

# Annual Flowering Plant Evaluations 2008

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*Sunflowers at the Georgeson Botanical Garden, fall 2008.*



## INTRODUCTION

Each year more than 300 annual flowering plants are grown in field trials at the Georgeson Botanical Garden. The annual flower trials were planted from 30 May to 5 June, 2008 in the Annual Flower and All American Selections (AAS) Display Garden of the Georgeson Botanical Garden (64° 51'N, 147° 52'W). The Fairbanks silt loam soils (pH 6.5) have been cultivated since 1910 and have been amended repeatedly with manure and more recently compost. The field beds were fertilized with 10-20-20S (4 lbs per 100 sq. ft., 195 g per sq meter) on 30 May. Baskets and containers were filled with equal parts Triple R® brand composted soil mix (Risse Greenhouses) and Pro Mix® Bedding plant soilless potting mix supplemented with Terra.Sorb® water absorbing crystals. Flowers were grown as seedling transplants with the exception of the sweet peas, swiss chard, and scarlet runner beans that were direct seeded. Transplants were hardened off outdoors for one week prior to transplanting.

All cultivars in garden beds were planted according to recommended commercial spacing guidelines in

unreplicated beds. Plant numbers varied according to plot size. The granular herbicide Preen® (Trifluralin), was applied on 13 June to all plots. Plots were irrigated as needed throughout the summer.

Weather data were compiled annually from a U.S. Weather Service station, elevation 475ft (145m), located approximately 350ft (107m) west of the garden. The summer was cool and overcast especially July through September with average daily maximum and minimum temperatures cooler than the previous two years (Tables 1 and 2). The total thaw degree days ranked the 2008 season the third coldest since 1998 in total heat accumulation during the growing season (Table 2). Plot evaluations began immediately after planting and continued weekly through September. They consisted of flowering dates and occurrence of disease, insect pests, seed pods, off-type plants, and deformities (Table 3). From 10 Aug to 25 Aug, each cultivar was measured for plant height and flower size, rated for performance of flowers and foliage, and evaluated for fragrance and potential use

as cut flowers or in dried arrangements. Frost tolerance was noted on September 19, 2008. Each cultivar grown in the garden beds is tested for at least three years depending upon the availability of seed or plugs. (Table 4).

Most ornamentals grew well except for those such as cardoon, castor beans, amaranth, and impatiens that only perform well in very warm seasons. Cool season vegetables grew well, but warm season ones had disappointing yields. Sweet corn did not mature. Gardeners around the Tanana Valley complained of size and quantity reductions in flowers, fruits, and vegetables, and delayed ripening especially in those crops requiring warm seasons. Although it was not a record breaking season, 2008 certainly was not one to brag about.

The garden beds continue to be plagued by a severe infestation of *Sclerotinia* cottony rot, and we learned this summer they also host a healthy population of pin nematodes, a severe plant pathogen in other regions but unknown to the GBG gardens until soil testing this summer.

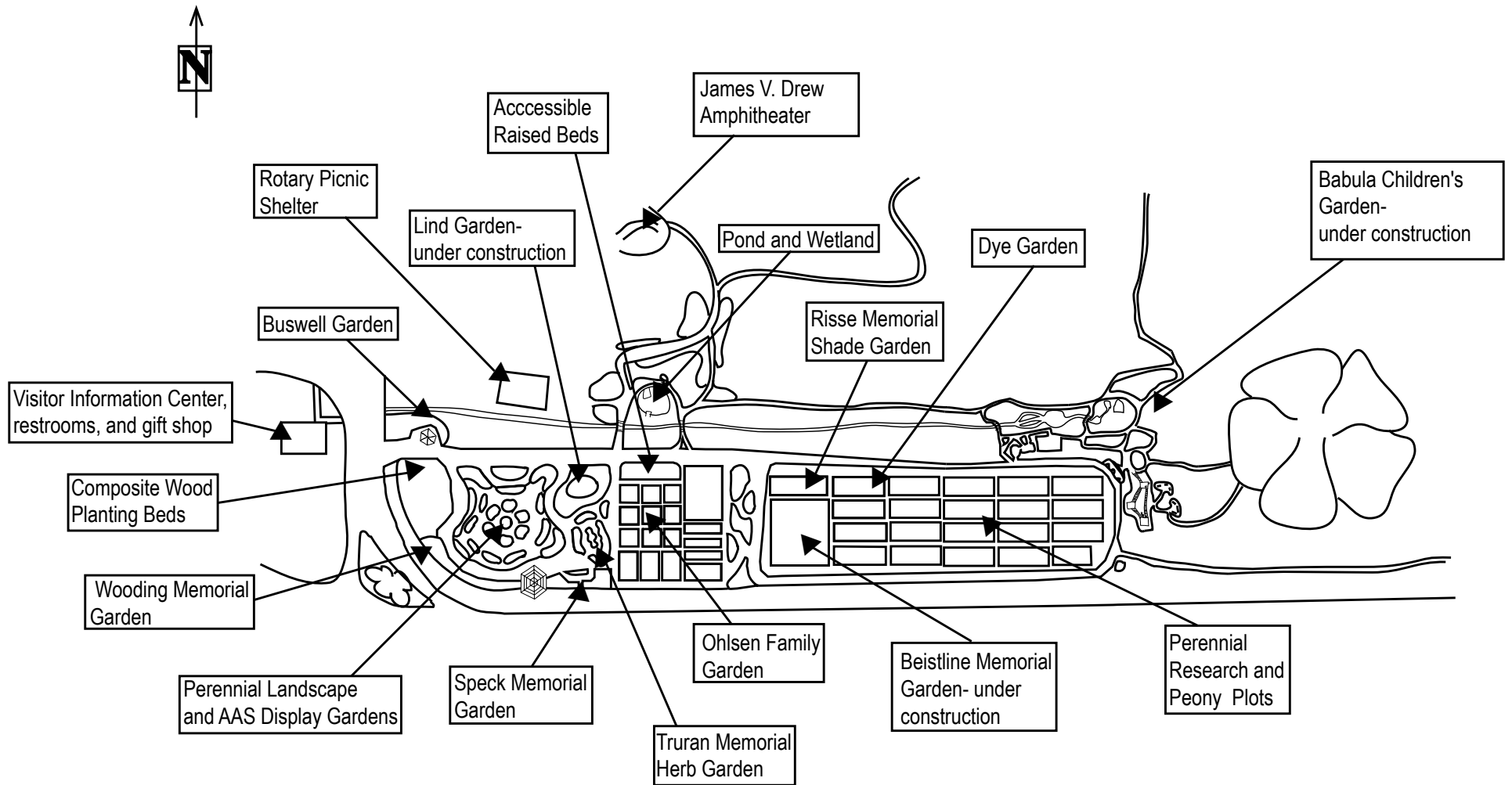
**Table 1. Weather data from the U.S. Weather Service station located just west of the garden for years 1998 – 2008.**

| Season                         | 1998   | 1999   | 2000   | 2001   | 2002   | 2003   | 2004  | 2005  | 2006   | 2007   | 2008   |
|--------------------------------|--------|--------|--------|--------|--------|--------|-------|-------|--------|--------|--------|
| Average temperature: (°F)      |        |        |        |        |        |        |       |       |        |        |        |
| May                            | 49     | 46     | 44     | 45     | 50     | 44     | 52    | 56    | 50     | 50     | 47.8   |
| June                           | 58     | 61     | 59     | 57     | 58     | 61     | 66    | 67    | 59     | 60     | 58.2   |
| July                           | 62     | 61     | 59     | 61     | 61     | 61     | 65    | 63    | 62     | 64     | 58.9   |
| Aug                            | 52     | 58     | 52     | 57     | 54     | 55     | 62    | 58    | 55     | 60     | 52.6   |
| Sep                            | 46     | 45     | 41     | 49     | 47     | 41     | 38    | 46    | 50     | 47     | 45.5   |
| Maximum temperature (°F)       | 87     | 91     | 83     | 95     | 85     | 82     | 90    | 85    | 80     | 84     | 84     |
| <b>Growing season:</b>         |        |        |        |        |        |        |       |       |        |        |        |
| Last frost                     | May 13 | May 29 | May 15 | May 13 | May 12 | May 24 | May 8 | May 5 | June 4 | May 13 | May 30 |
| First frost                    | Sep 13 | Sep 11 | Sep 16 | Sep 24 | Sep 2  | Sep 13 | Sep 4 | Sep 2 | Sep 25 | Sep 22 | Sep 21 |
| Frost free days                | 123    | 105    | 124    | 134    | 113    | 112    | 119   | 120   | 112    | 132    | 113    |
| Thaw degree days*              | 3278   | 3383   | 2943   | 3439   | 2980   | 3123   | 3751  | 3767  | 3523   | 3728   | 3185.5 |
| Rainfall (inches)              | 9.87   | 8.66   | 8.55   | 5.80   | 9.35   | 9.91   | 5.6   | 10.59 | 7.86   | 11.32  | 8.96   |
| <b>Previous winter season:</b> |        |        |        |        |        |        |       |       |        |        |        |
| Minimum temperature (°F)       | -48    | -54    | -50    | -27    | -36    | -35    | -45   | -50   | -49    | -41.7  | -46.1  |
| Snowfall (inches)              | 30.6   | 31.6   | 62.2   | 39.9   | 39.7   | 33.2   | 51.7  | 70.9  | 51.8   | 25.2   | 46.9   |

\* Thaw degree days = Cumulative (1 May - 30 Sep) average daily temperature minus 32°F baseline.

**Table 2. Weather data summaries for growing season years 2006 – 2008.**

|                          | May  |      |      | June |      |      | July |      |      | August |      |      | September |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|--------|------|------|-----------|------|------|
| Temperature °F           | 2006 | 2007 | 2008 | 2006 | 2007 | 2008 | 2006 | 2007 | 2008 | 2006   | 2007 | 2008 | 2006      | 2007 | 2008 |
| Average daily maximum    | 63   | 62   | 60   | 69   | 72   | 69   | 71   | 76   | 68   | 65     | 71   | 63   | 61        | 57   | 56   |
| Monthly high             | 75   | 80   | 69   | 80   | 84   | 81   | 83   | 84   | 84   | 72     | 84   | 74   | 69        | 71   | 70   |
| Average daily minimum    | 38   | 38   | 36   | 48   | 49   | 47   | 52   | 52   | 49   | 45     | 48   | 42   | 38        | 37   | 36   |
| Monthly low              | 27   | 28   | 23   | 30   | 41   | 39   | 46   | 44   | 42   | 36     | 39   | 35   | 29        | 22   | 15   |
| <b>Rainfall (inches)</b> | 0.20 | 0.90 | 0.54 | 1.15 | 2.66 | 1.94 | 3.42 | 4.12 | 3.65 | 2.48   | 1.85 | 2.26 | 0.61      | 1.79 | 0.57 |



**Table 3. Results of tested annual flower cultivars for 2008.**

| Common name           | Cultivar                      | Flower color                             | Height (in) <sup>w</sup> |      | Flower size (in) <sup>x</sup> |         | Flowering period <sup>y</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-------------------------------|--|--------------------------|------|-------------------------------|---------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                       |                               |  | max                      | min  | max                           | min     | Jun                           |      |      |      | Jul  |      |      |      | Aug  |      |      |      | Sep  |      |
|                       |                               |  |                          |      |                               |         | wk 1                          | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 |
| African Daisy**       | African Moon                  | cream w/ blue centers                    | 17.25                    | 7.25 | 1.75                          | .9      | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |      |      |
| African Foxglove      |                               | cream and pink                           | 24                       | 20   | 0                             | 0       |                               |      |      |      |      |      | ☼    | ☼    | ☼    | ☼    |      |      |      |      |
| Alternanthera         | Royal Tapestry                |  |                          |      |                               |         |                               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Alyssum, Sweet        | Clear Crystals Lavender Shade | lavender                                 | 6                        | 2    | 1.25                          | 1       | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Alyssum, Sweet        | Clear Crystals Purple Shade   | purple, lavender                         | 6                        | 1    | 1.25                          | .5      | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Alyssum, Sweet        | Clear Crystals White          | white                                    | 7                        | 1.5  | 1.125                         | .5      | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Alyssum, Sweet        | Rosie O'Day                   | rosy lavender                            | 3                        | 1    | 1x.75                         | .25x.25 | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Alyssum, Sweet        | Royal Carpet                  | purple, lavender                         | 14                       | 2.5  | 1                             | .25     | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Amaranth              | Dreadlocks                    | burgundy                                 | 26                       | 20   | 5.5x1.25                      | 2.25x.5 | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Amaranth, Feathered** | Autumn Palette                |  | 31                       | 21   | 12.5x2.5                      | 4x3.25  |                               |      | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Amaranth, Feathered   | Icecream Banana               | pale yellow                              | 6                        | 4    | 1.25x3                        | 1.25x1  |                               |      |      | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |      |      |      |
| Amaranth, Feathered   | Icecream Orange               | orange                                   | 7.5                      | 4.5  | 2.5x.75                       | 1x.75   |                               |      | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |      | ☼    |      |
| Amaranth, Tricolor    | Aurora                        | shades of peach                          | 13                       | 7    |                               |         |                               |      |      |      |      |      |      |      |      |      | ☼    | ☼    |      |      |
| Amberboa              |                               | lavender                                 | 27                       | 8.5  | 2                             | .5      | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Ambrosia**            |                               | green                                    | 14                       | 3    |                               |         |                               |      |      |      | ☼    | ☼    | ☼    |      |      |      |      |      |      |      |
| Annual Sea Holly      |                               | lavender                                 | 30                       | 21   |                               |         |                               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Aster, Annual Garden  | Ballet Mix                    | white, pink, rose, lavender              | 18                       | 6    | 5                             | 2.75    |                               |      |      |      | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Aster, Annual Garden  | Starlight Mixed Colors        | bright blue, sky blue, scarlet, and rose | 10                       | 5.5  | 4                             | 1.5     |                               |      |      | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |      |      |      |
| Aster, China          | Matsumoto Red Stripe          | maroon w/ white stripes                  | 23.5                     | 4    | 3                             | 1.75    |                               |      |      |      | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |

w: If the plant was uniform in height, the height is recorded under max only. \* = plants grown in containers or hanging baskets, limited data was collected on plant height, flower size and flowering dates.  
x: If flower size was uniform, size is recorded under max only; sizes with an x (ex.: 12x3) indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.  
y: ☼ indicates just starting to bloom, ☼ indicates 50% bloom, and ☼ indicates full bloom.

|  | Frost tolerance |         | Plant ratings <sup>z</sup> |         |         |         | Recommended for |         |        | Comments   |
|--|-----------------|---------|----------------------------|---------|---------|---------|-----------------|---------|--------|--|
|  |                 |         | Flower                     |         | Foliage | Overall |                 |         |        |  |
|  | foliage         | flowers | quantity                   | quality |         |         | Fragrance       | Cutting | Drying |  |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | n       | n      | Bushy plant with floppy open stems; not very showy and easily overwhelmed by adjacent plants; died early in 2008   |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | y       | n      | No blooms this summer; plants did not grow   |
|  | n               |         |                            |         | 1       | 1       | n               | y       | n      | Slightly trailing foliage with deep purplish red stems and small pointed leaves; cannot be recommended for ground beds; sparse growth, very little spread  |
|  | n               | n       | 1                          | 1       | 1       | 1       | sl              | n       | n      | Low-growing ground cover full of blooms all summer; holds up well; some flower size and plant size differences with different flower colors; lots of dead plants by mid September before frost         |
|  | y               | y       | 1                          | 1       | 1       | 1       | y               | n       | n      | Good mix of purple shades in this mounding ground cover; lots of dieout in early September   |
|  | y               | y       | 1                          | 1       | 1       | 1       | y               | n       | n      | Nice low-growing ground cover; fragrant; some die out in early September   |
|  | y               | y       | 1                          | 1       | 1       | 1       | y               | n       | n      | Compact carpet of color; fills in well; best for front of borders; All America Selections winner 1961  |
|  | n               | n       | 3                          | 3       | 3       | 3       | y               | n       | n      | One of the largest alyssums grown; spreads and fills in well; interesting mix of purple colors; some dead centers by mid August; All America Selections winner 1953                                    |
|  |                 |         | 4                          | 4       | 4       | 4       | n               |         |        | Drooping fingers of flowers cascade at the top of the plant; do not branch but remain a single stalk with yellow-green foliage tinged with red; good show when used in mixed beds as background plants |
|  | n               | n       | 4                          | 4       | 4       | 4       | n               |         |        | A few poor shoots survived the summer with some blooms; not at all attractive probably because of cold weather   |
|  | n               | n       | 2                          | 2       | 2       | 2       | n               | n       | n      | More branched than other Amaranths; needs close spacing; ugly yellow-green, brown-spotted foliage  |
|  | n               | n       | 2                          | 2       | 2       | 2       | n               | n       | n      | Stout spikes with yellow-green foliage and brilliant flower heads; needs close spacing; little branching; foliage is sickly yellow green; overshadows plumes   |
|  | n               |         | 1                          | 1       | 1       | 1       | n               | n       | n      | Very poor showing; did not grow well even in raised beds, and were eventually dwarfed by neighbors; yellow stems and leaves became brown and unsightly in early August                                 |
|  | n               | n       | 3                          | 2.5     | 2       | 2       | n               | n       | n      | Interesting needle-like petals around a whitish pin cushion center; loaded with blooms all summer; old flowers need deadheading, not very showy  |
|  | n               | n       | 1                          | 1       | 1       | 1       | y               | n       | n      | Poor germination; only 12 plants planted this year; grew better in raised beds than in the ground; big, bushy stalks covered with green blooms; brown seed heads are ugly in September                 |
|  | n               | n       |                            |         | 2       | 2       | n               | n       | n      | Bushy plant with spiky foliage; no blooms this year  |
|  | n               | n       | 4                          | 4       | 4       | 4       | n               | y       | y      | Big powderpuff-sized blooms; great mix of colors; needs deadheading by mid August for best show; very ragged late in season; floppy and unattractive late  |
|  | n               | n       | 2                          | 2       | 2       | 2       | n               | y       | y      | Short, puffy flowers, excellent early but do not last; very ragged looking late in the season  |
|  | n               | n       | 4                          | 4       | 4       | 4       | n               | y       | y      | Excellent bunches of blooms on branched stems; rich color; great cut flower  |

z: 0=dead; 1=poor, dead, rotten or not showy; 2= fair, other cultivars of its kind have been better; 3= good, worth growing, nice ornamental; 4= outstanding quality, the best of its kind grown in the garden

**Table 3. Results of tested annual flower cultivars for 2008.**

| Common name          | Cultivar            | Flower color                                       | Height (in) <sup>w</sup> |      | Flower size (in) <sup>x</sup> |          | Flowering period <sup>y</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |   |
|----------------------|---------------------|--|--------------------------|------|-------------------------------|----------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|
|                      |                     |  | max                      | min  | max                           | min      | Jun                           |      |      |      | Jul  |      |      |      | Aug  |      |      |      | Sep  |      |   |
|                      |                     |  |                          |      |                               |          | wk 1                          | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 |   |
| Australian Nicotiana | Suaveolens          | white  | 38                       | 16   | 3x10                          | 1x2.5    |                               |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| Bachelor's Button    | Jubilee Gem         | royal blue   | 23                       | 4.5  | 1.5                           | .5       | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| Bacopa*              | Blutopia            | lavender blue                                      | 5.5                      | 4    | .125                          | .125     | *                             | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |   |
| Bacopa**             | Snowtopia           | white  | 7                        | 2    | .125                          | .125     | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | * |
| Bidens*              | Gold Star           | yellow   | 34                       | 15   | 2                             | 1.25     |                               |      | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |   |
| Bishop's Flower      | Graceland           | white  | 21                       | 10   | 2.25                          | 1        | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| Bisnaga              | Casablanca          | white  | 36                       | 3.5  | 4                             | .75      |                               |      | *    | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| Blue Spiderwort      | Sleeping Beauty     | blue   | 23                       | 8.5  | 1.25                          | .5       |                               |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | * |
| Browallia            |                     | deep lavender                                      | 17                       | 5.5  | 1.25                          | .5       |                               |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| Calendula            | Orange Zinger       | orange, gold highlights                            | 28                       | 5    | 3.25                          | 1.25     | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| Calendula            | Sherbet Fizz        | peach w/ mahogany accents                          | 23.5                     | 12   | 2.5                           | .25      | *                             | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| Calendula            | Triangle Flashback  | peach-pink w/ dark rose backs                      | 29.5                     | 10   | 2.5                           | .25      | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| California Poppy     | Summer Sorbet       | rose fading to cream in centers, pink outer petals | 18                       | 6    | 2.5                           | .75      | *                             | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | *    | *    | *    |   |
| Candytuft            |                     | white  | 19                       | 5    | 1.75                          | .75      | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | *    | *    |      |   |
| Cardoon**            |                     |  | 42                       | 42   |                               |          |                               |      |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Castor Bean**        | Zanzibarensis Mix   | red  | 26                       | 18   |                               |          |                               |      |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Celosia**            | Burgundy Supercrest | rose   | 8                        | 4    | 4x3.5                         | 2.25x1.5 |                               |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | *    | * |
| Celosia              | Fireglow            | red  | 4.5                      | 2.75 | 1.25x1.25                     | .25x1    |                               |      |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | *    |      |      |   |

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x: If flower size was uniform, size is recorded under max only; sizes with an x (ex.: 12x3) indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.  
y: \* indicates just starting to bloom, ⊗ indicates 50% bloom, and ⊗ indicates full bloom.

