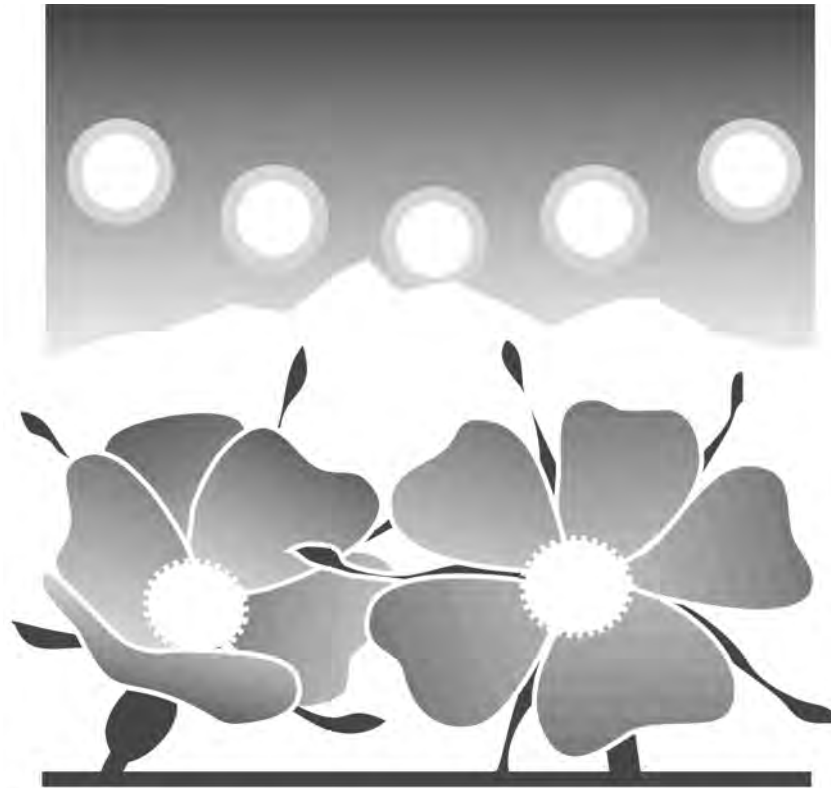


# Annual Flowering Plant Evaluations 2006

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**GEORGESON**  
BOTANICAL GARDEN

Patricia S. Holloway  
Professor of Horticulture

Etta Gardiner  
Greenhouse Manager

Horticulturists:  
Grant E.M. Matheke  
Jan Hanscom

Student interns:  
Katie Bosch  
Lindsay Douglass  
Valarie Lemens  
McKenzie Payne

Volunteer garden designer  
Judy Weber

Agricultural and Forestry Experiment Station  
School of Natural Resources and Agricultural Sciences



# Introduction

Each year more than 300 annual flowering plants are grown in field trials at the Georgeson Botanical Garden. In 2006, trials included an additional 50 cultivars grown in baskets and containers. The annual flower trials were planted from 31 May to 3 June 2006 in the Perennial Landscape and All American Selections (AAS) Display Garden of the Georgeson Botanical Garden (64° 51'N, 147° 52'W). The Fairbanks silt loam soil in field beds was fertilized with 10-20-20S (4 lbs per 100 sq ft, 195 g per sq m) on 31 May. Baskets and containers were filled with equal parts Triple R brand composted soil mix (Risse Greenhouses) and Pro Mix Bedding plant soilless potting mix supplemented with Terra.sorb water-absorbing crystals. Flowers were grown as seedling transplants with the exception of the sweet peas, annual flower mixes, 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 11 June to all plots. Plots were irrigated as needed throughout the summer.

Weather data were compiled annually from a U.S. Weather Service station, elevation 475 ft (145 m), located approximately 350 ft (107 m) west of the garden. The summer was an average growing season when comparing summary statistics, but it was anything but ordinary (Tables 1 and 2). A hard freeze and blizzard on 4–5 June caused significant damage to tender annuals. Although

only three cultivars were killed, the most tender flowers (i.e. zinnias, marigolds, salvia) showed damage to leaves and flower buds. The official temperature at the weather station reached 30°F, but the temperature at plant level in the plots was 25°F. Plots were covered with Reemay spun bonded fabric and irrigated overhead to minimize damage. The total thaw degree days showed an average summer only because September was warm and frost was not recorded until the end of the month. Most of the monthly averages were lower than the previous two years. Rainfall was similar to previous years, but much of July and August were overcast (Table 2). In July, there were 22 continuous days of measurable precipitation.

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), as well as deadheading requirements (Table 4). From 22 Aug to 28 Aug, each cultivar was measured for plant height and flower size, rated for performance of flowers and foliage, and evaluated for fragrance and potential use as cut flowers or in dried arrangements. Frost tolerance was noted three days after the first frost on 28 September.

Each cultivar grown in the garden beds is tested for at least three years depending upon the availability of seed or plugs. Only nine of the more than 300 cultivars tested showed consistently excellent performance with an overall rating of “4” (outstanding quality, the best of its kind) each year (Table 5).

**Table 1. Weather data from the U.S. Weather Service station located just west of the garden for years 1996-2006.**

Season	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Average temperature: (°F)											
May	44	48	49	46	44	45	50	44	52	56	50
June	57	61	58	61	59	57	58	61	66	67	59
July	62	64	62	61	59	61	61	61	65	63	62
Aug	52	57	52	58	52	57	54	55	62	58	55
Sep	41	50	46	45	41	49	47	41	38	46	50
Maximum temperature (°F)	82	87	87	91	83	95	85	82	90	85	80
Growing season:											
Last frost	June 5	May 25	May 13	May 29	May 15	May 13	May 12	May 24	May 8	May 5	June 4
First frost	Aug 27	Aug 19	Sep 13	Sep 11	Sep 16	Sep 24	Sep 2	Sep 13	Sep 4	Sep 2	Sep 25
Frost free days	83	86	123	105	124	134	113	112	119	120	112
Thaw degree days*	2811	3656	3278	3383	2943	3439	2980	3123	3751	3767	3523
Rainfall (inches)	8.73	5.86	9.87	8.66	8.55	5.80	9.35	9.91	5.6	10.59	7.86
Previous winter season:											
Minimum temperature (°F)	-48	-54	-48	-54	-50	-27	-36	-35	-45	-50	-49
Snowfall (inches)	47.8	38.4	30.6	31.6	62.2	39.9	39.7	33.2	51.7	70.9	51.8

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

**Table 2. Weather data summaries for growing season years 2004 - 2006.**

	May			June			July			August			September		
Temperature °F	2004	2005	2006	2004	2005	2006	2004	2005	2006	2004	2005	2006	2004	2005	2006
Average daily maximum	64	68	63	80	73	69	76	74	71	75	69	65	47	54	61
Monthly high	76	77	75	90	84	80	89	81	83	84	85	72	61	66	69
Average daily minimum	40	43	38	53	50	48	53	51	52	49	46	45	30	38	38
Monthly low	30	31	27	42	43	30	44	39	46	35	33	36	26	28	29
Rainfall (inches)	1.67	1.66	0.20	0.42	2.97	1.15	1.21	4.09	3.42	0.50	0.39	2.48	1.26	1.48	0.61

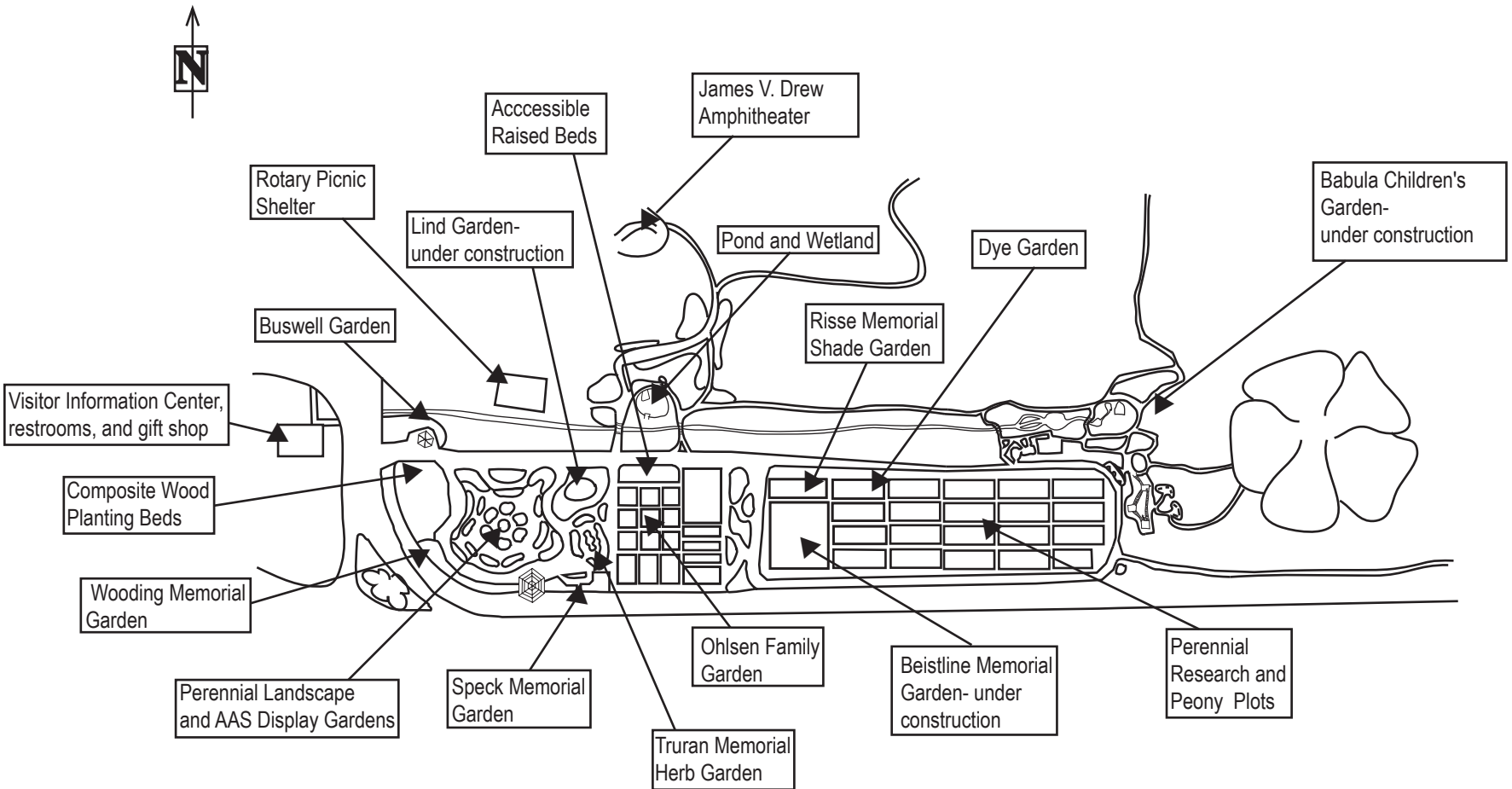


Table 3. Results of tested annual flower cultivars for 2006.

Common name	Cultivar	Flower color	Height (in) <sup>w</sup>		Flower size (in) <sup>x</sup>		Flowering period <sup>y</sup>												Frost tolerance	
			min	max	min	max	Jun	Jul	Aug	Sep	foliage	flowers								
African Daisy	African Moon	tawny yellow	6½	6½	¾	1½	* * * * * * * * * * * * * *										n	n		
Ageratum	High Tide Blue	lavender	9¼	17	1	2¾	* * * * * * * * * * * * * *											n	n	
Ageratum	Mexicana Tall	dark blue	15	26½	1	2	* * * * * * * * * * * * * *											n	n	
Alyssum, Sweet**	Rosie O'Day	rosy lavender	3	4¾	½	1	* * * * * * * * * * * * * *											y	y	
Alyssum, Sweet**	Royal Carpet	purple, lavender	2¼	3¾	¼	½	* * * * * * * * * * * * * *											y	y	
Amaranth, Feathered	Icecream Banana	pale yellow	7	8	1	3	* * * * * * * * * * * * * *											n	n	
Amaranth, Feathered	Icecream Mango	yellow-orange	4½	7½	1	4	* * * * * * * * * * * * * *											n	n	
Amaranth, Feathered	Icecream Orange	orange	5	10	1½	3¾	* * * * * * * * * * * * * *											n	n	
Amaranth, Feathered	Icecream Peach	pink	5	9	½	¾	* * * * * * * * * * * * * *											n	n	
Angelonia	Serena Purple	rosy purple	5½	10	¼	¾	* * * * * * * * * * * * * *											n	n	
Annual Flower Mix	Colorscape Mixture	mixed	14½	31½	1¼	5	* * * * * * * * * * * * * *											n	n	
Annual Flower Mix	Johnny's Butterfly & Hummingbird Mix	mixed	8¾	49½	¾	3	* * * * * * * * * * * * * *											n	n	
Annual Flower Mix	Knee-Hi Mix	mixed	11	27	¼	4	* * * * * * * * * * * * * *											n	n	
Annual Flower Mix	Low-Growing Mix	mixed	9	26	¼	3¾	* * * * * * * * * * * * * *											n	y	
Annual Flower Mix	Surprise Mixture	mixed	6	26¼	¼	3¼	* * * * * * * * * * * * * *											n	n	
Asarina**	Mystic Rose		6¼	11½	½	1¼												n	n	
Aster, Annual Garden	Ballet Mix	white, pink, rose, lavender	15	21	2¾	5	* * * * * * * * * * * * * *											n	n	
Aster, Annual Garden	Giant Ray Mix	lavender, light yellow, red, rose, white	19¾	29	4½	6	* * * * * * * * * * * * * *											n	n	
Aster, Annual Garden	Serenade Mix	red, white, rose, blue, carmine, light blue, scarlet, blue/white & red/white bicolors	17	22	1	1½	* * * * * * * * * * * * * *											n	n	
Aster, China	Pink Tower	pink	25	25	1	2½	* * * * * * * * * * * * * *											n	n	
Aster, Peony	Duchesse Formula Mix	rose, blue, yellow, white, sky blue, scarlet, silver-blue, silver-rose	18	28	2½	4½	* * * * * * * * * * * * * *											n	n	

<sup>w</sup> 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.

<sup>x</sup> if flower size was uniform, size is recorded under max only; sizes with an x like 12x3 indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.

<sup>y</sup> \* indicates just starting to bloom, \* indicates 50% bloom, and \* indicates full bloom.

