

# Annual Flowering Plant Evaluations 2009

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*Rudbeckia hirta cv. Cappuccino growing at the Georgeson Botanical Garden.*

## 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 on 3–4 June, 2009 in the Annual Flower 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). 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 sweet peas 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 12 June to all plots. The fungicide Cleary 33336 was applied to all plots on 26 June to control *Sclerotinia* cottony rot. Plots were irrigated as needed throughout the summer.

Weather data were compiled annually from a U.S. Weather Service station, elevation 475 ft (145 m), located approximately 350 ft (107 m) west of the garden. Although it seemed quite warm, especially when compared to last year, the 2009 growing season was only the fifth warmest since 1999 (based on thaw degree days, Table 1). However, the growing season of 126 days (last frost May 17 – first frost September 20) was 11 days longer than the 30-year mean. May started with a record high of 76°F and was warmer than normal. June was warmer than normal by just one half degree while July had the highest average daily maximum temperature and the lowest precipitation ever recorded in Fairbanks. The high temperatures

combined with the drought enhanced area wildfires, and resulted in heavy smoke in the area for much of the latter half of July. August saw cooler temperatures and increased rainfall, which alleviated wildfire threats. September's mean temperatures were about 4° above the long-term mean. (Weather discussion based on information from the Alaska Climate Research Center, University of Alaska Fairbanks, and weather data from the U.S. Weather Station west of the garden. See Tables 1 & 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). Each cultivar was measured for plant height and flower size, rated for performance of flowers and foliage, and evaluated for fragrance. Each cultivar grown in the garden beds is tested for at least three years depending on availability of seed or plugs.

**Table 1. Weather data from the U.S. Weather Service station located just west of the garden for years 1999–2009.**

Season	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Average temperature (°F):</b>											
May	46	44	45	50	44	52	56	50	50	47.8	50
June	61	59	57	58	61	66	67	59	60	58.2	58
July	61	59	61	61	61	65	63	62	64	58.9	65
August	58	52	57	54	55	62	58	55	60	52.6	53
September	45	41	49	47	41	38	46	50	47	45.5	47
<b>Maximum temperature (°F):</b>	<b>91</b>	<b>83</b>	<b>95</b>	<b>85</b>	<b>82</b>	<b>90</b>	<b>85</b>	<b>80</b>	<b>84</b>	<b>84</b>	<b>90</b>
<b>Growing season:</b>											
Last frost	May 29	May 15	May 13	May 12	May 24	May 8	May 5	June 4	May 13	May 30	May 17
First frost	Sept 11	Sept 16	Sept 24	Sept 2	Sept 13	Sept 4	Sept 2	Sept 25	Sept 22	Sept 21	Sept 20
Frost free days	105	124	134	113	112	119	120	112	132	113	126
Thaw degree days*	3383	2943	3439	2980	3123	3751	3767	3523	3728	3185.5	3473
Rainfall (inches)	8.66	8.55	5.8	9.35	9.91	5.6	10.59	7.86	11.32	8.96	6.4
<b>Previous winter season:</b>											
<b>Minimum temperature (°F)</b>	<b>-54</b>	<b>-50</b>	<b>-27</b>	<b>-36</b>	<b>-35</b>	<b>-45</b>	<b>-50</b>	<b>-49</b>	<b>-41.7</b>	<b>-46.1</b>	<b>-49.2</b>
Snowfall (inches)	31.6	62.2	39.9	39.7	33.2	51.7	70.9	51.8	25.2	46.9	68.6

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

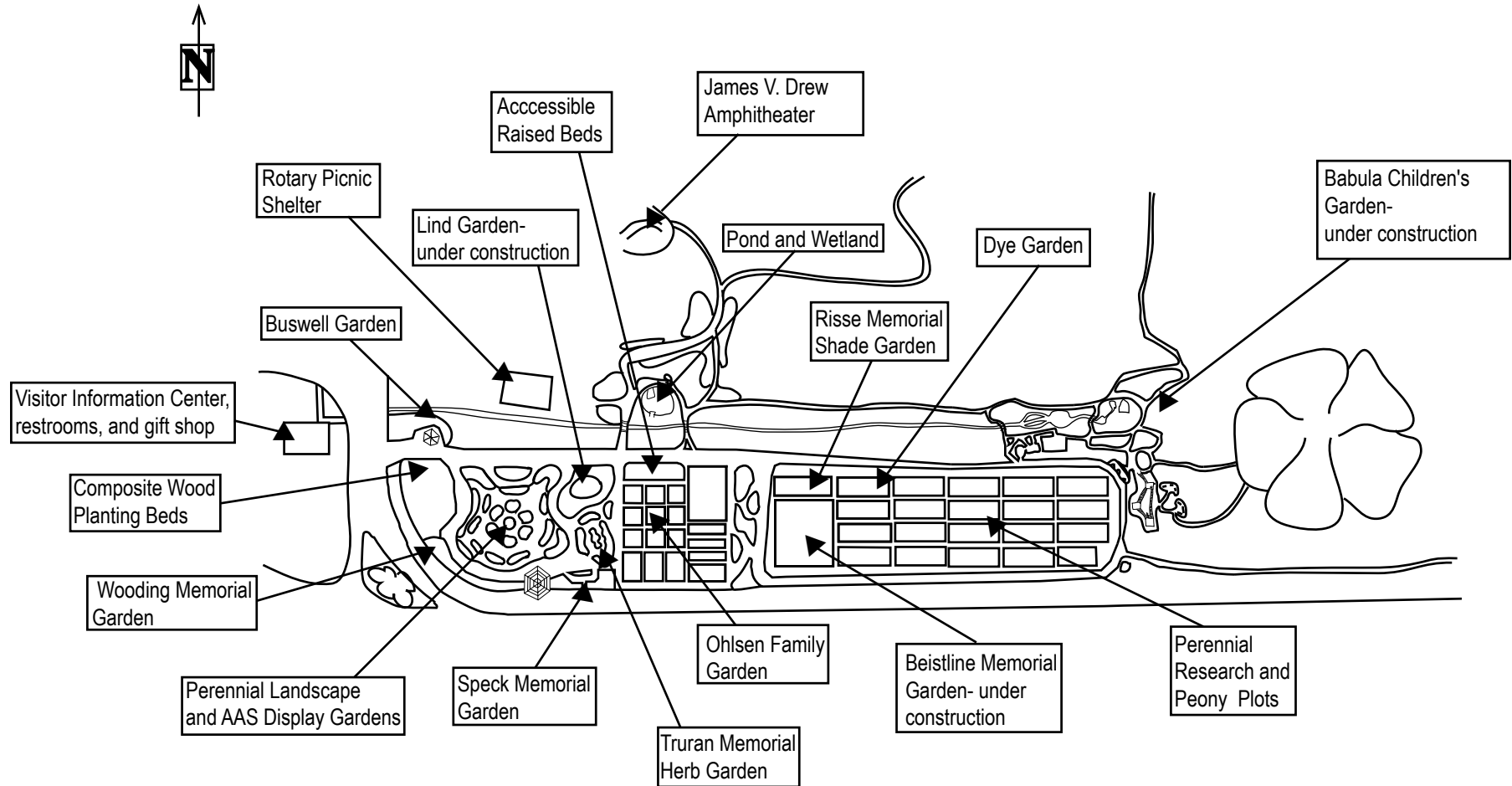
Most annual flowers grew well during the summer and provided beautiful displays throughout the extended season. Even the notoriously poor celosia and amaranth cultivars grew better than average because of the extra heat.

The warm weather promoted an outbreak of insect pests, particularly aphids, although their damage was more apparent in the raised vegetable beds and perennial flowers such as delphinium. Voles attacked some bedding plants in flats prior to

transplanting, especially the marigolds and flowering cabbage. The annual garden beds continue to be plagued by *Sclerotinia* cottony rot, which increased in intensity with permanent, non-rotating garden beds. Even with removal and burning of vegetation each season, the disease is persistent and attacks susceptible flowers, especially petunias and zinnias. Despite a few seasonal woes, it was a long, beautiful flower season.

**Table 2. Weather data summaries for growing sesason years 2007–2009.**

	MAY			JUNE			JULY			AUGUST			SEPTEMBER		
Temperature °F	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009
Average daily maximum	62	60	63	72	69	70	76	68	78	71	63	63	57	56	58
Monthly high	80	69	79	84	81	85	84	84	90	84	74	84	71	70	73
Average daily minimum	38	36	37	49	47	47	52	49	51	48	42	44	37	36	36
Monthly low	28	23	30	41	39	37	44	42	41	39	35	31	22	15	20
Rainfall (inches)	0.9	0.54	0.03	2.66	1.94	2.74	4.12	3.65	0.20	1.85	2.26	2.59	1.79	0.57	0.84



**Table 3. Results of tested annual flower cultivars for 2009.**

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		June				July				August			
			max	min	max	min	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4				
African Daisy	Buff Beauty	apricot	18	4.5	2	1		*	*	*	*	*	*	*	*	*						
African Lion's Tail	Staircase																					
Ageratum	Dondo Blue	lavender	29.5	7	3	0.5	*	*	*	*	*	*	*	*	*	*	*	*				
Ageratum	Timeless Rose	rose, purple	25.5	11.5	2	0.5	*	*	*	*	*	*	*	*	*	*	*	*				
Alternanthera	Royal Tapestry		2.5	1																		
Alyssum, Sweet	Clear Crystals Lavender Shade	lavender	10	2	1.25	0.75	*	*	*	*	*	*	*	*	*	*	*	*				
Alyssum, Sweet	Clear Crystals Purple Shade	purple, lavender	8	1.25	1	0.75	*	*	*	*	*	*	*	*	*	*	*	*				
Amaranth**	Dreadlocks	burgundy	45	26.75	26.5 x 2.25	5.5 x .75		*	*	*	*	*	*	*	*	*	*	*				
Amaranth, Feathered**	Autumn Palette	orange	38	21	19.5x4	12.75 x 4		*	*	*	*	*	*	*	*	*	*	*				
Amaranth, Feathered	Icecream Formula Mix	red, orange, yellow	15	5.5	8x3	1.5 x .5	*	*	*	*	*	*	*	*	*	*	*	*				
Amberboa		lavender	35	17	2	0.5		*	*	*	*	*	*	*	*	*	*	*				
Ambrosia		green	13	4							*	*	*	*								
Aster, Annual	Starlight Mixed Colors	bright blue, sky blue, scarlet, and rose	7.5	4	4	2.5				*	*	*	*	*	*	*	*	*				
Aster, China	Lemonetta	yellow	15	9	3.25	1						*	*	*	*	*	*	*				
Bacopa	Blutopia	lavender blue	3	1	0.5	0.25	*	*	*	*	*	*	*	*	*	*	*	*				

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.

			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
			4	4	4	2	sl			Small, bushy plant loaded with apricot blooms. Great display but closes up in cold, cloudy weather.
										Poor germination this year. Did not plant.
☼	☼	☼	2.5	2.5	2.5	3	n			Nice cut flower but not as floriferous as other cultivars. Good blooms all summer.
☼	☼	☼	1	1	1	1	n			Poor germination. Needed reseeding. Flowers are an interesting two-toned dusky rose with new flowers being dark, and fully open flowers paler and some nearly white. Some are also lavender.
						2	n	y	n	Trailing foliage with deep purplish red stems and small pointed leaves. Cannot be recommended for ground beds in cool seasons. Grew well and filled in well during this hot summer. Interesting foliage plant for the front of beds.
☼	☼	☼	4	4	4	1	y	n	n	Low-growing ground cover full of blooms all summer. Some flower size and plant size differences with different flower colors.
☼	☼	☼	4	4	4	2	y	n	n	Good mix of deep rose shades in this mounding ground cover.
☼	☼	☼	4	4	4	3	n			Drooping fingers of flowers cascade at the top of the plant. Does not branch but remains a single stalk with yellow-green foliage tinged with red. Okay show when used in mixed beds as background plants. Don't plant in mass plantings.
☼			4	4	4	1	n			Grew well in the summer heat. Tall spikes with interesting bloom color but spikes dry to an ugly brown in mid August. Did not flower in 2008, a cool summer.
☼	☼	☼	1.5	1.5	1.5	1.5	n	n	n	Needs close spacing to fill in well. Foliage is yellow-green, unattractive like other amaranths. Many plants died by mid August although growth was better this year because of early season hot weather.
☼	☼	☼	3	3	3	3	n	n	n	Interesting needle-like petals around a whitish pincushion center. Loaded with blooms all summer. Needs deadheading.
			2	2	3.5	2	y	n	n	Bushy stalks covered with green blooms. Very unusual display, best this year in ground beds with a very hot season. In cooler years, grew better in raised beds than in the ground; big, brown seed heads are ugly in September. The fragrance is highly unpleasant.
			4	4	4	4	n	y	y	Short, puffy flowers. Excellent display early but did not last. Very ragged appearance late in the season.
☼	☼	☼	3	3	3	3	n			Peony-like blooms. Lemon-yellow petals fade to cream at the tips. Plants are uniform height, loaded with blooms, bushy. Plants fill in well and produce great display from mid-season onward.
☼	☼	☼	2	2	2	2	n	n	n	Tiny leaves and small lavender flowers on cascading branches; bloomed nearly all summer as filler for containers. In ground beds, foliage becomes purplish, plants spread a bit, but need close spacing for best effect. Very short ground cover for the front of beds.