|  | Frost tolerance |         | Plant ratings <sup>z</sup> |         |         |         | Recommended for |         |        | Comments  |
|--|-----------------|---------|----------------------------|---------|---------|---------|-----------------|---------|--------|---|
|  |                 |         | Flower                     |         | Foliage | Overall |                 |         |        |   |
|  | foliage         | flowers | quantity                   | quality |         |         | Fragrance       | Cutting | Drying |   |
|  | n               | n       | 3                          | 3       | 3       | 3       | y               | n       | n      | Tiny, trumpet-shaped white flowers, not as floriferous as other nicotianas but nice bushy background plant; would be good as a filler rather than mass plantings  |
|  | n               | n       | 3                          | 3.5     | 3.5     | 3.5     | n               | y       | y      | Beautiful old fashioned flower; blooms early, showy all season; All America selections winner 1937  |
|  | n               | n       | 3                          | 3       | 3       | 3       | y               | n       | n      | Not showy this season in containers; overwhelmed by petunias and geraniums and shaded out   |
|  | y               | y       | 2                          | 2       | 2       | 2       | y               | n       | n      | Beautiful bushy, cascading plant covered with tiny white blooms all summer; some deadheading needed   |
|  |                 |         | 2                          | 2       | 2       | 2       | y               | n       | n      | Open, spreading, floppy stems with lots of golden blooms; must be in a very large container to keep in scale with the spread; can be overwhelming with geraniums, petunias and other shorter plants   |
|  | n               | n       | 2                          | 2       | 2       | 2       | sl              | y       | y      | Floppy stems make the plant appear shorter than it is; umbels not as compact as other Bishop's flowers grown this year; more like the wild Queen Anne's lace  |
|  | y               | y       | 4                          | 4       | 4       | 4       | y               | y       | y      | Similar to Ammi (Bishop's flower) with smaller umbel heads; stronger, straighter stems than Ammi; recommended by catalogs for greenhouse and field cut flower production; should be planted instead of Ammi; loaded with blooms until frost |
|  | n               | n       | 3                          | 4       | 3       | 3       | n               | n       | n      | Tall upright stems with single blooms in the axles of the leaves; brownish seed pods are ugly; brilliant clear blue color   |
|  | n               | n       | 3                          | 3       | 3       | 3       | sl              | y       | n      | Bushy plants covered with blooms; vivid color and display; no maintenance needed; well worth planting   |
|  | y               | y       | 4                          | 4       | 4       | 4       | sl              | y       | y      | Long stems, great for cutting; very nice uniform display all season; catalog says has high resin content for medicinal tinctures and salves   |
|  | y               | n       | 3                          | 3       | 3       | 3       | n               | y       | n      | Tiny flowers compared to other calendulas; bushy, fills in well; needs significant deadheading; great two-toned colors  |
|  | y               | y       | 4                          | 4       | 4       | 4       | n               | y       | y      | Bushy plants covered with flowers in unusual peachy pink color with striking maroon edges and backs; excellent cut flower   |
|  | y               | y       | 3                          | 3       | 3       | 3       | n               | y       | n      | Attractive ruffled petals; outstanding color; some flowers a light rose pink, others a pale peachy pink; holds up well in wet weather   |
|  |                 |         | 3                          | 3       | 3       | 3       | y               | n       | n      | Bushy plants covered with clusters of white blooms all summer; needs deadheading to avoid seed production; heirloom plants  |
|  | n               | n       | 2                          | 2       | 2       | 2       | n               | y       | y      | Attractive silvery foliage; huge plants with dissected, spiky leaves; flowering shoots emerged late in season with flower buds by mid September; did not bloom; needs lots of space to spread   |
|  | n               | n       |                            |         | 3       | 3       | n               | n       | n      | Plants grew poorly in cold, wet summer; no blooms like 2007   |
|  | n               | n       | 3                          | 3       | 3       | 3       | n               | n       | n      | Old fashioned cock's comb; medium-sized spikes of yellowish foliage tinged with red; spikes do not branch; cockscombs are tiny; appear late in the season; unattractive; not any better in raised beds than ground                          |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | n       | n      | Short, unbranched spikes of brilliant color; interesting flower heads but needs closer spacing for best effect; All America Selections winner 1964  |

z: 0=dead; 1=poor, dead, rotten or not showy; 2= fair, other cultivars of its kind have been better; 3= good, worth growing, nice ornamental; 4= outstanding quality, the best of its kind grown in the garden

**Table 3. Results of tested annual flower cultivars for 2008.**

| Common name             | Cultivar              | Flower color                                 | Height (in) <sup>w</sup> |     | Flower size (in) <sup>x</sup> |       | Flowering period <sup>y</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |   |  |
|-------------------------|-----------------------|--|--------------------------|-----|-------------------------------|-------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|--|
|                         |                       |  | max                      | min | max                           | min   | Jun                           |      |      |      | Jul  |      |      |      | Aug  |      |      |      | Sep  |      |   |  |
|                         |                       |  |                          |     |                               |       | wk 1                          | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 |   |  |
| Celosia                 | Fresh Look Gold       | gold   | 8                        | 3.5 | 1x.5                          | 1x.25 |                               |      |      |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | *    |      |      |      |   |  |
| Chinese Foxglove        |                       |  |                          |     |                               |       |                               |      |      |      |      |      |      |      |      |      |      |      |      |      |   |  |
| Chocolate Flower        |                       | gold w/ brown centers                        |                          |     |                               |       |                               |      |      |      |      |      |      |      | *    | *    | *    | *    |      |      |   |  |
| Chrysanthemum, Tricolor | Court Jester          | rose, white, red, yellow w/ mahogany centers | 28.5                     | 9.5 | 3                             | .5    |                               |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |  |
| Cigar Plant**           |                       | orange red w/ white ring                     | 13.5                     | 6.5 | 1.25                          | .25   | *                             | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |  |
| Clarkia                 | Chieftain             | hot pink                                     | 48                       | 4   | 1.5                           | .75   | *                             | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |  |
| Cleome**                | Colour Fountain Mixed | purple, pink, white bicolor with white       | 47                       | 24  | 1.5                           | 1.25  |                               |      |      |      |      |      | *    | *    | *    | *    | *    | *    | ⊗    | ⊗    |   |  |
| Coleus                  | Chocolate Dark        |  | 8                        | 3   | 1                             | .5    |                               |      |      |      |      |      |      |      |      |      |      |      | ⊗    | ⊗    |   |  |
| Coleus                  | Kong™Salmon Pink      |  | 9.5                      | 7   | 3                             | .5    |                               |      |      |      |      |      |      |      |      |      |      |      | ⊗    | ⊗    |   |  |
| Collinsia**             | Mystic Lilac          | pale lavender                                | 7.5                      | 7.5 | 3x1                           | 3x1   |                               |      |      |      |      |      |      |      |      |      |      |      |      | ⊗    | ⊗ |  |
| Coreopsis               | Sunfire               | yellow w/ burgundy center                    | 17                       | 12  | 2.25                          | 1.25  |                               |      |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |  |
| Corn Parsley            | Goldspray             | yellow                                       | 26                       | 4   | 2.5                           | .75   | *                             | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |  |
| Cosmos                  | Dazzler               | crimson, white, pink, rose                   | 36                       | 18  | 4.0                           | 2.0   |                               |      |      |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |  |
| Cosmos                  | Double Click          | white, crimson, pink, rose                   | 18                       | 9   | 2.5                           | .75   |                               |      | *    | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | *    | * |  |
| Cosmos                  | Happy Ring            | pink/rose bicolor                            | 29                       | 14  | 3.25                          | 2     | *                             | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | *    | *    | *    | *    | * |  |
| Cypress vine**          | Red                   | red  |                          |     |                               |       |                               |      |      |      |      |      |      |      |      |      |      |      |      |      |   |  |
| Dahlia**                | Bloomquist Dawn       | dark pink w/ yellow center                   | 36                       | 29  | 7                             | 3.75  |                               |      |      |      |      |      |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | *    | ⊗    | ⊗ |  |
| Dahlia**                | Chimicum Topaz        | yellow w/orange tips                         | 45                       | 40  | 3.25                          | 1.75  |                               |      |      |      |      |      |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |  |
| Dahlia**                | Citron De Cap         | yellow w/rose highlights                     | 46                       | 44  | 5.25                          | 4.5   |                               |      |      |      |      |      |      |      | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |  |
| Dahlia**                | Clydes Choice         | pink w/burgundy edges                        | 45                       | 45  |                               |       |                               |      |      |      |      |      |      |      |      |      |      |      |      | *    | * |  |

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x: If flower size was uniform, size is recorded under max only; sizes with an x (ex.: 12x3) indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.  
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|  | Frost tolerance |         | Plant ratings <sup>z</sup> |         |         |         | Recommended for |         |        | Comments  |
|--|-----------------|---------|----------------------------|---------|---------|---------|-----------------|---------|--------|---|
|  |                 |         | Flower                     |         | Foliage | Overall |                 |         |        |   |
|  | foliage         | flowers | quantity                   | quality |         |         | Fragrance       | Cutting | Drying |   |
|  | n               | n       | 2                          | 2       | 2       | 2       | n               | n       | n      | Tiny, thin spikes of electric color; needs very close spacing in ground beds for best display; colors are eye-catching but display is not very ornamental; better in containers |
|  | n               | n       |                            |         | 1       | 1       |                 | y       | n      | Flowering shoots formed very late, but did not bloom; poor growth this year   |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | n       | n      | Tiny daisy flowers with brown centers; sparse through the season; not the best show; died out in early September  |
|  | n               | n       | 4                          | 4       | 4       | 4       | n               | n       | n      | Brilliant multi-colored blooms on floppy stems; very colorful all season  |
|  | n               | n       | 4                          | 4       | 4       | 4       | n               | n       | n      | Interesting tubes with white ring at tip; not showy and were easily overwhelmed by neighbors; needs mass plantings in front of borders  |
|  | n               | n       | 4                          | 4       | 4       | 4       | y               | y       | n      | Tall stems becoming floppy in late season; very attractive flowers, but mostly on the ground; many dead plants  |
|  | n               | n       | 3                          | 3       | 3       | 3       | n               | y       | n      | Very poor germination this year; only 6 plants planted  |
|  | n               | n       | 3                          | 3       | 3       | 3       | n               | n       | n      | Did not grow and fill in containers; just a few sticks with curled leaves, many of which rotted in late summer  |
|  | n               | n       | 4                          | 4       | 4       | 4       | n               | n       | n      | Poor growth in this cold summer; little height growth; did not fill in containers   |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | n       | n      | Big bushy plants but only a couple of blooms by the end of the season   |
|  | y               | y       | 2                          | 2       | 3       | 2       | y               | y       | y      | Medium sized blooms on straight stems; good for cutting; very nice contrasting mahogany markings on brilliant blooms; abundant blooms this season                               |
|  | y               | n       | 4                          | 4       | 4       | 4       | y               | y       | n      | Looks like dill in bloom; nice filler; floppy, weak stems but masses of brilliant gold all summer; plant in masses for best effect  |
|  | n               | n       | 2                          | 3       | 3       | 2       | n               | y       | y      | Big, bushy, late; more bush than flowers; mostly crimson flowers this summer; not many flowers  |
|  | n               | n       | 4                          | 4       | 4       | 4       | n               | y       | y      | Very interesting double blooms but few are true doubles, floppy stems, needs deadheading  |
|  | n               | n       | 2                          | 2       | 3       | 2       | n               | y       | n      | Some flowers with distinct dark rose ring in center of petals; bushy, floppy stems; more bush than flowers  |
|  |                 |         |                            |         |         |         |                 |         |        | Very poor survival in greenhouse; not planted outdoors  |
|  | n               | n       | 4                          | 4       | 4       | 4       | sl              | y       | n      | Very attractive bicolor flowers; loaded with blooms in late season; very attractive, semi cactus bloom style  |
|  | n               | n       | 2                          | 2       | 2       | 2       | sl              | y       | n      | Diseased, possibly virus, weak not many blooms until late season; semi cactus style blooms  |
|  | n               | n       | 3                          | 3       | 3       | 3       | sl              | y       | n      | Lots of blooms too late in the season for great display; heavily lacinated petals give lacy appearance; yellow specked leaves looks like virus                                  |
|  | n               | n       | 1                          | 1       | 3       | 3       | n               | y       | n      | Small flowers, plants covered with blooms; very nice flowers; no blooms in 2008   |

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| Common name | Cultivar              | Flower color   | Height (in) <sup>w</sup> |      | Flower size (in) <sup>x</sup> |      | Flowering period <sup>y</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|-----------------------|--|--------------------------|------|-------------------------------|------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|             |                       |  | max                      | min  | max                           | min  | Jun                           |      |      |      | Jul  |      |      |      | Aug  |      |      |      | Sep  |      |
|             |                       |  |                          |      |                               |      | wk 1                          | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 |
| Dahlia**    | Emory Paul            | rosy purple, lighter toward tips                           | 40                       | 26   | 2.75                          |      |                               |      |      |      |      |      | *    | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    |      |
| Dahlia**    | Jayleen G.            | dark peach   | 58                       | 48   | 5.5                           | 2    |                               |      |      |      |      |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |      |
| Dahlia**    | Jo                    | pale yellow  | 48.5                     | 45   | 9.0                           | 5.0  |                               |      |      |      |      |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |      |
| Dahlia**    | Maggie C.             | yellow w/orange overtones                                  | 31                       | 31   |                               |      |                               |      |      |      |      |      |      |      |      |      |      |      | ⊗    |      |
| Dahlia**    | Mom's Special         | pale lavender w/ dark lavender flecks                      | 44.5                     | 40.5 | 8.5                           | 8.5  |                               |      |      |      |      |      |      | *    | *    | *    | *    | ⊗    | ⊗    |      |
| Dahlia**    | Papageno              | yellow w/pink tips   | 16                       | 16   | 3.5                           | 3.5  |                               |      |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |      |      |
| Dahlia**    | Pat Feary             | yellow w/ pink highlights                                  | 46                       | 38   | 5.75                          | 2.25 |                               |      |      |      |      |      | *    | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    |      |
| Dahlia      | Redskin               | white, apricot, yellow, pink red                           | 33                       | 19   | 4.5                           | 2.25 |                               |      |      |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |      |
| Dahlia**    | Robert Too            | purple and white   | 52                       | 40   | 4.5                           | 2    |                               |      |      |      |      |      | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |      |
| Dahlia**    | Scarborough Brilliant | red fading to pink in centers                              | 64                       | 48   | 6.25                          | 4.25 |                               |      |      |      |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |      |
| Dahlia**    | Snowbound             | creamy white   | 44                       | 32   | 11.5                          | 11.5 |                               |      |      |      |      |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |      |
| Dahlia**    | Spartacus             | dark red   | 42                       | 35   | 5                             | 5    |                               |      |      |      |      |      |      | *    | *    | *    | *    | ⊗    | ⊗    |      |
| Dahlia      | Star-Gazer            | white, rose, orange, yellow, pink, burgundy, some bicolors | 30                       | 13   | 3.75                          | 2.5  | *                             | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |      |
| Dahlia**    | Sterling Silver       | white  | 40                       | 38   | 11                            | 5    |                               |      |      |      |      |      |      |      | *    | *    | *    | *    | ⊗    |      |
| Dahlia**    | The Boss              | dark pink  | 21                       | 21   |                               |      |                               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Dianthus    | Bouquet™ Rose Magic   | rose, pink, white w/dark pink markings                     | 21.5                     | 8.5  | 3                             | 1    |                               |      |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |      |
| Dianthus    | Ideal Violet          | violet rose  | 11.5                     | 4    | 1                             | .5   | *                             | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |      |
| Dianthus    | Magic Charms          | red, white, pink   | 8                        | 3.5  | 2.25                          | 1.25 |                               |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |      |
| Dianthus    | Snowfire              | white w/red centers  | 10                       | 2.5  | 2.25                          | 1.25 |                               |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |      |

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|--|-----------------|---------|----------------------------|---------|---------|---------|-----------------|---------|--------|---|
|  |                 |         | Flower                     |         | Foliage | Overall |                 |         |        |   |
|  | foliage         | flowers | quantity                   | quality |         |         | Fragrance       | Cutting | Drying |   |
|  | n               | n       | 2                          | 2       | 2       | 2       | y               | y       | n      | Huge blooms just beginning to open up in mid September; lots of buds, not enough heat   |
|  | n               | n       | 4                          | 4       | 4       | 4       | n               | y       | n      | Very tall plant with abundant blooms; very nice dark peach color  |
|  | n               | n       | 3                          | 3       | 3       | 3       | y               | y       | n      | Medium sized, waterlily type blooms; outstanding pale yellow color; great contrast against dark green foliage   |
|  | n               | n       | 1                          | 2       | 3       | 3       | n               |         |        | Just started to bloom in early September; nice upright two-toned blooms; lots of buds, but..  |
|  | n               | n       | 2                          | 4       | 4       | 2       | sl              | y       | n      | Big floppy flowers make attractive display in late season; needs deadheading  |
|  | n               | n       | 2                          | 2       | 2       | 2       | sl              | y       | n      | No blooms this summer   |
|  | n               | n       | 4                          | 4       | 4       | 4       | sl              | y       | n      | Abundant tiny blooms on very tall plants, nice display late in season; interesting pink stripes on back of petals   |
|  | n               | n       | 4                          | 4       | 4       | 4       | n               | y       | y      | All America Selections Winner 1975; named for reddish foliage color; big bushy plant covered with multi-colored blooms; dark foliage sets off the flowers; very attractive; dig tubers in fall        |
|  | n               | n       | 3                          | 3       | 3       | 3       | sl              | y       | n      | Outstanding abundant flowers on tall plant; great show through mid season to frost; miniature formal decorative bloom style   |
|  | n               | n       | 4                          | 4       | 4       | 4       | y               | y       | n      | Outstanding hot pink blooms; one of the tallest plants; great show in late season   |
|  | n               | n       | 1                          | 4       | 4       | 4       | n               | y       | n      | Large outward facing flowers, needs deadheading   |
|  | n               | n       | 1                          | 2       | 2       | 2       | y               | y       | n      | Formal decorative style; petals fold back toward stem   |
|  | n               | n       | 4                          | 3.5     | 3.5     | 3.5     | y               | y       | y      | Abundant cactus blooms on plants much taller than advertised; covered with blooms on upright stems; nice mix of colors  |
|  | n               | n       | 1                          | 4       | 4       | 4       | sl              | y       | n      | Huge balloon flowers of pure white; very attractive late in season; giant bush with lots of branches, few blooms; formal decorative bloom type; recurved petals give flower a ball shape              |
|  | n               | n       | 1                          | 1       | 3       | 3       | y               | y       | n      | No blooms ; very nice display on medium sized bush other years  |
|  | y               | n       | 4                          | 4       | 4       | 4       | sl              | y       | y      | Large balls of flowers on tall, upright stems; very colorful display especially with mix of flower colors in a single ball; needs deadheading late in season; very nice display; attracts butterflies |
|  | y               | y       | 4                          | 4       | 4       |         | sl              | y       | y      | All America Selections winner 1992; compact plants covered with lacy flowers nearly all season; very attractive display of electric solid colors  |
|  | n               | n       | 3                          | 3       | 3       | 3       | n               | y       | y      | Mounds of brilliant color nearly all season; poor spread in this cold, rainy season; grew much better in other years; All America Selections winner 1974; very nice mix of colors                     |
|  | y               | y       | 4                          | 4       | 4       | 4       | sl              | y       | y      | Excellent display all season; mounded plants covered with blooms; striking patterns of red and white with some pink; All America Selections winner 1978   |

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**Table 3. Results of tested annual flower cultivars for 2008.**

| Common name          | Cultivar                  | Flower color                          | Height (in) <sup>w</sup> |     | Flower size (in) <sup>x</sup> |     | Flowering period <sup>y</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |   |   |
|----------------------|---------------------------|---------------------------------------|--------------------------|-----|-------------------------------|-----|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|---|
|                      |                           |                                       | max                      | min | max                           | min | Jun                           |      |      |      | Jul  |      |      |      | Aug  |      |      |      | Sep  |      |   |   |
|                      |                           |                                       |                          |     |                               |     | wk 1                          | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 |   |   |
| Dianthus             | Sweet Scarlet             | scarlet                               | 16.5                     | 5.5 | 4.5                           | .5  |                               |      |      |      | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ | ☼ |
| Diascia              | Diamonte Apricot          | peach                                 | 6.75                     | 3   | .75                           | .5  | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ | ☼ |
| Dicranostigma**      |                           | yellow                                |                          |     |                               |     |                               |      | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |   |   |
| Dusty Miller         | New Look                  |                                       | 14                       | 7   |                               |     |                               |      |      |      |      |      |      |      |      |      |      |      |      |      |   |   |
| European Meadow Rush | Blue Arrows               |                                       |                          |     |                               |     |                               |      |      |      |      |      |      |      |      |      |      |      |      |      |   |   |
| Fennel Flower        | African Bride             | white petals, maroon anthers          |                          |     |                               |     |                               |      |      |      |      |      |      |      | *    | *    | *    | *    | *    | *    | * | * |
| Feverfew             | Crown White               | white                                 | 20                       | 10  | .75                           | .5  | *                             | *    | *    | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ | ☼ |
| Flowering Flax**     | Charmer Mixed             | white, red, peach                     | 23                       | 11  | .5                            | .25 |                               |      |      |      | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | * | * |
| Gaillardia           | Amber Wheels              | yellow, brown centers                 |                          |     |                               |     |                               |      |      | *    |      |      |      |      |      |      |      |      |      |      |   |   |
| Gaillardia           | Razzledazzle Mixed Colors | deep red, gold tips                   | 29                       | 10  | 2.5                           | 1   |                               |      | *    | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |   |
| Gaillardia           | Sundance Bicolor          | red and orange bicolor                | 17                       | 6   | 2.5                           | .5  |                               |      | *    | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ | ☼ |
| Gazania              | Kontiki® Stars & Stripes  | mix: orange, rose, cream, red striped | 11                       | 5   | 3                             | 1   |                               |      | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | * | * |
| Geranium*            | Maverick Star             | pink w/rose centers                   | 18                       | 17  | 4.5                           | 2   | *                             | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |   |
| Gerbera*             | Revolution® Vanilla       | creamy yellow                         |                          |     |                               |     |                               |      |      | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ | ☼ |
| Grass, Feather       | Capriccio                 |                                       | 31                       | 15  |                               |     |                               |      |      |      |      |      |      |      |      |      |      |      |      |      |   |   |
| Grass, Great Quaking |                           | green                                 | 22.5                     | 9   | .75                           | .25 |                               |      |      |      |      |      |      |      |      |      |      |      |      | ☼    | ☼ | ☼ |
| Gypsophila           | Gypsy                     | pink                                  | 6                        | .75 | .125                          | .06 | *                             | *    | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | * |   |
| Helenium             | Goldfield                 | gold                                  | 20                       | 4   | 1.25                          | .5  |                               |      | *    | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |   | 1 |
| Hibiscus             | Luna™ Rose                | deep rose pink                        | 14                       | 12  | 3.25                          | .75 |                               |      |      |      | *    | *    | *    | *    | *    | *    | *    | *    | *    | *    | * |   |