	Plant ratings <sup>2</sup>				Recommended for			Comments
	Flower		Foliage	Overall	Fragrance	Cutting	Drying	
	quantity	quality						
	1	1	1	1	n	n	n	One plant survived by mid-August, very poor growth, some frost damage early but mostly disease
	4	4	3	4	n	y	y	Medium-height ageratum, attracts bee flies, variable flower height best for edges of borders, very good mounds of color nearly all season, good for cutting and drying
	4	4	3	4	n	y	y	Nice tall ageratum with billows of blooms, great for drying and cutting as well as the garden, attracts bees
	2	2	3	2	y	n	n	Compact carpet of color, fills in well, best for front of borders, All America Selections winner 1961
	4	3	3	3	y	n	n	One of the largest alyssums grown, spread and filled in well, interesting mix of purple colors, All America Selections winner 1953
	2	2	2	2	n	n	n	More branched than other amaranths, needs close spacing, may benefit from early season pinching to encourage branching
	2	3	2	2	n	n	n	Tiny upright unbranched stems topped with brilliant spikes of color, needs very close spacing for best effect, foliage is lime green
	2	2	2	2	n	n	n	Tiny spikes with yellow-green foliage and brilliant flower heads, needs close spacing, little branching, try in containers
	2	2	2	2	n	n	n	Tiny puffy pink flower heads on very short stems, no branching, needs extremely close spacing for any show, nice color
	3	3	3	3	n	n	n	First angelonia from seed, spiky like salvia, tiny compact plants covered with purple spikes, need close spacing for best effect, needs deadheading in late summer
	4	4	4	4	sl	y	y	Spectacular mix of flowers in a mid-height flower mix, includes many cultivars rather than wildflowers, great shirley and California poppies, holds up very well in cold rainy weather
	2	2	3	2	n	y	y	Medium-height mix but too much cosmos, many flowers engulfed with cosmos foliage, does not reach full bloom until August, color mostly blue of bachelor's buttons
	3	2	2	2	n	y	y	Excellent color mix throughout the flowering season, significant lodging in rainy weather, very poor appearance in late summer
	3	2	2	2	n	y	y	Good color mix, lots of lodging and bare spots, last year had too much linaria, this year too much bachelor's buttons
	3	3	3	3	n	y	y	Excellent tall flower mix, because of height did not come into full bloom until August, spectacular late-season color, lots of cosmos and poppies, did not lodge like other mixes
	1	1	2	1		n	n	Tiny vines did not grow well on trellises, never saw a bloom all summer
	3	3	3	3	n	y	y	Big powderpuff-sized blooms, great mix of colors, needs deadheading by mid-August for best show
	4	4	3	4	n	y	y	Needle-like 5-inch blooms on large plants, needs staking for straight stems, needs deadheading late in season, good cut flower
	2	2	2	2	sl	y	y	Small semidouble daisy-like flowers in clusters on very upright stems, different colors have very uneven heights, not attractive, useful as cut flower only in very short displays, needs close spacing to fill in beds
	2	2	2	2	n	y	y	Very attractive incurved fully double blooms, long straight stems great for cutting
	3	3	3	3	y	y	y	Fully double flowers in blend of 6 colors and 2 bicolors, good cut flower, flowers are late to appear but worth the wait, mostly pinks, rose, and lavenders





	Plant ratings <sup>z</sup>				Recommended for			Comments
	Flower		Foliage	Overall	Fragrance	Cutting	Drying	
	quantity	quality						
	2	3		3	n	y	y	Beautiful old-fashioned flower, started too early from seed so late season show was poor, All America selections winner 1937
	3	3	3	3	n	y	n	Big green bushes with lots of flowers along the stem among the leaves, display from above is mostly green, best used as edging or borders with side view, needs lots of space to spread, robust and bushy
	3	3	3	3	n	n	n	Surprising amount of growth this season, tall, bushy, fills in the beds well, very ornamental, very nice display in ground beds
	3	2		3	sl	y	y	Floppy stems that make the plant appear shorter than it is, umbels not as compact as other Bishop's Flowers grown this year, more like the wild Queen Anne's Lace
	4	3	3	3	n	y	n	Annual that looks like Queen Anne's Lace, large bushy floppy stems, nice old-fashioned flower with ferny foliage, attracts bee flies
	4	3	3	3	y	y	y	Very similar to Ammi (Bishop's Flower) with smaller umbel heads, stronger straighter stems than Ammi, recommended by catalogs for greenhouse and field cut flower production
	2	2	2	2	n	y	n	Bushy floppy stems that need a lot of room to spread, centers appear dead in wet seasons, better performance in hot summers, flowers close up in cold cloudy weather, poor display this year
	3	3	3	3	n	n	n	Compact plants bearing masses of small daisy-like violet-blue fragrant blooms, fills in well and forms close mounds of brilliant color, color becomes sparse by mid August
	1	1	1	1	n	y	y	Nearly destroyed by early June frost, did not recover and never bloomed, poor growth this year
	1	1	1	1	n	n	n	Poor performance in containers, leaves easily overtaken by coleus in the same container, not worth the trouble, better as a greenhouse plant
	2	2	2	2	n	n	n	Very eye-catching pocketbook flowers in great balls, flower heads got smaller as the season progressed, did not compete well with other flowers in containers, showy early, nearly disappeared later on
	3	3	3	3	sl	y	n	Abundant flowers on tall stems excellent for cutting, elegant mahogany accents on petals, mix of light and dark flowers, deadheading required
	3	3	3	3	sl	y	y	Long stems, great for cutting, very nice uniform display all season, catalog says has high resin content for medicinal tinctures and salves
	3	3	3	3	n	y	y	Bushy plants covered with flowers in unusual peachy pink color with striking maroon edges and backs, excellent cut flower
	3	3	3	3	sl	y	y	Intense burnt-orange double blooms fading slightly to lighter orange in centers, abundant blooms, very attractive, one of the best calendula colors we've tested, needs deadheading, attractive display all season
	4	4	3	4	n	y	n	Compact mounds of finely-dissected foliage covered with brilliant lemon yellow flowers, very attractive, stunning display, one "wild-type" plant among the more compact plants
	4	4	3	4	n	y	n	Attractive ruffled petals, outstanding color, some flowers a light rose pink, others a pale peachy pink, holds up well in wet weather
	2	2	2	2	n	n	n	Old-fashioned cockscomb, medium-sized spikes, yellowish foliage tinged with red, spikes do not branch, cockscombs are tiny, appear late in the season, unattractive, perhaps better in warmer sites
	2	2	2	2	n	n	n	Small unbranching spikes, needs very close spacing for best effect, nice flower head colors but too sparse, All America Selections winner 1985
	2	2	2	2	n	n	n	Short unbranched spikes of brilliant color, interesting flower heads, needs close spacing for best effect, All America Selections winner 1964
	1	1	1	1	n	n	n	Tiny thin spikes of electric color, needs very close spacing in ground beds for best display, colors are eye-catching but display is not very ornamental

<sup>z</sup>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 2006, cont.

Common name	Cultivar	Flower color	Height (in) <sup>w</sup>		Flower size (in) <sup>x</sup>		Flowering period <sup>y</sup>												Frost tolerance		
			min	max	min	max	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	foliage	flowers			
Celosia	Glow Pink	dusky pink	4	5½					*	*	*	*	*	*	*	*	*	*	*	n	n
Chiastophyllum*	Solar Yellow	yellow			1¼	¾			*	*	*	*	*	*	*	*	*	*	*		
Chinese Pink	Victoriana	maroon, white w/ maroon markings, deep rose	6	14½	1½	1¾			*	*	*	*	*	*	*	*	*	*	*	n	n
Chrysanthemum**	Moonlight	yellow	6¼	18	½	¾	*	*	*	*	*	*	*	*	*	*	*	*	*	y	y
Clarkia	Chieftain	hot pink	21	42	¾	1½			*	*	*	*	*	*	*	*	*	*	*	n	n
Cleome	Colour Fountain Mixed	rose, pink, white, purple, pink, white bicolor w/ white	22	29½	4½	6								*	*	*	*	*	*	n	n
Coleus	Kong Mosaic		8	16½	1	3								*	*	*	*	*	n	n	
Coleus	Wizard Mosaic		6¾	8½	¾	5½								*	*	*	*	*	n	n	
Coreopsis	Quills and Thrills	red and yellow combinations	19	34	1¼	2			*	*	*	*	*	*	*	*	*	*	*	y	y
Coreopsis	Sunfire	yellow w/ burgundy center	11	21¼	1¼	2¾			*	*	*	*	*	*	*	*	*	*	*	y	y
Coreopsis,** Large-flowered	Early Sunrise	gold	28¼	28½	1¼	2½			*	*	*	*	*	*	*	*	*	*	*	y	y
Coreopsis, Large-flowered	Rising Sun	yellow w/ red fleck	10	13	1¼	2½			*	*	*	*	*	*	*	*	*	*	*	n	n
Cosmos	Early Summer Mix	magenta, pink	31	53	2	4½			*	*	*	*	*	*	*	*	*	*	*	n	n
Cosmos	Fairy Mix	pink, white, magenta, pink w/ magenta edges	23½	33¼	1½	3¼			*	*	*	*	*	*	*	*	*	*	*	n	n
Cosmos	Unique Mix	magenta, pink	22½	41½	2	3¾			*	*	*	*	*	*	*	*	*	*	*	n	n
Cuphea, Creeping	Purple Star	lavender w/ cream center	8	17	½	1½	*	*	*	*	*	*	*	*	*	*	*	*	*	n	n
Cuphea (miniata)	Summer Medley	lavender, rose, red	7½	17¾	¾	1¼	*	*	*	*	*	*	*	*	*	*	*	*	*	n	n
Dahlia**	Amorus	variegated orange-red	46	2	4½				*	*	*	*	*	*	*	*	*	*	*	n	n
Dahlia**	Beaucon White	white		44	1¼	1½			*	*	*	*	*	*	*	*	*	*	*	n	n
Dahlia**	Bloomquist Dawn	dark pink w/ yellow center		43	4	6½			*	*	*	*	*	*	*	*	*	*	*	n	n
Dahlia**	Chimicum Topaz	yellow w/ orange tips		43½	6	7					*	*	*	*	*	*	*	*	n	n	
Dahlia**	Citron De Cap	yellow w/ rose highlights		50		5			*	*	*	*	*	*	*	*	*	*	*	n	n
Dahlia**	Emory Paul	rosy purple, lighter toward tips		41	2¼	8½					*	*	*	*	*	*	*	*	n	n	

<sup>w</sup> 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.

<sup>x</sup> if flower size was uniform, size is recorded under max only; sizes with an x like 12x3 indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.

<sup>y</sup> \* indicates just starting to bloom, \* indicates 50% bloom, and \* indicates full bloom.



	Plant ratings <sup>2</sup>				Recommended for			Comments
	Flower		Foliage	Overall	Fragrance	Cutting	Drying	
	quantity	quality						
	2	2	2	2	n	n	y	Dusky pink color is unique, needs close spacing for full color in mass plantings, larger flower heads than the Icecream Peach Celosia
					y			
	3	3	3	3	n	y	y	Beautiful feathery petals on tall stalks great for cutting, not as floriferous as other dianthus, excellent mix of pink shades, needs deadheading late in the season
	3	3	3	3	n	n	y	Excellent mounds of white blooms, performs very well all season, showy even after frost
	2	3		2	y	y	n	Tall stems becoming floppy in late season, very attractive flowers but mostly on the ground, many dead plants
	1	1	1	1	y	y	n	Poor germination, overshadowed by nearby sunflowers, grew poorly with few flowers, outstanding mix of colors on tall upright stems, a standard for many years
			2	2	n	n	n	Huge leaves, interesting mix of variegated foliage, did not get very big before setting flowers, ok as low-growing plants in containers, didn't get big to match huge leaves
			3	3	n	n	n	Dwarf compact plant, spotted and streaked foliage forming a mosaic pattern, needs close spacing for mass effect, ok in mixed containers, small most of the season, did not flower, not attractive
	4	3		3	n	y	y	Airy, bushy, upright flowers with fluted petals that are wider at the tip than the base, interesting combinations of red and yellow blooms, great planted in masses or as filler in back, needs space to flop
	3	3	3	3	y	y	y	Not as floriferous as the other coreopsis cultivars tested this season, medium sized blooms on straight stems, good for cutting
	4	4	3	3	sl	y	y	Medium sized plant loaded with double gold blooms from mid season on, flowers on very straight upright stems, needs a little deadheading late in the season, All America Selections winner 1989
	4	4	4	4	n	y	y	Tall straight-as-arrow stems topped with brilliant tufts of yellow and maroon centers, very ornamental from mid season onward
	3	4	3	3	y	y	n	Large bush needs lots of room to spread, floppy stems covered with open airy mostly pink and magenta flowers
	2	2	3	2	sl	y	n	Bushy mounded foliage topped with impressive display of mostly pink and magenta flowers, needs some deadheading in late summer
	2	2	3	2	y	y	n	Huge bushes, few blooms, mostly white, just a few pink, ragged appearance of white blooms, not the best cosmos
	2	2	2	2	n	y	n	Single stem branches out at the top in a vase-like growth habit, set back by early season frost, recovered slowly, needs close spacing for effect, overall appearance--ragged with lots of brown-tipped leaves
	3	3	3	3	n	n	n	Significantly more showy than the other cuphea tested this summer, compact, bushy, fill in well, great mix of flower colors
	3	3	3	3	sl	y	n	Compact symmetrical flowers in perfectly round button form, outstanding flecked colors, formal decorative bloom style
	2	2	3	3	sl	y	n	Medium-sized small flowers just beginning in late season, not the most decorative of blooms, informal decorative bloom style
	3	3	3	3	sl	y	n	Very attractive bicolor flowers, loaded with blooms in late season, very attractive, semicactus bloom style
	1	1	2	1	sl	y	n	Diseased, possibly virus, weak, not many blooms until late season, semicactus bloom style
	3	3	3	3	sl	y	n	Lots of blooms too late in the season for great display, heavily lacinated petals give lacy appearance
	3	3	3	3	y	y	n	Huge blooms with giant floppy petals, great when newly opened but ratty when old, needs deadheading

Table 3. Results of tested annual flower cultivars for 2006, cont.

Common name	Cultivar	Flower color	Height (in) <sup>w</sup>		Flower size (in) <sup>x</sup>		Flowering period <sup>y</sup>												Frost tolerance				
			min	max	min	max	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	foliage	flowers					
Dahlia**	Fidalgo Lisa			43								*	*	*	*	*				n			
Dahlia	Hello Gorgeous Mixture	red, yellow, orange, white, pink, rose	8	20½	2½	4		*	*	*	*	*	*	*	*	*	*	*	*			n	n
Dahlia**	Jo	pale yellow		50¾	4	5		*	*	*	*	*	*	*	*	*	*	*	*			n	n
Dahlia**	Mel's Misty Sunrise	creamy yellow w/ pink highlights		50	4	6½			*	*	*	*	*	*	*	*	*	*	*			n	n
Dahlia**	Mom's Special	pale lavender w/ dark lavender flecks		34½	5½	9¾					*	*	*	*	*	*	*	*	*			n	n
Dahlia**	Philothea	pink w/ white centers	16	50	5¼	2½					*	*	*	*	*	*	*	*	*			n	n
Dahlia**	Papageno	yellow w/ pink tips		39	6	7¼			*	*	*	*	*	*	*	*	*	*	*			n	n
Dahlia**	Pat Feary	yellow w/ pink highlights		61¾	3¾	5½			*	*	*	*	*	*	*	*	*	*	*			n	n
Dahlia**	Redskin	white, apricot, yellow, pink red	17	36	3¼	4¼			*	*	*	*	*	*	*	*	*	*	*			n	n
Dahlia**	Robert Too	purple & white		41¾	2½	4		*	*	*	*	*	*	*	*	*	*	*	*			n	n
Dahlia**	Scarborough Brilliant	red fading to pink in centers		62½	5½	6¾				*	*	*	*	*	*	*	*	*	*			n	n
Dahlia**	Spartacus	dark red		8½	1	1½				*	*	*	*	*	*	*	*	*	*			n	n
Dahlia	Star-Gazer	white, rose, orange, yellow, pink, burgundy, some bicolors	10¼	31½	3	4½			*	*	*	*	*	*	*	*	*	*	*			n	n
Dahlia**	Sterling Silver	white		56	5¾	7¼					*	*	*	*	*	*	*	*	*			n	n
Dahlia**	Tanjoh	creamy white w/ purple tips		39½	2½	5			*	*	*	*	*	*	*	*	*	*	*			n	n
Dahlia**	The Boss	dark pink		53½	2½	3¾					*	*	*	*	*	*	*	*	*			n	n
Dianthus	Bouquet™ Rose Magic	rose, pink, white w/ dark pink markings	12½	20½	2	4			*	*	*	*	*	*	*	*	*	*	*			y	n
Dianthus	Dynasty Orchid	deep purplish rose	8¾	21½	1	1½		*	*	*	*	*	*	*	*	*	*	*	*			y	y
Dianthus	Dynasty Rose Lace	dark rose pink w/ maroon centers & white edges & undersides	11	22¼	1	1¼		*	*	*	*	*	*	*	*	*	*	*	*			y	y
Dianthus	Ideal Violet	violet rose	3½	14	¾	1¾		*	*	*	*	*	*	*	*	*	*	*	*			y	y
Dianthus**	Magic Charms	red, white, pink	7½	10¾	1½	2		*	*	*	*	*	*	*	*	*	*	*	*			n	n
Dianthus	Panda Mix	white, pink, crimson	5½	10	1¾	2½		*	*	*	*	*	*	*	*	*	*	*	*			y	y
Dianthus**	Carpet Snowfires	white, red centers	6	13¾	1¼	2		*	*	*	*	*	*	*	*	*	*	*	*			y	y

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<sup>x</sup> if flower size was uniform, size is recorded under max only; sizes with an x like 12x3 indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.

<sup>y</sup> \* indicates just starting to bloom, \* indicates 50% bloom, and \* indicates full bloom.