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 2009, continued**

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	June				July				August			
							wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4
Bacopa	Snowtopia	white	4	0.25	0.5	0.25	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼		
Balloon Cottonbush		white	58	40	0.5	0.25							☼	☼	☼	☼	☼	☼
Balsam	Camellia flowered Mixed Colors	rose, white, peach	33	16	17x3	6.5x3		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Basket Flower		pink	42	20.5	4.5	1.5		☼	☼	☼	☼	☼	☼	☼	☼	☼		
Begonia	Pizzazz Hybrid Mix																	
Begonia, Fibrous	Bada Bing™ Rose Bicolor																	
Bidens	Gold Star	yellow	38.5	11.5	1.25	0.5		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Blue Spiderwort	Sleeping Beauty	blue	25.5	10	11x3	3x1.25	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Browallia**	Silver Bells	blue	34	10	2.25	1.25				☼	☼	☼	☼	☼	☼	☼	☼	☼
Bupleurum	Deco	greenish yellow	33	13	1.5	0.5				☼	☼	☼	☼	☼	☼	☼	☼	☼
Butterfly Flower	Angel Wings	lavender, pink, white mix	38	5	0.5	0.25		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Calendula	Red Heart	yellow, orange with red centers	30.5	11	2.75	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼		
Calendula	Sherbet Fizz	peach w/ mahogany accents	20	10.5	2	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼		☼
California Poppy	Dairy Maid	gold, apricot shades	16	4	1.5	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼		
California Poppy	Jelly Beans	orange, red, pink, yellow, gold, white	21	1	3.5	0.75	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼

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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.

			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
			2	2	2	2	n	n	n	Planted in ground beds this summer. Nice, flat ground cover early in season. Overwhelmed by neighboring plants late in season. In baskets, beautiful bushy, cascading plant covered with tiny white blooms all summer. Some deadheading needed to keep plants blooming all summer.
☼	☼	☼	2.5	2.5	2.5	2.5	n			Very tall bushy plant looks like willow branches. Flowers are nondescript, tiny white clusters in axles of the branches. A few balloon seed pods covered with soft hairs appeared in late season but were totally hidden by foliage.
☼	☼	☼	4	4	4	4	y			Attractive upright bushy stems with a variety of flower colors. Great background plant. Flowers hug the center stalk and are often hidden in beneath the foliage; this cultivar is an exception. All-America Selections winner 1959.
	☼	☼	2.5	2.5	2.5	2	n			Tall, floppy, thistle-like flowers with feathery petals and fuzzy calyx. Needs to be mass planted for best display and stems need support.
										Poor germination and seedling growth. Did not plant this year.
										Poor germination, was not planted this year.
☼	☼	☼	3	2.5	3	2.5	y	n	n	Large, bushy, spreading, floppy stems with lots of golden blooms; in ground beds needs lots of room to expand or they overwhelm the neighbors. Must be in a very large container to keep in scale with the spread.
☼	☼	☼	4	4	4	4	n	n	n	Tall upright stems with single blooms in the axles of the leaves. Brownish seed pods late in season are ugly. Brilliant clear blue flower color.
☼			2	2	2	2	n			No growth this season. Died out shortly after planting
☼			3.5	3.5	3.5	2	n			Interesting greenish yellow blooms on bushy plants. Would be great as filler but pretty blah by itself.
			4	4	4	4	n			Bushy plant with tall, floppy stems. Best early in the season but still colorful in cold, wet August weather. Stems begin to yellow in late season. Best as a filler.
			3	3	3	3	n			Bushy, yellow and orange mix with reddish centers. Covered with aphids this season. Needs significant deadheading to maintain show.
☼	☼	☼	2.5	2.5	2.5	2	n	y	n	Tiny flowers compared to other calendulas, two-toned blooms. Bushy, fills in well. Needs significant deadheading.
			3	3	3	3	n			Semi double blooms in mixed shades with bushy, feathery foliage. May be broadcast for late season color as well as transplanted.
☼	☼	☼	4	4	4	4	n			Fully double blooms, compact feathery foliage. Floppy stems leave a lot of open spaces late in the season. Very nice mix of flower colors. We have had showier cultivars.

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**Table 3. Results of tested annual flower cultivars for 2009, continued**

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			max	min	max	min	June				July				August				
							wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	
Candytuft		white	20	5	1.75	0.75	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Cardoon**			62	51															
Castor Bean**	Zanzibarensis Mix	red	60	27	1	0.5						☼	☼	☼	☼	☼	☼	☼	☼
Chenopodium	Strawberry Sticks	green	12	3.5	5x1	2.5x.75	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼			
Chocolate Flower		gold w/ brown centers	18	7	2	1.75		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Chrysanthemum, Tricolor**	Court Jester	rose, white, red, yellow w/ mahogany centers	27	5	2.25	0.5						☼	☼	☼	☼	☼	☼	☼	☼
Chrysanthemum, Tricolor**	Dunnettii Choice Mix	white, yellow, bronze, crimson	31	9	2.5	1.5		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Cigar Plant		orange red w/ white ring	10	1.5	0.75	0.5	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Coleus*	Chocolate Splash	lavender	20	6	6.5x.25	1x.25						☼	☼	☼	☼	☼	☼	☼	☼
Coleus*	Versa Burgundy to Green	lavender	26	11	6x.25	1x.125					☼	☼	☼	☼	☼	☼	☼	☼	☼
Coleus*	Versa Crimson Gold	lavender	28	8	5x.25	.75x.25									☼	☼	☼	☼	☼
Coleus*	Versa Green Halo	lavender	24.5	10	2.5x.5	1.25 x .75									☼	☼	☼	☼	☼
Coleus*	Versa Lime	lavender	26	11	6x.25	1x.125									☼	☼	☼	☼	☼
Coleus*	Versa Rose to Lime	lavender	24	12	1x.25	.25x.25					☼	☼	☼	☼	☼	☼	☼	☼	☼

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			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
*			2.5	2.5	2.5	2.5	n	n	n	Bushy plants covered with clusters of white blooms in early summer; needs significant deadheading to avoid seed production. Heirloom plant.
					3	2	n	y	y	Attractive silvery foliage. Huge plants with dissected, spiky leaves need lots of space to spread. Flower buds nearly bloomed in 2007, but no blooms in 2008 or the warm season 2009.
*	*	*	3	3	3	3	n	n	n	Even in hot summer, plants did not grow well. They were dwarfed by the nearby shoo fly plants. No flower data for '08.
	*		2	2	2	2	n			Planted as single stems already loaded with balls of red edible fruit. Did not expand much after initial planting. Looked ragged all season and was overwhelmed by neighbors. Not very ornamental.
*	*		2.5	3	2.5	2.5	y	n	n	Tiny daisy flowers with brown centers, sparse through the season. Not the best show. Died out in early September. Smells like chocolate.
*	*	*	4	4	4	3	n	n	n	Brilliant multi-colored blooms on floppy stems. Very colorful all season. Needs deadheading late in season.
*	*	*	3	3	3	3	n			Brightly colored mix of single and double flowers. Stems are very upright and ragged. Individual plants vary in bloom quantity making for uneven display.
*	*	*	4	4	4	4	n	n	n	Interesting orange-red tubes with white ring at tip. Plants loaded with blooms in this hot summer; not so floriferous in cool weather. Needs mass plantings in front of borders or in containers. Easily overwhelmed by aggressive neighbors.
*			4	4	4	4	n			Interesting patterns of deep burgundy splashes on light green leaves. Plant did not fill in well and many leaves became brown in cool late season weather. Scraggly appearance.
*	*	*	4	4	4	4	n			Nice bushy plant filled the container with light green leaves with just a touch of burgundy at the petiole. Some flowers. Not the most ornamental coleus we have grown.
*	*	*	4	4	4	4	n			Largest bushy coleus this summer. Not the most ornamental color; burgundy centers with lime edges. Some blooms but minor compared to leaves.
*	*	*	2	2	2	2	n			Bushy plant most of the season. Poor appearance in cool weather. Centers of leaves become brown, papery late in season.
*	*	*	3	3	3	3	n			The brightest color of all coleus this season; brilliant lime-green solid color. Some flowers. Not as bushy as other coleus, lots of open spaces in container.
*	*	*	2	2	2	2	n			Tall upright plants did not fill in well; lots of open spaces in containers all summer. Foliage is light green with red at the petiole end. Some flowers. Smaller leaves than other coleus.

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**Table 3. Results of tested annual flower cultivars for 2009, continued**

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	June				July				August				
							wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	
Coleus*	Versa Watermelon	lavender	16	8	4.25x.5	.5x.125										*	⊗	⊕	⊕
Collinsia**	Mystic Lilac	pale lavender	19.5	9	9.25x2	1.5x.75										⊗	⊗	⊗	⊗
Corn Parsley	Goldspray	yellow	26	14	2.5	1.25	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕
Cosmos	Double Click	white, crimson, pink, rose	38	10	3	1.25		*	*	*	⊗	⊗	⊗	⊗	⊗	⊗	⊕	⊕	⊕
Cosmos	Happy Ring	pink/rose bicolor	38	16	2	1		*	*	⊗	⊗	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊗
Cosmos**	Picotee	pink with magenta edges, yellow centers	41	16	2.75	1	*	⊗	⊗	⊗	⊗	⊗	⊕	⊕	⊕	⊕	⊕	⊕	⊗
Cosmos	Psyche Mix	magenta, pink	36	11	4	2					*	*	⊗	⊕	⊕	⊕	⊕	⊕	⊕
Cosmos**	Purity	white	31	17	4	1		*	*	*	*	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Cosmos	Rose Bonbon	pink	38	12	3.75	1.5		*	*	*	*	*	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Cosmos	Sensation Mix	pink, white, rose, carmine	41	24	3.25	1.5		*	*	*	*	*	*	*	*	*	⊗	⊗	⊗
Cosmos	Sonata Pink Blush	pink with magenta near center, yellow centers	32	13	4	2				*	*	⊗	⊗	⊗	⊗	⊗	⊗	⊕	⊕
Cosmos**	Sweet Dreams						*												
Creeping Gloxinia	Satin Slippers		23	5	2	0.75			*	*	*	*	*	*	*	⊕	⊕	⊕	⊗
Crepis		pink						⊗	⊗		⊗								
Dahlia**	April Dawn	white and lavender	32	21	5	3.5							⊗	⊗	⊕	⊕	⊕	⊕	
Dahlia**	Big Wow	red	44	15	9.5	9							*	*	*	⊕	⊕	⊕	
Dahlia	Bloomquist Glow																		

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

			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
✿	✿	✿	4	4	4	4	n			Nice bright colors, medium-sized bush with very few flowers. Leaves are bright red interior with light green edges. More ornamental than Versa Crimson Gold. Holds up well all season.
✿	✿	✿	2	2	2	1	n	n	n	Interesting spikes of pink flowers clustered in rings around the stems. Foliage spotted late in the season. Okay as filler or in mass planting. Did not bloom in 2008.
✿	✿	✿	2.5	2.5	2.5	2.5	n	y	n	Looks like dill in bloom. Nice filler. Floppy, weak stems but masses of brilliant gold all summer.
✿	✿	✿	2.5	2.5	2.5	2.5	n	y	y	Very interesting double blooms but few are true doubles, floppy stems, needs deadheading; not as floriferous as other cosmos but shorter mounds than most.
✿	✿	✿	2.5	2.5	2.5	2	sl	y	n	Some flowers with distinct dark rose ring in center of petals. Bushy, floppy stems. More bush than flowers.
✿	✿	✿	2.5	2.5	2.5	3	y			Interesting and attractive flowers but smaller flowers than other cosmos. Petals edged in dark colors. The most blooms of all cosmos this year.
✿	✿	✿	3	3	3	3	sl	y		Double petals, big bushy plants with lots of blooms late in August.
✿	✿	✿	3	3	3	3	n	y		Big bushy plants. Few blooms.
✿	✿	✿	2.5	2.5	2.5	2.5	n			Interesting double pink blooms. Few flowers on bushy green stems.
✿	✿	✿	2.5	2.5	2.5	2.5	n	y		Big bushy plants with lots of foliage, few flowers. Needs dark treatment, flower induction treatment for best flowering
✿	✿	✿	2.5	2.5	2.5	3	sl	y		Medium-sized bushy plants, few flowers. The flowers that formed needed significant deadheading to maintain ornamental appearance.
						3	n			Big bushy plants, no blooms.
✿	✿	✿	3.5	3.5	3.5	1	n			Very poor growth all season. Died out by mid-season.
										Seedling transplants damaged by voles before planting. No show all summer.
✿	✿	✿	3	3	3	3	n			Dainty small to medium blooms with great two toned color white centers with lavender pink tips. Lots of blooms and very colorful from mid-season on.
✿	✿	✿	4	4	4	4	n			Biggest blooms this season. Nice clear red and huge. Lots of blooms but one usually open at a time.
										Roots rotted shortly after planting in greenhouse. Was not transplanted outdoors.