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w: If the plant was uniform in height, the height is recorded under max only. \* = plants grown in containers or hanging baskets, limited data was collected on plant height, flower size and flowering dates.  
 x: If flower size was uniform, size is recorded under max only; sizes with an x (ex.: 12x3) indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.  
 y: \* indicates just starting to bloom, ☼ indicates 50% bloom, and ☼ indicates full bloom.

|  | Frost tolerance |         | Plant ratings <sup>z</sup> |         |         |         | Recommended for |         |        | Comments  |
|--|-----------------|---------|----------------------------|---------|---------|---------|-----------------|---------|--------|---|
|  |                 |         | Flower                     |         | Foliage | Overall |                 |         |        |   |
|  | foliage         | flowers | quantity                   | quality |         |         | Fragrance       | Cutting | Drying |   |
|  | y               | y       | 4                          | 4       | 4       | 4       | sl              | n       | n      | Large balls of scarlet on upright and some floppy stems; intense color; great display in hot summer; excellent cut flower   |
|  | y               | y       | 1                          | 1       | 1       | 1       | n               | y       | n      | Mounding, dense habit, can spread up to 18 inches when mature; excellent cover; jammed with blooms nearly all season  |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | n       | n      | Poor growth, few flowers, very ragged appearance; died out early; not at all showy; died early in 2008  |
|  | y               |         |                            |         | 4       | 4       | n               | y       | y      | Outstanding addition to dusty millers grown for their foliage; larger leaves than others; fills in well and forms a great carpet for edging; superb show long after last frost                    |
|  |                 |         |                            |         | 4       | 4       | n               | n       | n      | Grown for its stiff, upright blue-green foliage, recommended for bedding and mixed containers; Foliage is thin, upright; needs room to spread out; not good at front of beds; use as a background |
|  | y               | y       |                            |         |         |         | sl              | n       | n      | Direct seeded on June 6, 2008; flowers late as direct seed, but is much more ornamental; big bushy plants; do not grow as transplants   |
|  | n               | n       | 3                          | 3       | 3       | 3       | y               | n       | n      | Bushy, mounding plants covered with small white flowers; great filler or in mass plantings; variable height leads to ragged appearance late in season   |
|  | y               | n       | 3                          | 3       | 3       | 3       | n               | y       | n      | Tall, delicate stems topped with brilliant blooms; nice in mass plantings or as filler in borders   |
|  | n               | n       | 1                          | 1       | 1       | 1       |                 |         |        | Grew poorly, died out in late August  |
|  | n               | n       | 2                          | 2       | 2       | 2       | n               | y       | y      | Floppy stems; unkempt appearance; not a great display until very late in the season   |
|  | n               | n       | 3                          | 3       | 3       | 3       | sl              | y       | y      | All America Selections winner 2003; bushy, free flowering, masses of double bicolor blooms; not the most attractive display despite the masses of blooms  |
|  | n               | n       | 2                          | 2       | 2       | 2       | y               | n       | n      | Outstanding striped petals; filled in well and covered with bright blooms; very colorful display; closes up in evening  |
|  | n               | n       | 3                          | 3       | 3       | 3       | sl              | n       | n      | Nice bushy plants with plenty of bicolor pink flowers all summer; visitor favorite  |
|  | y               | y       |                            |         |         |         | y               | y       | n      | Poor display in ground beds; better in containers; plants and flowers are short and easily overgrown; outstanding flowers in containers but crowded out by other plants                           |
|  | y               | y       |                            |         | 2       | 2       | n               | n       | n      | Fine-textured, wispy grass for bedding or mixed containers and hanging baskets; needs to be mass planted for best effect; lost in flower bed  |
|  | y               | y       | 4                          | 4       | 4       | 4       | n               | y       | y      | Interesting floppy flowers and seed heads; good in dried arrangements; good as medium sized background plant  |
|  | n               | n       | 2                          | 2       | 2       | 2       | n               | n       | n      | Tiny mounds of baby flowers fill in bed well with color nearly all season; some plants died in midsummer; All America Selections winner 1997  |
|  | n               | n       | 3                          | 3       | 3       | 3       | sl              | y       | y      | Bushy gold daisies; wiry upright stems; colorful display nearly all season  |
|  | y               | n       | 4                          | 4       | 4       | 4       | n               | n       | n      | Very poor growth in ground beds especially in cold, wet summer; never branched, stayed yellow-green all summer and had some flower buds only in mid September; better in containers               |

z: 0=dead; 1=poor, dead, rotten or not showy; 2= fair, other cultivars of its kind have been better; 3= good, worth growing, nice ornamental; 4= outstanding quality, the best of its kind grown in the garden

**Table 3. Results of tested annual flower cultivars for 2008.**

| Common name       | Cultivar                   | Flower color                           | Height (in) <sup>w</sup> |     | Flower size (in) <sup>x</sup> |           | Flowering period <sup>y</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------------|----------------------------|--|--------------------------|-----|-------------------------------|-----------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                   |                            |  | max                      | min | max                           | min       | Jun                           |      |      |      | Jul  |      |      |      | Aug  |      |      |      | Sep  |      |
|                   |                            |  |                          |     |                               |           | wk 1                          | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 |
| Hollyhock         | Indian Spring              | pink, white, red                       | 60                       | 37  | 4                             | 2         |                               |      |      |      | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Impatiens, Garden | Fanciful™ Mix Stardust     | rose, orange, red                      | 6                        | 3.5 | 1.25                          | .5        | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Impatiens, Garden | Super Elfin XP Pink Deep   | dark pink                              | 6                        | 2   | 2                             | .25       | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Impatiens, Garden | Super Elfin XP Punch       | cherry red                             | 6                        | 2   | 1.5                           | .25       | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Impatiens, Garden | Super Elfin XP Red         | red                                    | 5.5                      | 2   | 2.5                           | .5        | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Impatiens, Garden | Super Elfin XP Star Cherry | cherry rose margin w/white center star | 4.5                      | 2   | 1.5                           | .5        | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Impatiens, Garden | Super Elfin XP Star Salmon | salmon edges w/white center star       | 5.5                      | 2   | 2                             | .5        | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |      |
| Impatiens, Garden | Super Elfin XP Violet      | violet                                 | 4.5                      | 1.5 | 2                             | .5        | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Impatiens, Garden | Balance Violet             | violet pink                            | 5.5                      | 2   | 2.5                           | .5        | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Japanese Thistle  | Beauty Rose                | pink                                   | 40                       | 20  | 1.75                          | .5        |                               |      |      |      |      | *    | *    | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Jewels of Opar    | Limon                      | rose pink                              | 20                       | 7   | .06                           | .06       |                               |      | *    | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Juncus            | Javelin                    | green                                  | 52                       | 15  |                               |           |                               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Koeleria          | Blue Sprite                |  |                          |     |                               |           |                               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Laurentia         | Avant Garde Pink Hybrid™   | pale lavender pink                     | 17                       | 4   | 1.25                          | .75       |                               |      |      | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Lupine            | Giant King Mix             | lavender, white                        | 24                       | 13  | 1.75x8                        | 1.25x2.25 | *                             | *    | *    | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Marigold, African | Crackerjack Mixed          | orange, gold, yellow                   | 23                       | 8   | 3.75                          | 1.5       |                               |      | *    | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |      |
| Marigold, African | First Lady                 | orange, gold                           | 16.5                     | 9   | 3.5                           | 1.75      |                               |      |      |      | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Marigold, African | Mumsy Gold                 | yellow                                 | 14                       | 2   | 3.25                          | 1         |                               |      |      |      |      | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Marigold, African | Orange Jubilee             | orange                                 |                          |     |                               |           |                               | *    | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |
| Marigold, African | Simba                      | orange                                 | 21                       | 8.5 | 4.5                           | 1.75      |                               |      | *    | *    | *    | *    | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |

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y: \* indicates just starting to bloom, ☼ indicates 50% bloom, and ☼ indicates full bloom.

|  | Frost tolerance |         | Plant ratings <sup>z</sup> |         |         |         | Recommended for |         |        | Comments  |
|--|-----------------|---------|----------------------------|---------|---------|---------|-----------------|---------|--------|---|
|  |                 |         | Flower                     |         | Foliage | Overall |                 |         |        |   |
|  | foliage         | flowers | quantity                   | quality |         |         | Fragrance       | Cutting | Drying |   |
|  | n               | n       | 4                          | 4       | 4       | 4       | sl              | y       | n      | Very tall spikes with attractive blooms; a real crowd pleaser in the garden; huge blooms; excellent color mix in the garden; All America Selections winner 1939   |
|  | n               | n       | 3                          | 3       | 3       | 3       | n               | n       | n      | Only rose with white centers; no other color; stop blooming in late summer; poor show, very ragged appearance this season   |
|  | n               | n       | 3                          | 3       | 3       | 3       | n               | n       | n      | Huge blooms; clear color; very nice mounds of color; did not fill in well this season   |
|  | n               | n       | 3                          | 3       | 3       | 3       | n               | n       | n      | Medium sized blooms with rich clear color; did not fill in well this summer but flowers were still showy  |
|  | n               | n       | 4                          | 4       | 4       | 4       | n               | n       | n      | Large flowers with clear red color; most showy impatiens this season; needs deadheading late in season  |
|  | n               | n       | 2                          | 2       | 2       | 2       | n               | n       | n      | Poor growth this season; tiny plants, few flowers especially late in season   |
|  | n               | n       | 3                          | 3       | 3       | 3       | n               | n       | n      | Very ornamental star pattern on petals; medium sized blooms; poor growth this summer; did not spread or fill in beds  |
|  | n               | n       | 3                          | 3       | 3       | 3       | n               | n       | n      | Huge blooms, great clear color; poor spread this season   |
|  | n               | n       | 4                          | 4       | 4       | 4       | n               | n       | n      | Huge flowers, nice display early in season but did not fill in well   |
|  | y               | n       | 3                          | 3       | 3       | 3       | y               |         |        | Abundant thistle flowers on tall stems with sharply pointed leaves; very upright stems hold up well; great for background plant   |
|  | n               | n       | 3                          | 3       | 3       | 3       | n               | y       | y      | Chartreuse foliage; nondescript tiny flowers overwhelmed by neighboring plants; not showy in garden beds  |
|  | y               |         |                            |         | 3       | 3       | n               | y       | y      | Tall, green background plant; winter interest with tall, stiff straw-colored stems; outstanding spiky branches; needs a lot of room to spread out   |
|  | n               | n       |                            |         | 4       | 4       |                 |         |        | Recommend for small mixed containers or as edging; small blue-green balls of foliage topped with wheat-like plumes; Ours never bloomed but mounds of spiky foliage are ornamental; great for front edges of borders |
|  | y               | n       | 4                          | 4       | 4       | 4       | n               | n       | n      | Bushy mounding plants covered with tiny stars and finely toothed leaves; excellent mounding cover for middle of beds and containers   |
|  | y               | y       | 3                          | 4       | 4       | 3.5     | n               | y       | n      | Tiny spikes of flowers, not the best lupine for gardens; floppy, show is nice but not outstanding like Russell Hybrids; All America Selections winner 1933  |
|  | n               | n       | 2                          | 2       | 2       | 2       | y               | y       | y      | Big, rounded flower heads with frilly petals; very showy and bright; some deadheading needed late in season; more open habit than other African marigolds   |
|  | n               | n       | 4                          | 4       | 4       | 4       | y               | y       | y      | Nice small, creamy yellow blooms with brighter yellow center; bushy, fills in well; needs deadheading; died out in early September  |
|  | n               | n       | 4                          | 4       | 4       | 4       | y               | n       | n      | Looks like a miniature football mum; gorgeous blooms with recurved petals; holds up well in cold, rainy weather; some deadheading needed  |
|  | n               | n       |                            |         |         |         | n               | y       | y      | Very nice tall marigold with large ball flowers; needs lots of deadheading; All America Selections winner 1968  |
|  | n               | n       | 4                          | 4       | 4       | 4       | y               | y       | y      | Looks like small football mums with incurved wrinkled petals; not as floriferous as other marigolds but unique blooms   |

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|---------------------|------------------------|-----------------------------------|--------------------------|------|-------------------------------|--------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|---|
|                     |                        |                                   | max                      | min  | max                           | min    | Jun                           |      |      |      | Jul  |      |      |      | Aug  |      |      |      | Sep  |      |   |   |
|                     |                        |                                   |                          |      |                               |        | wk 1                          | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 |   |   |
| Marigold, African   | Vanilla                | cream                             | 16                       | 9    | 3.5                           | 1      |                               |      |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ |
| Marigold, French    | Colossus               | gold w/<br>mahogany<br>markings   | 12.5                     | 6    | 3                             | 1.25   | *                             | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | * |
| Marigold, French    | Golden Guardian        | orange-yellow                     | 33                       | 4    | 1.75                          | 1      | *                             | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ |
| Marigold, French    | Naughty Marietta       | gold w/<br>mahogany<br>blotch     | 18                       | 10   | 2.5                           | 1.25   |                               |      | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ |
| Marigold, French**  | Petite Harmony         | gold and<br>mahogany              | 8                        | 2.5  | 1.75                          | .75    | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ |
| Marigold, French    | Queen Sophia           | orange w/<br>mahogany<br>markings | 9                        | 4    | 2.5                           | 1.5    | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | *    |      |      |      |      |   |   |
| Mexican Sunflower** | Goldfinger             | orange, yellow-<br>orange centers | 34.5                     | 15   | 3.25                          | 1      |                               |      |      |      | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ |
| Mexican Sunflower   | Torch                  | orange, light<br>orange centers   | 43.5                     | 15   | 3                             | 1.25   |                               |      |      |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ |
| Mexican Sunflower   | Morning Sun            | yellow w/orange<br>markings       | 61                       | 22.5 | 5                             | 2      |                               |      |      |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |   |
| Morning Glory**     | Grandpa Ott's          | purple                            | 85                       | 40   | 2                             | .5     |                               |      | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | * |
| Morning Glory**     | Milky Way              | white w/purple<br>stripes         | 97                       | 40   | 2.25                          | .75    |                               |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ |
| Mosquito Flower     | Pretty Rose            | rosy pink                         | 19                       | 9    | 2x2.5                         | 1.25x1 | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ |
| Nasturtium**        | Golden Gleam           | gold                              | 12                       | 5    | 3                             | 1.25   |                               |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ |
| Nasturtium**        | Indian Chief           | orange                            | 22                       | 3    | 3                             | 1      |                               |      |      |      | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ |
| Nasturtium**        | King Theodore          | orange                            | 16                       | 4    | 2.75                          | 1.25   |                               |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ |
| Nasturtium**        | Night and Day          | pale yellow,<br>mahogany          | 21                       | 2    | 2.5                           | 1      |                               |      | *    | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ |
| Nasturtium**        | Scarlet Gleam          | orange                            | 20                       | 8    | 2.75                          | 1      |                               |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ |
| Nasturtium**        | St. Clements           | gold                              | 16                       | 5    | 2.25                          | .5     |                               |      | *    | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ |
| Nasturtium**        | Whirlybird<br>Mahogany | burnt orange w/<br>yellow centers | 13                       | 4    | 3                             | 1      |                               |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ |
| Nasturtium, Dwarf** | Ladybird               | gold w/<br>mahogany<br>markings   | 11.2                     | 4    | 2.75                          | 1.25   |                               |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ |

w: If the plant was uniform in height, the height is recorded under max only. \* = plants grown in containers or hanging baskets, limited data was collected on plant height, flower size and flowering dates.

x: If flower size was uniform, size is recorded under max only; sizes with an x (ex.: 12x3) indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.

y: \* indicates just starting to bloom, ⊗ indicates 50% bloom, and ⊗ indicates full bloom.



|  | Frost tolerance |         | Plant ratings <sup>z</sup> |         |         |         | Recommended for |         |        | Comments   |
|--|-----------------|---------|----------------------------|---------|---------|---------|-----------------|---------|--------|--|
|  |                 |         | Flower                     |         | Foliage | Overall | Fragrance       | Cutting | Drying |  |
|  | foliage         | flowers | quantity                   | quality |         |         |                 |         |        |  |
|  | n               | n       | 4                          | 4       | 3       | 4       | y               | y       | y      | Replacement for Sweet Cream; fully double heads; supposed to avoid turning brown longer than Sweet Cream; needs deadheading late in season   |
|  | y               | y       | 3                          | 3       | 3       | 3       | n               | n       | n      | Short mounding plant covered with huge blooms; uneven flower height leads to ragged display, but flowers are gorgeous  |
|  |                 |         | 3                          | 2       | 2       | 2.5     |                 |         |        | Big, bushy, floppy plant; needs lots of space to spread and flop; covered with small light orange blooms all season  |
|  | n               | n       | 4                          | 4       | 4       | 4       | sl              | y       | y      | All America Selections winner 1947; billowy mounds of single-petaled flowers with striking deep mahogany pattern in the centers of the blooms; needs lots of room to expand; one of the best medium height marigolds |
|  | n               | n       | 3                          | 3       | 3       | 3       | sl              | n       | n      | Mounding bushy plant for front of beds; very attractive bicolor flowers; top petals are gold, bottoms are mahogany; needs deadheading  |
|  | n               | n       | 2                          | 2       | 2       | 2       | y               | y       | y      | Superb rich display of deep orange colors, outstanding markings; short mounding plants covered with blooms nearly all summer; All America Selections winner 1979   |
|  |                 |         | 2                          | 2       | 2       | 2       | n               |         |        | Attractive brilliant blooms on hairy stems and leaves; big bushy plants covered with blooms  |
|  | n               | n       | 3                          | 4       | 4       | 4       | sl              | y       | n      | Gorgeous velvety rich flowers; tall, floppy stems need ample room to spread; bushy, open growth; All America Selections winner 1951  |
|  |                 |         | 3                          | 3       | 3       | 3       | n               | n       | n      | Very short tiny flowers; very different from other tithonias; died out early; did not do well in cold, rainy summer  |
|  | n               | n       | 4                          | 4       | 4       | 4       | sl              | n       | n      | Not as vigorous as Milky Way morning glory; very attractive blooms, spotty foliage   |
|  | n               | n       | 4                          | 4       | 4       | 4       | n               | n       | n      | Vigorous, thick vine covered with blooms; very attractive display all summer; grew rapidly and covered the trellis by mid summer   |
|  | n               | n       | 3                          | 3       | 3       | 3       | n               | n       | n      | Bushy plants covered with tiny pink blooms all summer; name mosquito might have something to do with the tiny size and shape of the flowers; excellent accent plant; very productive; no maintenance                 |
|  | n               | n       | 3                          | 3       | 3       | 3       | y               | y       | n      | Large blooms; excellent show; light green foliage; fills in well   |
|  | n               | n       | 4                          | 4       | 4       | 4       | y               | n       | n      | Gorgeous dark green foliage and brilliant orange blooms  |
|  | n               | n       | 3                          | 2       | 2       | 3       | y               | n       | n      | Dark red-orange blooms and dark green foliage; fills in well with lots of blooms above the foliage   |
|  | n               | n       | 3                          | 3       | 3       | 3       | y               | n       | n      | Mix of yellow and mahogany-flowered plants, mostly yellow; yellows are more vigorous   |
|  | n               | n       | 3                          | 3       | 3       | 4       | y               | y       | n      | Huge flowers, excellent spread; very nice show of flowers above the foliage  |
|  | n               | n       | 3                          | 3       | 3       | 3       | n               | y       | n      | Mostly double flowers; yellowish foliage; not many blooms; appears sick late in the season   |
|  | n               | n       | 4                          | 4       | 4       | 4       | y               | n       | n      | Spurless bloom; huge flowers; very attractive color contrasts well with foliage  |
|  | n               | n       | 3                          | 3       | 3       | 3       | y               | n       | n      | Small mounding plant covered with small blooms; very attractive markings   |

z: 0=dead; 1=poor, dead, rotten or not showy; 2= fair, other cultivars of its kind have been better; 3= good, worth growing, nice ornamental; 4= outstanding quality, the best of its kind grown in the garden

**Table 3. Results of tested annual flower cultivars for 2008.**

| Common name         | Cultivar                 | Flower color                                    | Height (in) <sup>w</sup> |      | Flower size (in) <sup>x</sup> |         | Flowering period <sup>y</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |   |
|---------------------|--------------------------|---|--------------------------|------|-------------------------------|---------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|
|                     |                          |   | max                      | min  | max                           | min     | Jun                           |      |      |      | Jul  |      |      |      | Aug  |      |      |      | Sep  |      |   |
|                     |                          |   |                          |      |                               |         | wk 1                          | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 |   |
| Nasturtium, Dwarf** | Princess of India        | dark orange                                     | 12                       | 3    | 2                             | .5      |                               |      |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | *    |      |      |   |
| Nemesia             | Poetry White             | white w/yellow lip                              | 18                       | 2.5  | 2.25                          | .75     | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| Nicotiana           | Aztec Sweet Scent        | white   | 38                       | 16   | 4.5x5                         | 2.5x2.5 | *                             | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| Nicotiana           | Green Tears              | green   | 84                       | 20   | 26x6                          | 4x1.25  |                               |      |      |      | *    | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| Nicotiana           | Perfect Mix              | white, rose, pink                               | 49.5                     | 9    | 7x10.5                        | 1.5x5.5 |                               |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| Nicotiana, Garden   | Nicki Red                | red   | 26                       | 11   | 6x8                           | 5x5     |                               |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| Nicotiana, Hybrid   | Tinkerbelle              | dusky rose/green                                | 56.5                     | 15   | 7x3                           | 2x3     |                               |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| Nierembergia        | Purple Robe              | lavender  | 12                       | 1.2  | 1.25                          | .5      |                               |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| Nierembergia        | Robe Mixed               | lavender, white                                 | 14.25                    | 3    | .5                            | .25     |                               |      | *    | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |      |   |
| Nierembergia        | White Robe               | white   | 12                       | 2    | 1.125                         | .5      | *                             | *    | *    | *    | *    | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | * |
| Nolana              | Sun Belle Mixed Colors   | blue  | 11                       | 1    | .5                            | .5      | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| Osteospermum*       | Asti White               | white on top, lavender beneath, blue centers    | 16                       | 13.5 | 2.5                           | 1       | *                             | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| Oxypetalum          | Heavenborn               | blue  | 14                       | 8    | 2.5                           | .5      |                               |      |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | * |
| Pansy               | Atlas Needlepoint Mix    | lavender, cream, yellow w/yellow or purple face | 11.5                     | 4.5  | 2.25                          | .5      | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| Pansy               | Fizzy Lemonberry         | yellow w/purple face                            | 14.5                     | 5    | 2.25                          | 1       | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| Pansy               | Flambe Terracotta Shades | Rose, yellow, cream, peach                      | 13.5                     | 4    | 2.25                          | 1.5     | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |
| Pansy               | Flirty Skirts Burgundy   | burgundy, purple, lavender                      | 13                       | 5    | 1.75                          | 1       | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ |

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y: \* indicates just starting to bloom, ⊗ indicates 50% bloom, and ⊕ indicates full bloom.

|  | Frost tolerance |         | Plant ratings <sup>z</sup> |         |         |         | Recommended for |         |        | Comments  |
|--|-----------------|---------|----------------------------|---------|---------|---------|-----------------|---------|--------|---|
|  |                 |         | Flower                     |         | Foliage | Overall |                 |         |        |   |
|  | foliage         | flowers | quantity                   | quality |         |         | Fragrance       | Cutting | Drying |   |
|  | n               | n       | 1                          | 1       | 1       | 1       | y               | y       | n      | Tiny foliage, smaller mounded plants than other nasturtiums; abundant flowers, showy; needs closer spacing to fill in well  |
|  | y               | y       | 3                          | 3       | 3       | 3       | n               | n       | n      | Bushy plants covered with tiny white blooms; excellent for garden borders and mixed containers; attractive display in mass plantings nearly all season; some die out in mid August  |
|  | n               | n       | 3                          | 3       | 3       | 3       | y               | n       | n      | Outstanding, large-flowered clear white, trumpet shaped blooms; flowers are fragrant up close   |
|  | n               | n       | 4                          | 4       | 4       | 4       | y               | n       | n      | Tall, upright, bushy plant with green blooms; not very showy but okay as background plant where a big filler is needed; smells bad  |
|  | n               | n       | 3                          | 3       | 3       | 3       | y               | y       | n      | Bushy plant with floppy stems, needs room to spread; great show through most of season; old flowers are ugly; needs significant deadheading   |
|  | n               | n       | 4                          | 4       | 4       | 4       | y               | y       | n      | Outstanding solid mass of color nearly all season; amazing display of same-height blooms; no maintenance required; a visitor favorite; All America Selections winner 1979   |
|  | n               | n       | 4                          | 4       | 4       | 4       | sl              | y       | n      | Tiny clusters of trumpet-shaped flowers with green outer petals and rosy pink insides and bright blue stamens; very unusual color combination; loaded with blooms on tall, airy stalks; visitors either liked them very much or hated them; attracts bees |
|  | n               | n       | 2                          | 2       | 2       | 2       | n               | n       | n      | Short bushy flowers covered with blooms nearly all summer; a bit sparse late in season; fills in well and provides a great show for the edges of borders; a few dead plants in mid August; All America Selections winner 1942                             |
|  | n               | n       | 2                          | 2       | 2       | 2       | sl              | n       | n      | Small mounds loaded with blooms for most of the summer; some plants dry up in mid August; excellent edging for front of borders   |
|  | y               | y       | 2                          | 2       | 2       | 2       | n               | n       | n      | Compact bushy plants choked with blooms; very ornamental display early in season but needs deadheading to maintain blooms; some plants dried up in late season  |
|  | y               | y       | 3                          | 3       | 3       | 3       | n               | n       | n      | Attractive blue flowers made a great ground cover this season; looks like morning glories on top of thick, fuzzy leaves   |
|  | y               | n       | 4                          | 4       | 4       | 4       | n               | y       | y      | The first white color single flower color osteospermum from seed; thick fleshy foliage; All America Selections Bedding Plant Award Winner 2008; very attractive blooms nearly all summer; visitor favorite  |
|  | y               | y       | 3                          | 4       | 4       | 3.5     | y               |         |        | Tiny star shaped flowers on upright spikes; nice true blue flowers, fuzzy leaves and interesting milkweed-shaped seed pods; needs mass planting to show off the tiny flowers  |
|  | y               | y       | 2                          | 2       | 2       | 2       | sl              | n       | n      | Outstanding mix of lightly ruffled petals with two- and three-toned flowers, many edged in dark lavender; great mounds held up well all summer  |
|  | y               | y       | 4                          | 4       | 4       | 4       | n               | n       | n      | Small blooms with ruffled edges; very ornamental purple faces with purple markings; jammed with flowers all summer; no maintenance  |
|  | y               | y       | 2                          | 2       | 2       | 2       | y               | n       | n      | Nice mounding plants loaded with blooms all summer; fills in well; slightly ruffled blooms; great color mix   |
|  | y               | n       | 4                          | 4       | 4       | 4       | sl              | n       | n      | Excellent, abundant small flowers with ruffled edges; beautiful range of purples from lavender to deep velvety burgundy; very attractive  |

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**Table 3. Results of tested annual flower cultivars for 2008.**

| Common name | Cultivar                   | Flower color   | Height (in) <sup>w</sup> |     | Flower size (in) <sup>x</sup> |      | Flowering period <sup>y</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |   |
|-------------|----------------------------|--|--------------------------|-----|-------------------------------|------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|
|             |                            |  | max                      | min | max                           | min  | Jun                           |      |      |      | Jul  |      |      |      | Aug  |      |      |      | Sep  |      |   |
|             |                            |  |                          |     |                               |      | wk 1                          | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 |   |
|             |                            |  |                          |     |                               |      |                               |      |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Pansy       | Fraidy Cat                 | light blue and black   | 12                       | 2   | 2.75                          | .5   | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Pansy       | Frizzle Sizzle Blue        | lavender w/deep purple face  | 11                       | 4   | 2                             | 1.25 | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Pansy       | Frizzle Sizzle Formula Mix | yellow, rose, purple, cream w/ mahogany face                                   | 13.5                     | 3   | 2                             | .25  | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Pansy       | Frizzle Sizzle Yellow      | yellow w/ mahogany face, lavender highlights                                   | 10                       | 4   | 1.75                          | 1    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Pansy       | Frosty Rain                | lavender and cream   | 14.5                     | 2   | 1.75                          | 1    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Pansy       | Jolly Joker                | orange w/deep purple wings   | 15.5                     | 2.5 | 2.25                          | 1    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Pansy       | Majestic Giants Mix        | lavender, purple, red/yellow bicolor, rose, scarlet, white, yellow w/dark face | 14.5                     | 5   | 3                             | .5   | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Pansy       | Matrix Blue Frost          | lavender or purple w/purple face   | 14.5                     | 5   | 2.5                           | 1.25 | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Pansy       | Matrix Deep Blue Blotch    | deep lavender  | 14.5                     | 6   | 2.75                          | 1    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Pansy       | Matrix Ocean               | lavender w/deep purple face  | 13                       | 5   | 3                             | 1    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Pansy       | Matrix Red Blotch          | deep red w/ mahogany face  | 15.5                     | 4   | 2.5                           | .75  | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Pansy       | Matrix Rose                | rose   | 12                       | 4   | 2                             | 1    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Pansy       | Matrix Rose Blotch         | rose w/maroon face   | 4                        | 1.5 | 2.5                           | 1    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Pansy       | Matrix Rose Wing           | rose, cream, yellow  | 12                       | 4   | 2.5                           | 1    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Pansy       | Matrix White Blotch        | white w/maroon face  | 10                       | 7   | 2.75                          | 1.25 | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Pansy       | Matrix Yellow              | clear yellow and orange-yellow bicolor   | 13                       | 4   | 2.75                          | 1    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |

w: If the plant was uniform in height, the height is recorded under max only. \* = plants grown in containers or hanging baskets, limited data was collected on plant height, flower size and flowering dates.

x: If flower size was uniform, size is recorded under max only; sizes with an x (ex.: 12x3) indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.

y: ☼ indicates just starting to bloom, ☼ indicates 50% bloom, and ☼ indicates full bloom.

|  | Frost tolerance |         | Plant ratings <sup>z</sup> |         |         |         | Recommended for |         |        | Comments  |
|--|-----------------|---------|----------------------------|---------|---------|---------|-----------------|---------|--------|---|
|  |                 |         | Flower                     |         | Foliage | Overall |                 |         |        |   |
|  | foliage         | flowers | quantity                   | quality |         |         | Fragrance       | Cutting | Drying |   |
|  | y               | y       | 3                          | 3       | 3       | 3       | y               | y       | y      | Nice individual plants but color mix is very unattractive; too much contrast between nearly black and light colors; appearance in mix is blotchy                          |
|  | y               | y       | 4                          | 4       | 4       | 4       | y               | y       | y      | Ruffled petals; very ornamental mounds with shades of lavender and deep purple; rich colors; medium sized flowers but lots of them; fills in well and holds up all season |
|  | y               | y       | 4                          | 4       | 4       | 4       | sl              | y       | y      | Ruffled petals; small plants don't fill in as well as other pansies; need closer spacing; nice mix of colors.   |
|  | y               | y       | 2                          | 2       | 2       | 2       | n               | y       | y      | Old fashioned ruffled petals; fills in well, better than Chalon Mix; needs deadheading late in season; small flower size  |
|  | y               | y       | 4                          | 4       | 4       | 4       | n               | y       | y      | Outstanding mounds of solid cream and cream/lavender bicolors; excellent blooms all summer; mounds grow all summer and overrun neighbors                                  |
|  | y               | y       | 3                          | 3       | 3       | 3       | y               | y       | y      | Nice mounding plant covered with blooms; variation in flower color from pale orange to deep orange with purple highlights; All America Selections winner 1990             |
|  | y               | y       | 3                          | 3       | 3       | 3       | n               | y       | y      | All America Selections winner 1966; large flowers with contrasting dark face; very attractive display all season; needs some deadheading late in the season               |
|  | y               | y       | 2                          | 2       | 2       | 2       | n               | y       | y      | Advertised as cream with lavender face but most flowers lavender and purple with purple face; nice large flowers; abundant blooms; little maintenance                     |
|  | y               | y       | 3                          | 3       | 3       | 3       | sl              | y       | y      | Tiny flowers but abundant; attractive solid color on mounding plants; excellent display all season; needs some deadheading  |
|  | y               | y       | 4                          | 4       | 4       | 4       | sl              | y       | y      | Advertised as all lavender but had several cream flowers with purple face; nice sized blooms cover the plants well; very attractive; needs deadheading                    |
|  | y               | y       | 4                          | 4       | 4       | 4       | sl              | y       | y      | Very nice, uniform color; rich, dark blooms cover the small mounding plants; needs close spacing for best results   |
|  | y               | y       | 4                          | 4       | 4       | 4       | sl              | n       | n      | Outstanding clear rose blooms with slightly different shades in each plant; brilliant yellow centers are great accent; bushy plants bloom reliably all summer             |
|  | y               | y       | 2                          | 2       | 2       | 2       | n               | y       | y      | Outstanding bicolor combination of light and dark velvety rose; Abundant blooms this season lasted well in to fall  |
|  | y               | y       | 2                          | 2       | 2       | 2       | sl              | n       | n      | Large flowers in mix of cream, rose or yellow with deep rose face; ragged appearance late in season; not as bushy as some pansies   |
|  | y               | y       | 2                          | 2       | 2       | 2       | n               | y       | y      | Short, upright plant covered with beautiful white blooms; very attractive mounds of color all season  |
|  | y               | y       | 3                          | 3       | 3       | 3       | n               | y       | y      | Huge, brilliant clear colors; fills in well; covered with flowers all season, huge mounds of color  |

z: 0=dead; 1=poor, dead, rotten or not showy; 2= fair, other cultivars of its kind have been better; 3= good, worth growing, nice ornamental; 4= outstanding quality, the best of its kind grown in the garden

**Table 3. Results of tested annual flower cultivars for 2008.**

| Common name | Cultivar                   | Flower color                                       | Height (in) <sup>w</sup> |      | Flower size (in) <sup>x</sup> |      | Flowering period <sup>y</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |   |
|-------------|----------------------------|--|--------------------------|------|-------------------------------|------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|
|             |                            |  | max                      | min  | max                           | min  | Jun                           |      |      |      | Jul  |      |      |      | Aug  |      |      |      | Sep  |      |   |
|             |                            |  |                          |      |                               |      | wk 1                          | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 |   |
| Pansy       | Panola® Rose Picotee       | rose, yellow, burnt orange w/rose or mahogany face | 13                       | 4    | 2                             | 1    | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿ |
| Pansy       | Promise® Antique Shades    | rose, yellow bicolors w/purple face                | 14.5                     | 6    | 2                             | 1    | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿ |
| Pansy       | Promise® Beaconsfield      | cream and deep bluish purple                       | 11.5                     | 2.5  | 2.75                          | .75  | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿ |
| Pansy       | Promise® Blue/Blotch       | deep lavender w/purple face                        | 17                       | 2.75 | 2.75                          | 1    | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿ |
| Pansy       | Promise® Deep Orange       | orange   | 14.5                     | 4    | 2.25                          | 1    | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿ |
| Pansy       | Promise® Lemon Splash      | yellow w/orange-yellow face                        | 12                       | 3    | 2.75                          | .75  | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿ |
| Pansy       | Promise® Marina            | lavender w/white-edged deep purple face            | 16                       | 3    | 2                             | .75  | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿ |
| Pansy       | Promise® Primrose/Blotch   | yellow w/mahogany face                             | 17                       | 3    | 2.75                          | 1.25 | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿ |
| Pansy       | Promise® Pure Lilac Shades | lavender w/dark lavender face                      | 16                       | 3    | 3                             | .5   | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿ |
| Pansy       | Promise® Pure Silver Azure | clear lavender                                     | 14                       | 4    | 2.75                          | 1    | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿ |
| Pansy       | Promise® Pure Yellow       | yellow or gold w/mahogany face                     | 11                       | 1    | 2.25                          | .5   | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿ |
| Pansy       | Promise® Red/Blotch        | dark red w/mahogany face, yellow center            | 7                        | 2    | 2.25                          | 1    | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿ |
| Pansy       | Promise® Rose Shades       | rose w/maroon face                                 | 16                       | 4    | 3.5                           | .5   | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿ |
| Pansy       | Promise® True Blue         | bluish lavender                                    | 13                       | 5    | 2.75                          | .5   | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿ |
| Pansy       | Promise® White/Blotch      | white w/purple face                                | 11.5                     | 3    | 2.5                           | .75  | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿ |
| Pansy       | Promise® Yellow Blotch     | yellow, mahogany face                              | 15                       | 2    | 2.5                           | 1    | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿ |
| Pansy       | Promise® Yellow Blotch     | yellow, mahogany face                              | 14.5                     | 2    | 2.5                           | 1    | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿ |

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w: If the plant was uniform in height, the height is recorded under max only. \* = plants grown in containers or hanging baskets, limited data was collected on plant height, flower size and flowering dates.

x: If flower size was uniform, size is recorded under max only; sizes with an x (ex.: 12x3) indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.

y: ✿ indicates just starting to bloom, ✿ indicates 50% bloom, and ✿ indicates full bloom.

|  | Frost tolerance |         | Plant ratings <sup>z</sup> |         |         |         | Recommended for |         |        | Comments   |
|--|-----------------|---------|----------------------------|---------|---------|---------|-----------------|---------|--------|--|
|  |                 |         | Flower                     |         | Foliage | Overall |                 |         |        |  |
|  | foliage         | flowers | quantity                   | quality |         |         | Fragrance       | Cutting | Drying |  |
|  | y               | y       | 3                          | 3       | 3       | 3       | n               | y       | y      | Short, bushy growth covered with blooms all summer; attractive display and no maintenance needed; some blooms with a lot of orange rather than rose, not attractive mix    |
|  | y               | y       | 2                          | 2       | 2       | 2       | sl              | y       | y      | Ragged appearance; needs a lot of deadheading for best results; different colors have different heights leading to ragged appearance                                       |
|  | y               | y       | 4                          | 4       | 4       | 4       | y               | y       | y      | Interesting bicolor flowers with cream on top and deep bluish purple on bottom; lots of scarring on petals from cold, wet weather  |
|  | y               | y       | 2                          | 2       | 2       | 2       | y               | y       | y      | Very nice contrasting shades of purple with deep purple face; abundant mounding plants; excellent color all season   |
|  | y               | y       | 3                          | 3       | 3       | 3       | sl              | y       | y      | Very nice solid color pansy with mounds of color nearly all season; needs deadheading for best results; not the biggest orange-flowered pansy, but does well in containers |
|  | y               | y       | 3                          | 3       | 3       | 3       | sl              | y       | y      | Mostly pale yellow but some plants brilliant gold; nice carpet of flowers nearly all summer; needs deadheading in late summer  |
|  | y               | y       | 2                          | 2       | 2       | 2       | n               | y       | y      | Very nice compact growth that fills in the bed early; flowers are ragged; ugly in cool wet weather; needs more deadheading than other pansies                              |
|  | y               | y       | 3                          | 3       | 3       | 3       | sl              | y       | y      | Very nice yellow color; uniform plants; not as floriferous as other pansies; excellent contrasting colors; mounds of color all season                                      |
|  | y               | y       | 4                          | 4       | 4       | 4       | n               | y       | y      | Beautiful assortment of lavender shades; large and abundant flowers; very attractive overall display; beautiful purple whiskers on most flowers                            |
|  | y               | y       | 3                          | 3       | 3       | 3       | sl              | y       | y      | Large flowers, may be hardy in some areas; outstanding mounds of flowers with solid single color; very ornamental  |
|  | y               | y       | 2                          | 2       | 2       | 2       | n               | y       | y      | Great mounds of color nearly all season; brilliant yellow contrasts well with dark centers; fills in well; very little maintenance needed                                  |
|  | y               | y       | 1                          | 1       | 1       | 1       | n               | y       | y      | Rich red velvety color; small plants need closer spacing to fill in well; very nice uniform color and size of plants   |
|  | y               | y       | 3                          | 3       | 3       | 3       | y               | y       | y      | Excellent contrasting color; fills in well; very ornamental; no deadheading needed   |
|  | y               | y       | 3                          | 3       | 3       | 3       | n               | y       | y      | Uniform large blooms with the bluest color of all the mixes; abundant blooms; fills in well; lots of deadheading needed late in season                                     |
|  | y               | y       | 3                          | 2       | 3       | 3       | y               | y       | y      | Excellent blooms in bushy mounds all summer; beautiful white blooms with contrasting purple faces; some deadheading needed   |
|  | y               | y       | 3                          | 2.5     | 2       | 2       | n               | y       | y      | Very nice clear face with striking mahogany face; brilliant show with mounds of flowers; best of the yellow/face pansies this year   |
|  | y               | y       | 3                          | 3       | 3       | 3       | n               | y       | y      | Very nice clear face with striking mahogany face; brilliant show with mounds of flowers; best of the yellow/face pansies this year   |

z: 0=dead; 1=poor, dead, rotten or not showy; 2= fair, other cultivars of its kind have been better; 3= good, worth growing, nice ornamental; 4= outstanding quality, the best of its kind grown in the garden

**Table 3. Results of tested annual flower cultivars for 2008.**

| Common name        | Cultivar                        | Flower color                                       | Height (in) <sup>w</sup> |     | Flower size (in) <sup>x</sup> |      | Flowering period <sup>y</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |   |
|--------------------|---------------------------------|--|--------------------------|-----|-------------------------------|------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|
|                    |                                 |  | max                      | min | max                           | min  | Jun                           |      |      |      | Jul  |      |      |      | Aug  |      |      |      | Sep  |      |   |
|                    |                                 |  |                          |     |                               |      | wk 1                          | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 |   |
| Pansy              | Promise® Yellow/<br>Purple Wing | yellow w/<br>mahogany wing<br>and face             | 12                       | 2   | 2.25                          | 1    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Pansy              | Promise® Yellow/<br>Red Wing    | yellow w/<br>mahogany wings<br>and face            | 13                       | 3   | 2.75                          | .75  | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Pansy              | Whiskers Light Blue             | pale lavender,<br>cream face w/<br>dark "whiskers" | 12                       | 3   | 2.5                           | .5   | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Pansy              | XXL Golden Yellow               | yellow w/gold<br>highlights                        | 15                       | 5   | 2.75                          | .75  | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Penstemon          | Esprit Mix                      | pink, rose, red w/<br>white throats                | 28                       | 7   | 3x9                           | 3x4  | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ |
| Penstemon          | True Blue                       | blue   |                          |     |                               |      |                               |      |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Pepper, Ornamental | Black Pearl                     | black foliage<br>and fruit                         | 15                       | 13  | 0.06                          | 0.06 |                               |      |      |      |      |      |      |      |      | ☼    | ☼    | ☼    | ☼    | ☼    |   |
| Pepper, Ornamental | Calico                          | purple/lavender<br>bicolor                         | 13                       | 9   | 0                             | 0    |                               |      |      |      |      |      | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |   |
| Pepper, Ornamental | Chilly Chili                    | white  | 9.5                      | 8.5 | 1.5                           | 1    |                               |      | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |   |
| Pepper, Ornamental | Garda Tricolore                 | cream, orange,<br>red fruit                        | 15                       | 9   |                               |      |                               |      | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |   |
| Pepper, Ornamental | Peppa Blanca/<br>Rosu           | cream, rose fruit                                  | 6.5                      | 4.5 |                               |      |                               |      | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |   |
| Pepper, Ornamental | Peppa Lila/<br>Naranja          | white  | 8.5                      | 6   | 1                             | .5   |                               |      | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |   |
| Pepper, Ornamental | Peppa Orangina                  | orange fruit                                       | 11                       | 4   |                               |      |                               |      | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |   |
| Pepper, Ornamental | Purple Flash                    | lavender   | 10                       | 4.5 | 0                             | 0    |                               |      |      |      | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |      |      |      |      |   |
| Petunia*           | Alderman                        | purple   | 14                       | 4.5 | 2                             | 1    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |   |
| Petunia*           | Baby Duck Yellow                | soft yellow  | 14                       | 7   | 2                             | 1    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |   |
| Petunia            | Baby Duck Yellow                | soft yellow  |                          |     |                               |      | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |      |      |      |   |
| Petunia            | Carpet Pink<br>Improved         | pink   |                          |     |                               |      | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |      |      |      |   |
| Petunia*           | Carpet Pink Morn                | pink w/creamy<br>throat                            | 10                       | 6   | 2.5                           | 1.75 | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |   |

w: If the plant was uniform in height, the height is recorded under max only. \* = plants grown in containers or hanging baskets, limited data was collected on plant height, flower size and flowering dates.

x: If flower size was uniform, size is recorded under max only; sizes with an x (ex.: 12x3) indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.

y: ☼ indicates just starting to bloom, ☼ indicates 50% bloom, and ☼ indicates full bloom.