	Plant ratings <sup>z</sup>				Recommended for			Comments
	Flower		Foliage	Overall	Fragrance	Cutting	Drying	
	quantity	quality						
	1	1	3	2		n	n	No blooms, only green bush all summer
	2	3	3	3	sl	y	y	Medium-sized semidouble blooms, excellent mix of colors with lots of flowers, needs deadheading
	3	3	3	3	y	y	n	Medium sized water lily type blooms, outstanding color, great contrast against dark green foliage
	3	3	3	3	y	y	n	Laciniated flower form, very interesting 2-toned flowers, distinct feathery appearance, large blooms
	3	3	3	3	sl	y	n	Big floppy flowers make attractive display in late season, needs deadheading
	3	3	3	y	y	n		Medium-sized blooms, beautiful aciniated flower type, very attractive blooms, showy
	4	4	3	3	sl	y	n	Huge blooms on short plant, very attractive in late season
	3	3	3	3	sl	y	n	Abundant tiny blooms on very tall plants, nice display late in season, interesting pink stripes on back of petals
	3	3	4	3	y	y	y	Named for reddish foliage color, big bushy plant covered with multi-colored blooms, dark foliage sets off the flowers, very attractive, dig tubers in fall, All America Selections Winner 1975
	3	3	3	3	sl	y	n	Outstanding abundant flowers on tall plant, great show through mid season to frost, miniature formal decorative bloom style
	3	3	3	3	y	y	n	Outstanding hot pink blooms, one of the tallest plants, great show in late season
	2	2	2	2	y	y	n	Formal decorative style, petals fold back toward stem
	3	3	3	3	y	y	y	Abundant cactus blooms on plants much taller than advertised, covered with blooms on upright stems, nice mix of colors
	4	4	3	4	sl	y	n	Huge balloon flowers of pure white, very attractive in late season, giant bush with lots of branches, few blooms, formal decorative bloom type, recurved petals give flower a ball shape
	3	3		3	y	y	n	Striking bicolor blooms look like they've been dipped in paint, covered with medium sized blooms from midsummer on, very attractive
	3	3	3	3	y	y	n	Huge blooms late in season, very nice display on medium sized bush
	3	4	3	3	sl	y	y	Large balls of flowers on tall upright stems, very colorful display especially with mix of flower colors in a single ball, needs deadheading late in season, very nice display, attracts butterflies
	3	3	3	3	n	y	y	Very attractive open clusters of double blooms on tall upright stems, electric colors in mass plantings, needs deadheading by mid season for best display
	4	4	4	4	y	y	y	Tall upright stems covered with tiny carnations, very ornamental old-fashioned look, great stem length for cutting, rich rose color with intricate white edging, covered with blooms from mid season onward
	4	4	4	4	sl	y	y	Compact plants covered with lacy flowers nearly all season, very attractive display of electric solid colors, All America Selections winner 1992
	3	3	3	3	n	y	y	Mounds of brilliant color nearly all season, excellent display for the fronts of borders, no maintenance, All America Selections winner 1974
	3	2	3	3	y	y	y	Nice compact mounded plants covered with blooms nearly all season, brilliant colors, some bicolors, colors have different heights giving ragged overall appearance
	3	3	3	3	sl	y	y	Excellent display all season, mounded plants covered with blooms, striking patterns of red and white with some pink, All America Selections winner 1978

<sup>z</sup>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 2006, cont.

Common name	Cultivar	Flower color	Height (in) <sup>w</sup>		Flower size (in) <sup>x</sup>		Flowering period <sup>y</sup>												Frost tolerance	
			min	max	min	max	Jun	Jul	Aug	Sep	foliage	flowers								
Dianthus	Supra Purple	rose	7¼	14	1½	2½	* * * * * * * * * * * * * *										n	n		
Dianthus	Sweet Scarlet	scarlet	9¾	16½	1½	3				* * * * * * * * * * * * * *							n	n		
Dianthus	Noverna Purple	purplish pink	5½	13½	1½	2¾				* * * * * * * * * * * * * *							y	y		
Diascia	Diamonte Apricot	peach	15	15	¼	½	* * * * * * * * * * * * * *										y	y		
Diascia	Diamonte Coral Rose	coral	6	11½	¼	½	* * * * * * * * * * * * * *										y	y		
Dusty Miller	New Look																y			
Flaxleaf Pimpernel		blue		11½		½	* * * * * * * * * * * * * *										y	y		
Foxglove	Camelot Rose	deep rose	19	54	4	27				* * * * * * * * * * * * * *							y	y		
Gaillardia	Arizona Sun	mahogany w/ bright yellow tips & dark red centers	18	30¾	2	4½				* * * * * * * * * * * * * *							y	y		
Gaillardia**	Sundance Bicolor	red & orange bicolor	11	26	¾	2				* * * * * * * * * * * * * *							n	n		
Gazania	Frosty Kiss Mixture	orange, red, yellow, rose w/ gold centers	6½	16	1	2¼				* * * * * * * * * * * * * *							n	n		
Gazania	Kiss Mixture	orange, red, gold, pink, yellow, white	6½	13¾	1½	3	* * * * * * * * * * * * * *										n	y		
Gazania	Kontiki Stars & Stripes	orange, rose, cream, red striped	8	13	1½	2½	* * * * * * * * * * * * * *										n	n		
Gentian sage	Blue Angel	royal blue	19½	35½	1½	2½	* * * * * * * * * * * * * *										n	n		
Geranium	Black Velvet Appleblossom	pink fading to white in center	14	20¾	2¼	2¾	* * * * * * * * * * * * * *										n	n		
Geranium	Maverick Star	pink w/ rose centers	12	24	2½	4	* * * * * * * * * * * * * *										n	n		
Geranium	Multibloom Capri	light coral	11	13	1¼	4	* * * * * * * * * * * * * *										n	n		
Geranium	Multibloom Red	orange red	12	17	1½	3½	* * * * * * * * * * * * * *										y	y		
Geranium	Orbit Deep Salmon	salmon pink	14	17½	2½	4	* * * * * * * * * * * * * *										y	y		
Gerbera	Revolution Vanilla	creamy yellow	3½	10	2	3	* * * * * * * * * * * * * *										y	y		
Godetia	Fruit Punch	rose, pink, white bicolors & solids	11	17½	1¼	2¼				* * * * * * * * * * * * * *							n	n		

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<sup>x</sup> if flower size was uniform, size is recorded under max only; sizes with an x like 12x3 indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.

<sup>y</sup> \* indicates just starting to bloom, \* indicates 50% bloom, and \* indicates full bloom.

	Plant ratings <sup>2</sup>				Recommended for			Comments
	Flower		Foliage	Overall	Fragrance	Cutting	Drying	
	quantity	quality						
	4	3	3	3	sl	y	y	Bred as a short stemmed cut flower, lacy, highly fringed petal edges, no maintenance, very attractive and loaded with blooms, All America Selections 2006 Flower Award
	1	1	1	1	sl	n	n	Medium sized balls of scarlet flowers on sickly yellow stems, very unattractive, fills in well but few blooms, deadheading needed but even that does not help the poor display
	3	3	3	3	y	y	y	Rounded clusters full of electric blooms, nice fragrance needs close spacing to fill in bed, foliage is unattractive red in cool wet weather, needs deadheading, attracts butterflies, Fleuroselect Gold Medal
	4	3	3	3	n	y	n	Mounding dense habit, can spread up to 18 inches when mature, excellent cover even in cold wet summers, jammed with blooms nearly all season
	2	2	2	2	n	n	n	Good color early in season, display not as attractive as Diamonte Apricot, few flowers in mid-August, needs deadheading, All America Selection Cool Season Bedding Plant Award Winner 2006
			4	4		y	y	Outstanding addition to dusty millers grown for their foliage, larger leaves than others, fills in well and forms a great carpet for edging, superb show long after last frost
	1	1	1	1	n	n	n	Tiny mounding plants covered early in the season with tiny blue flowers, completely dead by mid-August, recommended for containers and hanging baskets, flowers close up in cold cloudy weather
	4	4	4	4	n	y	n	Finally another first-year blooming foxglove for northern gardens, outstanding height and rich color display, attracts bees and bumblebees, a visitor favorite in late season
	3	3		3	y	y	y	Flowers very late but huge! very ornamental mix of color, huge dark red balls in centers, flowers just opening are attractive, All America Selections Award Winner and Fleuroselect Gold Medal winner 2005
	3	3		3	sl	y	y	Bushy, free flowering, masses of double bicolor blooms, not the most attractive display despite masses of blooms, All America Selections winner 2003
	3	3	3	3	n	n	n	Excellent mass of brilliant flowers, great mix of colors, forms carpets of color, individual flower colors vary in height giving slightly ragged appearance, Fleuroselect Quality Award
	3	3	3	3	n	y	n	Compact plants with excellent color mix, closes up in evening, fine silvery foliage, some stripes, mostly solid colors
	4	4	3	4	y	n	n	Outstanding striped petals, fills in well, covered with bright blooms, colorful display, closes up in evening
	3	3	3	3	y	y	n	Tall spikes top dark green foliage, blue flowers begin early and continue all summer in cool weather, finish early in hot years, great background plant or accent
	2	2	3	2	sl	n	n	Leaves with dark chocolate centers show off the light pink flowers, flower heads are small, not as showy as other geraniums, needs significant deadheading in wet weather
	2	2	3	2	sl	n	n	Nice bushy plants with plenty of bicolor pink flowers, heads appear ragged in wet weather, needs a lot of deadheading for ornamental appeal
	3	3	3	3	sl	y	n	Excellent color on medium-sized flower heads, needs deadheading in cool wet seasons
	2	2		2	sl	n	n	Brilliant balls of flowers, fills in well, very attractive display through most of summer, needs deadheading for best display especially late in season
	3	3	3	3	sl	y	n	Outstanding cover of medium-sized balls of flowers with very attractive color, blooms all season, dead-heading needed in late season especially if wet, distinctive zonal stripe on leaves competes with blooms
	1	1	1	1	y	y	n	Poor display in ground beds, better in containers, few flowers on each plant and many were deformed, petals speckled brown in cool wet weather, needs close spacing for best display
	3	3	3	3	sl	y	n	Dwarf, compact, uniform plants, early blooms in a mostly pink colors, we have grown better cultivars, short for cutting, needs deadheading in late season

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Table 3. Results of tested annual flower cultivars for 2006, cont.													Frost tolerance										
Common name	Cultivar	Flower color	Height (in) <sup>w</sup>		Flower size (in) <sup>x</sup>		Flowering period <sup>y</sup>												foliage	flowers			
			min	max	min	max	Jun	Jul	Aug	Sep													
Gypsophila**	Gypsy	pink	2¼	3¼	¼	½		*	*	*	*	*	*	*	*	*	*	*			n	n	
Hollyhock**	Indian Spring	pink, white, red	41	90	20	4¼		*	*	*	*	*	*	*	*	*	*	*	*				
Hollyhock	The Watchman	maroon (nearly black)													*	*	*						
Hyacinth Bean**	White	white	11¾	28¾	¼	2															n	n	
Impatiens, African	Blondie	yellow	4	15	½	1¾	*	*	*	*	*	*	*	*	*	*	*	*	*			n	n
Impatiens, Garden	Dazzler Burgundy	burgundy	3	8¾	¾	2½	*	*	*	*	*	*	*	*	*	*	*	*	*			n	n
Impatiens, Garden	Dazzler Lilac Splash Improved	deep violet w/ dark magenta eye	4½	12	¾	2	*	*	*	*	*	*	*	*	*	*	*	*	*			n	n
Impatiens, Garden	Dazzler Violet Improved	lavender	2	7	½	2¾	*	*	*	*	*	*	*	*	*	*	*	*	*			n	n
Impatiens, Garden	Fanciful White	white	3	7¾	¾	1½	*	*	*	*	*	*	*	*	*	*	*	*	*			n	n
Impatiens, Garden	Showstopper Burgundy Improved	burgundy	1½	2¾	½	2¼	*	*	*	*	*	*	*	*	*	*	*	*	*			n	n
Impatiens, Garden	Showstopper Deep Orange Improved	orange	5	12¼	¾	2	*	*	*	*	*	*	*	*	*	*	*	*	*			n	n
Impatiens, Garden	Showstopper Red Improved	red	2½	10½	¼	2½	*	*	*	*	*	*	*	*	*	*	*	*	*			n	n
Impatiens, Garden	Showstopper Soft Blue Improved	lavender pink	3½	14	½	2½	*	*	*	*	*	*	*	*	*	*	*	*	*			n	n
Impatiens, Garden	Showstopper White	white	5	10¾	¼	1¾	*	*	*	*	*	*	*	*	*	*	*	*	*			n	n
Impatiens, Garden	Stardust Cherry	white & cherry red bicolor	2	7½	¼	2	*	*	*	*	*	*	*	*	*	*	*	*	*			n	n
Impatiens, Garden	Xtreme Mixture	red, white, pink, lavender, magenta, orange-red	1	6	1	2¼	*	*	*	*	*	*	*	*	*	*	*	*	*			n	n
Impatiens, New Guinea	Divine Cherry Red	red	¾	8½	½	2½	*	*	*	*	*	*	*	*	*	*	*	*	*			n	n
Impatiens, New Guinea	Divine Mix	lavender, rose	2¼	5½	½	2¾	*	*	*	*	*	*	*	*	*	*	*	*	*			n	n
Lavatera	Twins Hot Pink	pink w/ rose markings	11	20	½	3		*	*	*	*	*	*	*	*	*	*	*	*			y	y
Linaria	Enchantment	purplish red w/ yellow lip	7	20	¼	1½	*	*	*	*	*	*	*	*	*	*	*	*	*			y	y
Love Grass	Wind Dancer	green maturing to tan	17	21																		y	y

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<sup>y</sup> \* indicates just starting to bloom, \* indicates 50% bloom, and \* indicates full bloom.



	Plant ratings <sup>z</sup>				Recommended for			Comments
	Flower		Foliage	Overall	Fragrance	Cutting	Drying	
	quantity	quality						
	3	3	3	3	n	n	n	Tiny mounds of baby flowers fill in bed well with color nearly all season, held up well even in cool wet weather, All America Selections winner 1997
	2	2	3	2	sl			Very tall spikes, attractive blooms hidden by foliage at the base of the plant early in the season, flowering just climbed stem by late August, full bloom in mid-September, All America Selections winner 1939
	1	1	2	1				Huge plants but only one produced a flower stalk, no flowers by 1 September, not good as annual in cool wet summers
	1	1	2	1	n	n	n	Poor growth compared to scarlet runner beans, not worthwhile from direct seed
	2	2	3	2	n	n	n	Looked sick all summer—yellow foliage and a lot of spots on the leaves, interesting jewelweed-type flowers, but certainly not showy, may be better in containers
	3	3	3	3	n	n	n	Nice color, not as good as other burgundy cultivars, smaller flowers and not as floriferous
	3	3	3	3	n	n	n	Compact uniform habit with masses of blooms, flowers freely to frost, abundant blooms in warm season
	3	3	3	3	n	n	n	Rich, deep flower color, yellow foliage late in season
	2	3	2	2	n	n	n	Beautiful semidouble flowers, medium size, yellow foliage late in season, needs deadheading to remove brown spent flowers
	3	3	3	3	n	n	n	Outstanding height and spread this season, best show for mounds of color, huge flowers
	3	3	3	3	n	n	n	Flowers freely, also good in containers, excellent flower color, abundant blooms, deep rich color contrasts well with foliage, needs some deadheading
	3	3	3	3	n	n	n	Outstanding deep red color, excellent contrast with dark green foliage, abundant blooms this season, short but nice
	3	3		3	n	n	n	Flowers freely, also good in containers, very popular color with visitors, needs deadheading
	2	2		2	n			Brilliant white for shade, great contrasting foliage, uneven height and flower display, not as floriferous as other years, ragged appearance with rain splotches on petals
	2	2	3	2	n	n	n	Great flower color, not as floriferous as some other cultivars
	2	2	2	2	n	n	n	Interesting mixture of colors, not as floriferous as other mixes, needs deadheading for best show
	2	2	2	2	n	n	n	Huge blooms on attractive dark green foliage, did not spread well, stayed small, given little competition they will grow in containers, easily overtaken by competing plants
	2	2	2	2	n	n	n	Huge flowers, needs close spacing for mass effect, did not spread, flowers were confined to top of single stems, not showy
	1	1	1	1	n	y	n	Many plants died early from disease, remaining plants had upright stalks loaded with flowers through late July, disease ruined the effect
	4	3	3	3	sl	y	n	Outstanding early season color on compact upright bushy plants, mounds loaded with blooms, some plants died out by mid-August, appearance is ratty if not deadheaded, attracts bees and bumblebees
			2	2	n	n	y	Open sprawling and not very ornamental in ground beds, probably better in mass plantings in raised beds or containers, looks more like a weed to be pulled than ornamental

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Table 3. Results of tested annual flower cultivars for 2006, cont.