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**Table 3. Results of tested annual flower cultivars for 2009, continued**

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	June				July				August			
							wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4
Dahlia**	Bodacious																	
Dahlia	Brittany Rey																	
Dahlia	Candlelight																	
Dahlia	Clyde's Choice																	
Dahlia**	Emory Paul	pink	41	33	7.5	3						*	⊗	⊗	⊗	⊗	⊗	⊗
Dahlia**	Finn	pink	35	24	4	3.5								*	*	⊗	⊗	⊗
Dahlia	Gitts Perfection																	
Dahlia**	Grand Prix	yellow and white	36	24	7.5	6								*	*	⊗	⊗	⊗
Dahlia**	Jayleen G.	dark peach	42	38	4.5	3.75								*	⊗	⊗	⊗	⊗
Dahlia**	Kelvin Floodlight	yellow	36	16	8.25	6							*	⊗	⊗	⊗	⊗	⊗
Dahlia**	Lavender Perfection	rosy lavender	46	28.5	7.5	2.5							*	*	⊗	⊗	⊗	⊗
Dahlia	Linna																	
Dahlia**	Maggie C.	yellow w/ orange overtones	38.5	36	6.25	3											⊗	⊗
Dahlia	Margaret Allen																	
Dahlia	Myrtle's Folly																	
Dahlia**	Otto's Thrill	peach	43	26	7.5	5							*	⊗	⊗	⊗	⊗	⊗
Dahlia**	Parkland Rose	rose	45	42	5	3.25								⊗	⊗	⊗	⊗	⊗
Dahlia	Pineapple Lollipop																	
Dahlia	Redskin	white, apricot, yellow, pink red	30.5	16	4	2							*	⊗	⊗	⊗	⊗	⊗
Dahlia**	Richard Rogers	rose	38	29	9	8.5								*	*	⊗	⊗	⊗
Dahlia	Scout	scarlet																
Dahlia**	Snowbound	creamy white	41.5	35	8	4.5								*	*	⊗	⊗	⊗

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

			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
										Very small plant with no flowers.
										Roots rotted shortly after planting in greenhouse. Was not transplanted outdoors.
										Roots rotted shortly after planting in greenhouse. Was not transplanted outdoors.
										Roots rotted shortly after planting in greenhouse. Was not transplanted outdoors.
☼	☼	☼	4	4	4	4	y			Tall gangly shoots with weak stems but huge booms. Flowers mostly bent double.
☼	☼	☼	3	3	3	3	n			Medium-sized blooms mostly hidden in foliage. Lots of buds in late season but too close to frost.
										Roots rotted shortly after planting in greenhouse. Was not transplanted outdoors.
☼	☼	☼	4	4	4	4	n			Very large blooms, bright yellow tipped with white in an uneven pattern. Flowers need deadheading late in season. Floppy stems if not supported.
☼	☼	☼	4	4	4	4	sl	y	n	Very tall plant with abundant blooms. Flowers face upward and new buds are abundant above the open flowers. Great long stems for cutting.
☼	☼	☼	4	4	4	4	n			Outstanding medium sized, but abundant blooms held well above the foliage. Very colorful display from mid season onward
☼	☼	☼	3.5	3.5	3.5	3.5	n			Very large bloom and lots of buds. Very showy plant from mid season onward.
										Roots rotted shortly after planting in greenhouse. Was not transplanted outdoors.
☼	☼	☼	4	4	4	3	n			Nice upright two-toned blooms. Very feathery appearance. Foliage is very wrinkled.
										Roots rotted shortly after planting in greenhouse. Was not transplanted outdoors.
										Roots rotted shortly after planting in greenhouse. Was not transplanted outdoors.
☼	☼	☼	4	4	4	4	n			Large flowers with dark peachy pink centers and lighter outer petals. Plant is loaded with blooms late in season.
☼	☼	☼	4	4	4	4	n			Tall plant covered with cactus-type flowers, medium sized. Very attractive display.
										Roots rotted shortly after planting in greenhouse. Was not transplanted outdoors.
☼	☼	☼	4	4	4	3	n	y	y	All-America Selections Winner 1975. Named for reddish foliage color that contrasts well with medium sized flowers. Big bushy plant covered with multi colored blooms. Dig tubers in fall.
☼	☼	☼	4	4	4	4	n			Enormous blooms in clear deep rose red fading to light rose at the tips. Outstanding show. Shorter than all other dahlias in trials.
										One large stem with a few buds. Flower display was poor compared to other dahlias. Short plant, small flowers.
☼	☼	☼	3	3	3	4	n	y	n	Large outward facing flowers, needs deadheading. Lots of blooms late in season. Nice clear white petals.

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**Table 3. Results of tested annual flower cultivars for 2009, continued**

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	June				July				August			
							wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4
Dahlia**	Summer Breeze	gold and orange	49	35	7	3.5										✿	✿	✿
Dahlia	Walter Hardisty																	
Dahlia**	Wildwood Marie	peach	41	38	5.5	3.75									✿	✿	✿	✿
Dianthus	Bouquet™ Rose	deep rose	22.5	3	1.25	0.75		✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Dicranostigma**		yellow					✿	✿	✿									
Fennel Flower	African Bride	white petals, maroon anthers	23	11	2	1		✿	✿			✿	✿	✿		✿		
Feverfew	Crown White	white	18.5	10	0.25	0.125		✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Flowering Flax	Charmer Mix	white, red, peach	25	7	1.75	0.75	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Flowering Kale	Coral Queen		21	15														
Forget-Me-Not**	Victoria Azure	blue	10	6	0.75	0.5		✿	✿				✿	✿	✿	✿	✿	
Foxglove, African**		cream and pink	42.5	25	6.5 x 1.75	2x1.75							✿	✿	✿	✿	✿	✿
Gaillardia	Mesa Yellow F1 Hybrid	Yellow	19.5	8	3.25	1		✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Gaillardia	Razzledazzle Mixed Colors	deep red, gold tips	24	7	3.25	1.5		✿	✿	✿	✿	✿	✿	✿	✿	✿		
Gaillardia	Sundance Cream	yellow	19	4	2.25	1.25		✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Geranium*	BullsEye™Cherry	red	16	11	3.75	2.5	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Geranium	Horizon Coral Spice F1 hybrid	coral	17	9	3.5	2.5	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿

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			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
✿	✿	✿	4	4	4	4	n			Outstanding two-toned small to medium-sized blooms, gold with orange tips. Plant loaded with blooms. Very good show.
										Roots rotted shortly after planting in greenhouse. Was not transplanted outdoors.
✿	✿	✿	3	3	3	3	n			Outstanding, abundant peach blooms with dark peach undersides of petals. Very ornamental.
✿	✿	✿	4	4	4	4	n			Lacy, slightly scented flowers top strong, well-branched stems. No staking needed. Plants are a brilliant spot of color. Very attractive. No maintenance required. Claims to be hardy to -30°F.
						1	n	n	n	Poor growth, few flowers, very ragged appearance. Ugly seed pods in mid August. Died early in 2008. Survived the entire 2009 season but not ornamental.
			1	1	1	1	sl	n	n	Direct seeded on June 6, 2009. Flowers late as direct seed, but is much more ornamental than other years when grown as transplants. Big bushy plants with lots of flowers.
✿	✿	✿	1	1	1	3	y	n	n	Bushy, mounding plants covered with small white flowers. Great as filler or in mass plantings. Variable height leads to ragged appearance late in season.
✿	✿	✿	4	4	4	4	sl	y	n	Tall, delicate stems topped with brilliant blooms. Nice in mass plantings or as filler in borders.
					4	4	n			Seedling transplants damaged by voles before planting. Excellent growth of survivors. Beautiful dark pink star pattern of foliage. Outstanding display especially mid-season onward. Colors most vivid in late summer. Needs wide spacing.
			1	2	2	2	n			No blooms this season. Must be true biennial.
✿	✿		2	2	2	1	y	y	n	Tall spikes with lots of flowers, only one or two open at any one time. Looks like foxglove but sparse. Does not grow well in cold, wet summers and did not bloom in 2008.
✿	✿	✿	4	4	4	4	n			The first commercial yellow gaillardia from seed. 2010 All-America Selections winner and Fleuroselect Gold Medal Award. Small bushy plants loaded with blooms. Bright display when all in full bloom. Needs significant deadheading to maintain neat appearance. Variable height gives ragged appearance.
	✿	✿	3	3	3	3	n	y	y	Floppy stems, unkempt appearance. Not a great display until very late in the season. Needs deadheading for best appearance.
✿	✿	✿	3.5	3	3	3	n			Small bushy plants covered with creamy or yellowish blooms in various stages of development. Few flowers in full bloom at one time. Not the most attractive plants because of variable blooms.
✿	✿	✿	3	3	3	3	y			Rich chocolate foliage. Recommended for containers. Bloomed well and filled in well all season in ground beds.
✿			2.5	2.5	2.5	3	n			Early flowering plant with excellent basal branching. Lots of blooms all season long.

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			max	min	max	min	June				July				August				
							wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	
Grass, Feather	Capriccio																		
Grass, Great Quaking		green	27	10.5	0.25	0.125	*	*	*	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	
Helenium	Autumn Lollipops	yellow and bronze	39	21	0.75	0.25						*	*	⊗	⊗	⊗	⊗	⊗	
Helenium	Goldfield	gold	18.25	7	1.25	0.5		*	*	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	
Heliopsis	Golden Double Hybrids	gold	38	10.5	3.75	2.5				*	*	*	⊗	⊗	⊗	⊗	⊗	⊗	
Heliopsis	Summer Sun	gold	31	15	3.25	1.75				*	*	⊗	⊗	⊗	⊗	⊗	⊗	⊗	
Hibiscus	Luna™ Rose	deep rose pink														⊗	⊗	⊗	⊗
Hollyhock	Creme de Cassis	rose	81	17.75	33x6	31x5						*	*	*	*	*	*	*	
Impatiens, Garden	Balance Violet	violet pink	8.5	2.5	2.25	1.25	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	
Impatiens, Garden	Fanciful™ Mix Stardust	rose, orange, red	10	4	2	0.75	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	
Impatiens, Garden	Super Elfin XP Rose Improved	Rose	4.5	2	2	1.25	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	
Impatiens, Garden	Super Elfin XP Pink Deep	dark pink	7	2.5	2	1.5	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	
Impatiens, Garden	Super Elfin XP Punch	cherry red	6	2	2.5	1.25	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	
Impatiens, Garden	Super Elfin XP Red	red	6.5	1	2	1	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	
Impatiens, Garden	Super Elfin XP Star Salmon	salmon edges w/ white center star	8	2	1.75	1.5	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	
Impatiens, Garden	Super Elfin XP Star Cherry	cherry rose margin w/ white center star	8	2	1.5	1	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	

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			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
			4	4	4	4	n	n	n	Fine-textured, wispy grass for bedding or mixed containers and hanging baskets. Needs to be mass planted for best effect.
✿	✿	✿	4	4	4	4	n	y	y	Interesting floppy flowers and seed heads; good in dried arrangements; good as medium-sized background plant. Whole plant becomes brown in mid-season.
✿	✿	✿	4	4	4	4	n			Curious plant for borders, ball-like heads with basal frill of ruffled petals. Great cut flower. Not the most showy plant but big, bushy and covered with brownish balls.
✿	✿		3	3	3	3	n	y	y	Bushy gold daisies on wiry upright stems. Full, colorful display nearly all season.
✿	✿	✿	3	3	3	3	n			Brilliant golden daisies, some double, some single. Bushy plants loaded with blooms from mid-season onward. Variable height gives a ragged appearance. Excellent cut flower.
✿	✿	✿	3	3	3	3	sl			Tall bushy plant with upright stems loaded with blooms from mid-season onward. Flowers have greenish tinge to petals as they open then become pure gold. Excellent cut flower.
✿	✿	✿				1	n	n	n	Very poor growth in ground beds especially in cold, wet summers. Never branched, stayed yellow-green all summer and had some flower buds only in mid September. Better in containers with a few flowers but very short, no branches and only 1-2 flowers per stem.
✿	✿	✿	1	2	3	2.25				Blooms just beginning to appear late in the season. Tall stately spikes but effect is mostly green leaves.
		✿	4	4	4	3	n	n	n	Huge flowers, nice display early in season filled in well. One of the tallest impatiens this season.
✿	✿	✿	4	4	4	2	n	n	n	Only rose color with white centers. No other color in mix. Stopped blooming in late summer. Poor show, very ragged appearance this season.
✿	✿	✿	3	3	3	3	n			Deep rose flower color with contrasting dark green foliage. Moderate branching and spread.
✿	✿	✿	3	3	3	3	n	n	n	Huge blooms; clear color. Did not fill in well this season.
✿	✿	✿	4	4	4	3	n	n	n	Medium-sized blooms with rich clear color. Uneven height but nice color.
✿	✿	✿	4	4	4	3	n	n	n	Large flowers with clear red color. Most showy impatiens this season. Needs deadheading late in season.
✿	✿	✿	4	4	4	3	n	n	n	Very ornamental star pattern on petals. Medium-sized blooms filled in well in the warm season.
✿	✿	✿	3	3	3	2	n	n	n	Smaller than other impatiens. Does not fill in as well as other varieties.

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**Table 3. Results of tested annual flower cultivars for 2009, continued**

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	June				July				August				
							wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	
Impatiens, Garden	Super Elfin XP Violet	violet	7.5	2	1.75	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Incarvillea	Cheron	white	21.5	8	1.5	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
18 Japanese Thistle	Beauty Rose	pink	29.5	19	1.75	1						*	*	*	☼	☼	☼	☼	
Jewels of Opar	Limon	rose pink	17.5	15.5	0.25	0.125		*	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Jewels of Opar*	Verde	hot pink	17	9.75	1.75	1.25		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Juncus*	Javelin	green	37.5	22				☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Kiss Me Over the Garden Gate																			
Koeleria	Blue Sprite		8	6															
Laurentia	Avant-garde Blue Hybrid™	lavender	18	9.5	1.5	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Lavatera																			
Linanthus	French Hybrids	orange, pink, yellow, cream	7	1	0.5	0.25	☼	☼	☼	☼	☼	☼	☼	☼	☼				
Lupine	My Red Castle Russell	yellow	40	24	21.5 x 3.5	3x1.5	*	*	*	*	*		☼	☼	☼	☼	☼	☼	☼
Marigold, African	Lemon Mum	yellow	29	20	2.75	1.5					*	*	☼	☼	☼	☼	☼	☼	☼
Marigold, African	Morocco Mix F1 Hybrid	gold, orange, yellow	13.5	8	4	1.75				*	*	*	☼	☼	☼	☼	☼	☼	☼
Marigold, African	Mumsy Gold	yellow	18	13	2.5	1				*	*	☼	☼	☼	☼	☼	☼	☼	☼
Marigold, African	Simba	orange	29.5	11	3.75	2				*	*	☼	☼	☼	☼	☼	☼	☼	☼

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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.