|  | Frost tolerance |         | Plant ratings <sup>z</sup> |         |         |         | Recommended for |         |        | Comments  |
|--|-----------------|---------|----------------------------|---------|---------|---------|-----------------|---------|--------|---|
|  |                 |         | Flower                     |         | Foliage | Overall |                 |         |        |   |
|  | foliage         | flowers | quantity                   | quality |         |         | Fragrance       | Cutting | Drying |   |
|  | y               | y       | 2                          | 2       | 2       | 2       | n               | y       | y      | Unusual combination of colors was either liked or hated by visitors; hard to combine with other flowers   |
|  | y               | y       | 4                          | 3       | 3       | 3       | sl              | y       | y      | Bright yellow contrasts well with mahogany face; fills in well and covered with blooms; interesting mahogany highlights   |
|  | y               | y       | 3                          | 3       | 3       | 3       | sl              | y       | y      | Beautiful flowers appear to be painted with dark whiskers; nice mounding plant; very attractive blooms; needs deadheading late in season  |
|  | y               | y       | 3                          | 3       | 3       | 3       | y               | y       | y      | Medium sized mounding plants covered with solid color blooms; very attractive; needs deadheading in late season especially in wet weather; petals prone to spotting and discoloration |
|  | y               | n       | 2.5                        | 3       | 3       | 3       | sl              | y       | n      | Outstanding spikes of large, showy flowers; similar display to foxgloves but shorter; excellent mix of colors; best display from mid season onward                                    |
|  |                 |         |                            |         |         |         |                 |         |        | Died at planting  |
|  | n               | n       | 2                          | 2       | 3       | 2       | n               | n       | y      | Nearly black purplish leaves, very few small, shiny black peppers this season; ripe fruits are red; very ornamental, great in raised beds and in the garden; bushy, fills in well     |
|  | n               | n       | 2                          | 2       | 2       | 2       | n               | n       | n      | Very ornamental two-toned blooms in giant mounds covering the plant all season; top petals are purple, bottom are lavender  |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | n       | fruit  | Medium sized bushy plants with green leaves and very few pointed yellow fruit this year; better in containers   |
|  | y               | n       | 1                          | 1       | 1       | 1       | n               | y       | n      | Bloomed in late August; no fruit; bushy but not ornamental  |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | n       | y      | Poor growth this season in ground beds; lots of dead plants   |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | n       | fruit  | Poor growth this season; did not fill in well; very few flowers and fruit   |
|  | n               | n       | 2                          | 2       | 2       | 2       | n               | n       | fruit  | Upright tree-like plant covered with tiny blooms and round berry-like fruit; fruit did not ripen this season, and flowering was very late; no ornamental appeal this season           |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | n       | n      | Deep purple foliage; not as bushy or ornamental as Black Pearl; no fruit this summer; many dead plants by late summer   |
|  | n               | n       | 4                          | 4       | 4       | 4       | y               | n       | n      | Beautiful velvety blooms, but sparse and leggy in containers; nice contrast to pink petunias  |
|  | y               | n       | 3                          | 3       | 3       | 3       | y               | n       | n      | Small, trumpet-shaped blooms; slightly upright spreading habit; excellent filler for containers with mounds of blooms all summer  |
|  | y               | n       | 1                          | 1       | 1       | 1       | y               | n       | n      | Small, trumpet-shaped blooms; slightly upright spreading habit; killed by mid August by Sclerotinia   |
|  | y               | n       | 1                          | 1       | 1       | 1       | y               | n       | n      | Compact shape; mid-sized blooms; excellent branching; severe Sclerotinia rot in mid August  |
|  | y               | n       | 2                          | 2       | 2       | 2       | y               | n       | n      | Large flowers, bushy plant, grows well in containers; attractive bi-color flowers   |

z: 0=dead; 1=poor, dead, rotten or not showy; 2= fair, other cultivars of its kind have been better; 3= good, worth growing, nice ornamental; 4= outstanding quality, the best of its kind grown in the garden

**Table 3. Results of tested annual flower cultivars for 2008.**

| Common name | Cultivar                        | Flower color                              | Height (in) <sup>w</sup> |      | Flower size (in) <sup>x</sup> |      | Flowering period <sup>y</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
|-------------|---------------------------------|---|--------------------------|------|-------------------------------|------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
|             |                                 |   | max                      | min  | max                           | min  | Jun                           |      |      |      | Jul  |      |      |      | Aug  |      |      |      | Sep  |      |  |
|             |                                 |   |                          |      |                               |      | wk 1                          | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 |  |
| Petunia*    | Dreams Fuchsia                  | hot pink w/yellow throat                  | 19.5                     | 4    | 2.25                          | 1.25 | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |      |  |
| Petunia     | Dreams Rose Morn                | rose w/white centers and yellow throat    |                          |      |                               |      | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |      |  |
| Petunia*    | Easy Wave® Mix Pink Marble      | pink                                      | 15.5                     | 6    | 5                             | 1.5  | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |      |  |
| Petunia     | Easy Wave™ Coral Reef           | salmon pink                               |                          |      |                               |      | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |      |  |
| Petunia*    | Fantasy Pink Morn               | pink w/ cream center                      | 17                       | 12   | 3.75                          | 2    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |      |  |
| Petunia*    | Lambada Salmon Veined F1 Hybrid | salmon pink, dark pink veins              | 13                       | 9    | 3                             | 2.5  | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |      |  |
| Petunia     | Lambada Salmon Veined F1 Hybrid | salmon pink, dark pink veins              |                          |      |                               |      | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |      |  |
| Petunia     | Madness Plum Crazy Improved     | light purple, dark purple throat          |                          |      |                               |      | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |      |  |
| Petunia*    | Madness Red Improved            | deep red                                  | 21                       | 8    | 3                             | 2    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |  |
| Petunia     | Madness Red Improved            | deep red                                  |                          |      |                               |      | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |      |  |
| Petunia*    | Madness Red Picotee             | deep red w/ white edges                   | 14                       | 10   | 3                             | 2    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |  |
| Petunia*    | Madness Yellow                  | creamy yellow                             | 12                       | 9    | 2.5                           | .5   | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |  |
| Petunia     | Madness Yellow                  | creamy yellow                             |                          |      |                               |      | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |      |  |
| Petunia     | Madness Yellow                  | creamy yellow                             | 16                       | 6.5  | 2.25                          | 1    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |  |
| Petunia     | Opera Supreme Pink Morn         | pink w/cream throat                       | 16                       | 9    | 2                             | 1.25 | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |  |
| Petunia     | Prism Sunshine                  | light yellow                              | 17.5                     | 12   | 2.5                           | 1    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |  |
| Petunia     | Prism Sunshine                  | light yellow                              |                          |      |                               |      | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |  |
| Petunia     | Shock Wave Ivory                | cream w/soft yellow throat                | 12                       | 7.75 | 2.25                          | 1.25 | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |  |
| Petunia     | Shock Wave Ivory                | cream w/soft yellow throat                |                          |      |                               |      | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |  |
| Petunia     | Shock Wave Pink Vein            | light pink w/violet rose throat and veins | 9.5                      | 4    | 2.75                          | 1    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    |  |

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y: \* indicates just starting to bloom, ☼ indicates 50% bloom, and ☼ indicates full bloom.

|  | Frost tolerance |         | Plant ratings <sup>z</sup> |         |         |         | Recommended for |         |        | Comments  |
|--|-----------------|---------|----------------------------|---------|---------|---------|-----------------|---------|--------|---|
|  |                 |         | Flower                     |         | Foliage | Overall |                 |         |        |   |
|  | foliage         | flowers | quantity                   | quality |         |         | Fragrance       | Cutting | Drying |   |
|  |                 |         | 4                          | 4       | 4       | 4       | y               | n       | n      | Very large blooms in containers; showy display all summer; fills in well and complements other container plants   |
|  | y               | n       | 1                          | 1       | 1       | 1       |                 | n       | n      | Tightly branched, free-flowering; very nice bicolor early in season, killed by Sclerotinia in mid August  |
|  |                 |         | 4                          | 4       | 4       | 4       | y               | n       | n      | Small flowers but abundant; forms mounds of color that work well with other container plants; nice two-toned colors   |
|  | y               | y       | 1                          | 1       | 1       | 1       | sl              | n       | n      | Solid coral color with lighter pink throat; fair growth in containers; not as full and floriferous as other petunias, ragged appearance late in the season; needs deadheading |
|  | y               | n       | 4                          | 3       | 3       | 3       | y               | n       | n      | Out competed by other petunias and geraniums; not vigorous or showy   |
|  |                 |         | 2                          | 2       | 3       | 3       | y               | n       | n      | Better in containers than in ground beds, but not the most floriferous; other peonies fill containers better  |
|  |                 |         | 1                          | 1       | 1       | 1       |                 |         |        | Interesting two-toned blooms with attractive dark veins and throat  |
|  |                 |         | 1                          | 1       | 1       | 1       |                 |         |        | Outstanding flower color with light purple edges and deep purple throat; susceptible to Sclerotinia rot late in the season  |
|  | y               | n       | 2                          | 3       | 2       | 2       | sl              | n       | n      | Nice deep red, rich color; great show early, but died in mid August by Sclerotinia  |
|  | y               | n       | 1                          | 1       | 1       | 1       | sl              | n       | n      | Nice deep red, rich color; great show early, but died in mid August by Sclerotinia  |
|  | y               | n       | 3                          | 3       | 2       | 3       | sl              | n       | n      | Very attractive white-edged blooms with clear red throat; fills in well in containers; attractive display   |
|  | n               | n       | 4                          | 4       | 4       | 4       | y               |         |        | Nice two-toned yellow flowers but overwhelmed by wave petunias; very attractive blooms  |
|  |                 |         | 1                          | 1       | 1       | 1       |                 |         |        | Beautiful creamy yellow blooms fill in well in containers; nice complement to other container plants  |
|  |                 |         | 4                          | 3       | 3       | 3       | y               | n       | n      | Nice light color; blooms well in beginning of season but declines slowly with Sclerotinia rot;  |
|  | y               | y       | 3                          | 2       | 2       | 2       | y               | n       | n      | Low-growing carpet that spreads and fills in nicely with medium sized trumpet flowers; dead in late July from Sclerotinia rot   |
|  | y               | y       | 4                          | 4       | 4       | 4       | y               | n       | n      | Some creamy yellow blooms early in season but overwhelmed by other container plants; not much of a show this season; All America Selections winner 1998                       |
|  | y               | y       | 1                          | 1       | 1       | 1       | y               | n       | n      | Excellent display of creamy yellow blooms; huge flowers; All America Selections winner 1998   |
|  | n               | n       | 4                          | 4       | 4       | 4       | y               | n       | n      | Mounded spreading plants; tiny flowers; nice mounding filler for containers   |
|  | n               | n       | 1                          | 1       | 1       | 1       | y               | n       | n      | Mounded spreading plants; tiny flowers; nice complement to other larger-flowered petunias   |
|  | y               | n       | 3                          | 3       | 3       | 3       | sl              | n       | n      | Recommended for containers; mounded spreading plants; small flowered plants; killed by Sclerotinia in mid August  |

z: 0=dead; 1=poor, dead, rotten or not showy; 2= fair, other cultivars of its kind have been better; 3= good, worth growing, nice ornamental; 4= outstanding quality, the best of its kind grown in the garden

**Table 3. Results of tested annual flower cultivars for 2008.**

| Common name           | Cultivar             | Flower color                              | Height (in) <sup>w</sup> |     | Flower size (in) <sup>x</sup> |        | Flowering period <sup>y</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
|-----------------------|----------------------|---|--------------------------|-----|-------------------------------|--------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
|                       |                      |   | max                      | min | max                           | min    | Jun                           |      |      |      | Jul  |      |      |      | Aug  |      |      |      | Sep  |      |  |
|                       |                      |   |                          |     |                               |        | wk 1                          | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 |  |
| Petunia               | Shock Wave Pink Vein | light pink w/violet rose throat and veins |                          |     |                               |        | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    |      |  |
| Petunia               | Shock Wave Purple    | deep pink                                 | 12                       | 4   | 2.25                          | 1      | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    |      |  |
| Petunia               | Shock Wave Rose      | rose w/white throat                       | 17.5                     | 4   | 2                             | 1      | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    |      |  |
| Phlox, Annual         | Promise® Scarlet     | scarlet                                   |                          |     |                               |        |                               |      | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    |      |      |      |      |  |
| Plume Thistle         | Pink & Rose Beauty   | white, rose, pink                         | 51                       | 26  | 1.25                          | .5     |                               |      |      |      |      |      |      |      | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    |  |
| Portulaca             | Margarita Coral      | light orange                              | 4                        | 1   | .75                           | .25    |                               |      | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    |  |
| Pumpkin on a Stick**  |                      |   | 21                       | 13  |                               |        |                               |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| Rudbeckia             | Goldsturm            | yellow w/ chocolate centers               |                          |     |                               |        |                               |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| Salvia, Scarlet       | Red Hot Sally II     | red                                       | 9.5                      | 4   | 3.5x4.5                       | 1x2    | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    |  |
| Salvia, Scarlet       | Saluti Deep Red      | red                                       |                          |     |                               |        | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    |      |  |
| Salvia, Scarlet       | Saluti Formula Mix   | red, salmon                               | 18                       | 7.5 | 4.5x3.75                      | 2.5x2  | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    |      |  |
| Salvia, Scarlet       | Saluti Lilac         | lavender                                  | 7                        | 5   | 3.5x5                         | .5x2.5 | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    |  |
| Salvia, Scarlet       | Saluti Red           | scarlet                                   |                          |     |                               |        | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    |      |  |
| Salvia, Scarlet       | Saluti Salmon/Pink   | salmon pink                               |                          |     |                               |        | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    |      |  |
| Salvia, Scarlet       | Saluti Salmon/Pink   | salmon pink                               | 14                       | 7   | 2.5x3.5                       | 1x1.5  | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    |      |  |
| Salvia, Scarlet       | Saluti Scarlet/White | red and white bicolor                     | 8                        | 4   | 3.5x3.5                       | .5x2   | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    |      |  |
| Salvia, Scarlet       | Saluti White         | white                                     | 7                        | 4   | 1.75x1                        | 1x.75  | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    |      |  |
| Salvia, Scarlet       | Vista Rose           | rose                                      | 9                        | 4.5 | 2.5x3.5                       | .5x1.5 | ✿                             | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    |  |
| Scarlet Runner Bean** | Painted Lady         | scarlet and white bicolor                 | 82                       | 40  | 2.75x2.25                     | 1x1    |                               |      |      |      |      |      |      | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    | ✿    |  |

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|  | Frost tolerance |         | Plant ratings <sup>z</sup> |         |         |         | Recommended for |         |        | Comments   |
|--|-----------------|---------|----------------------------|---------|---------|---------|-----------------|---------|--------|--|
|  |                 |         | Flower                     |         | Foliage | Overall |                 |         |        |  |
|  | foliage         | flowers | quantity                   | quality |         |         | Fragrance       | Cutting | Drying |  |
|  | y               | n       | 1                          | 1       | 1       | 1       | sl              | n       | n      | Very nice two-toned flowers; fills in well in containers; small, abundant flowers  |
|  | n               | n       | 4                          | 4       | 4       | 4       | n               | n       | n      | Recommended for containers; mounded spreading plants; small flowered; fills in containers well   |
|  | y               | n       | 4                          | 4       | 4       | 4       | y               | n       | n      | Recommended for containers; mounded spreading plants; small flowered; outstanding clear rose color   |
|  | y               | n       | 1                          | 1       | 1       | 1       | n               | y       | n      | Double and semi-double flowers; loaded with blooms; fills in well; great carpet for the front of borders; needs some deadheading late in season; died early in 2008  |
|  | y               | y       | 4                          | 4       | 4       | 4       | n               | n       | n      | Very tall thistle flowers on spiky stems; very upright growth habit; nice mix of colors; great background plant  |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | n       | n      | Tiny bunches of flowers, spread poorly in cold season; some blooms by late season, but not a good show this year   |
|  | n               | n       |                            |         | 3       | 3       | n               | n       | n      | Thorny purple shoots with yellow-green foliage; no blooms all summer   |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | y       | y      | Bloomed in 2006 but not in 2007, the hotter season; grew poorly in 2008 and did not bloom  |
|  | n               | n       | 2                          | 2       | 2       | 2       | n               | y       | n      | Original in this series introduced 25 yrs ago, a garden favorite; mounding plant; dark green foliage and striking red spikes; some die out by mid August; deadheading required to maintain ornamental appeal |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | y       | n      | Rich red color, very attractive early; needs deadheading in late season; died early in 2008  |
|  | n               | n       | 1                          | 2       | 2       | 2       | n               | n       | n      | Only red, salmon colors this year; others died early; one big bushy plant, all others dead   |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | y       | n      | Very nice spikes of lavender color; held up well but died out in early September; needs deadheading  |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | y       | n      | Tall spikes of brilliant color; not as good as Red Hot Mama this season; some deadheading needed; branches well and fills in with color; died early in 2008  |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | n       | n      | Bushy plants, good color all season; interesting two-toned blooms; died out by early September   |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | n       | n      | Bushy plants, good color all season; interesting two-toned blooms; needs deadheading late in season  |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | n       | n      | Small flowers, not as showy as other salvias; yellow spotted foliage   |
|  | n               | n       | 1                          | 1       | 1       | 1       | sl              | n       | n      | Medium sized spikes produce an okay show through mid season; flowers turn brown; significant deadheading needed; by season's end, lots of plants died out, others look ragged                                |
|  | n               | n       | 1                          | 1       | 1       | 1       | sl              | n       | n      | Not as floriferous as other salvias; needs close spacing; nice deep rose color; needs deadheading in mid season  |
|  | n               | n       | 4                          | 4       | 4       | 4       | y               | y       | n      | Very attractive blooms with beautiful contrasting color; great alternative to scarlet runner beans; few beans this season  |

z: 0=dead; 1=poor, dead, rotten or not showy; 2= fair, other cultivars of its kind have been better; 3= good, worth growing, nice ornamental; 4= outstanding quality, the best of its kind grown in the garden

**Table 3. Results of tested annual flower cultivars for 2008.**

| Common name           | Cultivar                      | Flower color                                | Height (in) <sup>w</sup> |      | Flower size (in) <sup>x</sup> |          | Flowering period <sup>y</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |   |   |   |
|-----------------------|-------------------------------|---|--------------------------|------|-------------------------------|----------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|---|---|
|                       |                               |   | max                      | min  | max                           | min      | Jun                           |      |      |      | Jul  |      |      |      | Aug  |      |      |      | Sep  |      |   |   |   |
|                       |                               |   |                          |      |                               |          | wk 1                          | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 |   |   |   |
| Scarlet Runner Bean** | Scarlet Emperor               | scarlet                                     | 80                       | 40   | 2.5x2.25                      | .25x1    |                               |      |      |      |      |      |      | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ | ☼ | ☼ |
| Shasta Daisy          | Snow Lady                     | white, yellow centers                       | 13                       | 4    | 3.5                           | 2        | *                             | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ | ☼ | ☼ |
| Slipper Flower        |                               | yellow                                      | 18                       | 4    | .5                            | .25      | *                             | *    | *    | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ | ☼ | ☼ |
| Snapdragon            | Costa Mix                     | burgundy, rose, light pink, lavender, white | 23                       | 13   | 3.5x9                         | 2.5x2    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ | ☼ | ☼ |
| Snapdragon            | Rocket Rose                   | light rose                                  | 26                       | 11   | 7.5x3.5                       | 3x1.5    |                               |      | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ | ☼ | ☼ |
| Snapdragon            | Snapshot Rose                 | rose  |                          |      |                               |          | *                             | *    | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | *    |      |   |   |   |
| Snapdragon            | Snapshot White                | white w/yellow throat                       | 12                       | 4.25 | 4x2                           | 2.25x1.5 | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | *    | ☼    | ☼ |   |   |
| Snapdragon            | Snapshot Yellow               | yellow                                      | 10                       | 3    | 2x6                           | 1.25x2   | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | *    | *    | *    | * |   |   |
| Snapdragon            | Speedy Sonnet Rose            | rose  | 20                       | 11   | 3x6                           | 1.5x2.5  | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ | ☼ | ☼ |
| Snapdragon            | Speedy Sonnet White           | white                                       | 23                       | 9    | 2.5x9                         | 1.5x3    | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ | ☼ | ☼ |
| Snapdragon            | Spring Giant Mixture          | pink, red, orange, yellow, white            | 32.5                     | 11   | 9x3.5                         | 2.5x1    | *                             | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ | ☼ | ☼ |
| Snapdragon            | Chantilly Deep Orange         | dark orange                                 | 22                       | 12   | 6x3                           | 4.25x2.5 | *                             | *    | *    | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ | ☼ | * |
| Snow-on-the-Mountain  |                               | white                                       |                          |      |                               |          |                               |      |      |      |      |      |      |      |      |      |      |      |      |      |   |   |   |
| Spanish Lavender      | Fragrant Butterflies          | violet/lavender, purple                     | 20.5                     | 9    | 0                             | 0        |                               |      |      |      |      |      |      |      | ☼    | ☼    | *    |      |      | *    | * |   |   |
| Statice               | QIS Mixture                   | pink, white, lavender, yellow               | 38                       | 19   | 2.5x2                         | 1.5x1.25 |                               |      |      |      | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ | ☼ | ☼ |
| Stock                 | Sugar & Spice Mix             | maroon, white, pink, lavender               | 14                       | 1.5  | 1.75                          | .75      | ☼                             | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ | ☼ | ☼ |
| Sunflower**           | Double Quick Orange F1 Hybrid | yellow                                      | 64                       | 52   | 8                             | 5        |                               |      |      |      |      |      | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ | ☼ | ☼ |
| Sunflower**           | Key Lime Pie                  | creamy yellow w/green centers               | 52                       | 33   | 3.5                           | 1        |                               |      |      |      | *    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ | ☼ | ☼ |
| Sunflower**           | Mongolian Giant               | yellow                                      | 89                       | 72   | 14.5                          | 8        |                               |      |      |      |      |      |      |      | ☼    | ☼    | ☼    | ☼    | ☼    | ☼    | ☼ | ☼ | ☼ |

w: If the plant was uniform in height, the height is recorded under max only. \* = plants grown in containers or hanging baskets, limited data was collected on plant height, flower size and flowering dates.

x: If flower size was uniform, size is recorded under max only; sizes with an x (ex.: 12x3) indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.