Common name	Cultivar	Flower color	Height (in) <sup>w</sup>		Flower size (in) <sup>x</sup>		Flowering period <sup>y</sup>												Frost tolerance	
			min	max	min	max	Jun	Jul	Aug	Sep	foliage	flowers								
Lupine	Gallery Yellow	pale yellow/dark yellow bicolor	17	31	1¾	8	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *					y	y			
Lupine**	Giant King Mix	lavender, white	19	27½	2¼	5¼				* * * * *	* * * * *	* * * * *				y	y			
Lupine	Tutti Frutti	pink, yellow, rose, purple	23	46	10	25½		* * * * *	* * * * *	* * * * *	* * * * *					y	y			
Marigold	Cottage Red	orange-red w/ orange centers	19	33	¾	2¼	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *					n	n			
Marigold, African	Capriccio	yellow & gold	23	42	4½	6		* * * * *	* * * * *	* * * * *	* * * * *					n	n			
Marigold, African	Cempoalxochitl	yellow & orange striped	23½	39	1¾	3				* * * * *	* * * * *					n	n			
Marigold, African	Crackerjack Mixed	orange, gold, yellow	10½	26¼	2¼	5¼			* * * * *	* * * * *	* * * * *					n	n			
Marigold, African**	First Lady	orange, gold	11	14¾	2½	4½		* * * * *	* * * * *	* * * * *	* * * * *					n	n			
Marigold, African**	Orange Jubilee	orange	9¾	25½	1¾	4		* * * * *	* * * * *	* * * * *	* * * * *					n	n			
Marigold, African	Perfection Mixture	yellow, gold, orange	14	14½	2¼	4¾			* * * * *	* * * * *	* * * * *					n	n			
Marigold, French	Aurora Fire	orange w/ mahogany overtones, mahogany trimmed w/ orange	6	10	1½	2¼	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *					n	n			
Marigold, French	Aurora Light Yellow	lemon yellow	6	11½	1¼	2¼	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *					n	n			
Marigold, French	Disco Granada	gold w/ red markings, gold center	3	6¼	1¼	2½	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *					n	n			
Marigold, French	Durango Mix Outback	yellow, orange, red/ yellow & red/orange bicolors	6	12	1¼	2½	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *					n	n			
Marigold, French	Little Hero Gold	gold	3½	7½	1½	2¼	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *					n	n			
Marigold, French	Mars	mahogany w/ gold centers	7½	15¾	1	2	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *					n	n			
Marigold, French**	Naughty Marietta	gold w/ mahogany blotch	6	22	1	3	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *					n	n			
Marigold, French**	Queen Sophia	orange w/ mahogany markings	7	9½	1¼	2¾	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *					n	n			
Marigold, Signet	Starfire	orange, gold, red, yellow	11¼	21	½	1¾			* * * * *	* * * * *	* * * * *					n	n			
Mexican Hat	Red Midget	mahogany w/ yellow edges, green cone center	9½	33¼	1½	3½	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *					y	y			

<sup>w</sup> 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.

<sup>x</sup> if flower size was uniform, size is recorded under max only; sizes with an x like 12x3 indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.

<sup>y</sup> \* indicates just starting to bloom, \* indicates 50% bloom, and \* indicates full bloom.

	Plant ratings <sup>z</sup>				Recommended for			Comments
	Flower		Foliage	Overall	Fragrance	Cutting	Drying	
	quantity	quality						
	3	3	3	3	n	y	n	Attractive tall spikes contrast well with dark green foliage, best show late in the season after light frost
	2	2		2	n	y	n	Tiny spikes of flowers, not the best lupine for gardens, plants are floppy, show is nice but not outstanding like Russell Hybrids, All America Selections winner 1933
	4	4	4	4	y	y	n	Vigorous upright spikes great for the background, very nice mix of flower colors, especially attractive for late season gardens
	4	4	4	4	y	y	y	Airy, billowy marigold that needs lots of room, draped all over the bed, swallowed up neighbors, intense orange-red masses of blooms covered the plant, provided quite a display, very ornamental
	4	4	3	4	y	y	y	Probably largest double-flowered African marigold we've grown, huge blooms in gold and deep orange cover plant, interesting fluted edges, outstanding display worth testing in the back of borders
	3	3	3	3	y	y	y	Very nice bushy marigold covered with medium sized flowers with slightly reflexed petals, some deadheading needed, needs lots of space to spread
	3	3	3	3	n	y	y	Big rounded flower heads with frilly petals, very showy and bright, deadheading needed late in season
	3	3	3	3	y	y	y	Large balls of flowers cover the tall somewhat floppy stems, orange flowers are taller by at least 6 inches over the gold thus not an attractive mix, All America Selections winner 1968
	3	3	3	3	n	y	y	Very nice tall marigold with large ball flowers, needs lots of deadheading, All America Selections winner 1968
	4	4	4	4	y	y	y	Very large balls of flowers cover the plant nearly all season, excellent mix of colors, little maintenance required, vibrant display in mass plantings
	4	4	3	3	y	n	y	Brilliant mix of dark and light color patterns on petals, very attractive, slight variation in height but not unattractive, needs a little deadheading late in the season, bushy, fills in well
	3	3	3	3	y	n	y	Outstanding clear lemon yellow blooms, great in mass plantings at the edges of beds, needs a little deadheading late in the season for best show
	3	3	3	3	sl	n	y	Extra dwarf selection of single-petaled marigolds in gold and red, blooms early and all season until frost, excellent show, no maintenance required
	3	2	3	3	sl	n	y	Very good color display all season, needs a small amount of deadheading, uniform height, mostly orange and yellows with some contrasting dark colors
	2	3	3	3	y	n	y	Extra dwarf cultivar, not as floriferous as other marigolds, needs deadheading in cool wet weather
	4	4		3	y	y	y	Single deep mahogany red flowers with a contrasting orange center, stunning in mass plantings, bushy mounds covered with blooms, very attractive and colorful nearly all summer
	4	4	4	4	sl	y	y	Billowy mounds of single-petaled flowers with striking deep mahogany patterned centers, needs lots of room to expand, one of the best medium height marigolds, All America Selections winner 1947
	3	3	3	3	y	y	y	Superb rich display of deep orange colors, outstanding markings, short mounding plants covered with blooms nearly all summer, All America Selections winner 1979
	4	3	3	3	y	y	y	Outstanding mounds of starry flowers produce a solid display of color, excellent in mass plantings at the edges of garden beds, some lodging in cold wet weather
	3	3	3	3	sl	y	n	Tall, open, floppy stems topped with unusual flowers, large upright central cone, petals reflexed beneath cone, great cut flower, advertised black centers but ours were green, more foliage than flowers

<sup>z</sup>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 2006, cont.

Common name	Cultivar	Flower color	Height (in) <sup>w</sup>		Flower size (in) <sup>x</sup>		Flowering period <sup>y</sup>												Frost tolerance		
			min	max	min	max	Jun	Jul	Aug	Sep	foliage	flowers									
Nasturtium**	Black Velvet	deep red	17	23	1½	2¼		*	*	*	*	*	*	*	*	*	*	*	*	n	n
Nasturtium**	Milkmaid	creamy yellow	13½	20	1½	3		*	*	*	*	*	*	*	*	*	*	*	*	n	n
Nasturtium**	Tall Climbing Single Mix	red, gold, yellow, mahogany, orange	15½	29	1¾	2½		*	*	*	*	*	*	*	*	*	*	*	*	n	n
Nasturtium**	Vesuvius	salmon pink w/ dark red markings	12¼	20	2	2¾		*	*	*	*	*	*	*	*	*	*	*	*	n	n
Nasturtium**	Whirlybird Cherry Rose	rose	7¾	16	1½	2¾		*	*	*	*	*	*	*	*	*	*	*	*	n	n
Nasturtium**	Whirlybird Mahogany	burnt orange w/ yellow centers	12	16¾	2	3¼	*	*	*	*	*	*	*	*	*	*	*	*	*	n	n
Nemesia	Poetry White	white w/ yellow lip	18	20	½	1¾	*	*	*	*	*	*	*	*	*	*	*	*	*	y	y
Nemesia**	Serengeti Yellow	yellow	7	7½	¼	½	*	*	*	*	*	*	*	*	*	*	*	*	*	n	n
Nicotiana	Marshmallow	rose, pink, white	36	72¼	¾	1¼				*	*	*	*	*	*	*	*	*	*	n	n
Nicotiana	Perfume Deep Purple	dark purple	17¼	27½	1¼	2			*	*	*	*	*	*	*	*	*	*	*	n	n
Nicotiana, Garden	Nicki Red	red	17	30¼	1½	2¾			*	*	*	*	*	*	*	*	*	*	*	n	n
Nicotiana, Hybrid	Tinkerbelle	dusky rose/ green	5	7½	¾	2¾			*	*	*	*	*	*	*	*	*	*	*	n	n
Nierembergia**	Purple Robe	lavender	10½	14¾	¾	1	*	*	*	*	*	*	*	*	*	*	*	*	*	n	n
Nierembergia	White Robe	white	7½	13½	¼	¾			*	*	*	*	*	*	*	*	*	*	*	y	y
Ornamental Millet	Jester	burgundy																		n	n
Ornamental Millet	Purple Baron	burgundy					*	*	*	*	*	*	*	*	*	*	*	*	*	n	y
Ornamental Millet	Purple Majesty	burgundy	30	36	1 x 6	1½ x 9					*	*	*	*	*	*	*	*		n	
Pansy	Accord Daffodil Mixture	orange, white, yellow, gold clear face	7	16	1	2	*	*	*	*	*	*	*	*	*	*	*	*	*	y	y
Pansy	Accord Peace Mixture	white, blue, burnt orange	7¾	14½	1½	1½	*	*	*	*	*	*	*	*	*	*	*	*	*	y	y

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<sup>x</sup> if flower size was uniform, size is recorded under max only; sizes with an x like 12x3 indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.

<sup>y</sup> \* indicates just starting to bloom, \* indicates 50% bloom, and \* indicates full bloom.

	Plant ratings <sup>z</sup>				Recommended for			Comments
	Flower		Foliage	Overall	Fragrance	Cutting	Drying	
	quantity	quality						
	2	2	3	2	y	y	n	Abundant deep mahogany blooms, very striking and unusual, many flowers hidden beneath foliage, one orange-flowered plant
	3	4	3	3	y	y	n	Beautiful color, striking contrast with mounds of foliage, large open flowers, one of the best nasturtiums, very productive, viny
	3	3	3	3	sl	n	n	Vines trailed but did not climb without assistance, abundant vines and great flower show, trailing vines for containers, baskets, trellises
	3	3	3	3	y	y	n	Very attractive flower color, excellent vegetative growth, lots of flowers hidden by foliage
	4	4	2	3	y	y	n	Mounds of foliage totally covered with huge blooms, huge flowers, showy, great color
	3	3		3	y	n	n	Spurless bloom, huge flowers, very attractive color contrasts well with foliage
	4	3	3	3	n	n	n	Bushy plants covered with tiny white blooms, excellent for garden borders and mixed containers, attractive display in mass plantings nearly all season
	2	2	2	2	n	y	n	Nice bushy plant with lots of flowers early in season, got overwhelmed by neighbors in containers and disappeared by midsummer
	4	4	4	4	y	y	n	Tall annual for the back of borders, sprawling branches covered with flowers and buds need lots of room, catches your eye because of its size, pen, airy flowering habit, striking
	4	4	3	4	y	y	n	Tall nicotiana with very unusual purple blooms, outstanding as background plant in borders, delicate fragrance in evening, works well in beds with purple-leaved chokecherries, All America Selections Bedding Plant Award Winner 2006
	4	4	4	4	y	y	n	Outstanding solid mass of color nearly all season, amazing display of same-height blooms, no maintenance required, visitor favorite, All America Selections winner 1979
	4	3	3	3	sl	y	n	Tiny clusters, trumpet-shaped flowers with green outer petals, rosy pink insides, bright blue stamens, very unusual color combination, loaded with blooms, tall airy stalks, visitors either liked them very much or hated them, attracts bees
	3	3	3	3	n	n	n	Short bushy, covered with blooms nearly all summer, a bit sparse late in season, fills in well and provides a great show for the edges of borders, All America Selections winner 1942
	4	3	3	3	n	n	n	Compact bushy plants choked with blooms. Very ornamental display early in season, but needs deadheading to maintain blooms. Some plants dried up in late season despite wet weather.
					n	n	y	Killed by early June frost, least hardy of all ornamental millets
	0	0	0	0	n	y	y	Killed by early June frost
	1	1	1	1	n	y	y	Damaged significantly by early June frost, poor recovery, lots of dead foliage, no flowers, does better in raised beds and containers, not attractive, All America Selections Gold Medal flower award winner 2003
	3	3		3	sl	y	y	Beautiful well-balanced mix of colors, blooms all season, no maintenance
	3	2	3	3	y	y	y	Mix of mostly pastel colors, blues and white, some dark orange, not well mixed, many petals scarred by rain, needs deadheading for best appearance

<sup>z</sup>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





	Plant ratings <sup>z</sup>				Recommended for			Comments
	Flower		Foliage	Overall	Fragrance	Cutting	Drying	
	quantity	quality						
	3	2	3	3	y	y	y	Combination of mostly pastel pansies, nothing special about this one, uneven mixture of colors, one brilliant yellow plant in midst of mostly lavenders, some with frilly edges
	3	3	3	3	n	y	y	Old fashioned mix with frilly edges on petals, very nice effect, compact and does not fill in as well as other pansies, need close spacing, interesting mix of colors
	4	3	3	3	y	y	y	Ruffled petals, very ornamental mounds with shades of lavender and deep purple, rich colors, medium-sized flowers but lots of them, fills in well, holds up under cold wet weather
	3	4	3	3	sl	y	y	Ruffled petals, doesn't fill in as well as other pansies, nice mix of colors, all with deep purple face, different colors have different heights making ragged appearance
	3	2	2	2	n	y	y	Old fashioned ruffled petals, fills in better than Chalon Mix, needs deadheading late in season, small flower size
	4	4	4	4	n	y	y	Outstanding mounds of solid cream and cream/lavender bicolors, excellent blooms all summer, mounds grow all summer and over run neighbors
	3	3	3	3	y	y	y	Nice mounding plant covered with blooms, variation in the flower color from pale orange to deep orange with purple highlights did not occur in earlier years, All America Selections winner 1990
	3	3	3	3	sl	y	y	Outstanding clear deep velvety rose color, abundant blooms, nice performer all season, no maintenance
	3	3	3	3	n	y	y	Large flowers with contrasting dark face, very attractive display all season, needs some deadheading late in the season, All America Selections winner 1966
	3	3	3	3	sl	y	y	Tiny flowers but abundant, attractive solid color on mounding plants, excellent display all season, needs some deadheading
	2	3	3	3	sl	y	y	Advertised as all lavender but several cream flowers with purple face, nice sized blooms cover the plants well, very attractive
	3	3	3	3	sl	y	y	Very nice, uniform color, rich dark blooms cover the small mounding plants, fills in well, little deadheading needed
	3	3	3	3	n	y	y	Outstanding bicolor combination, not as full and bushy as some pansies but very attractive, little deadheading needed
	3	3	3	3	n	y	y	Short upright plants do not fill in as well as other pansies, lots of bare spaces between plants, attractive large flowers, needs significant deadheading in wet weather because of spotting on petals
	2	2	3	2	n	y	y	Interesting 2-toned petals, fills in well and covered with flowers nearly all season
	3	3	3	3	n	y	y	Short, bushy growth covered with blooms all summer, attractive display and no maintenance needed
	3	3	3	3	n	y	y	Ragged appearance, does not fill in well, colors are uneven, needs deadheading for best results, different colors have different heights leading to ragged appearance
	2	2	3	2	n	y	y	Interesting bicolor flowers with cream on top, deep bluish purple on bottom, lots of scarring on petals from cold wet weather
	2	2	3	2	sl	y	y	Variable colors, some creamy petals, most uniform purple, very nice contrasting shades of purple, does not fill in as well as other pansies
	3	3	3	3	sl	y	y	Very nice solid color pansy with mounds of color nearly all season, needs deadheading for best results, not the biggest orange-flowered pansy, does well in containers

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Table 3. Results of tested annual flower cultivars for 2006, cont.