			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
✿	✿	✿	3	3	3	3	n	n	n	Huge blooms, great clear color. Filled in well in the warm season.
✿	✿	✿	3	3	3	3	n			Interesting busy plant with dissected foliage topped with tall spikes of creamy white trumpet shaped blooms. Flowers are sparse but nice. Would work well as a filler or in mass plantings.
✿	✿	✿	3	3	3	3	y			Abundant thistle-like flowers on tall, very upright stems with sharply pointed leaves. Great for background plant.
✿			2	2	2	2	n	y	y	Chartreuse foliage, nondescript tiny flowers overwhelmed by neighboring plants. Not showy in garden beds. Use as filler and plant lots of them.
✿	✿	✿	3	4	3	3.5	n			Overwhelmed by neighboring plants in containers. Not worth the effort. Stems are wiry and flowers are nearly microscopic. Doesn't work even as a filler.
✿	✿	✿	3	3	3	3	n	y	y	Tall, green background plant with outstanding spiky branches. Needs a lot of room to spread out. Interesting tall plant for containers this year. No flowers in '07 and '08.
										No germination without pretreatment. Second attempt with scarified seeds yielded one germinant.
					4					Recommend for small mixed containers or as edging. Small blue-green balls of foliage topped with wheat-like plumes. Mounds have nice spikes of greenish flowers. Needs mass planting for best display.
✿	✿	✿	4	4	4	4	sl	y	n	Billowy masses of star-shaped blooms; ferny foliage; fills in well in raised containers and ground beds. Great accent plant.
										Huge bushy plant with variegated leaves but no flowers. Might be useful as a bushy background plant.
			1.5	1.5	1.5	1.5	n			Masses of tiny stars are attractive up close, but the plants do not spread. Overall effect in a garden is poor. Little color, little spread. Flowers close up in cold rainy weather.
✿	✿	✿	4	4	4	4	n			Excellent clear yellow viola with maroon whiskers. Nice accent flowers in containers. lots of blooms nearly all season in ground beds and containers.
✿	✿	✿	3	3	4	3	y			Tall upright stems loaded with bright solid color blooms from mid-season onward. Some flowers are semi-doubles, others are singles; mix leads to ragged appearance of the beds. Needs deadheading late in the season especially after wet weather.
✿	✿	✿	3	3	3	2	y			Dwarf plant, fully double huge flower heads. Mostly yellow, one orange-flowered plant. Needs some deadheading late in season.
✿	✿	✿	3	3	3	3	sl	n	n	Looks like a miniature football mum; gorgeous blooms with recurved petals. Holds up well in cold, rainy weather; some deadheading needed.
✿	✿	✿	3	3	3	3	y	y	y	Looks like small football mums with incurved wrinkled petals. Flowers are in various stages of doubleness; some fully double, others only beginning. Ragged appearance. Needs deadheading late in season.

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**Table 3. Results of tested annual flower cultivars for 2009, continued**

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	June				July				August			
							wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4
Marigold, African	Taishan Gold F1 Hybrid	gold	10.5	3	3.5	1.5				*	*	☼	☼	☼	☼	☼	☼	☼
Marigold, African	Taishan Orange F1 Hybrid	orange	12.5	5.5	4.5	1.75			*	*	☼	☼	☼	☼	☼	☼	☼	☼
Marigold, African	Taishan Yellow F1 Hybrid	Yellow	10	8	3.5	1.5				*	*	*	*	*	*	☼	☼	☼
Marigold, African	Togo Yellow F1 Hybrid	yellow	8.5	4	3.5	1.25				*	*	☼	☼	☼	☼	☼	☼	☼
Marigold, African	Vanilla	cream	17	8	3	2				*	*	☼	☼	☼	☼	☼	☼	☼
Marigold, French	Colossus	gold w/ mahogany markings						☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Marigold, French	Frances Hoffman's Choice	red with gold edges	32	20.5	2	1		*	*	*	☼	☼	☼	☼	☼	☼	☼	☼
Marigold, French	Golden Guardian	orange-yellow	31	6.5	1.75	1.25		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Marigold, French	Petite Harmony	gold and mahogany	9	4.5	2.25	0.5		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Marigold, French	Red Metamorph	red with gold centers	26	10	1.75	0.75		*	*	☼	☼	☼	☼	☼	☼	☼	☼	☼
Marigold, French	Tashkent	red with gold centers	18	4	2.25	0.75		*	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Mask Flower	Salmon Beauty	salmon	32	9	0.75	0.25		*	*	*	*	*	☼	☼	☼	☼		
Mask Flower	Coral Beauty	coral	49	9	22x2	5x1		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Meadow Foam	Spanish Omelette Mixed	yellow and white	15	6.5	0.75	0.25		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Milk Thistle	Variegated	lavender	86	16	6	1						*	☼	☼	☼	☼	☼	*

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			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
☼			3	3	3	3	sl			Taishan Series chosen for the 2008 Olympic Games, Beijing, China. Shorter, more compact than other African marigolds. Well branched, fills in well, needs deadheading especially after cold wet weather.
☼	✱	☼	4	4	4	4	y			Taishan Series chosen for the 2008 Olympic Games, Beijing, China. Shorter, more compact than other African marigolds. Large balls of color, variable height. Needs significant deadheading in late season.
☼	☼	☼	2	2	2	2	sl			Taishan Series chosen for the 2008 Olympic Games, Beijing, China. Shorter, more compact than other African marigolds. Well branched, fills in well. Needs deadheading late in season especially in wet weather.
☼	✱		4	4	4	4	y			Extra dwarf African marigold with fully double, huge, bright blooms on a tiny plant. Well branched plant fills in well, flowers set off by deep green foliage.
☼	☼	☼	4	4	4	3	y	y	y	Replacement for Sweet Cream. Fully double heads advertised as later to turn brown than Sweet Cream, but it still looks bad late in season. Needs deadheading late in season.
☼	☼	☼				4	n	n	n	Short mounding plant covered with huge blooms. Uneven flower height leads to ragged display, but flowers are gorgeous. Some deadheading needed late in the season.
☼	☼		3	3	4	3	sl			Large bushy plants with single petals edged in gold, fills in well. Loaded with blooms late in the season. No maintenance required.
☼	☼	☼	4	3	3	3	sl			Big, bushy, floppy plant; needs lots of space to spread and flop. Covered with small light orange blooms all season.
☼			2.5	2.5	2.5	2.5	sl	n	n	Mounding bushy plant for front of beds. Attractive bicolor flowers; top petals, gold, bottom petals, mahogany. Variable height looks ragged in mass plantings.
☼	☼	☼	4	4	4	4	sl			Medium-sized bushy plants loaded with rich deep red blooms and contrasting gold centers. Excellent show with no maintenance required.
☼	☼	☼	4	4	4	4	y			Rich deep red blooms with contrasting gold centers. Most plants a uniform height, but a couple were double in size; makes for a ragged appearance.
			3	3	3	3	n			Interesting filler plant with tiny salmon blooms. Not very showy. Best used as accent for other blooms.
✱	✱	✱	2	2	2	2	n			Gorgeous tiny blooms but not a great display. Would work best as a filler with other plants.
✱	✱	✱	3	3	3	3	n			Interesting mixture of shiny yellow and white petals, some flowers one color, others bicolors. Flowered well through mid August then became quite sparse.
✱	✱	✱	4	4	4	3	sl			Monstrous plant; needs lots of room to spread in warm seasons. Grows poorly in cold seasons. Foliage is very unusual with white patterns between veins and lots of striking thorns on leaves and flowers. Topped with purple thistles. Floppy stems need staking.

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**Table 3. Results of tested annual flower cultivars for 2009, continued**

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	June				July				August				
							wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	
Morning glory**	Carnevale di Venezia	white with blue, pink stripes	73	38	0.5	0.25											*	*	☼
Morning Glory**	Grandpa Ott's	purple with rose markings	82	8	2.25	0.5		*	*	*	*	☼	☼	☼	☼	☼	☼	☼	☼
Morning Glory**	Milky Way	white w/ purple stripes																	
Mosquito Flower	Pretty Rose	rosy pink	29.5	13	12x1.5	2.5x.5	*	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Mosquito Plant		rose	27.5	8	0.25	0.125	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Nasturtium**	Golden Gleam	gold	30	3	2.25	1.5		*	*	*	*	☼	☼	☼	☼	☼	☼	☼	☼
Nasturtium**	Indian Chief	orange	14	6	3	1.5						*	☼	☼	☼	☼	☼	☼	☼
Nasturtium**	King Theodore	yellow	16.5	4	1.75	1.25		*	*	*	*	☼	☼	☼	☼	☼	☼	☼	☼
Nasturtium**	Moongleam	gold	17	1	2.5	1.75							☼	☼	☼	☼	☼	☼	☼
Nasturtium**	Night and Day	pale yellow, mahogany	11	6	2	1		*	*	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Nasturtium**	St. Clements	gold	26	4	2.5	1				*	*	☼	☼	☼	☼	☼	☼	☼	☼
Nasturtium, Dwarf**	Ladybird	gold w/ mahogany markings	12	5	2	1.25		*	*	*	*	☼	☼	☼	☼	☼	☼	☼	☼
Nasturtium, Dwarf**	Princess of India	dark orange	12	5	2	1.25				*	*	☼	☼	☼	☼	☼	☼	☼	☼
Nemesia	Danish Flag	red and white	17	1	0.75	0.5		*	*	*	☼	☼	☼	☼	☼	☼	☼	☼	☼
Nicotiana	Aztec Sweet Scent	white	42	7	7.5x6	4x5				*	*	☼	☼	☼	☼	☼	☼	☼	☼
Nicotiana	Green Tears	green	57	24	33x9	12x3						*	☼	☼	☼	☼	☼	☼	☼
Nicotiana	Perfect Mix	white, rose, pink	48	14	6x8	3.5x2.5		*	*	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼

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

			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
☼	☼	☼	3	3	3	3	n			Vines did not reach half way on the trellis. Few flowers even by mid August. Unusual markings differ from flower to flower as if painted individually.
☼	☼	☼	4	4	4	4	y	n	n	Grew to the top of the trellis by mid August. Nice blooms, variable colors. Good growth this season. Deep purple color with red overtones is very striking.
	☼					4	n	n	n	Vigorous, thick vine covered with blooms. Very attractive display all summer. Grew rapidly and covered the trellis by midsummer.
☼	☼	☼	4	4	4	4	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.
☼	☼	☼	4	4	4	4	n			Tall bushy plant covered with tiny pink flowers. Excellent filler especially for the dianthus Bouquet Rose.
☼	☼	☼	3	3	3	3	y	y	n	Large blooms with light green foliage. Fills in well. Excellent season-long display.
☼	☼	☼	4	4	4	4	y	n	n	Gorgeous dark green foliage and brilliant orange blooms. Great colorful flower display all season. Mounds spread and cover edges of the raised bed.
☼	☼	☼	3	3	3	3	y	n	n	Tiny leaves, poor flowering on tiny bushes. Very poor show this season.
☼	☼	☼	3	3	3	3	sl			Outstanding golden color and clear light green foliage. Plenty of flowers held above the foliage. Best show this season.
☼	☼	☼	2	2	2	3	y	n	n	Mix of yellow and mahogany-flowered plants, mostly yellow. Yellows are more vigorous. Not a spectacular flower display.
☼	☼	☼	3	3	3	3	sl	y	n	Huge mounds of gold and yellow flowers, slightly trailing. Covers edges of raised beds. One of the best this season.
☼	☼	☼	3	3	3	3	y	n	n	Small mounding plant covered with small blooms. Very attractive markings. Lots of diseased, dwarf plants this season.
			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; grew very poorly this year; died out by late August.
☼	☼	☼	4	4	4	4	n			Very ornamental bushy plant covered with eye-catching bicolor flowers. Needs serious deadheading mid-season to keep blooming.
☼	☼	☼	4	4	4	4	y	n	n	Outstanding, large-flowered clear white, trumpet-shaped blooms. Flowers are fragrant up close.
☼	☼	☼	3.5	3.5	3.5	3.5	n	n	n	Tall, upright, bushy plant with green blooms. Not showy, ugly flowers and seed pods, smells bad.
☼	☼	☼	4	4	4	4	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.