y: \* indicates just starting to bloom, ☼ indicates 50% bloom, and ☼ indicates full bloom.

|  | Frost tolerance |         | Plant ratings <sup>z</sup> |         |         |         | Recommended for |         |        | Comments  |
|--|-----------------|---------|----------------------------|---------|---------|---------|-----------------|---------|--------|---|
|  |                 |         | Flower                     |         | Foliage | Overall |                 |         |        |   |
|  | foliage         | flowers | quantity                   | quality |         |         | Fragrance       | Cutting | Drying |   |
|  | n               | n       | 4                          | 4       | 4       | 4       | y               | y       | n      | Robust vine, huge beans; excellent climber and fills in well; thick, bushy vines with abundant scarlet blooms   |
|  | y               | n       | 2                          | 3       | 3       | 3       | n               | y       | y      | Nice compact shasta daisy; blooms well not as showy as traditional shastas but great for a bit of white in front edgings; All America Selections winner 198888                                |
|  | n               | n       | 3                          | 3       | 3       | 3       | sl              | y       | n      | Interesting, tiny "pocket books"; tall, bushy plants; flowers are not showy, but would be a great filler; needs deadheading late in season  |
|  | y               | n       | 3                          | 3       | 3       | 3       | n               | y       | n      | Strong stems for cutting; very nice color combination; rocket mixes are better  |
|  | n               | y       | 4                          | 4       | 4       | 4       | n               | y       | n      | Attractive tall straight spikes, excellent for cutting; great show all season; All America Selections winner 1960   |
|  | y               | n       | 1                          | 1       | 1       | 1       | y               | n       | n      | Does not fill in well; needs significant deadheading to bloom all season; not for cutting; died early in 2008   |
|  | y               | y       | 2                          | 2       | 1       | 1       | n               | n       | n      | Short snapdragon, does not fill in well; many died out by mid August; poor show this season; needs lots of deadheading  |
|  | y               | y       | 3                          | 1       | 1       | 2       | n               | y       | n      | Short snapdragon forms mats rather than spikes; needs deadheading to keep display all season  |
|  | y               | n       | 2                          | 2       | 2       | 2       | y               | y       | n      | Shorter than many snapdragons but not a true dwarf; bloomed early but finished early; nice light rose color; there are better ones for cutting  |
|  | y               | y       | 2.5                        | 2.5     | 2.5     | 2.5     | n               | y       | n      | Short stems; blooms early and is done early; few flowers; needs deadheading   |
|  | y               | y       | 3                          | 3       | 3       | 3       | 4               | y       |        | Very nice, stocky upright stems, excellent for cutting; great mix of colors; variable height with yellow flowers tallest  |
|  |                 |         | 1                          | 1       | 1       | 1       | y               | n       | n      | Poor survival after transplanting; only two plants bloomed; flower spikes are medium sized and flowers are open faced; unusual shade of orange; cannot be recommended in cold summers         |
|  |                 |         | 1                          | 1       | 1       | 1       |                 |         |        | Medium sized stems just began to show variegated white and green foliage in mid September; not showy in this cold season; died early in 2008  |
|  | n               | n       | 1                          | 1       | 1       | 1       | y               | y       | y      | Tiny bushes, did not bloom; very poor growth in ground beds this season   |
|  | y               | y       | 4                          | 4       | 4       | 4       | n               | y       | y      | Bushy upright plants; excellent mix of colors; flowers just beginning to open in early September; mix is mostly pinks and whites, some lavender and yellow                                    |
|  | n               | n       | 1                          | 1       | 1       | 1       | y               | n       | n      | Tall stems, often floppy with clusters of very fragrant blooms. does not fill in so needs close spacing; best planted in mixed borders; some double, mostly single blooms; heavenly fragrance |
|  | n               | n       | 4                          | 4       | 4       | 4       | y               |         |        | Medium sized heads on medium sized plants   |
|  | n               | n       | 3                          | 3       | 3       | 3       | y               | y       | y      | Small flowers in clusters; good cut flower; needs support in open beds; some lodging late in season; good show from midseason on  |
|  | n               | n       | 4                          | 4       | 4       | 4       | sl              |         |        | Not very giant this year; plants were short and head medium sized; killed by frost before seed set  |

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| Common name              | Cultivar                          | Flower color                                      | Height (in) <sup>w</sup> |     | Flower size (in) <sup>x</sup> |      | Flowering period <sup>y</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|-----------------------------------|---|--------------------------|-----|-------------------------------|------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                          |                                   |   | max                      | min | max                           | min  | Jun                           |      |      |      | Jul  |      |      |      | Aug  |      |      |      | Sep  |      |
|                          |                                   |   |                          |     |                               |      | wk 1                          | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 |
| Sunflower                | Pro Cut Yellow Lite               | yellow w/ greenish centers                        | 47                       | 25  | 6.5                           | 2.75 |                               |      |      |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | *    |      | *    |      |
| Sunflower**              | Solar Eclipse F1 Hybrid           | gold/mahogany                                     | 63                       | 37  | 7.5                           | 3    |                               |      |      |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |
| Sunflower**              | Soraya                            | gold w/ brown centers                             | 67                       | 50  | 6                             | 4    |                               |      |      |      | *    | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |
| Sunflower**              | Sparky                            | dusky yellow                                      | 80                       | 50  | 5.5                           | 2    |                               |      |      |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |
| Sunflower**              | Velvet Queen                      | mahogany, brown centers                           | 61                       | 48  | 8                             | 3    |                               |      |      |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |
| Sunflower                | Waooh                             | gold w/brown centers                              | 36                       | 21  | 6                             | 4    |                               |      |      |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |
| Sunflower                | Zebulon                           | yellow, greenish yellow centers                   | 35                       | 24  | 6.5                           | 5    |                               |      |      |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | *    |      |      |      |
| Sunflower, Cucumber-leaf | Pan                               | gold, brown centers                               | 42                       | 24  | 11.5                          | 4.5  |                               |      |      |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | *    |      |      |      |
| Sweet Pea**              | Cuthbertson Floribunda Choice Mix | pink, red, white, lavender, purple, maroon        | 78                       | 35  | 1.5                           | 1    |                               |      |      |      |      |      |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |
| Sweet Pea**              | Lady Grisel Hamilton              | lavender blue                                     | 73                       | 21  | 1.75                          | .5   |                               |      |      |      |      |      |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |
| Sweet Pea**              | Old Spice Mix                     | lavender, pink, red, rose, maroon, white          | 73                       | 31  | 1.25                          | .5   |                               |      |      |      |      |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |
| Sweet Pea**              | Royal Mix                         | pink, red, rose, white, lavender, maroon          | 67                       | 30  | 1.5                           | 1    |                               |      |      |      |      |      |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |
| Sweet Pea**              | Spencer Ripple Formula Mix        | purple/white bicolor, white, lavender, pink, rose | 58                       | 49  | 1.5                           | 1    |                               |      |      |      |      | *    | *    | *    | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    |
| Swiss chard              | Bright Lights                     |   | 32                       | 17  |                               |      |                               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Verbena, Garden          | Quartz X P Purple                 | velvet purple                                     | 11                       | 3   | 2.5                           | .25  | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |
| Verbena, Garden          | Quartz X P Red Eye                | red w/white eye                                   | 9.5                      | 3.5 | 2.5                           | .75  | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |
| Verbena, Garden          | Quartz X P Scarlet                | red w/white centers                               | 8                        | 2.5 | 2.5                           | 1    |                               |      | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |
| Verbena, Garden          | Quartz X P Silver                 | lavender-silver                                   | 12                       | 2   | 2.25                          | 1.5  | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    |

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y: \* indicates just starting to bloom, ⊗ indicates 50% bloom, and ⊕ indicates full bloom.



|  | Frost tolerance |         | Plant ratings <sup>z</sup> |         |         |         | Recommended for |         |        | Comments  |
|--|-----------------|---------|----------------------------|---------|---------|---------|-----------------|---------|--------|---|
|  |                 |         | Flower                     |         | Foliage | Overall |                 |         |        |   |
|  | foliage         | flowers | quantity                   | quality |         |         | Fragrance       | Cutting | Drying |   |
|  | n               | n       | 3                          | 3       | 3       | 3       | n               | y       | n      | Very early medium sized blooms on medium sized stems; excellent cut flower; multiple blooms from mid season onward; produces mature seed even in rainy summers                              |
|  | n               | n       | 4                          | 4       | 4       | 4       | n               |         |        | Interesting flower pattern with gold petals and mahogany markings in the center; multiple blooms beginning in mid season  |
|  | n               | n       | 3                          | 3       | 3       | 3       | y               | y       | n      | Tall, multi-stemmed sunflower; straight stems excellent for cutting; All America Selections winner 2000   |
|  | n               | n       | 3                          | 3       | 3       | 3       | sl              |         |        | Thin petals mostly a dusky yellow; interesting pin-cushion-type centers; many blooms per stem but bloomed late  |
|  | n               | n       | 2                          | 2       | 2       | 2       | n               |         |        | Nice mahogany color of blooms, but few blooms all summer; not showy this season   |
|  | n               | n       | 4                          | 4       | 4       | 4       | n               | y       | n      | Excellent short sunflower blooms all summer, most short sunflowers finish blooming early and set seed, this cultivar blooms all summer; abundant blooms on each stalk                       |
|  | y               | y       | 2                          | 2       | 2       | 2       | n               | y       | n      | Short stalky stems with medium sized heads, some of which mature seed by early September; hold up well although summer flower show is in mid season   |
|  | n               | n       | 3                          | 3       | 3       | 3       | n               | y       | n      | Buckets of small blooms; very bushy plant; needs room to spread; great cut flower   |
|  | y               | y       | 2                          | 4       | 4       | 4       | y               | y       | n      | Huge blooms; excellent fragrance; vigorous growth this season   |
|  | n               | n       | 4                          | 4       | 4       | 4       | y               | y       | n      | Vigorous vines covered with mostly lavender blue flowers; outstanding fragrance   |
|  | y               | y       | 4                          | 4       | 4       | 4       | y               | y       | n      | The best flowering sweet pea this year; excellent blooms at nose level; sturdy thick vines  |
|  | y               | y       | 3                          | 4       | 4       | 4       | sl              | y       | n      | The best fragrance of all sweet peas this year; not as floriferous as others; great growth  |
|  | y               | y       | 4                          | 4       | 4       | 4       | y               | y       | n      | Very attractive blooms some bicolors; tall, stocky vines; some flowers but late; not the most floriferous; fragrant; had fewest flowers of all sweet peas this year                         |
|  | y               | y       |                            |         | 4       | 4       | n               | n       | n      | Outstanding colorful stems on this ornamental vegetable; looked great as green backdrop in flower garden; all America Selections winner 1998; gets tall and rangy when flower stalks emerge |
|  | y               | n       | 4                          | 4       | 4       | 4       | y               | y       | n      | Attractive rich velvety purple color; great blooms all summer; holds up better than other verbenas; Fleuroselect Novelty Winner   |
|  | y               | n       | 4                          | 4       | 4       | 4       | n               | y       | n      | Clear red, rich color; abundant blooms all summer; very nice show   |
|  | y               | y       | 4                          | 4       | 4       | 4       | n               | n       | n      | Very attractive rich red blooms; not as floriferous as other verbenas; ragged appearance because of height difference among plants; needs deadheading for best show                         |
|  | n               | n       | 2.5                        | 2.5     | 2.5     | 2.5     | y               | y       | n      | Uniform height, compact growth; not as floriferous as other cultivars; nice pale, pale lavender blooms  |

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**Table 3. Results of tested annual flower cultivars for 2008.**

| Common name     | Cultivar                                  | Flower color  | Height (in) <sup>w</sup> |     | Flower size (in) <sup>x</sup> |      | Flowering period <sup>y</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |   |   |   |   |
|-----------------|---|---|--------------------------|-----|-------------------------------|------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|---|---|---|
|                 |   |   | max                      | min | max                           | min  | Jun                           |      |      |      | Jul  |      |      |      | Aug  |      |      |      | Sep  |      |   |   |   |   |
|                 |   |   |                          |     |                               |      | wk 1                          | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 |   |   |   |   |
| Verbena, Garden | Quartz X P White                          | white   | 8                        | 3   | .5                            | .125 | *                             | *    | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ | ⊗ | ⊗ |
| Verbena, Garden | Snowy River                               | white   | 17                       | 2.5 | 0.25                          | 0.25 |                               |      | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ | ⊗ | ⊗ |
| Viola           | Microla® Lavender                         | lavender w/ cream face and purple whiskers                      |                          |     |                               |      | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ | ⊗ | ⊗ |
| Viola           | Microla® Plum                             | purple w/light purple face                                      | 17                       | 2   | 1.25                          | .5   | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ | ⊗ | ⊗ |
| Viola           | Microla® Pure Yellow                      | yellow  | 15                       | 1   | 1.5                           | .5   | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ | ⊗ | ⊗ |
| Viola           | Rain Blue and Purple                      | lavender, light blue  | 15.5                     | 6   | 1.25                          | .5   | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ | ⊗ | ⊗ |
| Viola           | Skippy® Experimental Pastel Blue Improved | lavender w/deep lavender face                                   | 15                       | 7   | 1.5                           | 1.25 | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ | ⊗ | ⊗ |
| Viola           | Skippy® Purple Improved                   | deep purple bicolor   | 15                       | 7   | 1.5                           | .5   | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ | ⊗ | ⊗ |
| Viola           | Skippy® XL Blue-Yellow                    | yellow w/ lavender wings. purple whiskers                       | 16                       | 7   | 1.5                           | 1    | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ | ⊗ | ⊗ |
| Viola           | Skippy® XL Deep Blue-Blotch               | purple w/deep purple face                                       | 18.5                     | 3.5 | 1.5                           | 1    | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ | ⊗ | ⊗ |
| Viola           | Skippy® XL Plum-Gold                      | gold face w/ purple around the face and purple whiskers         | 15                       | 3.5 | 1.5                           | .5   | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ | ⊗ | ⊗ |
| Viola           | Skippy® XL Purple Duet                    | purple/lavender bicolor shades, purple whiskers, yellow centers | 14                       | 5   | 1.5                           | 1    | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ | ⊗ | ⊗ |
| Viola           | Skippy® XL Red-Gold                       | maroon gold face, maroon lower petals                           | 15                       | 2   | 1.5                           | .75  | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ | ⊗ | ⊗ |
| Viola           | Skippy® Yellow/Purple Wing                | yellow w/deep purple wings, purple whiskers                     | 15                       | 2   | 1.5                           | 1    | *                             | *    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ | ⊗ | ⊗ |
| Viola           | Sorbet® Blue Babyface                     | deep lavender, purple eye                                       | 17                       | 3   | 1.75                          | 1    | ⊗                             | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗    | ⊗ | ⊗ | ⊗ | ⊗ |

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w: If the plant was uniform in height, the height is recorded under max only. \* = plants grown in containers or hanging baskets, limited data was collected on plant height, flower size and flowering dates.

x: If flower size was uniform, size is recorded under max only; sizes with an x (ex.: 12x3) indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.

y: \* indicates just starting to bloom, ⊗ indicates 50% bloom, and ⊕ indicates full bloom.

|  | Frost tolerance |         | Plant ratings <sup>z</sup> |         |         |         | Recommended for |         |        | Comments   |
|--|-----------------|---------|----------------------------|---------|---------|---------|-----------------|---------|--------|--|
|  |                 |         | Flower                     |         | Foliage | Overall | Fragrance       | Cutting | Drying |  |
|  | foliage         | flowers | quantity                   | quality |         |         |                 |         |        |  |
|  | y               | y       | 2                          | 3       | 3       | 3       | sl              | y       | n      | Poor flower display when compared with other verbenas; spreads well, but few flowers; needs a lot of deadheading   |
|  | y               | y       | 2                          | 3       | 3       | 3       | sl              | y       | n      | Cousin to the lavender verbenas, 'Moon River'; tiny blooms, not very showy in mass plantings; best as filler with other larger specimen flowers  |
|  | Y               | Y       |                            |         |         |         | sl              | Y       | Y      | Poor growth; plenty of plants died this year   |
|  | y               | y       | 3                          | 3       | 3       | 3       | sl              | y       | y      | Tiny blooms, huge mounds; not as floriferous as other violas; some deadheading late in season  |
|  | y               | y       | 3                          | 3       | 3       | 3       | y               | y       | y      | Excellent clear yellow viola with maroon whiskers; nice accent flowers in containers; lots of blooms nearly all season   |
|  | y               | y       | 4                          | 4       | 4       | 4       | sl              | n       | n      | Thick mounds covered with blooms all summer; reliable blooms, no maintenance; some plants with all white blooms, some light lavender; excellent growth all summer                              |
|  | y               | y       | 4                          | 4       | 4       | 4       | y               | y       | y      | Abundant blooms, excellent mounding display; great show all summer; no maintenance   |
|  | y               | y       | 4                          | 4       | 4       | 4       | n               | y       | y      | Mounds of velvety rich flowers in deep purple with slightly lighter purple centers; very ornamental all season   |
|  | y               | y       | 3                          | 3       | 3       | 3       | y               | y       | y      | Abundant blooms, great mounds of flowers; fills in well; deadheading unnecessary   |
|  | y               | y       | 4                          | 4       | 4       | 4       | n               | y       | y      | Rich velvety mounds of clear purple and contrasting yellow centers; brilliant color all summer   |
|  | y               | y       | 4                          | 4       | 4       | 4       |                 | y       | y      | Bred for winter bloom season in southern states; All America Selections Cool Season Bedding Plant Award Winner 2008; giant mounds of blooms all season; very nice display with bicolor flowers |
|  | y               | y       | 4                          | 4       | 4       | 4       | sl              | y       | y      | Outstanding very uniform mounds of color; rich, velvety appearance in attractive bicolor; packed with blooms   |
|  | y               | y       | 4                          | 4       | 4       | 4       | n               | y       | y      | Nice mounds of color all season; fills in well; less maintenance than other violas; unusual color; best in mass plantings  |
|  | y               | y       | 4                          | 4       | 4       | 4       | n               | y       | y      | Very attractive bicolor flowers; huge mounds covered with blooms all summer; a visitor favorite  |
|  | y               | y       | 4                          | 4       | 4       | 4       | n               | y       | y      | Outstanding mounds of deep purple blooms with dark eye; fills in bed well and requires no maintenance; one of the best violas this year; visitor favorite                                      |

z: 0=dead; 1=poor, dead, rotten or not showy; 2= fair, other cultivars of its kind have been better; 3= good, worth growing, nice ornamental; 4= outstanding quality, the best of its kind grown in the garden

**Table 3. Results of tested annual flower cultivars for 2008.**

| Common name       | Cultivar                  | Flower color  | Height (in) <sup>w</sup> |     | Flower size (in) <sup>x</sup> |      | Flowering period <sup>y</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |   |
|-------------------|---------------------------|---|--------------------------|-----|-------------------------------|------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|
|                   |                           |   | max                      | min | max                           | min  | Jun                           |      |      |      | Jul  |      |      |      | Aug  |      |      |      | Sep  |      |   |
|                   |                           |   |                          |     |                               |      | wk 1                          | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 | wk 3 | wk 4 | wk 1 | wk 2 |   |
| Viola             | Sorbet® Peach Frost       | orange, cream, peach, lavender                              | 15                       | 1   | 1.5                           | .5   | ☀                             | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀ |
| Viscaria          | Ruby Flax                 | ruby  | 12                       | 5   | 2                             | .75  |                               |      | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀ |
| Wallflower        | Citrona Orange            | orange  | 18                       | 11  | 2.75x1.5                      | 1x1  | ☀                             | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀ |
| Wallflower        | Citrona Yellow            | gold  | 19                       | 4.5 | 2.5x2                         | 1x1  | ☀                             | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    |      |      |   |
| White Lace Flower |                           | white   |                          |     |                               |      | ☀                             | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    |      |      |   |
| Zinnia, Garden    | Canary Bird               | yellow  |                          |     |                               |      | ☀                             | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    |      |      |      |   |
| Zinnia, Garden    | Peggy's Delight           | mostly orange shades from burnt orange to cream, pink, rose | 30                       | 14  | 4                             | 3    | ☀                             | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    |      |      |      |   |
| Zinnia, Garden**  | Polar Bear                | creamy white  | 25.5                     | 21  | 2.5                           | 2.25 | ☀                             | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    |      |      |   |
| Zinnia, Garden    | Profusion Knee High Red   | dark orange red   | 22                       | 5   | 2.25                          | 1    |                               |      | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    |   |
| Zinnia, Garden    | Profusion Knee High White | creamy white, gold centers                                  | 16.5                     | 11  | 2.12                          | 1.25 |                               |      | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    |      | ☀    | ☀    |   |
| Zinnia, Garden    | Thumbelina Mix            | red, orange, yellow, pink, scarlet w/yellow centers         |                          |     |                               |      | ☀                             | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀ |
| Zinnia, Garden    | Uproar                    | rose  | 22.5                     | 9   | 4.25                          | 2.5  | ☀                             | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    |      |      |   |
| Zinnia, Garden    | Zahara Coral Rose         | dark pink   | 13                       | 4   | 2.5                           | 1.0  |                               |      |      | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀ |
| Zinnia, Garden    | Zahara Scarlet            | scarlet   | 11                       | 8   | 2.25                          | 1.75 |                               |      |      | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    |      |      |      |   |
| Zinnia, Garden    | Zahara White              | white   | 12.5                     | 7   | 2.5                           | 1.25 |                               |      | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    |      | ☀    | ☀    |   |
| Zinnia, Garden    | Zahara Yellow             | yellow  | 16                       | 10  | 2.25                          | 1    |                               |      | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    |      |      |      |   |
| Zinnia, Mexican   | Aztec Sunset              | mahogany/ yellow bicolor, yellow, gold                      | 23.25                    | 11  | 1.25                          | .75  | ☀                             | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀ |
| Zinnia, Mexican   | Persian Carpet            | bicolors in red, mahogany, gold, purple, cream              | 24                       | 5   | 2.25                          | .75  | ☀                             | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀    | ☀ |

w: If the plant was uniform in height, the height is recorded under max only. \* = plants grown in containers or hanging baskets, limited data was collected on plant height, flower size and flowering dates.

x: If flower size was uniform, size is recorded under max only; sizes with an x (ex.: 12x3) indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.

y: ☀ indicates just starting to bloom, ☀ indicates 50% bloom, and ☀ indicates full bloom.