Common name	Cultivar	Flower color	Height (in) <sup>w</sup>		Flower size (in) <sup>x</sup>		Flowering period <sup>y</sup>												Frost tolerance					
			min	max	min	max	Jun			Jul			Aug			Sep			foliage	flowers				
Pansy	Promise True Blue	bluish lavender	8½	19½	1½	2	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	y	y
Pansy	Promise Formula Mix	yellow w/ mahogany face	6	13¾	1½	2¾	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	y	y
Pansy	Promise Lemon Splash	yellow w/ orange-yellow face	5	15	1¼	2	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿		
Pansy	Promise Marina	lavender w/ white-edged deep purple face	6	14½	¾	1¾	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	y	y
Pansy	Promise Primrose/ Blotch	yellow w/ mahogany face	5¾	21½	1½	2½	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	y	y
Pansy	Promise Pure Lilac Shades	lavender w/ dark lavender face	4½	12¾	1½	2	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	y	y
Pansy	Promise Pure Yellow	yellow or gold w/ mahogany face	8	17	1¾	2¼	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	y	y
Pansy	Promise Red/ Blotch	dark red w/ mahogany face, yellow center	6¼	11¼	1½	2¼	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	y	y
Pansy	Promise White/ Blotch	white w/purple face	4¾	12½	1¾	2¼	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	y	y
Pansy	Promise Yellow Blotch	yellow, mahogany face	5½	12¾	1½	1½	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	y	y
Pansy	Promise Yellow/ Purple Wing	yellow w/ mahogany wing & face	3	3	3	3	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	y	y
Pansy	Promise Yellow/ Red Wing	yellow w/ mahogany wings & face	4	10½	1¾	2¼	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	y	y
Pansy	Swiss Giant Pure Orange	orange	6¾	14½	1½	2	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	y	y
Pansy	Swiss Giant Violet Blue	deep violet	6¾	13¾	1½	2¼	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	y	y
Pansy	Universal Plus Primrose	light yellow	7	11	1¼	2	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	y	y
Pansy	XXL Golden Yellow	yellow w/ gold highlights	4½	15¼	1¾	2	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	y	y
Penstemon	Violet Dusk	rosy lavender	10	20	½	¾	*	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	n	n	
Pentas	Butterfly Lavender Shades	lavender	2½	3	1	1¾								*	*	✿	*	*					n	n
Pentas	Butterfly Light Lavender	pink	1½	2																			n	n
Pentas	Butterfly Pink	pink	½	¾									*	*	*	*	*						n	n
Pepper, Ornamental*	Black Pearl	black foliage & fruit	11	15½	¼	½							*	*	✿	✿	✿	✿	✿	✿	✿	n	n	

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<sup>x</sup> if flower size was uniform, size is recorded under max only; sizes with an x like 12x3 indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.

<sup>y</sup> \* indicates just starting to bloom, ✿ indicates 50% bloom, and ✿ indicates full bloom.

	Plant ratings <sup>z</sup>				Recommended for			Comments
	Flower		Foliage	Overall	Fragrance	Cutting	Drying	
	quantity	quality						
	3	4	3	3	n	y	y	Uniform, large blooms with the bluest color of all the mixes, abundant blooms, fills in well, some deadheading needed late in season
	3	2		3	n	y	y	Mostly yellow with mahogany face, not mix as advertised, nice bright colors, does not fill in as well as other pansies
	3	3		2	sl			Mostly pale yellow but some plants brilliant gold, nice carpet of flowers nearly all summer, needs deadheading in late summer, splotched and streaked petals in cold rainy weather
	2	2	3	2	n	y	y	Very nice compact growth that fills in the bed early, flowers are ragged and ugly in cool wet weather, needs more deadheading than other pansies
	3	3	3	3	sl	y	y	Very nice yellow color, uniform plants, not as floriferous as other pansies but nice show
	2	2	3	2	n	y	y	Beautiful assortment of lavender shades, large and abundant flowers, very attractive overall display, beautiful purple whiskers on most flowers
	3	3	3	3	n	y	y	Great mounds of color nearly all season, brilliant yellow contrasts well with dark centers, fills in well, very little maintenance needed
	2	2	2	2	n	y	y	Rich red color, small plants need closer spacing to fill in well, very nice uniform color and size of plants
	3	2	2	2	y	y	y	Excellent early in season, but ragged later, needs massive deadheading, splotchy flowers in cool rainy season, some flowers lavender, most white
	3	3	3	3	n	y	y	Very nice clear color with striking mahogany face, brilliant show with mounds of flowers
	3	3	3	3	n	y	y	Unusual combination of colors, either liked or hated by visitors, hard to combine with other flowers
	3	3	3	3	n	y	y	Bright yellow contrasts well with mahogany face, fills in well, covered with blooms, interesting mahogany highlights
	3	3	3	3	y	y	y	Two-toned effect with deep orange petal face and lighter orange back, lots of medium-sized blooms. fills in well, little maintenance required
	4	4		4	y	y	y	Outstanding velvety petals invite touching, not as floriferous as other pansies, medium-sized blooms, needs deadheading
	3	3		3	n	y	y	Excellent mounding plants with creamy light colors, some flowers tinged with lavender
	3	3	3	3	y	y	y	Medium-sized mounding plants covered with solid color blooms, very attractive, needs deadheading in late season especially in wet weather, petals prone to spotting and discoloration in wet weather
	3	2	2	2	n	n	n	Nice upright stems with small flowers, great accent plant in mixed beds
	1	1	1	1	n	n	n	Very poor growth during the season, no branching, tiny heads, better growth in containers and raised beds
	0	0	0	0	n	y	n	Died out in ground beds, better in previous years in raised beds
	1	1	1	1	n	n	n	Very poor growth all season, did not grow well, only half of flowers bloomed, better in raised beds
	3	3	3	3	n	n	y	Nearly black purplish leaves in full sun, small shiny black peppers, ripe fruit are red, very ornamental, great in containers, most fruit remain black, aphids

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Table 3. Results of tested annual flower cultivars for 2006, cont.

Common name	Cultivar	Flower color	Height (in) <sup>w</sup>		Flower size (in) <sup>x</sup>		Flowering period <sup>y</sup>												Frost tolerance	
			min	max	min	max	Jun	Jul	Aug	Sep	foliage	flowers								
Pepper, Ornamental*	Chilly Chili		7	13	¼	½		*	*	*	*	*	*	*	*	*	*			
Pepper, Ornamental*	Garda Tricolore	cream, orange, red fruit	5¼	9						*	*	*	*	*	*	*	*			
Pepper, Ornamental*	Peppa Blanca/Rosu	cream, rose fruit	6½	9¼				*	*	*	*	*	*	*	*	*	*	n	n	
Pepper, Ornamental*	Peppa Lila/Naranja	orange, red fruit	10½	14½	¼	¼				*	*	*	*	*	*	*	*			
Pepper, Ornamental*	Peppa Pepperoni	red, cream, orange fruit	7	12				*	*	*	*	*	*	*	*	*	*	n	n	
Petunia**	Carpet Pink Morn	pink w/ creamy throat	5½	19	¼	½	*	*	*	*	*	*	*	*	*	*	*			
Petunia	Cloud Snow	white					*	*	*	*	*	*	*	*	*	*	*	n	n	
Petunia	Double Cascade Blue	deep purple	9¼	17½	3	2½	*	*	*	*	*	*	*	*	*	*	*	y	y	
Petunia	Dreams Burgundy Picotee	burgundy w/ white edges	4	9¾	1	2½	*	*	*	*	*	*	*	*	*	*	*	y	y	
Petunia	Dreams Rose Picotee	rose w/ white edges					*	*	*	*	*	*	*	*	*	*	*	y	y	
Petunia	Dreams Sky Blue	lavender fading to light lavender in centers	7	10	1½	3	*	*	*	*	*	*	*	*	*	*	*	n	y	
Petunia	Easy Wave Salmon	salmon pink	3½	5	1½	2½	*	*	*	*	*	*	*	*	*	*	*	y	y	
Petunia	Easy Wave White	white	6¾	14	¾	1¾	*	*	*	*	*	*	*	*	*	*	*	y	y	
Petunia	Easy Wave Coral Reef	salmon pink	5	12	2	2½	*	*	*	*	*	*	*	*	*	*	*	y	y	
Petunia	Easy Wave Red	dark red fading w/ age	9½	23	1¼	2¼	*	*	*	*	*	*	*	*	*	*	*	y	y	
Petunia	Fantasy Crystal Red	pink w/ rose throat & burgundy markings	6	10¼	¾	1½	*	*	*	*	*	*	*	*	*	*	*	n	n	
Petunia	Frillytunia White	white	3½	12	1¼	2½	*	*	*	*	*	*	*	*	*	*	*	y	y	
Petunia	Frost Mixture	purple, rose, red, coral w/ white picotee edges	1	9	¾	2	*	*	*	*	*	*	*	*	*	*	*	y	y	
Petunia	Madness Lavender Glow	rosy lavender w/ lighter centers	4¾	16	1¾	2¼	*	*	*	*	*	*	*	*	*	*	*	y	y	
Petunia	Madness Rose Morn	rose w/ cream centers	5½	12¼	1¼	2¼	*	*	*	*	*	*	*	*	*	*	*	y	y	
Petunia	Madness Salmon Morn	salmon	5	8	1¾	2½	*	*	*	*	*	*	*	*	*	*	*	y	y	

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<sup>x</sup> if flower size was uniform, size is recorded under max only; sizes with an x like 12x3 indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.

<sup>y</sup> \* indicates just starting to bloom, \* indicates 50% bloom, and \* indicates full bloom.

	Plant ratings <sup>z</sup>				Recommended for			Comments
	Flower		Foliage	Overall	Fragrance	Cutting	Drying	
	quantity	quality						
	2	2	2	2	n			Medium sized bushy plants loaded with yellow oblong fruit, flower parts stuck to the ends, not very attractive, aphids
	2	2	2	2	n			Small conical fruit start out deep purple, ripen to cream, orange and red, not as ornamental as other peppers, late season show
	2	2	2	2	n	n	y	Short rounded plant loaded with blooms, oblong fruit late in season, fruit is yellow with purple streaks, good in containers
	3	3	3	3	n			Short oblong fruit late in season, flowers are not ornamental
	2	2		2	n	n	y	Sparse foliage, lots of oblong fruit, pot and patio ornamental pepper
	2	2	2	2				Beautiful carpets of blooms through the first part of the season, killed by Sclerotinia in mid-August
	3	3	3	3	n	n	n	Huge pure white flowers on mounding plants, one of the best white petunias we've tried, needs some deadheading, some Sclerotinia late in the season
	3	3	3	3	y	n	n	Outstanding huge blooms as big as baseballs, very frilly deep blue-purple flowers on strong upright stems, held up well all season, very little evidence of disease this year
	2	2	2	2	y	n	n	Large showy flowers, little picotee effect, mostly solids, velvety rich display through late July, many plants died with Sclerotinia by mid-August
	2	2	2	2	y	n	n	Outstanding performer early in season, huge showy flowers with stunning white picotee edges, completely died out in mid-August from Sclerotinia
	3	3	3	3	sl	n	n	Outstanding mounds of abundant flowers early in the season, very nice color, needs some deadheading late in season, some Sclerotinia late in season
	3	3	3	3	n	n	n	Outstanding color, spreads well to form solid mats of color, recommended for containers and baskets, more Sclerotinia tolerant than other petunias
	2	2	2	2	y	n	n	Small flowers hold up well until mid summer when hit by Sclerotinia. better in containers
	3	3	3	3	sl	n	n	Solid coral color with lighter pink throat, very attractive ground cover but significant Sclerotinia in late season, ragged appearance in wet weather, needs deadheading
	3	3	3	3	n	n		Needs significant deadheading, new flowers are great but they fade as they get old, not attractive, small flowers
					y	n	n	Petite mounds covered with two-toned flowers, pink darkening to a red throat, needs close spacing, excellent performance all summer, deadhead in late summer, great show till frost, some died of Sclerotinia
	3	3	3	3	n	n	n	Huge blooms, not as heavily fringed as other petunias in the "Frillytunia" series, disappointing, needs deadheading late in season, some Sclerotinia
	3	3	3	3	y	n	n	Interesting mix of frilly-edged petunias, some picotee, others solids, "kitchen sink" in colors, matches just about anything, susceptible to Sclerotinia in mid Aug, needs deadheading in wet weather
	2	2	2	2	n	n	n	Good early season display but many plants died from Sclerotinia rot, needs deadheading
	2	2	2	2	sl	n	n	Excellent display early in the season, susceptible to Sclerotinia, many plants died early, nice two-toned flower color
	3	3	3	3	y	n	n	Nice two-toned flowers, some Sclerotinia late in season, needs deadheading

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Table 3. Results of tested annual flower cultivars for 2006, cont.

Common name	Cultivar	Flower color	Height (in) <sup>w</sup>		Flower size (in) <sup>x</sup>		Flowering period <sup>y</sup>												Frost tolerance	
			min	max	min	max	Jun			Jul			Aug			Sep			foliage	flowers
Petunia	Opera Supreme Pink Morn	pink w/ cream throat	7	15	1¼	2¼	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				y	y	
Petunia	Primetime Twilight Mixture	lavender, pink, pink w/ white throat	6	22	¾	2¼	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				y	y	
Petunia**	Prism Sunshine	light yellow	6	15	1½	2¼	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				y	y	
Petunia	Ramblin' Red	red	8	8¾	½	1¾	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				y	y	
Petunia**	Ultra Crimson Star	crimson/ white	21¼	29¼			* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *						
Petunia	Ultra Pastel Pink	pastel pink w/ rose overtones, cream throat	5½	10	1½	3¾	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				y	n	
Phlox, Garden	21 <sup>st</sup> Century Blue Star	rosy burgundy fading to pink at edges	4	14	2¼	4½	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				y	y	
Phlox, Garden	21 <sup>st</sup> Century Rose Star	pink w/ deep rose centers	5¼	22	¾	1¼	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				y	y	
Phlox, hybrid	Peppermint Candy	cream w/ red edges, stripes	4	10½	1	3½		* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				n	n	
Plectranthus	Silver Shield		7	19¼	2	4½												n		
Poppy, Mexican Tulip	Sunlite	yellow					* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				y	y	
Portulaca	Margarita Coral	light orange	2½	5½	½	1	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				n	n	
Portulaca	Margarita Peppermint	rosy pink w/ dark pink flecks, deep pink	3	5	¾	1	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				n	n	
Portulaca	Margarita Scarlet	scarlet	2	5½	½	1¾												n	n	
Rudbeckia	Cordoba	mahogany w/ gold tips	10½	18¾	2½	4				* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				y	y	
Rudbeckia	Goldsturm	yellow w/ chocolate centers	10½	21¼	2¾	4½				* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				n	n	
Rudbeckia	Hot Chocolate	mahogany w/ orange tips, brown centers	12	24	3	5				* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				y	n	
Rudbeckia	Maya	gold	10	16¼	2¾	4½				* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				n	n	
Salvia, Mealy-cup	Evolution	violet	16¼	23½			* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				y	y	
Salvia, Mealy-cup	Gruppenblau	royal blue	14½	30			* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				n	y	
Salvia, Mealy-cup	Victoria White	silvery white	17	28½			* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				y	y	

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<sup>y</sup> \* indicates just starting to bloom, \* indicates 50% bloom, and \* indicates full bloom.



	Plant ratings <sup>2</sup>				Recommended for			Comments
	Flower		Foliage	Overall	Fragrance	Cutting	Drying	
	quantity	quality						
	3	3	3	3	y	n	n	Low-growing carpet, spreads, fills in nicely with medium sized trumpet flowers, some Sclerotinia damage in late season, definitely one of the best to survive this season
	4	3	3	3	n	n	n	Small flowers, unusual mix of pastels with solids and dark-edged two-tones, needs deadheading late in season, lavender flowers smaller than pinks, one of the best for tolerating Sclerotinia this season
	2	2	2	2	y	n	n	Excellent display of creamy yellow blooms early in season, killed by Sclerotinia by mid season, All America Selections winner 1998
	2	2	2	2	y	n	n	Outstanding spreading petunia covered with small red trumpets, excellent display until midsummer when destroyed by Sclerotinia
	2	2	2	2	sl	n	n	Ruffled petals, attractive star pattern, bloomed well through mid-August, killed by Sclerotinia
	2	2	2	2	y	n	n	Attractive huge pink blooms with rose overtones, abundant blooms, needs deadheading to keep from looking ragged, Sclerotinia late in the season especially in wet seasons
	4	4		4	sl	y	n	Outstanding clusters of bicolor blooms nearly all season, sensitive to herbicide Preen
	2	3	3	3	sl	y	n	Bushy, attractive plants through most of the season, very attractive bicolor in few-flowered clusters, yellow foliage beginning in mid-August, blooming and very ornamental long after other flowers have died of frost, susceptible to Preen
	3	3	2	3	n	n	n	Grew well in containers in past years but did poorly in ground beds, tiny mounds with poorly colored flowers, many plants died out by the end of the season, Fleuroselect Quality Award winner
			4	4	n	y	y	Grew out of control in containers in 2004, filled in well and produced a solid mass of silvery foliage and no flowers in ground beds, similar to dusty miller, very attractive
	2	3	3	3	sl	y	n	Large lemon yellow tulip-like flowers, attractive, not abundant blooms, interesting pale green feathery foliage, plant in mass plantings for best effect
	2	3	2	2	n	n	n	Tiny bunches of flowers, does not spread, needs very close spacing for best display in ground beds, loaded with blooms in late season but mostly closed in wet weather
	2	2	2	2	sl	n	n	Spread better in raised beds than in ground beds, poor show in this cool wet season, needs close spacing for best display
	2	2	2	2	n	n	n	Does not spread well even in raised beds, too cool for good growth. needs the warmest sunniest locations, flowers close up in cool cloudy weather, rich flower color
	3	3	3	3	n	y	y	Outstanding short rudbeckia with very large blooms, great mix of dark and light colored blooms, variable height, best for edges of borders
	4	4	3	4	n	y	y	Very nice uniform height loaded with blooms from mid season onward, outstanding display
	4	4	4	4	n	y	y	Very nice mostly rich mahogany flowers tipped with dark orange, abundant blooms on medium-sized mounds, some deadheading late in season
	3	3	3	3	y	y	y	Excellent dwarf rudbeckia with wonderful double and semi double flowers, very showy, Fleuroselect Gold Medal winner
	3	3	3	3	sl	y	y	First violet colored mealy cup salvia, shorter spikes than Victoria, distinct color is attractive and vibrant
	3	3	3	3	sl	y	y	Excellent tall spikes of deep blue color, great background plant, excellent as cut flower, attractive display from mid season through frost
	3	3	3	3	y	y	y	Bushy mounds of silvery spikes, contrasts well with other flowers, excellent cut flower

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Table 3. Results of tested annual flower cultivars for 2006, cont.