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							Flowering Period <sup>y</sup>												
Common Name	Cultivar	Flower Color	Height (in) <sup>w</sup>		Flower Size (in) <sup>x</sup>		June				July				August				
			max	min	max	min	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	
Nicotiana, Australian	Suaveolens	white	35	9	1	0.5		*	*	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Nierembergia	Robe Mix	lavender, white	10.5	2	1.25	0.5	*	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Nolana	Sun Belle Mixed Colors	blue	14	6	1.75	1	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗		
Ornamental Millet	Jade Princess																		
Osteospermum*	Asti White	white on top, lavender beneath, blue centers	18.5	17	3	1.25	*	*	*	*	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Osteospermum	Ballade Mix	rosy purple, lavender, white mix	19	9	2.5	0.75	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Oxypetalum	Heavenborn	blue	16	13	8x3	3x1.5				*	⊗	⊗	⊗	⊗		⊗	⊗	⊗	
Painted Tongue	Kew Blue	blue	26	8.5	2.25	1.75	*	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Painted Tongue	Scarlet	scarlet	19	14	3.5	2.25	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗			
Pansy	Atlas Needlepoint Mix	lavender, cream, yellow with yellow or purple face	11	3	2.5	0.5	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Pansy	Fizzy Lemonberry	yellow with purple face	14.5	3	2.25	1.25	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Pansy	Flambe Terracotta Shades	rose, yellow, cream, peach	12	4	2.5	1.25	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Pansy	Flirty Skirts Burgundy	burgundy, purple, lavender	10.5	3	1.5	1.25	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Pansy**	Fraidy Cat	light blue and black	14	3	2.25	0.75	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗

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			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
☼	☼	☼	2.5	2.5	2.5	2.5	sl	n	n	Tiny, trumpet-shaped white flowers, not as floriferous and flowers are tiny, not showy; would be good as a filler rather than mass plantings.
			4	4	4	2	sl	n	n	Small mounds loaded with blooms for most of the summer. Most plants dry up in mid August. Excellent edging for front of borders but short-lived.
			3	3	3	3	n	n	n	Attractive blue flowers on sparse, ground-hugging plant. Grows better in ground beds than containers. Try self-seeding for best growth.
										Seed company mentions that cool temperatures cause brown leaf edges and curved flower heads. Seedling transplants had significant browning on leaves and looked nitrogen deficient. Did not plant.
☼	☼	☼	3.5	3.5	4	3.5	n	y	y	The first white, single flower color Osteospermum from seed. Thick fleshy foliage. All-America Selections Bedding Plant Award Winner 2008. Very attractive blooms nearly all summer. A visitor favorite.
☼	☼	☼	4	4	4	4	sl			Mounding, bushy plants covered with two-toned flowers. Excellent display all summer even in the cold weather.
☼	☼	☼	4	4	4	3	y			Tiny, star-shaped, true blue flowers on upright spikes, fuzzy leaves and interesting milkweed-shaped seed pods. Needs mass planting to show off the tiny flowers.
☼			4	4	4	2	n			Bushy plants with tall, upright stems covered with velvety blooms. Great through mid August but lots of dieback in late season.
			1	3	2	2	n			Some plants died shortly after planting. A few bloomed but did not become bushy or develop a great display. All plants gone by mid August.
☼	☼	☼	3	3	3	2	sl	n	n	Mix of lightly ruffled petals with two- and three-toned flowers, many edged in dark lavender. Needs lots of deadheading late in season especially after a rain.
☼	☼	☼	2.5	2.5	2.5	2.5	sl	n	n	Small blooms with ruffled edges, very ornamental purple faces with purple markings on yellow background. Jammed with flowers all summer. No maintenance.
☼	☼	☼	2.5	2.5	2.5	3	sl	n	n	Nice mounding plants loaded with slightly ruffled blooms all summer. Fills in well with great color mix.
☼	☼	☼	3.5	3.5	3.5	4	y	n	n	Abundant small flowers with ruffled edges. Beautiful range of purples from lavender to deep velvety burgundy. Very attractive.
☼	☼	☼	2	2	2	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.

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**Table 3. Results of tested annual flower cultivars for 2009, continued**

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	June				July				August				
							wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	
Pansy	Frizzle Sizzle Formula Mix	yellow, rose, purple, cream w/ mahogany face	9	2	1.5	0.75	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Matrix Mix Raspberry Sundae F1 Hybrid	rose	12.5	4	3	1.25	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Matrix Orange Clear Improved F1 Hybrid	orange	12	4	2.5	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Matrix Rose	rose	13.5	4	2.5	1.5	☼	☼	☼	☼	☼	☼	☼	☼	☼				
Pansy	Matrix Rose Wing	rose, cream, yellow	8	3	2.5	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Matrix Yellow Clear F1 Hybrid	yellow	14	5	3.5	2.25	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Promise® Formula Mix	yellow with mahogany face	16	4	2.75	1.5	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Promise® Pure Silver Azure	clear lavender	16	5	2.5	1.5	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Promise® Rose Shades	rose w/ maroon face	10	2.5	2	0.75	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Queen Victoria Mix	lavender, bronze, purple with yellow face	14.5	5	1.75	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Whiskers Light Blue	pale lavender, cream face w/ dark "whiskers"	12.5	6.5	2.75	1.75	☼	☼	☼	☼	☼	☼	☼	☼					
Pansy	XXL Golden F1 Hybrid	gold	12	2	2.75	1.25	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	XXL White Blotch F1 Hybrid	white/purple	11	2	2.5	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	XXL Yellow Blotch F1 Hybrid	yellow, burgundy face	10	2	2.75	1.5	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼

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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.



			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
✿	✿	✿	4	4	4	3	y	y	y	Ruffled petals. Small plants don't fill in as well as other pansies; need closer spacing. Nice mix of colors.
✿	✿	✿	4	4	4	4	sl			Clear rose with striking yellow centers. Nice show early in season but ragged later in August. Needs lots of deadheading.
✿	✿	✿	4	4	4	3	y			Small mounds of gorgeous clear orange color nearly all season. Needs deadheading late in season.
			3	3	3	3	y	n	n	Outstanding clear rose color with slightly different shades in each plant. Brilliant yellow centers are great accent. Bushy plants bloom reliably all summer. Needs deadheading especially after cool, wet weather.
✿	✿	✿	1	1	1	1	sl	n	n	Large flowers but ragged appearance late in season. Not as bushy as some pansies, and lots of plants died out by mid August.
✿	✿	✿	4	4	4	4	y			Great mounds of clear yellow blooms. Eye-popping display all summer. Very little deadheading needed.
✿	✿	✿	3	3	3	3	y	y	y	Plants were mostly yellow with mahogany face, not mix as advertised. Nice bright colors. Does not fill in as well as other pansies.
✿	✿	✿	4	4	4	3	y	y	y	Large flowers, may overwinter in some areas. Outstanding mounds of flowers with solid single color.
✿	✿	✿	1	1	1	3	y	y	y	Excellent mix of rose shades. Fills in well, no deadheading needed.
✿	✿		2.5	2.5	2.5	2.5	y			Mounding plant covered with small blooms with a variety of stripes and colors. There were two black-flowered plants that looked odd in the mix.
✿	✿	✿	3.5	3.5	3.5	3.5	y	y	y	Beautiful flowers appear to be painted with dark whiskers. Nice mounding plant but needs deadheading late in season.
✿	✿	✿	4	4	4	3	y			Brilliant clear yellow blooms on small mounds, great color all season. Needs some deadheading at end of season.
✿	✿	✿	1	1	1	1	n			Small mounds of attractive blooms. Not as floriferous as other pansies.
✿	✿	✿	2	2.5	2	2	y			Uniform plants loaded with blooms, attractive display nearly all season. Some deadheading needed especially after wet weather.

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**Table 3. Results of tested annual flower cultivars for 2009, continued**

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	June				July				August			
							wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4
Penstemon**	Esprit Mix	pink, rose, red w/ white throats	28	13	18x5	3.25x1		*	*	*	*	☼	☼	☼	☼	☼	☼	☼
Penstemon	True Blue																	
Pepper, Ornamental	Calico	purple/lavender bicolor	16	7	0.25	0.125				*	*	*	☼	☼	☼	☼	☼	☼
Pepper, Ornamental	Purple Flash	lavender	16	9.5	0.25	0.125				*	*	*	☼	☼☼	☼	☼	☼	☼
Petunia	Alderman	purple	23.5	2.5	2.5	1.75	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼		
Petunia	Baby Duck Yellow	soft yellow	20.5	2	1.75	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼		
Petunia*	Dreams Fuchsia	hot pink w/ yellow throat	14.5	7	3.25	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Petunia	Dreams Rose Morn	rose w/ white centers and yellow throat	23	4	3.25	2	☼	☼	☼	☼	☼	☼	☼	☼	☼		*	*
Petunia**	Easy Wave® Burgundy Star F1 Hybrid	burgundy with white star	22	2	3	1.75	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Petunia*	Easy Wave® Mix Pink Marble	pink/cream	15	10	3.25	1.25	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Petunia*	Easy Wave® Mystic Pink	pink and white	16	10	3.25	1.25	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Petunia*	Easy Wave® Plum Vein F1 Hybrid	lavender with plum veins	16	7	2.75	1.25	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Petunia*	Easy Wave® Violet F1 Hybrid	violet	17	8	3	1.5		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Petunia	Easy Wave® White Improved F1 Hybrid	white	14	2	2.5	1.5	☼	☼	☼	☼	☼	☼	☼	☼	☼			
Petunia*	Fantasy Plnk Morn	pink w/ cream center	14	9	3	1.25	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Petunia	Lambda Salmon Veined F1 Hybrid	salmon pink, red markings	17.5	5	3.25	2.25	*	☼	☼	☼	☼	☼	☼	☼	☼	☼		

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

			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
☼	☼	☼	3	3	3	3	sl	y	n	Outstanding spikes of large, showy flowers. Similar display to foxgloves but shorter. Excellent mix of colors from mid-season onward. Flowers have solid color with creamy white throats.
										Lots of foliage but no blooms. Poor display through the season. Died at planting in 2008.
			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.
☼			3	3	3	1	n	n	n	Deep purple foliage. Not as bushy or ornamental as Black Pearl. No fruit this summer.
			3	3	3	2	y	n	n	Beautiful velvety blooms, but sparse and leggy in containers. Better in ground beds but needs fungicide for <i>Sclerotinia</i> ; Nice contrast to pink flowers.
			4	4	4	4	y	n	n	Small, trumpet-shaped blooms on slightly upright spreading habit. Excellent filler for containers and beds with mounds of blooms all summer.
☼	☼	☼	3	3	3	3	y	n	n	Very large blooms in containers. Showy display all summer. Fills in well and complements other container plants.
☼	☼		4	4	4	4	sl	n	n	Tightly branched, free-flowering bicolor. Blooms are great early in season and hold up well with fungicide treatment for <i>Sclerotinia</i> . Needs deadheading late in season.
			4	4	4	4	y			First spreading petunia from seed. Climbed up the stems of the nearby dahlias. Susceptible to <i>Sclerotinia</i> rot through the season.
☼	☼	☼	3	3	3	3	y	n	n	Small flowers but abundant; forms mounds of color that work well with other container plants; nice two-toned colors.
☼	☼	☼	3	3	3	3	y	n	n	Soft to medium pink-and-white flower. Some <i>Sclerotinia</i> damage in mid August. Needs deadheading.
☼	☼	☼	4	4	4	4	y			Star-shaped blooms. Interesting pattern on petals. Susceptible to <i>Sclerotinia</i> rot late in season.
☼	☼	☼	4	4	4	4	y			Outstanding spread in containers. Petals become spotted in cold wet weather. Brilliant display all season.
			2.5	2.5	2.5	2.5	n			Pure white color with less blushing than other white petunias. Mounding, dense habit. Severe <i>Sclerotinia</i> rot late in season even with fungicide treatment.
☼	☼	☼	3	3	3	3	y	n	n	Out-competed by other petunias and geraniums in containers, not vigorous or showy.
			4	4	4	4	y	n	n	Interesting salmon pink with dark red lines and throat. Very ornamental and great show through early and mid-season. Needs significant deadheading for best display late in the season.

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**Table 3. Results of tested annual flower cultivars for 2009, continued**

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	June				July				August			
							wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4
Petunia	Madness Plum Crazy Improved	lavender/ purple throat	18	7	2.5	1.5	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿		
Petunia	Madness Red Improved	deep red	16	4	1.5	1.5	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿		
Petunia	Madness Yellow	creamy yellow	23	3	2.5	1	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia	Shock Wave Ivory	cream w/ soft yellow throat	20.5	2	2	1	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia	Shock Wave Purple	deep pink	26	3.5	1.5	1	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	
Petunia	Shock Wave Rose	rose w/ white throat	18	3	2.25	1.25	✿	✿	✿	✿	✿	✿	✿	✿	✿			
Petunia*	Shock Wave™ Denim F1 Hybrid	dark blue-purple	13	7	1.75	1		✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia*	Sophistica Antique Shades F1 Hybrid	Pale rose with yellow throat	20	9	3.5	2	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia	Sophistica Blue Morn F1 Hybrid	Blue edges with silver white throat	17	2	3.25	2	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿		
Petunia	Sophistica Lime Bicolor F1 Hybrid	lime green/ yellow/rose	15	4.5	3.75	2.5	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿		
Phacelia	Lavender Lass	pink with white centers	26.5	2	1	0.5	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Pheasant's Eye		red	26	6.5	0.75	0.5				*	✿	✿	✿	✿	✿	✿	*	*
Phlox, Annual	Isabellina	white	18.5	4.25	0.25	0.25		*	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Phlox, Annual	Promise® Scarlet	scarlet	9	2.5	3.5	0.5		*	*	✿	✿	✿	✿	✿	✿	✿	✿	✿

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

			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
			3.5	3.5	3.5	1	y			Excellent two-toned blooms with light lavender outer edges and deep plum throat. Abundant blooms that hold up well.
			4	4	3	3	sl	n	n	Nice deep red, rich color with dark throat; great show early, but sparse flowers, ragged appearance in August. Holds up well with fungicide treatment for <i>Sclerotinia</i> . Needs deadheading late in season.
*	*		3	3	3	3	y			Nice two-toned yellow flowers, very attractive blooms. Needs some deadheading late in season.
☼	☼		4	4	4	4	y	n	n	Mounded spreading plants with tiny flowers. Nice filler for ground beds and containers, best with some deadheading late in the season.
			4	4	4	4	sl	n	n	Recommended for containers. Mounded spreading plants with small flowers. Fills in containers well. Great in ground beds in early season but susceptible to <i>Sclerotinia</i> rot by mid August.
			4	3	3	3	n	n	n	Recommended for containers. In ground beds, forms mounded spreading, small-flowered plants. Outstanding clear rose color. Some death due to <i>Sclerotinia</i> at end of season.
☼	☼	☼	3	3	3	3	y			Mounding, spreading plant excellent in containers. Susceptible to <i>Sclerotinia</i> rot in ground beds.
☼	☼	☼	4	4	4	4	y			
			4	4	4	2	y			Flowers become more blue in cool greenhouse conditions, more silvery outdoors. Some <i>Sclerotinia</i> damage late in season even with fungicide. Not as floriferous as other petunias.
	*		4	4	4	4	sl			Odd patterns of lime green, yellow and rose blooms with unusual streaks and stripes. Overall effect is unpleasant. Needs deadheading late in season; better in containers than ground beds. Flower color will change based on light, heat, and age of flower.
☼	☼		4	4	4	4	sl			Slightly scented tiny blooms on small bushy plants. Great filler and complement to other blooms. Bruising of leaves can stain clothing and close contact may cause allergies in people with sensitive skin.
*	*	*	4	4	4	4	n			Brilliant bright red tiny blooms through mid-season. Unusual green seed pods top feathery foliage for an interesting late-season effect even if it is all green; flowers are gorgeous but tiny.
☼	☼	☼	2	2	2	2	y			Attractive, creamy white flowers but sparse; not very showy through the season; perhaps needs closer spacing to have good show.
☼	☼	☼	2.5	2.5	2.5	2.5	n	y	n	Double and semi-double flowers; plants loaded with blooms. Great carpet for the front of borders but needs very close spacing. Needs some deadheading late in season. Died early in 2008 but held up well in 2009.