|  | Frost tolerance |         | Plant ratings <sup>z</sup> |         |         |         | Recommended for |         |        | Comments   |
|--|-----------------|---------|----------------------------|---------|---------|---------|-----------------|---------|--------|--|
|  |                 |         | Flower                     |         | Foliage | Overall |                 |         |        |  |
|  | foliage         | flowers | quantity                   | quality |         |         | Fragrance       | Cutting | Drying |  |
|  | y               | y       | 3                          | 2.5     | 2.5     | 2.5     | n               | y       | y      | Flowers open as peach with dark orange center and creamy wings and mature to shades of cream and orange with lavender wings; huge mounds of color with blooms nearly all season; very attractive |
|  | n               | n       | 2                          | 2       | 2       | 2       | y               |         |        | Very attractive ruby red blooms, grow as filler or in mass plantings   |
|  | n               | n       | 3                          | 3       | 3       | 3       | sl              | y       | n      | Great mounds of color nearly all season; very attractive in mass plantings; prominent seed heads in late season; some lodging; needs deadheading from planting onward                            |
|  | n               | n       | 3                          | 3       | 3       | 3       | y               | y       | n      | Plants are in bloom in containers when planted; go to seed early if not deadheaded; try direct sowing or serious deadheading for best late season color  |
|  |                 |         | 1                          | 1       | 1       | 1       |                 |         |        | Bloomed well especially at the beginning of the season; big bushy plants covered with tiny flowers   |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | n       | n      | A few stems survived and bloomed; poor show this season; died early in 2008  |
|  | n               | n       | 2                          | 2       | 2       | 2       | n               | n       | y      | Selected from Vietnamese germplasm by Seeds of Change; square-edged petals; colors are creamy, not brilliant like other zinnias; nice mix of colors; variable height; wide range of flower sizes |
|  | n               | n       | 1                          | 1       | 1       | 1       | sl              |         |        | Small to medium blooms; plants did not branch well; attractive creamy white color  |
|  | n               | n       | 4                          | 4       | 4       | 4       | n               | y       | y      | Very attractive color; open floppy mounds covered with blooms; excellent show nearly all season; some disease late in season   |
|  | n               | n       | 2                          | 2       | 2       | 2       | n               | y       | y      | Bushy mounding plant covered with blooms; excellent display nearly all season; died out in early September because of Sclerotinia rot  |
|  | n               | n       | 2                          | 2       | 2       | 2       | n               | y       | y      | Miniature flowers on tall stalks; striking early summer display; abundant blooms all season; some deadheading needed by midseason; All America Selections winner 1963                            |
|  | n               | n       | 3                          | 3       | 3       | 3       | sl              | y       | y      | Outstanding, tall solid-color zinnias; very floriferous, blooms hold up well all season; some deadheading late in season; some sclerotinia rot late in season                                    |
|  | n               | n       | 4                          | 4       | 4       | 4       | n               |         |        | Very nice clear dark pink color, plants are sparse fillers compared to others of its kind, susceptible to Sclerotinia cottony rot  |
|  | n               | n       | 1                          | 1       | 1       | 1       | n               | n       | n      | Short mounding plants covered with blooms early; died out because of Sclerotinia rot in late August  |
|  | n               | n       | 2                          | 2       | 2       | 2       | n               | n       | n      | Large blooms on small mounding plants; did not fill in well as other zinnias of this type; many plants died in late season from Sclerotinia rot  |
|  | n               | n       | 2                          | 2       | 2       | 2       | sl              | n       | n      | Nice small, creamy yellow blooms with brighter yellow center; bushy, fills in well; needs deadheading; died out in early September   |
|  | n               | n       | 3                          | 3       | 3       | 3       | n               | y       | y      | Tiny multicolored flowers bloom all season; great in mass plantings or as accents to larger zinnias; good cut flower   |
|  | n               | n       | 3                          | 3       | 3       | 3       | n               | y       | y      | All America Selections winner 1952; double and semi double blooms; small but abundant flowers in a variety of patterns; some disease in mix August   |

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Table 4. Results on cultivars completed three years testing

| Name                 | Cultivar              | Ave. <sup>z</sup><br>Overall<br>Rating | Ave. <sup>z</sup><br>Foliage<br>Rating | Ave.<br>Min flower<br>ht (in) | Ave.<br>Max Flower<br>ht (in) | Ave. <sup>x</sup><br>Min flower<br>Size (in) | Ave. <sup>x</sup><br>Max Flower<br>Size (in) | Ave. <sup>z</sup><br>Flower<br>Quality | Ave. <sup>z</sup><br>Flower<br>Quantity |
|----------------------|-----------------------|--|--|-------------------------------|-------------------------------|--|--|--|---|
| African Daisy**      | African Moon          | 1                                      | 1                                      | 7.25                          | 17.25                         | .87  | 1.75   | 1                                      | 1                                       |
| Alyssum, Sweet       | Rosie O'Day           | 2                                      | 2.3                                    | 2                             | 5.3                           | .42  | 1.0  | 2.3                                    | 2.3                                     |
| Alyssum, Sweet       | Royal Carpet          | 3.3                                    | 3.3                                    | 2.3                           | 11.3                          | .3   | .8   | 3.3                                    | 3.7                                     |
| Amaranth, Feathered  | Icecream Banana       | 2.3                                    | 2                                      | 5.7                           | 8                             | 1.4x1.2                                      | 2.4x3.1                                      | 2.3                                    | 2.3                                     |
| Amaranth, Feathered  | Icecream Orange       | 2.3                                    | 2                                      | 4.8                           | 9.8                           | 1.6x0.9                                      | 3.75x1.9                                     | 2.7                                    | 2.3                                     |
| Aster, Annual Garden | Ballet Mix            | 3.7                                    | 3.7                                    | 9.7                           | 18.7                          | 2.8  | 5.2  | 3.7                                    | 3.7                                     |
| Bachelor's Button    | Jubilee Gem           | 3.2                                    | 3.2                                    | 6.7                           | 17.3                          | .7   | 1.3  | 3.5                                    | 2.7                                     |
| Bishop's Flower      | Graceland             | 2.3                                    | 2.3                                    | 10.7                          | 22.5                          | 1.5  | 3.8  | 2                                      | 2.3                                     |
| Bisnaga              | Casablanca            | 3.7                                    | 3.7                                    | 8.5                           | 29.7                          | 1.2  | 4  | 3.7                                    | 4                                       |
| Calendula            | Orange Zinger         | 3.3                                    | 3                                      | 12                            | 31.4                          | 1.7  | 3  | 3.3                                    | 3.3                                     |
| Calendula            | Triangle Flashback    | 3.3                                    | 3.3                                    | 11.7                          | 27.5                          | .8   | 2.3  | 3.3                                    | 3.3                                     |
| California Poppy     | Summer Sorbet         | 3.3                                    | 3                                      | 4.8                           | 17.2                          | .6   | 2.4  | 3.3                                    | 3.3                                     |
| Celosia              | Burgundy Supercrest   | 2.3                                    | 2.3                                    | 8.8                           | 12.8                          | 1.4x1.5                                      | 2.5x3.5                                      | 2.7                                    | 2                                       |
| Celosia              | Fireglow              | 2                                      | 2                                      | 3.9                           | 6.8                           | 0.8x1  | 1.8x1.25                                     | 2                                      | 2                                       |
| Celosia              | Fresh Look Gold       | 1.7                                    | 1.7                                    | 4.2                           | 9.6                           | 0.9x0.9                                      | 3.25x0.75                                    | 2                                      | 1.7                                     |
| Clarkia              | Chieftain             | 2.7                                    | 2.7                                    | 12.7                          | 37.3                          | .8   | 1.5  | 3                                      | 2.7                                     |
| Coreopsis            | Sunfire               | 2.7                                    | 3                                      | 10.7                          | 19.1                          | 1  | 2.3  | 2.7                                    | 2.7                                     |
| Cosmos               | Dazzler               | 2.7                                    | 3.3                                    | 20.5                          | 39.3                          | 1.6  | 4.3  | 3                                      | 2.3                                     |
| Dahlia               | Bloomquist Dawn       | 3.7                                    | 3.7                                    | 23.7                          | 42.3                          | 3.8  | 6.5  | 3.7                                    | 3.7                                     |
| Dahlia               | Citron De Cap         | 2.8                                    | 2.8                                    | 45.3                          | 53                            | 4.25   | 5.6  | 2.8                                    | 2.8                                     |
| Dahlia               | Emory Paul            | 3                                      | 2.7                                    | 35                            | 42.7                          | 3.7  | 6.9  | 3                                      | 2.7                                     |
| Dahlia               | Jo                    | 3.3                                    | 3.3                                    | 41.9                          | 47.4                          | 4  | 6.8  | 3.3                                    | 3.3                                     |
| Dahlia               | Mom's Special         | 1.7                                    | 2.3                                    | 39                            | 40.3                          | 5.5  | 9.13   | 2.3                                    | 1.7                                     |
| Dahlia               | Papageno              | 2.7                                    | 2.7                                    | 30.33                         | 32                            | 4.3  | 5.3  | 3                                      | 3                                       |
| Dahlia               | Pat Feary             | 3                                      | 3                                      | 51.25                         | 58.9                          | 3.2  | 5.4  | 3                                      | 3                                       |
| Dahlia               | Robert Too            | 3                                      | 3                                      | 41.58                         | 51.6                          | 2.3  | 4  | 3                                      | 3                                       |
| Dahlia               | Scarborough Brilliant | 3.7                                    | 3.7                                    | 52.17                         | 62.2                          | 4.3  | 6.3  | 3.7                                    | 3.7                                     |
| Dahlia               | Spartacus             | 2.7                                    | 2.7                                    | 29.5                          | 38.5                          | 3.5  | 3.8  | 2.7                                    | 2.3                                     |
| Dahlia               | Star-Gazer            | 2.2                                    | 2.2                                    | 10.4                          | 30.2                          | 2.2  | 4.1  | 2.2                                    | 2.3                                     |
| Dahlia               | Sterling Silver       | 4                                      | 3.7                                    | 44.67                         | 48                            | 4.6  | 8.9  | 4                                      | 3                                       |
| Dahlia               | The Boss              | 3                                      | 3                                      | 18.17                         | 3.8                           | 4.8  | 3.1  | 2.3                                    | 2.3                                     |
| Dianthus             | Bouquet™ Rose Magic   | 3.7                                    | 3.7                                    | 9.2                           | 20.5                          | 1.3  | 3.4  | 4                                      | 3.7                                     |
| Dianthus             | Ideal Violet          | 2.3                                    | 3.7                                    | 3.3                           | 13.3                          | .6   | 1.4  | 3.7                                    | 3.7                                     |

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x: If flower size was uniform, size is recorded under max only; sizes with an x (ex.: 12x3) indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.

y: \* indicates just starting to bloom, ☼ indicates 50% bloom, and ☀ indicates full bloom.

**Table 4. Results on cultivars completed three years testing**

| Name              | Cultivar                 | Ave. <sup>z</sup><br>Overall<br>Rating | Ave. <sup>z</sup><br>Foliage<br>Rating | Ave.<br>Min flower<br>ht (in) | Ave.<br>Max Flower<br>ht (in) | Ave. <sup>x</sup><br>Min flower<br>Size (in) | Ave. <sup>x</sup><br>Max Flower<br>Size (in) | Ave. <sup>z</sup><br>Flower<br>Quality | Ave. <sup>z</sup><br>Flower<br>Quantity |
|-------------------|--------------------------|--|--|-------------------------------|-------------------------------|--|--|--|---|
| Dianthus          | Magic Charms             | 3.3                                    | 3.3                                    | 6.5                           | 10.3                          | 1.4  | 2.1  | 3.3                                    | 3.3                                     |
| Dianthus          | Snowfire                 | 3.3                                    | 3.3                                    | 3.8                           | 12.6                          | 1.2  | 2  | 3.3                                    | 3.3                                     |
| Dianthus          | Sweet Scarlet            | 2.7                                    | 3                                      | 7.4                           | 18.7                          | .9   | 3.7  | 3                                      | 2.7                                     |
| Diascia           | Diamonte Apricot         | 2.3                                    | 2.3                                    | 6.7                           | 10.9                          | .3   | .7   | 2.3                                    | 2.7                                     |
| Dusty Miller      | New Look                 | 4                                      | 4                                      | 5.3                           | 13.7                          |  |  |  |   |
| Gaillardia        | Sundance Bicolor         | 2.7                                    | 2.7                                    | 9                             | 21                            | .8   | 2.2  | 2.7                                    | 2.7                                     |
| Gazania           | Kontiki® Stars & Stripes | 3                                      | 2.7                                    | 6                             | 11.8                          | 1.3  | 2.8  | 3                                      | 3                                       |
| Geranium          | Maverick Star            | 2.7                                    | 3.3                                    | 15.3                          | 21.7                          | 2  | 3.6  | 2.7                                    | 2.7                                     |
| Gypsophila        | Gypsy                    | 3                                      | 2.7                                    | 1.3                           | 5.8                           | .1   | .3   | 3                                      | 3                                       |
| Hollyhock         | Indian Spring            | 3.3                                    | 3.7                                    | 31.3                          | 63.3                          | 2  | 4.1  | 3.3                                    | 3.3                                     |
| Lupine            | Giant King Mix           | 2.5                                    | 2.7                                    | 14                            | 25.2                          | 2.0x1.9                                      | 6.4x1.6                                      | 2.7                                    | 2.3                                     |
| Marigold, African | Crackerjack Mixed        | 2.7                                    | 2.7                                    | 8.8                           | 27.8                          | 1.8  | 4.5  | 2.7                                    | 2.7                                     |
| Marigold, African | First Lady               | 3.7                                    | 3.7                                    | 9                             | 16.4                          | 2  | 4  | 3.7                                    | 3.7                                     |
| Marigold, French  | Naughty Marietta         | 4                                      | 4                                      | 7                             | 20.3                          | 1.1  | 2.6  | 4                                      | 4                                       |
| Marigold, French  | Queen Sophia             | 2.7                                    | 2.7                                    | 4.7                           | 10.8                          | 1.3  | 2.6  | 2.7                                    | 2.7                                     |
| Mexican Sunflower | Torch                    | 3.3                                    | 3.7                                    | 18.9                          | 47.2                          | 1.5  | 3.4  | 3.3                                    | 3                                       |
| Nasturtium        | Whirlybird Mahogany      | 3.7                                    | 3.7                                    | 6                             | 15.6                          | 1.3  | 2.9  | 3.7                                    | 3.7                                     |
| Nemesia           | Poetry White             | 2.7                                    | 2.7                                    | 7.7                           | 17.3                          | .5   | 1.8  | 2.7                                    | 3                                       |
| Nicotiana, Garden | Nicki Red                | 4                                      | 4                                      | 13                            | 28.1                          | 6.5x5  | 8.5x7  | 4                                      | 4                                       |
| Nicotiana, Hybrid | Tinkerbelle              | 3.7                                    | 3.7                                    | 10.3                          | 27.3                          | 2x2.25                                       | 8.5x2.5                                      | 3.7                                    | 4                                       |
| Nierembergia      | Purple Robe              | 2.3                                    | 2.7                                    | 5.6                           | 12.4                          | .5   | 1.1  | 2                                      | 2                                       |
| Nierembergia      | White Robe               | 2.5                                    | 2.3                                    | 3.5                           | 13.2                          | .4   | 1.0  | 2.7                                    | 3                                       |
| Pansy             | Frizzle Sizzle Blue      | 3.3                                    | 3.3                                    | 4.8                           | 13.3                          | 1.2  | 2  | 3.3                                    | 3.7                                     |
| Pansy             | Frizzle Sizzle Yellow    | 2.3                                    | 2.3                                    | 4.5                           | 10.1                          | 2.9  | 1.8  | 2.3                                    | 2.7                                     |
| Pansy             | Frosty Rain              | 4                                      | 4                                      | 5.3                           | 15.7                          | .9   | 1.5  | 4                                      | 4                                       |
| Pansy             | Jolly Joker              | 3.3                                    | 3.3                                    | 5.6                           | 14.6                          | 1.3  | 2.2  | 3.3                                    | 3.3                                     |
| Pansy             | Majestic Giants Mix      | 3                                      | 3                                      | 6                             | 14.9                          | 1.2  | 2.7  | 3                                      | 3                                       |
| Pansy             | Matrix Blue Frost        | 2.7                                    | 3                                      | 4.5                           | 13.2                          | 1.3  | 2.7  | 2.7                                    | 3                                       |
| Pansy             | Matrix Deep Blue Blotch  | 3                                      | 3                                      | 5.8                           | 12.3                          | .8   | 2.4  | 3                                      | 3                                       |
| Pansy             | Matrix Ocean             | 3.3                                    | 3.3                                    | 4.9                           | 12.7                          | .9   | 2.3  | 3.3                                    | 3.3                                     |
| Pansy             | Matrix Red Blotch        | 3.3                                    | 3.3                                    | 3.8                           | 13.5                          | 1.1  | 2.3  | 3.3                                    | 3.7                                     |
| Pansy             | Matrix Rose Blotch       | 2.7                                    | 2.7                                    | 2.6                           | 9.2                           | 1.2  | 2.5  | 2.7                                    | 2.7                                     |
| Pansy             | Matrix White Blotch      | 2.7                                    | 2.7                                    | 4.7                           | 9.7                           | 1.2  | 2  | 2.7                                    | 3                                       |

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Table 4. Results on cultivars completed three years testing

| Name               | Cultivar                    | Ave. <sup>z</sup><br>Overall<br>Rating | Ave. <sup>z</sup><br>Foliage<br>Rating | Ave.<br>Min flower<br>ht (in) | Ave.<br>Max Flower<br>ht (in) | Ave. <sup>x</sup><br>Min flower<br>Size (in) | Ave. <sup>x</sup><br>Max Flower<br>Size (in) | Ave. <sup>z</sup><br>Flower<br>Quality | Ave. <sup>z</sup><br>Flower<br>Quantity |
|--------------------|-----------------------------|--|--|-------------------------------|-------------------------------|--|--|--|---|
| Pansy              | Matrix Yellow               | 3                                      | 3.3                                    | 4.4                           | 13.3                          | 1.3  | 2.5  | 3                                      | 3                                       |
| Pansy              | Panola® Rose Picotee        | 3                                      | 3                                      | 5                             | 11.7                          | 1.3  | 1.9  | 3                                      | 3                                       |
| Pansy              | Promise® Antique Shades     | 2.7                                    | 2.7                                    | 5.3                           | 15.2                          | 1  | 1.5  | 2.7                                    | 2.7                                     |
| Pansy              | Promise® Beaconsfield       | 3                                      | 3                                      | 2.7                           | 12.4                          | 1.2  | 2.4  | 3                                      | 2.7                                     |
| Pansy              | Promise® Blue/Blotch        | 2.3                                    | 2.7                                    | 4.3                           | 15.8                          | 1.2  | 2.5  | 2.3                                    | 2.3                                     |
| Pansy              | Promise® Deep Orange        | 2.7                                    | 2.7                                    | 5.8                           | 13.2                          | 1.3  | 2.2  | 2.7                                    | 2.7                                     |
| Pansy              | Promise® Lemon Splash       | 2.7                                    | 3                                      | 4                             | 12                            | 1  | 2.3  | 3                                      | 3                                       |
| Pansy              | Promise® Marina             | 2.3                                    | 2.7                                    | 4                             | 14                            | .8   | 2  | 2.3                                    | 2.3                                     |
| Pansy              | Promise® Primrose/Blotch    | 2.7                                    | 2.7                                    | 4.9                           | 17.2                          | 1.3  | 2.5  | 2.7                                    | 3                                       |
| Pansy              | Promise® Pure Lilac Shades  | 3.3                                    | 3.7                                    | 3.8                           | 14.3                          | 1  | 2.5  | 3.3                                    | 3.3                                     |
| Pansy              | Promise® Pure Yellow        | 3                                      | 3                                      | 4.3                           | 14                            | 1.1  | 2.3  | 3                                      | 3                                       |
| Pansy              | Promise® Red/Blotch         | 2                                      | 2                                      | 3.4                           | 10.3                          | 1.3  | 2.4  | 2                                      | 2.3                                     |
| Pansy              | Promise® True Blue          | 3                                      | 3                                      | 5.2                           | 15                            | 1  | 2.3  | 3.3                                    | 3                                       |
| Pansy              | Promise® White/Blotch       | 2.3                                    | 2.3                                    | 3.3                           | 12.7                          | 1.2  | 2.3  | 2                                      | 2.7                                     |
| Pansy              | Promise® Yellow Blotch      | 2.7                                    | 2.7                                    | 3.8                           | 13.3                          | 1.3  | 2.1  | 2.8                                    | 3                                       |
| Pansy              | Promise® Yellow Blotch      | 3                                      | 3                                      | 3.8                           | 13.1                          | 1.3  | 2.1  | 3                                      | 3                                       |
| Pansy              | Promise® Yellow/Purple Wing | 3                                      | 3                                      | 3.5                           | 8.6                           | 1.8  | 2.5  | 3                                      | 3                                       |
| Pansy              | Promise® Yellow/Red Wing    | 3.3                                    | 3.3                                    | 4.2                           | 12.3                          | 1.2  | 2.6  | 3.3                                    | 3.7                                     |
| Pansy              | XXL Golden Yellow           | 2.7                                    | 2.7                                    | 4                             | 14.1                          | 1  | 2.3  | 2.7                                    | 2.7                                     |
| Pepper, Ornamental | Black Pearl                 | 2.7                                    | 3                                      | 12.7                          | 16.3                          | .2   | .4   | 2.7                                    | 2.7                                     |
| Pepper, Ornamental | Chilly Chili                | 2.3                                    | 2.3                                    | 8.2                           | 11.5                          | .9   | 1.7  | 2.3                                    | 2.3                                     |
| Pepper, Ornamental | Garda Tricolore             | 1.3                                    | 1.3                                    | 10.1                          | 15.3                          |  |  |  |   |
| Pepper, Ornamental | Peppa Blanca/Rosu           | 2                                      | 1.7                                    | 6.3                           | 8.9                           | .5   | 1  | 2                                      | 2                                       |
| Pepper, Ornamental | Peppa Lila/Naranja          | 2.7                                    | 2.7                                    | 8.2                           | 11.7                          | .3   | .8   | 2.7                                    | 2.7                                     |
| Petunia            | Carpet Pink Morn            | 1.7                                    | 1.7                                    | 4.5                           | 12                            | 1.3  | 1.8  | 1.7                                    | 1.7                                     |
| Petunia            | Easy Wave™ Coral Reef       | 2.5                                    | 2.3                                    | 4.5                           | 13.5                          | 2  | 2.8  | 2.7                                    | 2.7                                     |
| Petunia            | Opera Supreme Pink Morn     | 2.3                                    | 2.3                                    | 6                             | 14                            | 1.2  | 1.8  | 2.3                                    | 2.3                                     |
| Petunia            | Prism Sunshine              | 2.3                                    | 2.3                                    | 8.3                           | 15.8                          | 1.3  | 2.4  | 2.3                                    | 2.3                                     |
| Portulaca          | Margarita Coral             | 2.3                                    | 2.3                                    | 1.8                           | 5.5                           | .3   | 1.1  | 2.7                                    | 2.3                                     |
| Salvia, Scarlet    | Red Hot Sally II            | 2.7                                    | 3                                      | 6                             | 11.7                          | 1x1.5  | 3.25x4.75                                    | 2.7                                    | 2.7                                     |
| Salvia, Scarlet    | Saluti Formula Mix          | 2.2                                    | 2.3                                    | 6.3                           | 14.7                          | 2.75x1.75                                    | 7.75x2.9                                     | 2                                      | 2                                       |
| Salvia, Scarlet    | Saluti Salmon/Pink          | 2                                      | 2                                      | 5.5                           | 12.8                          | 1.1x.09                                      | 4.5x2.75                                     | 2                                      | 2                                       |
| Salvia, Scarlet    | Saluti White                | 1.3                                    | 1.3                                    | 6.5                           | 10.9                          | 2.25x1                                       | 4.1x1.25                                     | 1                                      | 1.3                                     |