Common name	Cultivar	Flower color	Height (in) <sup>w</sup>		Flower size (in) <sup>x</sup>		Flowering period <sup>y</sup>												Frost tolerance	
			min	max	min	max	Jun	Jul	Aug	Sep	foliage	flowers								
Salvia, Scarlet**	Picante Light Purple	2-toned lavender and purple	11½	17			* * * * * * * * * * * * * *										n	n		
Salvia, Scarlet	Red Hot Mama	red	14	23½	2	7								* * * * * * * *			n	n		
Salvia, Scarlet	Red Hot Sally II	red	8	13½										* * * * * * * *			n	n		
Salvia, Scarlet	Saluti Formula Mix	lavender, pink, salmon, white, red	4½	10										* * * * * * * *			n	n		
Salvia, Scarlet	Saluti Red	scarlet	9	16										* * * * * * * *			n	n		
Salvia, Scarlet	Saluti Salmon/Pink	salmon pink	3½	10										* * * * * * * *			n	n		
Salvia, Scarlet	Saluti White	white	6½	12¾										* * * * * * * *			n	n		
Scarlet Runner Bean**		scarlet	86	101	1½	2¾								* * * * * * * *			n	n		
Shasta Daisy	Amelia	white w/ yellow centers	20	41	3½	5								* * * * * * * *			y	y		
Shasta Daisy	Giant Marconi Double	white w/ yellow centers	19	41	1¾	4								* * * * * * * *			y	y		
Shasta Daisy**	Snow Lady	white, yellow centers	4	15	1¾	3¾								* * * * * * * *						
Shoo Fly Plant**	Splash of Cream	blue	15½	56	½	1¼								* * * * * * * *			n	n		
Snapdragon	Golden Monarch	yellow	11	27										* * * * * * * *			y	y		
Snapdragon	La Bella Yellow	yellow	16	25										* * * * * * * *			y	y		
Snapdragon	Liberty Classic Mixture	orange, cherry, red, lavender, pink, rose, scarlet, white, yellow	19¼	35										* * * * * * * *			y	y		
Snapdragon**	Rocket Rose	light rose	13½	34										* * * * * * * *			n	y		
Snapdragon	Scarlet Giant	red	14	36										* * * * * * * *			y	y		
Snapdragon	Snapshot Mix	red, yellow, orange, rose, white	7	10½										* * * * * * * *			n	n		
Spanish Daisy		white, pink with yellow centers	¾	11	½	¾								* * * * * * * *			y	y		
Stock	Giant Imperial Mix	rose, lavender, white, pink, purple	15	22										* * * * * * * *			y	y		
Sunflower**	American Giants Hybrid	yellow w/ brown centers	36½	77	¾	9¾								* * * * * * * *			n	n		
Sunflower	Bicentenary	mahogany w/ gold tips, brown centers	49	88	3	6¾								* * * * * * * *			n	n		
Sunflower**	Jade	creamy lime w/ light green centers	38	57½	3	5								* * * * * * * *			n	n		

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<sup>y</sup> \* indicates just starting to bloom, \* indicates 50% bloom, and \* indicates full bloom.

	Plant ratings <sup>z</sup>				Recommended for			Comments
	Flower		Foliage	Overall	Fragrance	Cutting	Drying	
	quantity	quality						
	3	3	2	3	sl	n	n	Attractive lavender color but shorter clusters of flowers than other salvias, needs close spacing for best cover, petals turn brown, unsightly when old, not as showy as other scarlet salvias
	2	2		2	n	y	n	One of the tallest scarlet salvias we have grown, flowers better in warm summers, sparse this year
	3	3	3	3	n	y	n	Original in this series introduced 25 years ago, a garden favorite, mounding plant, dark green foliage and striking red spikes, some died out by mid-August, deadhead to maintain ornamental appeal
	2	2	2	2	n	n	n	Many plants died by mid season (Sclerotinia?), only red-flowered plants remained by late August, all plants need significant deadheading but especially white flowers
	3	3	2	3	n	y	n	Tall spikes of brilliant color, one of the best salvias this season, some deadheading needed, branches well and fills in with color
	2	2	2	2	n	n	n	Many plants died by mid-August, remaining plants had yellowish foliage and short flower spikes
	2	1	2	2	sl	n	n	Medium sized spikes produce an ok show through mid season, flowers turn brown, significant deadheading needed, lots of plants died out and others look ragged by season's end
	4	4	3	3	n	y	n	Old standby used to compare other lesser known vines, great show of flowers and long beanpods
	4	4	3	4	n	y	y	Huge blooms and floppy stems, more delicate plant than Giant Marconi but the same huge flowers
	4	4		4	n	y	y	Huge blooms, upright stems, very uniform linear petals, great for cutting, abundant blooms, needs lots of room for floppy stems.
	3	3		3	n			Nice compact shasta daisy, blooms well nearly all summer, declines by mid-August, not as showy as traditional shastas but great for a bit of white in front edgings, All America Selections winner 1988
	2	2	3	2	n	n	y	Variegated leaves, not as vigorous as the green type, looks sickly, does not grow to the stature of the species, lodged this year because of heavy rain
	3	3	3	3	n	y	n	Tall yellow spikes from mid season on, not as floriferous as others, good but not the best cut flower
	3	3	3	3	sl	y	n	Beautiful clear yellow butterfly-type blooms, medium-sized stalks, great for cutting, solid masses of color
	4	4	3	4	sl	y	n	Excellent mix of flower colors, nice straight, tall stems for cutting
	3	3	3	3	n	y	n	Attractive tall straight spikes, excellent for cutting, great show all season, All America Selections winner 1960
	3	3	3	3	n	y	n	Rich velvety red flowers on tall spikes, very showy in mass plantings, excellent height for cutting
	2	2	3	2	sl	n	y	Dwarf carpet snap, great mix of colors, died out early in season (Sclerotinia?), needs deadheading to keep blooming
	4	3	3	3	sl	n	n	Tiny daisies with abundant needle-like petals around a yellow center, mounds of thin tangled stems and leaves topped with a mass of flowers, immature flowers are pink, great in mass plantings
	3	3	3	3	y	y	n	Some double, mostly single flowers, very nice mix of colors, great contrast with silvery foliage, flower stalks are leggy and floppy with ugly seed pods late in season, fragrance is superb
	2	3	2	2	y	n	y	Huge heads and very thick stems, great addition to the giant single-headed cultivars, did not reach great heights this cool wet summer
	2	2	3	2	y	y	y	Large gold and bronze bicolored flowers, silver-green foliage, multiple heads, great for the back of borders, some multi-stemmed plants, others single
	2	2	2	2	y	y	y	Unusual petal color, pollen free, not many flowers in this cool wet summer

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Table 3. Results of tested annual flower cultivars for 2006, cont.

Common name	Cultivar	Flower color	Height (in) <sup>w</sup>		Flower size (in) <sup>x</sup>		Flowering period <sup>y</sup>												Frost tolerance	
			min	max	min	max	Jun	Jul	Aug	Sep	foliage	flowers								
Sunflower	Key Lime Pie	creamy yellow w/ green centers	28½	52	2¼	4¼			*	*	☼	☼	☼	☼	☼	☼	☼	☼	n	n
Sunflower	Moonshadow	white w/ tinge of rose, brown centers	42	91	3½	5¾			*	☼	☼	☼	☼	☼	☼	☼	☼	☼	n	n
Sunflower	Peach Passion	light orange-yellow	19¾	31½	1¼	1¾				☼	☼	☼	☼	☼	☼	☼	*		n	n
Sunflower	Prado Red	burgundy, chocolate w/ brown centers	23	42	4½	6			*	☼	☼	☼	☼	☼	☼	☼	☼	☼	n	n
Sunflower**	Pro Cut Yellow Lite	yellow w/ greenish centers		30½		4					☼	☼	☼	☼	☼	☼				
Sunflower**	Soraya	gold w/ brown center	51¾	65½	2¾	6¾								☼	☼	☼	☼		n	n
Sunflower**	Supermane	golden yellow	55	61	7	9½					@	@	@	☼	☼	☼	☼	☼	n	n
Sunflower**	Tarahumara	yellow w/ green centers	8	10½										☼	☼	☼	☼	☼	n	n
Sweet Pea**	Cuthbertson Floribunda Choice Mix	red, maroon, rose, pink, white, lavender	30	66¾	¼	2								*	*	*	*		y	y
Sweet Pea**	Fantasia Formula Mix	pink, red, maroon	8	17½	¼	¼									*	*	*		y	y
Sweet Pea**	Old Spice Mix	lavender, pink, red, rose, maroon, white	32	71¾	1	1¼								*	*	☼	☼	☼	y	y
Sweet Pea**	Pink Cupid	pink	49¼	66¼	1¼	1¾									*	☼			y	y
Sweet Pea**	Royal Mix	pink, red, rose, white, lavender, maroon	38½	71	1	2										☼	☼	☼	y	y
Sweet Pea**	Spencer Ripple Formula Mix	purple/white bicolor, white, lavender, pink, rose	31½	71¼	½	1¾								*	*	☼	☼	☼	y	y
Sweet Pea**	Supersnoop Mix	pink, white, rose		8½	1	1½													y	y
Swiss chard**	Bright Lights	dark green w/ yellow, orange, & red stems	23¾	53¼											*	*	*	*	y	y
Tasselflower	Harvest Mixture	deep red-orange	9½	28	½	¾	*	*	*	☼	☼	☼	☼	☼	☼	☼	☼	☼	n	n
Tithonia**	Torch	orange	23¾	45	1½	3¼					*	☼	☼	☼	☼	☼	☼	☼	n	n
Ursinia		orange w/ brown centers	10½	19¼	½	1			*	☼	☼	☼	☼	☼	☼	☼	☼	*	n	n
Venidium	Exotic	orange w/ chocolate centers	13¼	32½	¼	1½				☼	☼	☼	☼	☼	☼	☼	☼	☼	y	y
Verbena	Peaches & Cream	peach & orange-peach	9	21	1¼	1¾	*	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	*	y	y
Verbena, Garden	Mango	peach	6½	11¾	¾	2	*	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	n	n
Verbena, Garden	Quartz Silver	very pale silvery lavender, nearly white	5	12¾	1¼	2	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	y	y

<sup>w</sup> 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.

<sup>x</sup> if flower size was uniform, size is recorded under max only; sizes with an x like 12x3 indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.

<sup>y</sup> \* indicates just starting to bloom, ☼ indicates 50% bloom, and ☼ indicates full bloom.

	Plant ratings <sup>z</sup>				Recommended for			Comments
	Flower		Foliage	Overall	Fragrance	Cutting	Drying	
	quantity	quality						
	3	3	3	3	y	y	y	Small flowers in clusters, good cut flower, needs support in open beds, some lodging late in season, good show from mid season on
	3	3	3	3	n	y	y	Short with many small flowers on multiple branching stems, good mixed with other larger-flowering sunflowers, pollen free
	3	2	2	2	n	y	y	Very short with mostly downward-facing blooms, flowers are small but abundant, nice display early in season, plants died out starting in mid-August beginning with yellow spotted foliage
	3	4	3	3	y	y	y	Multiflowering branching plant with burgundy stems, covered with small heads that tend to lean downward at maturity, nice short sunflower
	3	3	3	3	n			Very early medium-sized blooms on medium-sized stems, excellent cut flower, multiple blooms from midseason onward
	3	3	3	3	y	y	n	Tall multistemmed sunflower, straight stems excellent for cutting, All America Selections winner 2000
	2	3		2	n	y	n	Excellent heads packed with petals in solid mound
	2	2	3	2	y	y	y	Very attractive single-headed medium-height sunflower with interesting green centers
	2	2	2	2	n	y	n	Lots of bushy stems but few flowers until late in the season
	2	3	3	2	y	y	n	Tall stems but fewest flowers of those grown this year, just starting to bloom in late August
	3	3	3	3	y	y	n	Best flowering sweet pea this year, excellent blooms at nose level, sturdy thick vines
	2	2	3	2	y	y	n	Very late and few flowers
	2	2		2	sl	y	n	Very few flowers, poor show this year
	2	3		3	y	y	n	Very attractive blooms some bicolors, tall stocky vines, some flowers but late
	2	2	2	2	y	y	n	Dwarf plant with few flowers this year, sturdy stems but few of them
			4	4	n	n	n	Outstanding colorful stems on this ornamental vegetable, looked great as green backdrop in flower garden, All America Selections winner 1998
	2	2	2	2	n	n	n	Interesting orange tufted flowers looks a lot like hawkweed, low foliage topped with floppy airy stems and many clusters of blooms, seeds mature in mid-August, use as filler, not main plant
	2	2	3	2	sl	y	n	Just beginning to show good color in late August, hit hard by early June frost, recovered to bloom well but late, gorgeous velvety rich flowers, All America Selections winner 1951
	3	3	3	3	n	y	y	Small abundant daisy flowers with attractive contrasting centers, bushy short plants loaded with blooms, similar color to calendula but feathery foliage, lots of deadheading needed
	3	3	3	3	n	y	n	Tall floppy stems, brilliant flowers, needs lots of room to spread, flower buds are fuzzy, ornamental
	2	3	3	3	n	n	n	Very attractive flowers but not enough of them, poorer show this cool wet season than other years, needs deadheading, All America Selections winner 1992
	2	2	3	2	sl	n	n	Interesting peach shades range from dark peach to pale shades, very few flowers, does not fill in like other verbenas, needs close spacing and deadheading for best display
	2	2	2	2	n	y	n	Better cultivars are available, lacked the fullness of blooms and great show of other verbenas, very nice color, needs constant deadheading for best show

<sup>z</sup>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 2006, cont.**

Common name	Cultivar	Flower color	Height (in) <sup>w</sup>		Flower size (in) <sup>x</sup>		Flowering period <sup>y</sup>												Frost tolerance	
			min	max	min	max	Jun			Jul			Aug			Sep	foliage	flowers		
Viola	Bilbo Baggins	lavender/yellow bicolor w/ mahogany face	6½	13½	¾	1½	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			y	y	
Viola	Eye of the Tiger	yellow w/ brown markings	7	11¼	1	1½	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			y	y		
Viola	Microla Lavender	lavender w/ cream face & purple whiskers	9	20	1	1¼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			y	y		
Viola*	Microla Pure Yellow	yellow	10¾	16	¾	1	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			y	y		
Viola	Penny Primrose	white w/ yellow center & mahogany whiskers	8	11	½	1½	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			y	y		
Viola	Skippy Yellow/Purple Wing	yellow w/ deep purple wings, purple whiskers	7	16	1½	1½	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			y	y		
Viola	Skippy Purple Imp.	deep purple bicolor	3½	21½	¾	1½	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			y	y		
Viola	Skippy XL Deep Blue-Blotch	purple w/ deep purple face	3	3	3	3	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			y	y		
Viola	Skippy XL Purple Duet	purple/lavender bicolor shades, purple whiskers, yellow centers	5	17¼	¾	1½	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			y	y		
Viola	Skippy XL Red-Gold	red w/ gold face, maroon lower petals	7½	12	1	1½	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			y	y		
Viola	Sorbet Blue Babyface	deep lavender, purple eye	7¼	15¾	1¼	1¼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			y	y		
Viola	Sorbet Peach Frost	orange, cream, peach, lavender	7	20	1¼	1	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			y	y		
Wallflower	Citrona Orange	orange	8	15¾	1½	2¼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			n	n		
Wallflower	Citrona Yellow	gold	8½	20	½	2½	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			n	n		
Zinnia	Short Stuff Gold	creamy gold	7¼	13	1½	2¾	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			n	n		
Zinnia	Swizzle Cherry & Ivory	cherry red w/ creamy white tips	5	14¾	¾	3¾	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			n	n		
Zinnia**	Thumbelina Mix	red, orange, yellow, pink, scarlet w/ yellow centers	11¾	28¾	1¼	2	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			n	n		
Zinnia, Garden	Carrousel Mix	yellow/red, pink, coral, orange, apricot	15	38	2	3½	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			n	n		
Zinnia, Garden	Magellan Coral	coral pink	10	19¼	2¼	4½	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			n	n		
Zinnia, Garden	Magellan Orange	orange	12	15¾	1¾	4	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			n	n		
Zinnia, Garden	Peggy's Delight	mostly orange shades from burnt orange to cream	18	34½	2¼	5	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼	☼☼☼☼☼☼☼☼☼☼☼☼			n	n		

<sup>w</sup> 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.