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			max	min	max	min	June				July				August			
							wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4
Poppy, Peony-flowered	Peony Mix	rose, lavender pink	41	19	4.5	1.75	*	*	*	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Pumpkin on a Stick**		white	27	19	1	0.5							*		*	*	⊗	⊗
Rudbeckia	Cherry Brandy	cherry red, brown centers	25	8	4	1.25		*	*	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Rudbeckia	Corona	gold with brown center	16	3.5	5	1.5		⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Rudbeckia	Irish Spring	gold with green centers	32	24	7.25	3						*	⊗	⊗	⊗	⊗	⊗	⊗
Rudbeckia	Tiger Eye Gold F1 Hybrid	gold with brown centers	16	5	3.25	2		⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Rudbeckia	Cappuccino	mahogany and gold	27	13	7	2.5		*	*	*	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Salvia, Mealy-cup	Signum Blue	dark lavender	30.5	13	9.5x.75	1x.5	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Salvia, Scarlet	Saluti Deep Red	red	15	4	8.25x2	1x.5	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Salvia, Scarlet	Saluti Lilac	lavender	14.5	7	8x3.5	1.5x.5	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	*
Salvia, Scarlet	Saluti Scarlet/White	red and white bicolor	15.5	8	6.5x2	3x3.5	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Salvia, Scarlet	Vista Rose	rose	12	7	6x4	4.75x4	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Scarlet Runner Bean**	Painted Lady	scarlet and white bicolor	86	34	3.5 x 2.75	1x1									⊗	⊗	⊗	⊗
Scarlet Runner Bean**	Scarlet Emperor	scarlet	61	29	2x1.75	.75x1									⊗	⊗	⊗	⊗
Sea Holly, Annual**		lavender	40	18.75	13x2	6.5 x 1.25												
Slipper Flower		yellow	18	13	0.5	0.25	*	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗

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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.



			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
☼	☼	☼	3	4	3	3	y			Overwhelmed by neighboring flowers. Poor show this season.
☼	☼	☼	1	1	2	2	n	n	n	Thorny purple shoots with yellow-green foliage. Tiny white blooms are not attractive. Grown mostly for Chinese lanterns but we didn't see any.
☼	☼	☼	3	3	3	3	sl			First red rudbeckia from seed. Nice blooms in mid-season. Petals are brown-tipped as they age. Needs a lot of deadheading to remove unsightly flowers.
☼	☼	☼	2.5	3	3	3	n			Medium to small plant with extremely variable height. Older flowers fade and turn whitish. Not as attractive or showy as other rudbeckias.
☼	☼	☼	3	3	3	3	n			Outstanding bushy plant loaded with blooms on upright stems. Very attractive green centers. Excellent cut flowers.
☼	☼	☼	3	3	3	3	n			First F1 hybrid rudbeckia. Long-lasting cut flower but stems are short. Lots of flowers, brilliant color.
☼	☼	☼	4	4	4	4	y			Very nice, large and medium-sized blooms with mostly mahogany flowers, some gold-tipped with mahogany. Loaded with blooms from mid-season onward. Holds its own in crowded beds.
☼	☼	☼	4	4	4	4	y			Excellent, tall spikes on medium-sized bushy plants. Great color from late June onward.
☼	☼	☼	2.5	2.5	2.5	2.5	n	y	n	Rich red color, very attractive early. Needs deadheading in late season. Died early in 2008. Lots of dead flowers by mid August in 2009.
☼	☼	☼	3	2	2	1	n	y	n	Very nice spikes of lavender color early in season. Held up well but died out in early September. Needs deadheading especially late in season.
☼	☼	☼	1.5	1.5	1.5	1.5	n	n	n	Small flowers, not as showy as other salvias. Yellow spotted foliage. Needs lots of deadheading late in season.
☼	☼	☼	3	3	3	3	n	n	n	Not as floriferous as other salvias. Needs close spacing. Nice deep rose color. Needs deadheading in mid-season.
☼	☼	☼	3	3	3	4	y	y	n	Very attractive blooms with beautiful contrasting color. Great alternative to scarlet runner beans. Fewer beans this season than 2008.
☼	☼	☼	3	3	3	4	y	y	n	Poor growth this season. Looked nutrient deficient. Some blooms late but no pods.
			1	1	1	2	n	n	n	Bushy plant with spiky foliage. Few blooms this year in raised beds. Grew better in ground beds in 2008.
☼	☼	☼	3	3	3	3	n	y	n	Interesting, tiny flower pocket books form masses on bushy plants. Flowers are not showy in ground beds but excellent in containers as accent plant. Needs deadheading late in season in ground beds.

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**Table 3. Results of tested annual flower cultivars for 2009, continued**

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	June				July				August				
							wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	
Snapdragon	Bronze Dragon	purple and white bicolor	18	6.5	5x2.25	3.5x1.5		*	*	*	*	*	*	*	*	*	*	*	
Snapdragon	Chantilly Deep Orange	dark orange	28	4	17x3	4x1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	
34 Snapdragon	Snapshot Rose	rose	12	3	5.5x2.5	2x2	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	
Snapdragon	Snapshot White	white w/ yellow throat	8	3	4x2	2x.5	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	
Snapdragon	Snapshot Yellow	yellow	8.5	3	4.25x3	2.5 x 2.25	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	
Snapdragon	Speedy Sonnet Rose	rose	18	12	8x3	4x2	☼	☼	☼	☼	☼	☼	☼	☼	☼				
Snapdragon	Speedy Sonnet White	white					☼	☼	☼	☼	☼	☼	☼	☼	☼				
Snapdragon	Spring Giant Mix	pink, red, orange, yellow, white	26	16	8x3	4x2.5		*	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	
Snapdragon	Twinny Peach F1	peach, yellow, light orange	10	3	5.5x3	4x2.5	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	
Snow-on-the-Mountain		white	24	15	0.063	0.063													
Spanish Lavender**	Fragrant Butterflies	violet/ lavender, purple	19	6	1.5	0.25										*	*	*	*
Starflower	Ping Pong	white	22.5	11.5	1.75	1.5						☼	☼	☼	☼				
Statice	QIS Mix	pink, white, lavender, yellow	34	7	3	0.5						*	☼	☼	☼	☼	☼	☼	
Stock	Sugar & Spice Mix	maroon, white, pink, lavender	22	8	13x2.5	2.5x2.5	*	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	
Sunflower**	Double Quick Orange F1 Hybrid	yellow	59	47	4	3							*	☼	☼	☼	☼	☼	
Sunflower**	Full Sun Hybrid	yellow with brown centers	52	27.5	6.75	2.5				*	*	☼	☼	☼	☼	☼	☼	☼	

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

			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
☼	✱		4	4	4	4	sl			Dark, almost black, eye-catching foliage on bushy, dwarf plants with two-toned pink/rose blooms. Floppy stems but well worth growing.
☼	☼		4	4	4	1	y	n	n	Open-faced butterfly-type flowers with unusual orange-red color. Very attractive display this season. Did not grow well in 2008. Excellent cut flower.
☼	✱		2	2	2	1	y	n	n	Does not fill in well. Needs significant deadheading to bloom all season. Not for cutting. Died early 2008, okay in 2009 but not the best dwarf snap.
☼	☼		2	2	2	2	n	n	n	Short snapdragon. Fills in well only in hot summers. Needs lots of deadheading for continuous bloom.
☼	✱		1	1	1	1	n	y	n	Short snapdragon forms mats rather than spikes. Needs deadheading to keep display all season.
			1	1	1	1	n	y	n	Shorter than many snapdragons but not a true dwarf. Bloomed early but finished early. Nice light rose color; there are better snaps for cutting.
							n	y	n	Dwarf. Blooms early and is done early. Few flowers. Needs deadheading to keep blooming.
☼	✱		3	3	3	3	y	y		Stocky upright stems excellent for cutting. Great mix of colors.
☼	☼		2	3	2	2	n			A dwarf double-flowered, butterfly-type snapdragon with a blend of yellow/peach pastel colors. All-America Selections Bedding Plant winner for 2010. Outstanding display. Does not seem to require the high maintenance of other dwarf snapdragons.
			2	2	4	1	n			Died out early in 2008 and 2009.
✱	✱	✱	1	1	1	1	y	y	y	Tiny bushes did not bloom. Very poor growth in ground beds in 2008 and in raised beds this season.
			2	2	2	2	n			Overwhelmed by neighbors. Interesting seedheads in mid August. Some blooms through season, but not showy.
☼	☼	☼	4	4	4	4	n	y	y	Bushy upright plants with excellent mix of colors. Flowers just beginning to open in early September. Mix is mostly pinks and whites, some lavender and yellow.
☼	✱	✱	3	3	3	2	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. Ugly seed heads in mid August.
☼	✱		2	2	2	4	y			Medium-sized heads on medium-sized plants. Okay, but nothing spectacular.
			3	3	3	3	sl			Europe's top cut flower. Pollen-free hybrid with butter-yellow petals around a dark disc. Can be grown at close spacing for smaller plants. Bloomed from mid-season onward.

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**Table 3. Results of tested annual flower cultivars for 2009, continued**

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	June				July				August			
							wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4
Sunflower**	Mongolian Giant	yellow	85	82	12	4								*	*	☼	☼	☼
Sunflower**	Ruby Eclipse	yellow/ mahogany markings	61	28	8.5	4								*	☼	☼	☼	☼
Sunflower**	Solar Eclipse F1 Hybrid	gold/ mahogany	60	35	7.75	3					*	☼	☼	☼	☼	☼	☼	☼
Sunflower**	Sparky	dusky yellow	39	38	4.75	1.5						*	☼	☼	☼	☼	☼	☼
Sunflower**	Terracotta		49	41	6	1.5							*	☼	☼	☼	☼	☼
Sunflower**	Velvet Queen		43	215	5.75	4.25						*	*	*	☼	☼	☼	☼
Sunflower	Waooh	gold w/ brown centers	35.5	23.5	4	1.5							*	*	*	☼	☼	☼
Sunflower	Zebulon		32	27	8	6					*	☼	☼					
Sunflower, Cucumber-leaf	Pan	yellow with brown centers	65	47	4	1.25						☼	☼	☼	☼	☼	☼	☼
Sunflower, Mexican	Goldfinger	gold	33	16	3	2.25						*	☼	☼	☼	☼	☼	☼
Sunflower, Mexican**	Morning Sun	yellow w/ orange markings	41	24	4	2						*	☼	☼	☼	☼	☼	☼
Super Short Wildflower Mix		white, yellow, lavender, blue, pink mix	19	1.5	1.25	0.25						*	☼	☼	☼	☼	☼	☼
Sweet Annie	Scentsless																	
Sweet Pea**	Fantasia Formula Mix		38	14	2x1.5	1x1									☼	☼	☼	☼
Sweet Pea**	Mammoth Choice Mix	red, lavender, white, pink, rose	62	31	1.25	0.5								*	☼	☼	☼	☼
Sweet Pea**	Old Spice	red, white. pink, lavender	68	27	2	0.5								*	☼	☼	☼	☼

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			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
☼	☼		3	3	3	3	y			Not very giant in 2009 or 2008. Plants were short and head medium-sized. Few blooms.
☼	☼		4	4	4	4	n			Small flowers. Not the most attractive sunflower this year.
☼	☼		4	4	4	4	y			Interesting flower pattern with gold petals and mahogany markings in the center. Multiple blooms beginning in mid-season.
☼	☼		2	2	2	3	sl			Thin petals mostly a dusky yellow. Interesting pincushion-type centers. Many blooms per stem but bloomed late.
☼	☼		3	3	3	3	sl			
☼	☼		3	3	3	2	n			Small blooms, not very showy.
☼	☼	☼	3	3	3	3	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.
			3	3	3	3	n	y	n	Short, stalky stems with medium-sized heads. All mature seed by mid August. Hold up well although summer flower show is in mid-season.
☼	☼	☼	3	3	3	3	n			Medium-sized sunflower loaded with small blooms all summer with big buttons of chocolate in the center. Very attractive bushy plants.
☼	☼		3	3	3	3	n			Attractive brilliant blooms on bushy, soft-hairy stems. More compact with smaller flowers than older cultivars but not as striking. Needs a lot of deadheading late in the season.
☼	☼		3	3	3	3	n	n	n	Tall plants with creamy yellow blooms. Very attractive. More upright stems but not as striking color as other tithonias. Great background plant.
☼	☼	☼	3	3	3	3	n			A mixture of 19 wildflowers, all growing less than 10 inches tall for a low-growing carpet effect. Late to bloom when direct seeded but very nice display from mid-season onward. Great mix of colors from white, yellow, lavenders, blues and pink. Lovely.
										Poor germination this year. Not planted.
☼	☼	☼	2	2	2	2	y			Short bushy plants but no blooms. Fills in well, but so what?
☼	☼	☼	3	3	3	3	y			Not as tall as other sweet peas but nice-sized blooms, great fragrance.
☼	☼	☼	3	3	3	3	y			Shortest sweet pea this season. Nice combination of colors, but few flowers; small flower size.