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|-----------------|--------------------------------------|--|--|-------------------------------|-------------------------------|--|--|--|---|
| Shasta Daisy    | Snow Lady                            | 3                                      | 3                                      | 4.7                           | 13.3                          | 1.8  | 3.8  | 3                                      | 2.3                                     |
| Snapdragon      | Rocket Rose                          | 3.3                                    | 3.3                                    | 8.8                           | 28                            | 11.8   | 7.7  | 3.3                                    | 3.3                                     |
| Sunflower       | Key Lime Pie                         | 3                                      | 3                                      | 28.2                          | 54                            | 1.9  | 4.1  | 3                                      | 3                                       |
| Sunflower       | Pro Cut Yellow Lite                  | 3                                      | 3                                      | 31.8                          | 42.8                          | 3.42   | 5.3  | 3                                      | 3                                       |
| Sunflower       | Soraya                               | 3                                      | 3                                      | 49.9                          | 70.8                          | 3.3  | 6.6  | 3                                      | 3                                       |
| Sweet Pea       | Cuthbertson Floribunda<br>Choice Mix | 3                                      | 3                                      | 29                            | 66.9                          | .8   | 1.8  | 3                                      | 2.3                                     |
| Sweet Pea       | Old Spice Mix                        | 3.3                                    | 3.3                                    | 22.7                          | 55.6                          | .7   | 1.3  | 3.3                                    | 3.3                                     |
| Sweet Pea       | Royal Mix                            | 2.7                                    | 3                                      | 36.2                          | 63                            | 1  | 1.8  | 2.7                                    | 2.3                                     |
| Sweet Pea       | Spencer Ripple Formula Mix           | 3.3                                    | 3.3                                    | 46.5                          | 63.4                          | .8   | 1.8  | 3.3                                    | 2.7                                     |
| Swiss chard     | Bright Lights                        | 3.7                                    | 3.7                                    | 16.6                          | 36.3                          |  |  |  |   |
| Verbena, Garden | Snowy River                          | 2.2                                    | 2.2                                    | 3.8                           | 16.3                          | .3   | .8   | 2.2                                    | 2.2                                     |
| Viola           | Microla® Lavender                    | 2                                      | 2                                      | 4.7                           | 10                            | .5   | .9   | 2                                      | 2                                       |
| Viola           | Skippy® Purple Improved              | 4                                      | 4                                      | 4.8                           | 17.5                          | .8   | 1.5  | 4                                      | 4                                       |
| Viola           | Skippy® XL Deep Blue-Blotch          | 3.7                                    | 3.7                                    | 2.7                           | 12.5                          | 1.5  | 2.1  | 3.7                                    | 3.7                                     |
| Viola           | Skippy® XL Purple Duet               | 4                                      | 4                                      | 5                             | 15.8                          | .8   | 1.5  | 4                                      | 4                                       |
| Viola           | Skippy® XL Red-Gold                  | 3.5                                    | 3.3                                    | 14.8                          | 14                            | 1  | 1.5  | 3.7                                    | 3.7                                     |
| Viola           | Skippy® Yellow/Purple Wing           | 4                                      | 4                                      | 6.3                           | 15.3                          | 1.2  | 1.5  | 4                                      | 4                                       |
| Viola           | Sorbet® Blue Babyface                | 4                                      | 4                                      | 4.2                           | 16.8                          | .8   | 1.6  | 4                                      | 4                                       |
| Viola           | Sorbet® Peach Frost                  | 3.5                                    | 3.5                                    | 4.3                           | 15.7                          | .7   | 1.3  | 3.5                                    | 3.7                                     |
| Wallflower      | Citrona Orange                       | 3                                      | 3                                      | 7.3                           | 17.8                          | 0.9  | 2.17   | 3                                      | 3                                       |
| Wallflower      | Citrona Yellow                       | 3                                      | 3                                      | 5.8                           | 20.3                          | 0.7  | 2.34   | 3                                      | 3.3                                     |
| Zinnia, Garden  | Peggy's Delight                      | 2.3                                    | 2.3                                    | 18.7                          | 34.8                          | 2.6  | 5  | 2.3                                    | 2                                       |
| Zinnia, Garden  | Thumbelina Mix                       | 3                                      | 3                                      | 10.4                          | 25.9                          | 1  | 2  | 3                                      | 3                                       |
| Zinnia, Mexican | Persian Carpet                       | 3                                      | 3                                      | 10.1                          | 24.8                          | .9   | 1.9  | 3                                      | 3                                       |

## About the Agricultural and Forestry Experiment Station

The federal Hatch Act of 1887 authorized establishment of agricultural experiment stations in the U.S. and its territories to provide science-based research information to farmers. The Morrill Act established the land-grant colleges in 1862. The Alaska Agricultural Experiment Station was not originally part of the Alaska land-grant college system. In 1898, the station was established in Sitka, also the site of Alaska's first experiment farm. Subsequent branches were opened at Kodiak, Kenai, Rampart, Copper Center, Fairbanks, and Matanuska. The latter two remain as the Fairbanks Experiment Farm and the Matanuska Experiment Farm. The USDA established the Fairbanks experiment station in 1906 on a site that in 1915 provided land for a college. In 1931, the experiment station was transferred from federal ownership to the

college, and in 1935 the college was renamed the University of Alaska. Early experiment station researchers developed adapted cultivars of grains, grasses, potatoes, and berries, and introduced many vegetable cultivars appropriate to Alaska. Animal and poultry management was also important. This work continues, as does research in soils and revegetation, forest ecology and management, and rural and economic development. As the state faces new challenges in agriculture and resource management, the Agricultural and Forestry Experiment Station continues to bring state-of-the-art research information to the people of Alaska.

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# Seed and Plant Sources

The list does not include all possible seed and plant sources. The list reflects sources from which the Georgeson Botanical Garden has received seeds/plants. No endorsement of companies should be implied by those listed, nor criticism intended of those not listed.

## ALASKA SOURCES

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- Ann's Greenhouse, 780 Sheep Creek Rd, Fairbanks AK 99709  
Alaska Greenhouse, 1301 Muldoon Rd, Anchorage AK 99514  
Clair's Cultivations, 1364 Esro Rd, Fairbanks AK 99712  
Denali Seed, PO Box 111425, Anchorage AK 99511, [www.denaliseed.com](http://www.denaliseed.com)  
Dinkel's Fairview Nursery, HC 31 Box 5193, Wasilla AK 99687  
Driftwood Nurseries, 7.2 Mile Chena Hot Springs Rd PO Box 10462, Fairbanks AK 99710  
Hawk's Farm & Garden Center, 12 Mile Richardson Hwy PO Box 55759, North Pole AK 99705  
Holm Town Nursery, PO Box 71565, Fairbanks AK 99707  
Plant Kingdom, 620 Fiedeler Rd, Fairbanks AK 99709  
Risse Greenhouses, 981 Risse Rd, Fairbanks AK 99712  
Seeds of Alaska, Box 3127, Kenai AK 99611  
Washburn Farm Nursery, PO Box 823, Palmer AK 99645  
Woodland Farms, Mile 311 Parks Hwy, Nenana AK

## COMMERCIAL WHOLESALE AND RESEARCH SOURCES (SEEDS AND PLANTS NOT SOLD DIRECTLY TO THE PUBLIC)

- All American Selections, 1311 Butterfield Rd Suite 310, Downer's Grove IL 60515, [www.all-americaselections.org](http://www.all-americaselections.org)  
Ball Horticultural Co., PO Box 335, West Chicago IL 60185 (wholesale only), [www.ballseed.com](http://www.ballseed.com)  
EuroAmerican Propagators (Proven Winners), PO Box 289, Bonsall CA 92003, [www.euroamprop.com](http://www.euroamprop.com)  
Fischer USA, 6899 Winchester Circle Suite 102, Boulder CO 80301, [www.fischerusa.com](http://www.fischerusa.com)  
Goldsmith, PO Box 1349, Gilroy CA 95021, [www.goldsmithseeds.com](http://www.goldsmithseeds.com)  
Green Leaf (Yoder Bros.) 2369 Old Philadelphia Pike, Lancaster PA 17602, [www.green-leaf-ent.com](http://www.green-leaf-ent.com)  
Kieft Pro Seeds Holland, PO Box 63 1606 ZH, Venhuizen Holland, [www.kieftseeds.com](http://www.kieftseeds.com)  
Lawyer Nursery, 950 Hwy 200 W, Plains MT 59859, [www.lawyer nursery.com](http://www.lawyer nursery.com)  
Oglevee Ltd., 152 Oglevee Ln, Connellsville PA 15425, [www.oglevee.com](http://www.oglevee.com)

- PanAmerican Seeds, PO Box 438, West Chicago IL 60186, [www.panamseed.com](http://www.panamseed.com)  
The Flower Fields (Yoder Bros & Ecke Ranch) Carlsbad CA 92008, [www.theflowerfields.com](http://www.theflowerfields.com)  
USDA Plant Introduction Stations- NC7, Ames IA, [www.ars-grin.gov/ars/MidWest/Ames](http://www.ars-grin.gov/ars/MidWest/Ames)

## GARDEN SOCIETIES AND ORGANIZATIONS WITH SEED EXCHANGES AND SALES FOR MEMBERS ONLY

- Alaska Native Plant Society, PO Box 141613, Anchorage AK 99514, [www.aknps.org](http://www.aknps.org)  
American Horticultural Society, PO Box 6118, Alexandria VA 22308, [www.ahs.org](http://www.ahs.org)  
North American Rock Garden Society, PO Box 67, Millwood NY 10546, [www.nargs.org](http://www.nargs.org)  
Hardy Fern Foundation, Box 60034, Richmond Beach WA 98160, [www.hardyferns.org](http://www.hardyferns.org)  
New England Wildflower Society, 180 Hemenway Rd, Framingham MA 01701, [www.newfs.org](http://www.newfs.org)

## RETAIL SOURCES OF PLANTS/SEEDS

- Agway, Inc. Seed Plant, 1225 Zeager Rd, Elizabethtown PA 17022  
Alberta Nurseries & Seeds Ltd., PO Box 20, Bowden AB TOM 0K0 Canada, [www.gardenersweb.ca](http://www.gardenersweb.ca)  
Applewood Seed Co., 5380 Vivian St, Aruada CO 80002, [www.applewoodseed.com](http://www.applewoodseed.com)  
B&D Lilies, PO Box 2007, Port Townsend WA 98368, [www.bdlilies.com](http://www.bdlilies.com)  
Bear Creek Nursery, PO Box 411, Northport WA 99157, [www.BearCreekNursery.com](http://www.BearCreekNursery.com)  
Bluebird Nursery, Inc., PO Box 460, Clarkson NE 68629, [www.bluebirdnursery.com](http://www.bluebirdnursery.com)  
Carolina Seeds, PO Box 2658 Hwy 105 Bypass, Boone NC 28607, [www.carolinaseeds.com](http://www.carolinaseeds.com)  
Clause Seed, 100 Breen Rd, San Juan Bautista CA 95045, [www.clausezieier.com](http://www.clausezieier.com)  
Connell's Dahlias, 10616 Waller Rd E, Tacoma WA 98446, [www.connells-dahlias.com](http://www.connells-dahlias.com)  
Cook's Garden, PO Box 535, Londonderry VT 05148, [www.cooksgarden.com](http://www.cooksgarden.com)  
Daehnfeldt, PO Box 947, Albany OR 97321, [www.daehnfeldt.com](http://www.daehnfeldt.com)  
Dutch Gardens, Inc., PO Box 2037, Lakewood NJ 08701, [www.dutchgardens.nl](http://www.dutchgardens.nl)  
F.W. Schumacher Co., Inc., 36 Spring Hill Rd, Sandwich MA 02563, [www.treeshrubseed.com](http://www.treeshrubseed.com)  
Farmer Seed & Nursery Co., 818 NW 4th St, Fairbault MN 55021, [www.farmerseed.com](http://www.farmerseed.com)  
Ferry-Morse Seed Co., PO Box 4938, Modesto CA 95352, [www.ferry-morse.com](http://www.ferry-morse.com)  
Fred C. Gloeckner & Co., Inc., 15 E 26th St, New York NY 10010, [www.fredgloeckner.com](http://www.fredgloeckner.com)  
Gardens North, 5984 Third Line Rd N, North Gower ON K0A 2TO Canada, [www.gardensnorth.com](http://www.gardensnorth.com)  
Germania Seed Co., 5978 N Northwest Hwy, Chicago IL 60631, [www.germaniaseed.com](http://www.germaniaseed.com)  
Gilbert H. Wild & Sons, P O Box 338, Sarcoxie MO 64862, [www.gilberthwild.com](http://www.gilberthwild.com)  
H.G. German Seeds, Inc., PO Box 398, Smethport PA 16749  
Harris Seeds, PO Box 24966, Rochester NY 14624-0966, [www.harrisseed.com](http://www.harrisseed.com)

Henry Field's Seed and Nursery Co., 415 N Burnett, Shenandoah IA 51602, [www.HenryFields.com](http://www.HenryFields.com)

Home Harvest Seeds, 3807 Bank St, Baltimore MD 21224, [www.homeharvestseeds.com](http://www.homeharvestseeds.com)

Irish Eyes & Garden City Seeds, PO Box 307, Thorp WA 98946, [www.irish-eyes.com](http://www.irish-eyes.com)

J.L. Hudson, PO Box 1058H, Redwood City CA 94064, [www.jlhudsonseeds.net](http://www.jlhudsonseeds.net)

Jackson & Perkins, PO Box 1028, Medford OR 97501, [www.jacksonandperkins.com](http://www.jacksonandperkins.com)

John Scheepers Kitchen Garden Seeds, PO Box 638, Bantam CT 06750, [www.kitchengardenseeds.com](http://www.kitchengardenseeds.com)

Johnny's Selected Seeds, 1 Foss Hill Rd, Albion ME 044910, [www.johnnyseeds.com](http://www.johnnyseeds.com)

Jung Quality Seeds, 335 S High St, Randolph WI 53957, [www.jungseed.com](http://www.jungseed.com)

K. Van Bourgondien & Sons, Inc., PO Box 1000, Babylon NY 11702, [www.dutchbulbs.com](http://www.dutchbulbs.com)

McClure & Zimmerman, PO Box 368, Friesland WI 53935, [www.mzbulb.com](http://www.mzbulb.com)

Milk Ranch Specialty Potatoes LLC, 20094 Hwy 149, Powderhorn CO 81243, [www.milkkranch.com](http://www.milkkranch.com)

Nichols Garden Nursery, 1190 N Pacific Hwy, Albany OR 97321, [www.gardennursery.com](http://www.gardennursery.com)

Nourse Farms, Inc., Box 485 RFD, South Deerfield MA 01373, [www.noursefarms.com](http://www.noursefarms.com)

Park Seeds, 2 Parkton Ave, Greenwood SC 29649, [www.parkseed.com](http://www.parkseed.com)

Peter de Jager Bulb Co., PO Box 2010, So Hamilton MA 01982

Pinetree Garden Seeds, PO Box 300, New Gloucester ME 04260, [www.superseeds.com](http://www.superseeds.com)

Richters, 357 Highway 47, Goodwood ON LOC 1A0 Canada, [www.richters.com](http://www.richters.com)

R.H. Shumway's Seeds, 334 W. Stoud St, Randolph WI 53956-1274, [www.rhshumway.com](http://www.rhshumway.com)

Roseraie at Bayfields, Box R, Waldoboro ME 04572, [www.roseraie.com](http://www.roseraie.com)

Royal Sluis, Inc., 1293 Harkins Rd, Salinas CA 93901

Rupp Seeds, Inc., 17919 County Rd B, Wauseon OH 43567, [www.ruppseeds.com](http://www.ruppseeds.com)

Seeds of Change, PO Box 15700, Santa Fe NM 87501, [www.seedsofchange.com](http://www.seedsofchange.com)

Seeds of Distinction, PO Box 86 Station A, Toronto ON M9C 4V2 Canada, [www.seedsofdistinction.com](http://www.seedsofdistinction.com)

Seedway, Inc., PO Box 250, Hall NY 14463, [www.seedway.com](http://www.seedway.com)

Select Seeds, 180 Stickney Hill Rd, Union CT 06076, [www.selectseeds.com](http://www.selectseeds.com)

Seymour's Selected Seeds, PO Box 1346, Randolph WI 53956, [www.seymourseeduk.com](http://www.seymourseeduk.com)

Shepherd's Garden Seeds, 30 Irene St, Torrington CT 06790, [www.shepherdseeds.com](http://www.shepherdseeds.com)

Song Sparrow Perennial Farm, 13101 East Rye Rd, Avalon WI 53505, [www.songsparrow.com](http://www.songsparrow.com)

Stokes Seeds, PO Box 548, Buffalo NY 14240, [www.stokeseeds.com](http://www.stokeseeds.com)

T & T Seeds, Ltd., Box 1710, Winnipeg MB R3C 3P6 Canada, [www.ttseeds.mb.ca](http://www.ttseeds.mb.ca)

Territorial Seed Co., PO Box 157, Cottage Grove OR 97424, [www.territorial-seed.com](http://www.territorial-seed.com)

Thompson & Morgan Seed Co., Box 1308, Jackson NJ, [www.thompson-morgan.com](http://www.thompson-morgan.com)

Twilley Seeds, 121 Gary Rd, Hodges SC 29653, [www.twilleyseed.com](http://www.twilleyseed.com)

Valley Nursery, Box 4845, Helena MT 59604

Van Bloem USA, Inc., 500 Pendley Industrial Park, Cumming GA 30130

Vaughan's Seed Co., 5300 Katrine Ave, Downers Grove IL 60515

Vermont Bean Seed Co., Garden Ln, Fair Haven VT 05743, [www.vermontbean.com](http://www.vermontbean.com)

Vesey's Seeds, Ltd., PO Box 9000, Calais ME 04619-6102, [www.veseys.com](http://www.veseys.com)

W. Atlee Burpee & Co., 300 Park Ave, Warminster PA 18991, [www.burpee.com](http://www.burpee.com)

Waushara Gardens, N 5491 5th Dr, Plainfield WI 54966

Wayside Gardens, 1 Garden Ln, Hodges SC 29695, [www.waysidegardens.com](http://www.waysidegardens.com)

West Coast Seeds, 3925 64 St, Delta BC V4K3N2 Canada, [www.westcoastseeds.com](http://www.westcoastseeds.com)

White Flower Farm, PO Box 50, Litchfield CT 06759, [www.whiteflowerfarm.com](http://www.whiteflowerfarm.com)

Wildseed, Inc., PO Box 308, Eagle Lake TX 77434

*Pansies, petunias, nasturtiums, and other flowers for the demonstration garden at the Georgeson Botanical Garden.*



*Without our dedicated volunteers, continued growth and success of the Georgeson Botanical Garden would not be possible.*

**A big thank you to our  
2008 volunteers!**

*To join these valued people, call Jan Hanscom at  
474-6921*

Walt Babula, Kathy Baum, Deb Benson, Cathi Bouton, Holly Buzby, Jane Campbell, Carolyn Chapin, Olga Cook, Virginia Damron, Susan Dearborn, Donna Dinsmore, Liz Fuerst, Gail Garregues, Ethan Gridley (Eagle Scout), Phyllis Haggland, Judy Harris, Shirley Harris, Kate Hedstrom, Bette Higbie, Hilary Houghton, Victoria Hill, Helen Howard, Ted Kegler, Jeff Karrick, Dee King, Nancy Kilgore, Joanne Klumb, Deb Koons, Sherry Lewis, Susan Lightbody, Carol Ann Lovejoy, Gail Marakami, Gail Mayo, Rose Meier, Martin and Sue Miller, Andee Mitchell, Marsha Munsell, Peggy O'Neal, Mary Parsons, Asa Pendergast (Eagle Scout), Emily Reiter, Debbie Rimer, Susan Risse, Ann Roberts, Lou Rowinski, Barb Rondine, Kathy Seim, Annie Sherman, Libby Silberling, Melody Springer, Ann Swift, Shirley Sterner, Phylis Slone, Curtis Thorgaard, Dida Uotila, Eileen VanWyhe, Maggie Waite, Judy Weber, Susie Zimmerman, Spring Fest volunteers, University Park 2nd grades, The Herb Bunch, the GBG Society Board consisting of Virginia Damron, Diane Hunt, Jamie Smith, Mike Salzman, Curtis Thorgaard, Carolyn Chapin, Melody Springer, Deb Koons, and the many others who made the Victorian Tea and Garden Faire a success.

**Special thanks to our partners and volunteers who support the Garden with seeds and other donations:**

All America Selections, Flower and Vegetable Seeds

Goldsmith Seeds, Flower seeds

Kieft Seeds, Flower seeds

PanAmerican seeds, Flower seeds

Risse Greenhouses, Plants and supply discounts

USDA Plant Introduction Stations, NC7, Iowa State Univ., Plants and seeds



*Sweet peas at the Georgeson Botanical Garden.*