'Pink' | PW | 4.00 | 4.67 | 1.67 | 3.33 | 3.42 |
| Petunia | Surfinia® | 'Patio White' | JP | 4.67 | 2.67 | 3.00 | 3.33 | 3.42 |
| Stachys | | 'Sentimental Journey' | PW | 2.33 | 4.00 | 3.67 | 3.67 | 3.42 |
| Petunia | Easy Wave® | 'Rosy Dawn' | PAS | 2.67 | 4.00 | 3.33 | 3.33 | 3.33 |
| Calibrachoa | Superbells® | 'Plum' | PW | 4.00 | 4.67 | 2.33 | 2.00 | 3.25 |
| Convolvulus | | 'Blue Casbah' | PW | 2.67 | 4.33 | 3.33 | 2.67 | 3.25 |
| Hibiscus | Luna™ | 'Pink Swirl' | BS | 1.33 | 2.67 | 4.33 | 4.67 | 3.25 |
| Lobelia | Laguna™ | 'Sky Blue' | PW | 5.00 | 4.33 | 1.33 | 2.33 | 3.25 |
| Coleus | Wizard® | 'Mosaic' | PAS | 2.67 | 4.33 | 3.67 | 2.33 | 3.25 |
| Nemesia | Sunsatia™ | 'Peach' | PW | 4.33 | 3.00 | 2.33 | 3.33 | 3.25 |
| Torenia | Catalina™ | 'Pink' | PW | 3.67 | 4.33 | 2.33 | 2.33 | 3.17 |
| Asteriscus | | 'Aurelia Gold' | PW | 2.67 | 4.33 | 2.67 | 3.00 | 3.17 |
| Coleus | Kong | 'Red' | PAS | 3.67 | 4.00 | 3.00 | 2.00 | 3.17 |
| Hibiscus | Luna™ | 'White' | BS | 1.33 | 2.67 | 4.33 | 4.33 | 3.17 |
| Lobelia | Laguna™ | 'White' | PW | 4.67 | 3.67 | 1.33 | 2.67 | 3.08 |
| Lotho-spermum | | 'Wine Red' | JP | 3.00 | 3.33 | 2.33 | 3.00 | 2.92 |
| Sutera | Cabana | 'Trailing Blue' | PW | 3.00 | 3.67 | 1.67 | 3.33 | 2.92 |
| Portulaca | Tequila™ | 'Yellow' | PAS | 3.33 | 4.67 | 3.33 | Died before the final evaluation | |
| Portulaca | Tequila™ | 'Cherry' | BS | 3.67 | 4.67 | 2.33 | | |
| Nemesia | Sunsatia™ | 'Coconut' | PW | 5.00 | 4.33 | 2.00 | | |

Table 2 (continued). Clark County 2005 Field Trial Ratings.

| Plant Name | Series | Cultivar | Source | June | July | Aug | Sept | Overall Rating |
|----------------|----------------|----------------------------|------------|-------------|-------------|------|------|----------------------------------------|
| Sanvitalia | | 'Sunbini' | PW | 3.00 | 4.00 | 4.00 | | Died before the final evaluation |
| Argyranthemum | | 'Vanilla Butterfly' | PW | 4.67 | 3.67 | | | |
| Calibrachoa | Million Bells® | 'Trailing Magenta' | JP | 4.00 | 3.67 | | | Died before the 3rd evaluation |
| Calibrachoa | Superbells® | 'Tequila Sunrise' | PW | 5.00 | 4.33 | | | |
| Calibrachoa | Superbells® | 'Peach' | PW | 4.33 | 4.00 | | | |
| Torenia | Clown® | 'Burgundy Improved' | PAS | 2.00 | 1.67 | | | |
| Viola | | 'Blue/white' | JP | 2.33 | 3.00 | | | |
| Viola | | 'Yellow' | JP | 3.00 | 4.00 | | | |
| Phlox | Intensia® | 'White' | PW | 4.67 | 3.33 | | | |
| Phlox | Intensia® | 'Lavender Glow' | PW | 3.33 | 1.67 | | | |
| Petunia | Surfinia® | 'Red' | JP | 2.67 | 2.00 | | | |
| Verbena | Temari® | 'Burgundy' | JP | 3.00 | | | | |
| Alyssum | Rally | 'Mix' | S | 4.00 | | | | |
| Calibrachoa | Million Bells® | 'Tangerine' | JP | 4.33 | | | | |
| Nemesia | Sunsatia™ | 'Pineapple' | PW | 4.33 | | | | |
| Nemesia | Sunsatia™ | 'Lemon' | PW | 3.00 | | | | |
| Nemesia | Sunsatia™ | 'Cranberry' | PW | 1.33 | | | | |
| Nemesia | Sunsatia™ | 'Banana' | PW | 2.67 | | | | |
| Petunia | Carpet | 'Pink Morn' | PAS | 2.33 | | | | |
| Snapdragon | Snapshot™ | 'Mix' | BS | 1.33 | | | | |
| Salvia argenta | | 'Artemis' | S | 1.33 | | | | |
| Argyranthemum | Molimba | 'First Blush' | PW | | | | | Dead before the 1st evaluation in June |
| Calibrachoa | Million Bells® | 'Flamingo' | JP | | | | | |
| Osteospermum | Soprano™ | 'Lilac Spoon' | PW | | | | | |
| Osteospermum | Soprano™ | 'Light Purple' | PW | | | | | |
| Osteospermum | Symphony | 'Melon' | PW | | | | | |