<sup>x</sup> if flower size was uniform, size is recorded under max only; sizes with an x like 12x3 indicates a spike flower type with the height x width. \*\* = plants grown in raised beds.

<sup>y</sup> ☼ indicates just starting to bloom, ☼ indicates 50% bloom, and ☼ indicates full bloom.



	Plant ratings <sup>z</sup>				Recommended for			Comments
	Flower		Foliage	Overall	Fragrance	Cutting	Drying	
	quantity	quality						
	4	4	4	4	y	y	y	Interesting flower color and pattern, petite blooms cover the plant nearly all summer, visitors liked the color combinations and the name one all-purple plant
	3	3	3	3	sl	y	y	Striking flowers with contrasting dark markings on yellow petals, plants remain small, need close spacing to fill in bed, significant number of off color types this season, purples and reds with yellow
	4	4	4	4	sl	y	y	Very attractive mounds of tiny flowers all season, maintenance free, excellent show
	3	3	3	3	n	y	y	Excellent clear yellow with maroon whiskers, nice accent flowers in containers, lots of blooms nearly all season
	4	3	3	3	y	y	y	Mountains of tiny flowers cover the foliage, very attractive, no maintenance, great color all season
	4	4	4	4	n	y	y	Very attractive bicolor flowers, huge mounds covered with blooms all summer, a visitor favorite
	4	4	4	4	n	y	y	Mounds of velvety rich flowers in deep purple with slightly lighter purple centers, very ornamental
	3	3	3	3	n	y	y	Floriferous mounds bloom all summer, very nice compliment to mixed beds
	4	4	4	4	sl	y	y	Outstanding very uniform mounds of color, rich velvety appearance in attractive bicolor, packed with blooms
	3	3	3	3	n	y	y	Nice mounds of color all season, fills in well, less maintenance than other violas, unusual color best in mass plantings
	4	4		4	n	y	y	Outstanding mounds of deep purple blooms with dark eye, fills in bed well, requires no maintenance, one of the best violas this year
	4	4		4	n	y	y	Flowers first open as peach with dark orange center and creamy wings, mature to shades of cream and orange with lavender wings, huge mounds of color with blooms nearly all season, very attractive
	3	3	3	3	sl	y	n	Great mounds of color nearly all season, very attractive in mass plantings, prominent seed heads in late season, some lodging
	4	3	3	3	y	y	n	Mountains of color most of the season, color only at tips in late August, prominent seed pods, lots of lodging in cold wet weather
	3	3	3	3	sl	n	y	Compact flowers with uniform gold color, more ragged appearance than Zesty cultivars grown this season
	3	3		3	sl	y	y	Interesting bicolor flowers on bushy upright plants, not the most floriferous of zinnias, variable ragged plant heights
	3	3	3	3	n	y	y	Miniature flowers on tall stalks, striking early summer display, needs lots of deadheading late in season, All America Selections winner 1963
	3	3	3	3	n	y	y	Tall upright stems with many sizes and colors of flowers, nice mix of solids and bicolors, singles, doubles, recovered well from early June frost
	4	4	3	4	n	y	y	Outstanding solid coral color on huge fully double flowers, very attractive in mass plantings, deadhead late in season. recovered well from early season frost, variable plant height, best for front edges of borders
	4	4	4	4	n	y	y	Outstanding, brilliant orange blooms cover plants, provides intense solid color displays, huge flowers really glow variable flower height best for edges of borders
	2	2	2	2	n	n	y	From Vietnamese germplasm by Seeds of Change, square-edged petals, colors are creamy, not brilliant like other zinnias, nice mix of colors, variable height, recovered well from early June frost

<sup>z</sup>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 2006, cont.

Common name	Cultivar	Flower color	Height (in) <sup>w</sup>		Flower size (in) <sup>x</sup>		Flowering period <sup>y</sup>												Frost tolerance	
			min	max	min	max	Jun			Jul			Aug			Sep			foliage	flowers
Zinnia, Garden	Profusion Fire	reddish orange	5¼	14½	1¼	2½	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				n	n		
Zinnia, Garden	Zesty Lemon	lemon yellow	5½	21½	2	4¼	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				n	n		
Zinnia, Garden	Zesty Pink	coral pink	2	24	2	4	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				n	n		
Zinnia, Garden	Zesty Scarlet	scarlet	13½	22	1¼	4	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				n	n		
Zinnia, Garden	Zesty White	pale yellow	14	20	2	3¾	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				n	n		
Zinnia, Garden	Zesty Yellow	gold	10	20½	2	3¾	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				n	n		
Zinnia, Garden	Zig Zag	pink, rose, scarlet, yellow, orange, cream solids & bicolors	12	32	1½	4	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				n	n		
Zinnia, Garden	Zowie!Yellow Flame	scarlet/rose centers w/ yellow tips	15½	25½	2	3	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				n	n		
Zinnia, Mexican**	Persian Carpet	bicolors in red, mahogany, gold, purple, cream	20¼	26¼	1	1¾	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *				n	n		

<sup>w</sup> 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.  
<sup>x</sup> if flower size was uniform, size is recorded under max only; sizes with an x like 12x3 indicates a spike flower type with the height x width.  
<sup>y</sup> \* indicates just starting to bloom, \* indicates 50% bloom, and \* indicates full bloom.

Table 4. Deadheading data 2006.

Common name	Cultivar	June	July			Aug		
African Daisy	African Moon		#	\$				
Ageratum	High Tide Blue			@			@	
Ageratum	Mexicana Tall			@			@	
Alyssum, Sweet	Rosie O'Day							#
Alyssum, Sweet	Royal Carpet							
Amaranth, Feathered	Icecream Banana							
Amaranth, Feathered	Icecream Mango							
Amaranth, Feathered	Icecream Orange							
Amaranth, Feathered	Icecream Peach							
Angelonia	Serena Purple			@				#
Annual Flower Mix	Colorscape Mixture							

Deadhead rating- blank = no deadheading needed; @ = <25%; # = 25-75%; \$ = 75-100%

Table 4. Deadheading data 2006, cont.

Common name	Cultivar	June	July			Aug		
Annual Flower Mix	Johnny's Butterfly and Hummingbird Mix							@
Annual Flower Mix	Knee-Hi Mix							
Annual Flower Mix	Low-Growing Mix							
Annual Flower Mix	Surprise Mixture							
Asarina	Mystic Rose							
Aster, Annual Garden	Ballet Mix				@	@	@	
Aster, Annual Garden	Giant Ray Mix							#
Aster, Annual Garden	Serenade Mix						@	
Aster, China	Pink Tower							
Aster, Peony	Duchesse Formula Mix							#

Plant ratings <sup>2</sup>					Recommended for			Comments
Flower		Foliage	Overall	Fragrance	Cutting	Drying		
quantity	quality							
4	4	3	4	sl		y	Bushy mounds loaded with reddish-orange flowers, very intense and showy, brilliant display on a no-maintenance plant, outstanding	
4	4	4	4	n	y	y	Outstanding large flowers, creamy golden yellow tinged with light green, dark green foliage really shows off gorgeous blooms, variable height best for the front of borders	
3	3	3	3	n	y	y	Outstanding quantity of medium-sized and large blooms, solid pink color and greenish centers, variable flower height, recovered well from early June frost, very attractive display	
4	3	3	3	sl	y	y	Medium-sized balls of electric color, plants stacked with blooms in multi-levels, very attractive all season, minor deadheading needed late in season	
3	3	3	3	n	y	y	Large neat blooms cover this plant from mid season onward, very attractive color contrasts well with yellow-green foliage, variable flower height best for edges of borders, not a true white despite name	
4	3	3	3	y	y	y	Outstanding large flowers cover the plants from mid season onward, some deadheading needed, very attractive contrast of gold blooms on top of medium green foliage, variable plant height best used at edges of borders	
3	3	3	3	n	y	y	Abundant small blooms on tall upright stems, vibrant mix of colors in solids and bicolors, overall effect is reds and oranges	
4	4	3	4	sl	y	y	Brilliant eye popping bicolor, tall, loaded with upright blooms, worth growing just for the novel- color abundant blooms, some deadheading needed	
3	3	3	3	n	y	y	Double and semi double blooms, small but abundant flowers in a variety of patterns, All America Selections winner 1952	

<sup>2</sup>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 4. Deadheading data 2006, cont.*

Common name	Cultivar	June		July			Aug	
Bachelor's Button	Jubilee Gem	#		#	@	@	#	@
Balsam	Tom Thumb				@		@	@
Begonia	Baby Wings Pink							
Begonia, Wax	Harmony Pink Imp						@	
Bishop's Flower	Graceland	#			@			
Bishop's Flower	Green Mist							#
Bisnaga	Casablanca							
Blue Eyed Daisy	Grandis	#		@	@	#	#	@
Brachycome	Brachy Blue							#
Broom Corn								
Caladium	Florida Cardinal							
Calceolaria	Golden Mystery	#		@	@		@	@
Calendula	Deja Vu	#		#	@	#	#	#
Calendula	Orange Zinger	@		#	@	#	#	\$ @
Calendula	Triangle Flashback	@		@	@	#	@	\$
Calendula	Victoria Sunset	@		@	#	#	#	\$ @

*Table 4. Deadheading data 2006, cont.*

Common name	Cultivar	June		July			Aug	
California Poppy	Golden Tears						#	#
California Poppy	Summer Sorbet	@		@			@	#
Celosia	Burgundy Supercrest							
Celosia	Century Mixture							
Celosia	Fireglow							
Celosia	Fresh Look Gold							
Celosia	Glow Pink							
Chiastophyllum	Solar Yellow			#	\$	\$	\$	\$ #
Chinese Pink	Victoriana			@	#	@	#	# \$
Chrysanthemum	Moonlight	@		@				\$
Clarkia	Chieftain					@		@
Cleome	Colour Fountain Mixed	@						
Coleus	Kong Mosaic							
Coleus	Wizard Mosaic							

Deadhead rating- blank = no deadheading needed; @ = <25%; # = 25-75%; \$ = 75-100%

Common name	Cultivar	June	July				Aug	
Coreopsis	Quills and Thrills						@	
Coreopsis	Sunfire			@	@	#	@	
Coreopsis, Large-flowered	Early Sunrise		@	@	@	@	\$	
Coreopsis, Large-flowered	Rising Sun		@	#	#	#	@	
Cosmos	Early Summer Mix			@	@	@	#	
Cosmos	Fairy Mix		@	@	@	@	# @	
Cosmos	Unique Mix	@		@	@	#	# #	
Cuphea, Creeping	Purple Star		@	@	#	#	@ @	
Cuphea (miniata)	Summer Medley			@			@	
Dahlia	Amorus		#					
Dahlia	Beaucon White		#	@				
Dahlia	Bloomquist Dawn						@	
Dahlia	Chimicum Topaz							
Dahlia	Citron De Cap	@	#	@		@	@	
Dahlia	Emory Paul						@	
Dahlia	Fidalgo Lisa					@		
Dahlia	Hello Gorgeous Mixture		@	@	@	@	# @	
Dahlia	Jo	#				#	#	
Dahlia	Mel's Misty Sunrise		#	@			@ @	
Dahlia	Mom's Special							
Dahlia	Papageno		#	@	@		#	
Dahlia	Pat Feary		#	@	@	@	@	
Dahlia	Philothea							
Dahlia	Redskin							
Dahlia	Robert Too	@	#	@				
Dahlia	Scarborough Brilliant							
Dahlia	Spartacus							
Dahlia	Star-Gazer			@	@	@	@	
Dahlia	Sterling Silver							
Dahlia	Tanjoh		#					
Dahlia	The Boss						@	
Dianthus	Bouquet Rose Magic					@	@	
Dianthus	Dynasty Orchid			@		@	#	
Dianthus	Dynasty Rose Lace	#				@	@	
Dianthus	Ideal Violet	@	@	@	@	@	@	
Dianthus	Magic Charms	@	@	@	@	#	\$ \$	
Dianthus	Panda Mix	@	@		@	@	# @	
Dianthus	Carpet Snowfires	@	@	@	@	@	#	

Deadhead rating- blank = no deadheading needed; @ = <25%; # = 25-75%; \$ = 75-100%

Common name	Cultivar	June	July				Aug	
Dianthus	Supra Purple		@	@	#	#	\$ @	
Dianthus	Sweet Scarlet							
Dianthus	Noverna Purple						@ #	
Diascia	Diamonte Apricot							
Diascia	Diamonte Coral Rose							
Dusty Miller	New Look							
Flaxleaf Pimpernel				@			@	
Foxglove	Camelot Rose							
Gaillardia	Arizona Sun			@		@	@ #	
Gaillardia	Sundance Bicolor	@					@ #	
Gazania	Frosty Kiss Mixture	@		@	#	#	\$ \$	
Gazania	Kiss Mixture	#	@	@	#	#	\$ \$	
Gazania	Kontiki Stars & Stripes	#		@	#	#	\$ \$	
Gentian sage	Blue Angel	@					@ @	
Geranium	Black Velvet Appleblossom		@	@			\$	
Geranium	Maverick Star						@	
Geranium	Multibloom Capri	@			@	@	@ @	
Geranium	Multibloom Red					@	@ #	
Geranium	Orbit Deep Salmon	@			@	@		
Gerbera	Revolution Vanilla		#	@		@	@ #	
Godetia	Fruit Punch			@	@	@	@ #	
Gypsophila	Gypsy							
Hollyhock	Indian Spring	@						
Hollyhock	The Watchman							
Hyacinth Bean	White							
Impatiens, African	Blondie							
Impatiens, Garden	Dazzler Burgundy	@	@					
Impatiens, Garden	Dazzler Violet Improved	@					@	
Impatiens, Garden	DazzlerLilac Splash Improved	@					@	
Impatiens, Garden	Fanciful White	@						
Impatiens, Garden	Showstopper Burgundy Imp.	@					@	
Impatiens, Garden	Showstopper Deep Orange Improved	@					@	
Impatiens, Garden	Showstopper Red Improved	@					@	
Impatiens, Garden	Showstopper Soft Blue Improved	@						

Common name	Cultivar	June	July				Aug
Impatiens, Garden	Showstopper White	@					@
Impatiens, Garden	Stardust Cherry	@					
Impatiens, Garden	Xtreme Mixture	@					
Impatiens, New Guinea	Divine Cherry Red	@					@
Impatiens, New Guinea	Divine Mix						
Lavatera	Twins Hot Pink	@		@	#	#	@
Linaria	Enchantment						
Love Grass	Wind Dancer						
Lupine	Gallery Yellow		@	#	@		@
Lupine	Giant King Mix						@
Lupine	Tutti Frutti						#
Marigold	Cottage Red			@	@	@	@
Marigold, African	Capriccio		@				@
Marigold, African	Cempoalxochitl						
Marigold, African	Crackerjack Mixed			@			
Marigold, African	First Lady					@	#
Marigold, African	Orange Jubilee					@	\$
Marigold, African	Perfection Mixture					@	@
Marigold, French	Aurora Fire		@	@	@	#	#
Marigold, French	Aurora Light Yellow			@	@	@	#
Marigold, French	Disco Granada	@		@	@	#	#
Marigold, French	Durango Mix Outback		@	@	@	@	#
Marigold, French	Little Hero Gold	@	@	@	#	#	#
Marigold, French	Mars			@		@	@
Marigold, French	Naughty Marietta					@	@
Marigold, French	Queen Sophia	@	@	@	@	@	#
Marigold, Signet	Starfire						
Mexican hat	Red Midget		@				@
Nasturtium	Black Velvet	@	@				@
Nasturtium	Milkmaid		@				
Nasturtium	Tall Climbing Single Mix						@
Nasturtium	Vesuvius	@					@
Nasturtium	Whirlybird Cherry Rose			@			@
Nasturtium	Whirlybird Mahogany	@					@
Nemesia	Poetry White						
Nemesia	Serengeti Yellow	#	#	#			