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**Table 3. Results of tested annual flower cultivars for 2009, continued**

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			max	min	max	min	June				July				August				
							wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	
Sweet Pea**	Prized Strain Mix	white, pink, lavender, red	23	16	1	0.5										☼	☼	☼	☼
Sweet Pea**	Unwin's Striped Mix	white, pink, lavender, red	67	29	1.5	1							*	*	*	☼	☼	☼	☼
Verbena*	Peaches & Cream	peach and orange-peach	13	10	2.25	1.5		*	*	*	☼	☼	☼	☼	☼	☼	☼	☼	☼
Verbena, Garden	Quartz X P Purple	velvet purple	11.5	3	2.5	1.25	*			*	*	☼	☼	☼	☼	☼	☼	☼	☼
Verbena, Garden	Quartz X P Red Eye	red w/ white eye	14	3	2.5	0.75	*	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Verbena, Garden	Quartz X P Scarlet	red w/ white centers	14	3	2.25	1.25	*	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Verbena, Garden	Quartz X P Silver	lavender-silver	11	1	2.5	1	*	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Verbena, Garden	Quartz X P White	white	13.5	3	2.25	1.5	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Verbena, Garden	Tusacany Pink Picotee	pink and white	14	2	2.5	1.5	*	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	*
Viola	Microla® Plum	purple w/ light purple face	15	7.5	1	0.5	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viola	Microla® Pure Yellow	yellow	18	3	1..25	0.5	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viola	Rain Blue and Purple	lavender, light blue	15.5	3.5	1.5	0.75	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viola	Skippy® Experimental Pastel Blue Improved	lavender w/ deep lavender face	14	1	1.5	0.75				☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viola	Skippy® XL Blue-Yellow	yellow w/ lavender wings, purple whiskers	14	4	1.75	0.75	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼

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			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
✿	✿	✿	2	2	2	2	y			Short stature but very nice color and flower size; great fragrance.
✿	✿		4	4	4	4	y			Some flowers with speckles and stripes. Flowers are tiny and not very abundant this year.
✿	✿	✿	3	3	3	3	sl	n	n	Very attractive flowers, abundant blooms nearly all summer. Interesting two-toned color. Needs deadheading late in season. All-America Selections winner 1992. Excellent contrast plant with purple petunias.
✿	✿		3	3	3	4	y	y	n	Attractive rich velvety purple color. Great blooms all summer. Holds up better than other verbenas. Fleuroselect Novelty Winner.
✿	✿	✿	4	4	4	4	n	y	n	Clear rich red, abundant blooms through midsummer. Needs deadheading for full display. Very nice show.
✿	✿	✿	4	4	4	4	n	n	n	Very attractive rich red blooms. Ragged appearance because of height difference among plants. Needs deadheading for best show.
✿	✿	✿	3	3	3	3	y	y	n	Uniform height, compact growth. Not as floriferous as other cultivars. Nice pale, pale lavender blooms.
✿	✿	✿	2	2	2	2	n	y	n	Poor flower display when compared with other verbenas. Spreads well, but few flowers. Needs a lot of deadheading.
✿	✿	✿	2.5	3	3	3	n			Loaded with pink and white bicolor flowers through mid-season. Requires significant deadheading late in the season.
✿	✿	✿	2.5	2.5	2.5	2.5	sl	y	y	Tiny blooms on large mounds; not as floriferous as other violas. Some deadheading late in season.
✿	✿	✿	3.5	3	3	3	n	y	y	Excellent clear yellow viola with maroon whiskers; nice accent flowers in containers; lots of blooms nearly all season.
✿	✿	✿	3	3	3	3	sl	n	n	Thick mounds covered with blooms all summer. Some plants with all-white blooms, some light lavender. Excellent growth all summer.
✿	✿	✿	4	4	4	4	y	y	y	Abundant blooms with excellent mounding display. Great show all summer. No maintenance needed.
✿	✿	✿	4	4	4	4	y	y	y	Abundant blooms, huge mounds of flowers. Fills in well with no maintenance necessary. The best viola this season.

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			max	min	max	min	June				July				August			
							wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4
Viola	Skippy® XL Plum-Gold	gold face w/ purple around the face and purple whiskers	11.5	2	1.25	0.75	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viola	Viva Mix	purple/yellow bicolor	18.5	3	1	0.5	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viola	Amber Kiss Angel	yellow with rose overtones	11.5	3	1.5	0.5	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viscaria	Ruby Flax	red	21.5	4.5	1.25	0.5		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
White Lace Flower		white					☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Zinnia	Zahara Rose Starlight	White and rose bicolor	18	8	2.5	1.5		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Zinnia, Garden	Canary Bird	yellow	31	17	3.5	1.75		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Zinnia, Garden	Distance Scarlet	scarlet, orange	18	9	3	1.75	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Zinnia, Garden	Gift	dark orange	33	12	3.75	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼		
Zinnia, Garden	Polar Bear	creamy white	31	7	3.25	1		☼	☼	☼	☼	☼	☼	☼	☼	☼		
Zinnia, Garden	Profusion Knee High Red	dark orange red	20	4.5	2.5	0.75		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Zinnia, Garden	Profusion Knee High White	creamy white, gold centers	18	12.5	2.75	1.25		☼	☼	☼	☼	☼	☼	☼	☼	☼		
Zinnia, Garden	Scabiosaflora Mix	rose, orange, yellow, white	21.5	11	2.5	1	☼	☼	☼	☼	☼	☼	☼	☼	☼			
Zinnia, Garden	Solcito																	
Zinnia, Garden**	Swizzle Scarlet + Yellow F1 Hybrid	lavender blue	13	6	3	2.25		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼

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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.



			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
✿	✿	✿	4	4	4	4	y	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 of tiny but abundant bicolor flowers.
✿	✿	✿	3	3	3	3	y			A petite viola loaded with classic tricolor Johnny Jump-Up type blooms in yellow, violet, and lavender. Nice display all season with no maintenance. Other violas are more mounding and floriferous.
✿	✿	✿	4	4	4	4	y			Small blooms with unique two-toned colors; mostly yellow centers with rosy edges and purple whiskers; petal edges are frilly; plant is loaded with blooms; great display, no maintenance this summer.
✿	✿	✿	1	1	1	1	n			Grew well in the 2008 cool season, but died out early in 2009. Best planted in mix with other flowers as a filler.
✿	✿	✿				1				Overwhelmed by cosmos nearby. No blooms or plants visible in mid August.
			3	3	3	3	n			2010 All-America Selections Bedding Plant Award Winner. The first zinnia with white and rose bicolor blooms. Variable plant height makes for ragged display. Not the most floriferous zinnia; needed a lot of deadheading mid season onward.
✿			4	4	4	1	n	n	n	Grew poorly in cold, rainy 2008, but excellent this year. Tall, upright stems with creamy yellow blooms. Excellent cut flower.
✿			3	3	3	3	n			Medium-sized plants loaded with medium and small blooms. Most flowers are scarlet, some medium to light orange. Needs a lot of deadheading to maintain ornamental appeal; very ragged appearance. There are a lot better zinnias.
			2.5	2.5	3	3	sl			Medium-sized, upright stems with small to medium flowers. Very ragged appearance with lots of brown edges on petals. Not the showiest zinnia.
	✿		1	2	1	1.5	sl			Small to medium blooms. Attractive creamy white color shows up well against dark green foliage. Needs a lot of deadheading to remove brown, rotting flowers late in season.
✿	✿		4	4	4	4	n	y	y	Open floppy mounds covered with brilliant blooms. Excellent show nearly all season. Some disease late in season. Little maintenance required.
			2.5	2.5	2.5	2.5	n	y	y	Bushy mounding plant covered with blooms. Excellent display nearly all season. Performs well with fungicide treatment for <i>Sclerotinia</i> .
			1	1	1	1	n			Tiny flowers. Poor showing this season. Very ragged appearance. Needs significant deadheading.
										No seed germination. Did not plant.
✿	✿		4	4	4	3	y	n	n	Outstanding, eye-popping color. An excellent display in mass plantings.

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 2009, continued**

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	June				July				August			
							wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4	wk1	wk2	wk3	wk4
Zinnia, Garden	Uproar Rose	rose	29	16	3.75	1.25		*	*	*	*	*	*	*	*	*	*	*
Zinnia, Garden	Zahara Coral Rose	dark pink	19.5	3	2.5	1		*	*	*	*	*	*	*	*	*	*	*
Zinnia, Garden	Zahara Fire	orange-red	13.5	4	2.25	1		*	*	*	*	*	*	*	*	*	*	*
Zinnia, Garden	Zahara Scarlet	scarlet	15	3.5	3	1.25			*	*	*	*	*	*	*	*	*	*
Zinnia, Garden	Zahara White	white	14	5.5	2.75	2		*	*	*	*	*	*	*	*	*	*	*
Zinnia, Garden	Zahara Yellow	yellow	17	4	3	1		*	*	*	*	*	*	*	*	*	*	*
Zinnia, Mexican	Aztec Sunset	mahogany/ yellow bicolor, yellow, gold	21	7	1.75	0.75	*	*	*	*	*	*	*	*	*	*	*	*

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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.

			Plant Ratings <sup>z</sup>				Recommended For			Comments
September			flower		foliage	overall				
wk1	wk2	wk3	quantity	quality			fragrance	cutting	drying	
☼	☼		4	4	4	4	sl	y	y	Outstanding, tall solid-color zinnia; very floriferous, blooms hold up well all season; Some deadheading late in season. Good cut flower although size of blooms reduced with each cutting. 2009 Association of Specialty Cut Flower Growers Fresh Cut flower of the year.
✱			4	4	4	4	n			Very nice clear dark pink color. Plants are sparse fillers in cool seasons and susceptible to <i>Sclerotinia</i> cottony rot. Responds well to fungicide treatment. Gorgeous flower color; flowers fade with aging to have a two-toned effect.
✱	✱		4	4	4	4	n			Hybrid between <i>Zinnia angustifolia</i> and <i>Z. violacea</i> . Variable height and flower color. Appears ragged from a distance. Needs a lot more deadheading than similar cultivars.
☼			4	4	4	4	n	n	n	Short mounding plants covered with two sizes of blooms: large flowers are deep red-orange, smaller flowers are lighter orange. Interesting two-toned effect. Succumbed to <i>Sclerotinia</i> rot in 2008 but responded well to fungicide in 2009.
			3	3	4	3.5	n	n	n	Large blooms on small mounding plants did not fill in as well as other zinnias of this type. Many plants died in late season from <i>Sclerotinia</i> rot. Some deadheading needed late in season.
☼			3	3	3	2	sl	n	n	Nice small, creamy yellow blooms with brighter yellow center. Bushy, fills in well. Needs deadheading. Susceptible to <i>Sclerotinia</i> rot.
☼	☼		3	3	3	3	y	y	y	Abundant, small, multicolored flowers bloom all season look like they are hand painted. Excellent in mass plantings or as accents to larger zinnias. Good cut flower. Similar to the AAS winner 'Persian Carpet'.

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**Table 4. Results on cultivars that completed three years' trials.**

Common Name	Cultivar	Ave. <sup>Z</sup> Overall Rating	Ave. <sup>Z</sup> Foliage Rating	Ave. Min Ht (in)	Ave Max Ht (in)	Ave. <sup>X</sup> Min Flower Size (in)	Ave. <sup>X</sup> Max Flower Size (in)	Ave. <sup>Z</sup> Flower Quality	Ave. <sup>Z</sup> Flower Quantity
Amaranth	Dreadlocks	2.3	3.0	23.75	35.33	8.79 x 1.42	11.08 x 1.21	3.7	3.7
Ambrosia		1.7	1.8	4.00	12.67			1.3	1.3
Bacopa	Snowtopia	2.3	2.3	2.75	6.42	0.21	0.38	2.3	2.7
Calendula	Sherbet Fizz	2.0	2.5	12.17	22.50	0.58	2.00	2.5	2.5
Cardoon		2.7	2.7	43.67	54.67			0.7	0.7
Castor Bean	Zanzibarensis Mix	3.0	3.3	32.67	52.67	2 x 1.17	4 x 1.67	2.3	2.3
Cigar Plant		3.0	3.3	5.67	13.83	0.17 x 0.67	1.33 x 1.33	3.7	3.0
Corn Parsley	Goldspray	2.5	2.8	8.33	29.33	0.75	2.83	2.8	2.8
Cosmos	Happy Ring	2.0	2.8	14.00	36.33	1.50	2.75	2.2	2.2
Cosmos	Double Click	2.5	3.2	13.00	32.00	0.83	2.17	3.2	3.2
Dahlia	Redskin	3.3	4.0	17.33	33.17	2.50	4.25	3.7	3.7
Dahlia	Snowbound	3.3	3.3	33.67	42.17	3.17	8.83	3.3	2.3
Flowering Flax	Charmer Mix	3.3	3.3	8.00	23.33	0.42	1.17	3.3	3.0
Foxglove, African		1.7	2.0	26.00	39.83	0.67 x 2.08	2.17 x 3.42	1.7	1.7
Gaillardia	Razzledazzle Mixed Colors	2.5	2.3	8.33	27.00	1.08	2.75	2.7	2.3
Helenium	Goldfield	3.0	2.7	5.67	19.42	0.58	1.25	3.0	3.0
Impatiens, Garden	Super Elfin XP Punch	3.0	3.3	2.17	7.67	0.75	2.08	3.3	3.3
Impatiens, Garden	Super Elfin XP Pink Deep	2.7	3.0	2.67	7.17	1.00	2.17	2.7	3.0
Impatiens, Garden	Super Elfin XP Star Cherry	2.3	2.7	2.00	6.83	0.92	1.50	2.3	2.7
Impatiens, Garden	Super Elfin XP Violet	2.3	3.0	2.50	8.33	0.67	1.83	2.7	3.0
Impatiens, Garden	Super Elfin XP Red	2.7	3.3	1.83	7.17	0.75	2.17	3.3	3.7
Impatiens, Garden	Super Elfin XP Star \$Salmon	3.0	3.3	2.33	7.83	1.17	1.92	3.3	3.7
Impatiens, Garden	Fanciful™ Mix Stardust	2.7	3.7	4.00	9.83	0.58	1.75	3.7	3.7
Jewels of Opar	Limon	1.3	2.3	9.83	20.17	0.33 x 1.24	2.33 x 1.44	2.3	2.0
Juncus	Javelin	3.3	3.3	23.67	46.33			1.0	1.0
Marigold, African	Simba	2.7	3.3	12.17	27.17	2.08	3.92	3.3	3.3
Marigold, African	Vanilla	2.7	3.7	9.67	17.33	1.50	3.33	3.7	3.3
Nasturtium	St. Clements	3.3	3.0	3.67	18.33	1.00	2.33	3.3	3.3
Nasturtium	Golden Gleam	3.0	2.7	4.00	21.67	1.42	2.58	3.0	3.0
Nasturtium, Dwarf	Princess of India	1.7	2.0	4.00	11.50	0.92	2.00	1.3	1.3

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**Table 4. Results on cultivars that completed three years' trials, continued.**

Common Name	Cultivar	Ave. <sup>z</sup> Overall Rating	Ave. <sup>z</sup> Foliage Rating	Ave. Min Ht (in)	Ave Max Ht (in)	Ave. <sup>x</sup> Min Flower Size (in)	Ave. <sup>x</sup> Max Flower Size (in)	Ave. <sup>z</sup> Flower Quality	Ave. <sup>z</sup> Flower Quantity
Nicotiana	Perfect Mix	3.0	3.3	12.33	44.83	2 x 2	5.83 x 8.17	3.0	3.3
Nierembergia	Robe Mix	2.0	2.7	2.17	12.25	0.42	0.92	3.0	3.0
Nolana	Sun Belle Mixed Colors	2.3	2.3	4.67	11.67	0.75	1.25	3.0	2.3
Osteospermum	Asti White	3.5	3.7	13.67	16.50	1.00	2.58	3.5	3.5
Pansy	Frizzle Sizzle Formula Mix	2.3	3.3	3.50	11.67	0.58	1.75	3.7	3.3
Pansy	Promise® Pure Silver Azure	3.0	3.7	4.33	15.67	1.50	3.08	3.3	3.7
Pansy	Promise® Rose Shades	3.3	2.7	2.50	12.67	0.75	2.58	2.7	2.3
Pansy	Whiskers Light Blue	3.2	3.2	4.83	12.50	1.08	2.50	3.2	3.2
Pansy	Fraidy Cat	2.3	2.7	4.00	14.50	1.25	2.67	2.3	2.7
Penstemon	Esprit Mix	3.0	3.0	13.33	30.67	2.67 x 2.08	12 x 5.67	3.0	2.8
Petunia	Baby Duck Yellow	2.7	2.7	4.00	16.83	1.00	1.75	2.7	2.7
Petunia	Shock Wave Rose	2.3	3.0	3.00	16.17	1.00	2.00	3.0	3.3
Petunia	Shock Wave Ivory	3.0	3.3	3.92	13.83	1.00	1.92	3.3	3.3
Petunia	Shock Wave Purple	2.3	3.0	3.50	15.67	0.83	1.67	3.0	3.0
Petunia	Madness Red Improved	2.0	2.0	5.67	16.67	1.50	2.33	3.3	3.0
Petunia	Fantasy Pink Morn	2.7	3.0	9.33	14.33	1.58	3.17	3.0	3.3
Petunia	Alderman	1.7	2.7	4.33	16.17	1.33	2.17	2.7	2.7
Salvia, Scarlet	Saluti Scarlet/White	1.5	1.2	6.00	12.50	1.83 x 2.83	5.33 x 3.17	1.2	1.2
Salvia, Scarlet	Saluti Lilac	1.7	2.0	5.00	11.83	1.33 x 1.33	5.83 x 4	1.7	2.0
Salvia, Scarlet	Vista Rose	2.3	2.0	5.17	11.00	2.42 x 2.33	4.33 x 3.17	2.0	2.0
Scarlet Runner Bean	Painted Lady	3.7	3.7	56.67	88.00	0.67 x 1.17	2.08 x 2.5	3.7	3.7
Scarlet Runner Bean	Scarlet Emperor	3.3	3.7	55.00	79.00	0.33 x 1	1.5 x 2.17	3.7	3.7
Slipper Flower		3.3	3.3	8.17	19.33	0.42 x 0.33	0.33 x 1	3.3	3.3
Snapdragon	Speedy Sonnet Rose	2.0	2.0	9.67	18.67	2.50 x 1.92	5.33 x 4	2.0	2.0
Snapdragon	Snapshot Yellow	2.0	1.3	2.50	9.33	1.58 x 1.75	5.08 x 4	1.3	2.3
Snapdragon	Snapshot White	1.7	1.3	3.75	9.50	1.83 x 1.08	3.5 x 2.17	1.7	1.7
Spanish Lavender	Fragrant Butterflies	1.0	1.0	7.00	17.83	0.04 x 0.17	0.04 x 0.58	1.0	1.0
Statice	QIS Mix	3.7	4.0	14.33	36.33	0.5 x 0.83	0.83 x 2.83	4.0	4.0
Sunflower	Waooh!	3.3	3.7	20.50	35.83	2.83	5.50	3.7	3.7
Verbena	Peaches & Cream	3.0	3.7	7.67	16.17	1.17	2.00	3.0	3.0
Verbena, Garden	Quartz XP Silver	2.3	2.5	2.17	11.33	1.25	2.42	2.5	2.5

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**Table 4. Results on cultivars that completed three years' trials, continued.**

Common Name	Cultivar	Ave. <sup>Z</sup> Overall Rating	Ave. <sup>Z</sup> Foliage Rating	Ave. Min Ht (in)	Ave Max Ht (in)	Ave. <sup>X</sup> Min Flower Size (in)	Ave. <sup>X</sup> Max Flower Size (in)	Ave. <sup>Z</sup> Flower Quality	Ave. <sup>Z</sup> Flower Quantity
Verbena, Garden	Quartz XP Purple	3.7	3.7	2.50	11.67	0.58	2.00	3.7	3.7
Verbena, Garden	Quartz XP White	2.0	2.3	3.67	11.17	0.71	1.17	2.3	2.0
Verbena, Garden	Quartz XP Red Eye	3.7	4.0	3.83	11.50	1.08	2.42	4.0	4.0
Verbena, Garden	Quartz XP Scarlet	2.8	3.3	2.67	11.83	0.92	1.92	3.7	3.3
Viola	Microla® Pure Yellow	3.3	3.0	1.67	16.33	0.33	0.92	3.0	3.2
Viola	Skippy® XL Blue-Yellow	4.0	3.7	4.50	15.00	0.75	1.58	3.7	3.7
Viola	Microla® Plum	2.5	2.8	4.67	15.50	0.42	1.17	2.8	2.8
Viola	Skippy® Experimental Pastel Blue Improved	3.7	4.0	3.67	14.67	0.92	1.83	4.0	4.0
Viola	Skippy® XL Plum-Gold	3.7	4.0	3.58	13.17	0.67	1.33	4.0	4.0
Zinnia, Garden	Profusion Knee High Red	3.7	4.0	3.83	22.67	1.00	2.33	4.0	4.0
Zinnia, Garden	Profusion Knee High White	2.8	2.8	8.83	18.50	1.21	2.62	2.8	2.8
Zinnia, Garden	Swizzle Scarlet + Yellow F1 Hybrid	3.3	3.3	4.67	8.17	0.96	1.21	3.3	3.7
Zinnia, Garden	Uproar Rose	4.0	3.7	12.67	27.83	2.17	4.25	3.7	3.7
Zinnia, Mexican	Aztec Sunset	3.3	3.3	7.00	22.75	0.75	1.67	3.3	3.3

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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

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-americanselections.org](http://www.all-americanselections.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.lawyernursery.com](http://www.lawyernursery.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 (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, Arvada 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)  
Big Dipper Farm, 26130 SE Green Valley Rd, Black Diamond, WA 98010, [www.bigdipperfarm.com](http://www.bigdipperfarm.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)  
Daehnfeltdt, PO Box 947, Albany OR 97321, [www.daehnfeltdt.com](http://www.daehnfeltdt.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)  
Fedco Seeds, PO Box 520, Waterville, ME 04903, [www.fedcoseeds.com](http://www.fedcoseeds.com)

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



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 2T0 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)

High Country Gardens, 2902 Rufina St, Santa Fe, NM 87507, [www.highcountrygardens.com](http://www.highcountrygardens.com)

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

Horizon Herbs, PO Box 69, Williams, OR 97544, [www.horizonherbs.com](http://www.horizonherbs.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.jllhudsonseeds.net](http://www.jllhudsonseeds.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.milkbranch.com](http://www.milkbranch.com)

Mulberry Creek Herb Farm, 3312 Bogart Rd, Huron, OH 44839, [www.mulberrycreek.com](http://www.mulberrycreek.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)

Reimer Seeds, PO Box 236, Mount Holly, NC 28120, [www.reimerseeds.com](http://www.reimerseeds.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)

Sand Mountain Herbs, 321 County Rd 18, Fyffe, AL 35971, [www.sandmountainherbs.com](http://www.sandmountainherbs.com)

Seed Saver's Exchange, 3094 N Winn Rd, Decorah, IA 52101, [www.seedsavers.org](http://www.seedsavers.org)

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)

Summer Hill Seeds, 13505 Hamilton Pike Rd, Whittington, IL 62897, [summerhillseeds.com](http://summerhillseeds.com)

Swan Island Dahlias, PO Box 700, Canby, OR 97013, [www.dahlias.com](http://www.dahlias.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)

Wauhara 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)

Whatcom Seed Co., PO Box 40700, Eugene, OR 97404, [seedrack.com](http://seedrack.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



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

*A big thank you to our  
2009 volunteers!*

Walt Babula, Kathie Baum, Peggy Birkenbuel, Cheryl Berrong, Holly Buzby, Virginia Damron, Dee Daniels, Susan Dearborn, Donna Dinsmore, Jackson Drew (Eagle Scout), Steve Ewest, Anne Foster, Pauline Fusco, Jane Gregory, Jan Hanscom, Kate Hedstrom, Bette Higbie, Victoria Hill, Helen Howard, Joanne Klumb, Ted Kegler, Nancy Kilgore, Sherry Lewis, Susan Lightbody, Carol Lovejoy, Janet Matheson, Gail Mayo, Rose Meier, Marsha Munsell, Peggy O'Neal, Mary Parsons, Joanna Phillips, Ann Roberts, Barbara Rondine, Nora Rojek, Anne Rozell-Ruiz, Libby Silberling, Melody Springer, Ann Swift, Curtis Thorgaard, Terry Tomczak, Judith Treesberg, Eileen VanWyhe, Maggie Waite, Judy Weber, Suzanne Williams, Susie Zimmerman, Family Centered Services, The Herb Group, the GBG Society Board consisting of Donna Dinsmore, Virginia Damron, Mike Salzman, Curtis Thorgaard, Melody Springer, Robyn Russell, George Wilson, Ken McFarland, Diane Hunt, Ann Roberts, Ann Swift, Lisa Drew, and the many others who made the Garden Tea and Garden Faire a success.

**To join these valued people,  
call Katie DiCristina at 474-6921  
or e-mail [gbgardensuaf@gmail.com](mailto:gbgardensuaf@gmail.com)**



**SPECIAL THANKS TO OUR PARTNERS AND VOLUNTEERS  
WHO SUPPORT THE GARDEN  
WITH SEEDS AND OTHER DONATIONS:**

All America Selections, Flower and Vegetable Seeds

Denali Seed

Driftwood Nurseries

Virginia Gauss

PanAmerican Seeds, Flower seeds

Curtis Thorgaard

USDA Plant Introduction Stations,  
NC17, Iowa State University, Plants and seeds

## **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 were 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.



*Osteospermum ecklonis* cv. Ballade Mix growing at the Georgeson Botanical Garden.