Deadhead rating- blank = no deadheading needed; @ = <25%; # = 25-75%; \$ = 75-100%

Common name	Cultivar	June	July				Aug
Nicotiana	Marshmallow						@
Nicotiana	Perfume Deep Purple	@	#	#	#	#	\$
Nicotiana, Garden	Nicki Red					@	\$
Nicotiana, Hybrid	Tinkerbelle						#
Nierembergia	Purple Robe						
Nierembergia	White Robe						
Ornamental Millet	Purple Baron						
Ornamental Millet	Purple Majesty						
Pansy	Accord Daffodil Mixture		@				
Pansy	Accord Peace Mixture		@				
Pansy	Acquarelle						
Pansy	Chalon Supreme Mix						
Pansy	Frizzle Sizzle Blue						
Pansy	Frizzle Sizzle Formula Mix						
Pansy	Frizzle Sizzle Yellow						
Pansy	Frosty Rain						
Pansy	Jolly Joker		@				
Pansy	Karma Rose		@				
Pansy	Magestic Giants Mix		@	@			@
Pansy	Matrix Blue Frost						
Pansy	Matrix Deep Blue Blotch		#				
Pansy	Matrix Ocean						
Pansy	Matrix Red Blotch						
Pansy	Matrix Rose Blotch		@				
Pansy	Matrix White Blotch		@				
Pansy	Matrix Yellow		@				@
Pansy	Panola Rose Picotee		@				
Pansy	Promise Antique Shades		@				
Pansy	Promise Beaconsfield						
Pansy	Promise Blue/ Blotch			@			

Common name	Cultivar	June	July			Aug		
Pansy	Promise Deep Orange		@					
Pansy	Promise Formula Mix		#					
Pansy	Promise Lemon Splash							
Pansy	Promise Marina						@	
Pansy	Promise Primrose/Blotch		@					
Pansy	Promise Pure Lilac Shades							
Pansy	Promise Pure Yellow							
Pansy	Promise Red/Blotch		#					
Pansy	Promise True Blue							
Pansy	Promise White/Blotch		@					
Pansy	Promise Yellow Blotch		@					
Pansy	Promise Yellow/Purple Wing							
Pansy	Promise Yellow/Red Wing		@					
Pansy	Swiss Giant Pure Orange							
Pansy	Swiss Giant Violet Blue							
Pansy	Universal Plus Primrose		@					
Pansy	XXL Golden Yellow		@					
Penstemon	Violet Dusk			#	\$	\$	@	\$
Pentas	Butterfly Lavender Shades							
Pentas	Butterfly Light Lavender							
Pentas	Butterfly Pink							
Pepper, Ornamental	Black Pearl							
Pepper, Ornamental	Chilly Chili							
Pepper, Ornamental	Garda Tricolore							
Pepper, Ornamental	Peppa Blanca/Rosú							
Pepper, Ornamental	Peppa Lila/Naranja							

Deadhead rating- blank = no deadheading needed; @ = <25%; # = 25-75%; \$ = 75-100%

Common name	Cultivar	June	July			Aug		
Pepper, Ornamental	Peppa Orangina							
Pepper, Ornamental	Peppa Pepperoni							
Petunia	Carpet Pink Morn	#	@	@	@			
Petunia	Cloud Snow	@	#	#	@	@	@	
Petunia	Double Cascade Blue	@	@	@	@	@	@	@
Petunia	Dreams Burgundy Picotee	@	@	#	@	@	#	@
Petunia	Dreams Rose Picotee	@	@	@	@			
Petunia	Dreams Sky Blue	#	@	#	@	@	@	#
Petunia	Easy Wave Salmon	@	@	@	@		@	@
Petunia	Easy Wave White	#	@	@	@	@	@	@
Petunia	Easy Wave Coral Reef	@	@	@	#	@	@	@
Petunia	Easy Wave Red	#	@	@	@	@	@	@
Petunia	Fantasy Crystal Red	@	#	#	@	@	@	#
Petunia	Frillytunia White	@	@	@	@	@		@
Petunia	Frost Mixture	@	@	#	#	@	@	
Petunia	Madness Lavender Glow	#	@	#	#	@	@	#
Petunia	Madness Red Morn	#	@	@	@	@	#	
Petunia	Madness Rose Morn	@	@	#	@	@	#	#
Petunia	Madness Salmon Morn	@	@	@	@		@	@
Petunia	Opera Supreme Pink Morn	#	@	@	@	#	@	#
Petunia	Primetime Twilight Mixture	@	@	@	@	#	\$	@
Petunia	Prism Sunshine	#	#	@	@	@	@	@
Petunia	Ramblin' Red	@	@	@	@	@	@	@
Petunia	Ultra Crimson Star	@	@	@	@	#	@	
Petunia	Ultra Pastel Pink	@	@	@	@		@	
Phlox, Garden	21 <sup>st</sup> Century Blue Star							@
Phlox, Garden	21 <sup>st</sup> Century Rose Star	#			@		@	@
Phlox, hybrid	Peppermint Candy			@	@	@	#	@
Plectranthus	Silver Shield							
Poppy, Mexican Tulip	Sunlite							@
Portulaca	Margarita Coral			@				@
Portulaca	Margarita Peppermint				@			



Common name	Cultivar	June	July				Aug	
Rudbeckia	Cordoba				@			
Rudbeckia	Goldsturm					@	@	
Rudbeckia	Hot Chocolate			@	@	@	@	
Rudbeckia	Maya						@	
Salvia, Mealy-cup	Evolution							
Salvia, Mealy-cup	Gruppenblau							
Salvia, Mealy-cup	Victoria White							
Salvia, Scarlet	Picante Light Purple	@	#	@	@	@	#	
Salvia, Scarlet	Red Hot Mama							
Salvia, Scarlet	Red Hot Sally II				@	@	@	
Salvia, Scarlet	Saluti Formula Mix		@	#	#			
Salvia, Scarlet	Saluti Red	@					@	
Salvia, Scarlet	Saluti Salmon/Pink	@	@	@	@	@	@	
Salvia, Scarlet	Saluti White	@	#	@	@	@	@	
Scarlet Runner Bean								
Shasta Daisy	Amelia							
Shasta Daisy	Giant Marconi Double							
Shasta Daisy	Snow Lady		#	@	@	@	@	
Shoo Fly Plant	Splash of Cream			#	#	#		
Snapdragon	Golden Monarch							
Snapdragon	La Bella Yellow	@				@	#	
Snapdragon	Liberty Classic Mixture				@		@	
Snapdragon	Rocket Rose						#	
Snapdragon	Scarlet Giant					@	@	
Snapdragon	Snapshot Mix				#		@	
Spanish Daisy			@				@	
Stock	Giant Imperial Mix					@	@	
Sunflower	American Giants Hybrid						@	
Sunflower	Bicentenary						@	
Sunflower	Jade							
Sunflower	Key Lime Pie			@	@		#	
Sunflower	Moonshadow		@	#	@	@	#	
Sunflower	Peach Passion			@	@		#	
Sunflower	Prado Red		@	@	#	@	#	
Sunflower	Pro Cut Yellow Lite							
Sunflower	Soraya							
Sunflower	Supermane							
Sunflower	Tarahumara						@	

Common name	Cultivar	June	July				Aug	
Sweet Pea	Cuthbertson Floribunda Choice Mix							
Sweet Pea	Fantasia Formula Mix							
Sweet Pea	Old Spice Mix							
Sweet Pea	Pink Cupid							
Sweet Pea	Royal Mix							
Sweet Pea	Spencer Ripple Formula Mix							
Sweet Pea	Supersnoop Mix							
Swiss chard	Bright Lights							
Tasselflower	Harvest Mixture	@			@		@	
Tithonia	Torch				@	@	#	
Ursinia		@	@	#	\$	\$	\$	
Venidium	Exotic		@	@	@	@	#	
Verbena	Peaches & Cream	@		@		#	#	
Verbena, Garden	Mango				@	@	#	
Verbena, Garden	Quartz Silver	#		@	@	#	#	
Viola	Bilbo Baggins							
Viola	Eye of the Tiger							
Viola	Microla Lavender	@						
Viola	Microla Pure Yellow		@					
Viola	Penny Primrose		@					
Viola	Skippy Yellow/Purple Wing							
Viola	Skippy Purple Improved							
Viola	Skippy XL Deep Blue-Blotch							
Viola	Skippy XL Purple Duet							
Viola	Skippy XL Red-Gold							
Viola	Sorbet Blue Babyface		@					
Viola	Sorbet Peach Frost							
Wallflower	Citrona Orange	@					@	
Wallflower	Citrona Yellow	@					@	
Zinnia	Short Stuff Gold	@	#	#	@	#	@	
Zinnia	Swizzle Cherry & Ivory	@	@	@	@	@	#	

Deadhead rating- blank = no deadheading needed; @ = <25%; # = 25-75%; \$ = 75-100%



Common name	Cultivar	June		July				Aug	
Zinnia	Thumbelina Mix	@			\$	#	@	#	
Zinnia, Garden	Carrousel Mix		@		@		@	@	
Zinnia, Garden	Magellan Coral			@		@	#	@	
Zinnia, Garden	Magellan Orange	@	@	@	@	@	@	@	
Zinnia, Garden	Peggy's Delight			#				#	
Zinnia, Garden	Profusion Fire				@	@	@		
Zinnia, Garden	Zesty Lemon	@		@	@	@	@	@	
Zinnia, Garden	Zesty Pink		@	@	@	@	@		
Zinnia, Garden	Zesty Scarlet	@	@	#	@	@	@	@	
Zinnia, Garden	Zesty White		@	#	#	@	@	@	
Zinnia, Garden	Zesty Yellow		@	#		@	@	@	
Zinnia, Garden	Zig Zag			@	@				
Zinnia, Garden	Zowie! Yellow Flame	#	@	@	@			@	
Zinnia, Mexican	Persian Carpet	@	#			@	@	@	

Deadhead rating- blank = no deadheading needed; @ = <25%; # = 25-75%; \$ = 75-100%

**Table 5 Results on cultivars completed three years testing**

Name	Cultivar	Ave. <sup>z</sup> Overall Rating	Ave. <sup>z</sup> Foliage Rating	Ave. Min flower ht (in)	Ave. Max Flower 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
Annual Flower Mix	Colorscape Mixture	4	4	6.5	27.8	0.7	2.9	4	4
Annual Flower Mix	Johnny's Butterfly and Hummingbird Mix	3	3	4.3	33.2	0.8	3.4	3	3
Annual Flower Mix	Knee-Hi Mix	3	3	6.7	33.0	0.6	4.2	3	3
Annual Flower Mix	Low-Growing Mix	3	3	6.3	25.7	0.2	2.1	3	3
Annual Flower Mix	Surprise Mixture	3	3	8.3	40.4	0.6	3.3	3	3
Aster, Peony	Duchesse Formula Mix	3	3	16.0	28.3	2.0	4.1	3	3
Begonia, Wax	BabyWing Pink	2	2	2.7	8.0	0.6	0.6	2	2
Bishop's Flower	Green Mist	2	2	11.4	26.3	1.3	5.3	2	2
California Poppy	Golden Tears	4	3	6.0	18.3	0.7	2.3	4	4
Celosia	Glow Pink	2	2	5.2	10.3	1.5 x 0.8	10 x 3.3	3	2
Coreopsis, Large-flowered	Rising Sun	3	3	8.7	15.8	1.3	2.3	3	3
Cosmos	Early Summer Mix	3	3	21.0	39.0	1.9	4.5	4	3
Cosmos	Fairy Mix	3	3	17.0	29.9	1.8	4.1	2	2
Cosmos	Unique Mix	2	3	19.5	34.8	2.2	4.4	2	2

<sup>0</sup>=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

<sup>x</sup>sizes with an x like 12x3 indicates a spike flower type with the height x width.

Table 5 Results on cultivars completed three years testing, cont.

Name	Cultivar	Ave. <sup>z</sup> Overall Rating	Ave. <sup>z</sup> Foliage Rating	Ave. Min flower ht (in)	Ave. Max Flower 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
Dahlia	Amorus	3	3	37.3	30.7	3.5	4.5	4	3
Dahlia	Hello Gorgeous Mixture	3	3	7.7	17.5	2.3	3.8	3	2
Dianthus	Dynasty Rose Lace	3	3	10.8	18.9	0.8	1.3	3	3
Dianthus	Panda Mix	3	2	5.2	12.3	1.4	2.4	2	3
Dianthus	Noverna Purple	3	3	6.2	13.7	1.5	3.1	3	3
Flaxleaf Pimpernel		2	2	2.3	9.5	0.3	0.8	2	2
Gaillardia	Arizona Sun	3	3	11.7	22.1	1.7	2.9	3	3
Gazania	Frosty Kiss Mixture	3	3	6.8	12.7	1.9	3.0	3	3
Gazania	Kiss Mixture	2	2	6.2	12.9	1.7	3.0	2	2
Geranium	Multibloom Red	3	3	7.2	17.8	1.7	3.1	3	3
Geranium	Orbit Deep Salmon	4	4	11.2	16.2	2.5	4.0	4	4
Impatiens, Garden	Dazzler Lilac Splash Imp.	3	3	3.5	10.8	1.5	1.8	3	3
Impatiens, Garden	Showstopper Burgundy Imp.	3	3	2.8	9.6	0.7	1.8	3	3
Impatiens, Garden	Showstopper Deep Orange Imp.	3	3	2.8	13.1	1.4	1.8	3	3
Impatiens, Garden	Showstopper Red Imp.	3	3	5.2	11.5	1.2	2.0	3	3
Impatiens, Garden	Showstopper Soft Blue Imp.	3	3	2.2	11.3	1.2	1.9	3	3
Impatiens, Garden	Showstopper White	2	2	4.0	10.6	1.3	1.7	2	3
Lupine	Gallery Yellow	3	3	17.2	31.2	3 x 1	9.6 x 2	3	3
Marigold, African	Cempoalxochitl	3	3	15.8	34.8	1.5	2.6	3	3
Marigold, African	Perfection Mixture	4	4	9.8	19.2	1.9	4.3	4	4
Marigold, French	Durango Mix Outback	3	3	5.2	14.7	1.1	2.3	3	3
Marigold, French	Little Hero Gold	2	2	4.1	9.0	1.3	2.6	2	1
Nasturtium	Milkmaid	3	3	6.8	21.3	1.3	2.4	3	3
Nasturtium	Vesuvius	3	3	6.1	19.3	1.6	2.5	3	3
Nasturtium	Whirlybird Cherry Rose	3	3	4.3	16.8	1.5	2.8	4	4
Pansy	Accord Daffodil Mixture	3	3	4.3	14.3	1.3	2.5	3	3
Pansy	Karma Rose	3	3	4.2	11.6	1.4	2.5	3	3
Penstemon	Violet Dusk	1	1	12.3	20.0	1.1	1.6	1	1
Petunia	Cloud Snow	3	3	3.0	10.5	2.0	3.2	4	4
Petunia	Double Cascade Blue	3	3	6.6	15.2	2.3	3.0	3	3
Petunia	Dreams Burgundy Picotee	3	3	4.7	12.9	1.8	3.3	3	3
Petunia	Dreams Rose Picotee	3	3	4.0	10.5	1.3	2.7	3	3
Petunia	Dreams Sky Blue	3	3	4.3	12.3	1.8	3.4	3	3

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<sup>x</sup>sizes with an x like 12x3 indicates a spike flower type with the height x width.

Name	Cultivar	Ave. <sup>z</sup> Overall Rating	Ave. <sup>z</sup> Foliage Rating	Ave. Min flower ht (in)	Ave. Max Flower 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
Petunia	Easy Wave Salmon	3	3	2.8	6.2	1.5	2.7	3	3
Petunia	Easy Wave White	3	3	2.9	10.7	0.9	2.2	3	3
Petunia	Fantasy Crystal Red	2	2	4.0	8.9	1.2	2.0	2	2
Petunia	Frost Mixture	3	3	4.3	14.3	1.7	3.2	3	3
Petunia	Primetime Twilight Mixture	3	3	4.2	20.5	1.2	2.6	3	3
Petunia	Ultra Pastel Pink	2	3	4.2	12.5	1.8	3.8	2	3
Phlox, Garden	21 <sup>st</sup> Century Blue Star	3	3	3.3	11.6	1.3	2.3	3	3
Phlox, Garden	21 <sup>st</sup> Century Rose Star	2	2	3.4	13.8	0.8	1.2	2	2
Phlox, hybrid	Peppermint Candy	2	2	4.0	13.2	0.7	1.8	2	1
Portulaca	Margarita Peppermint	3	3	2.8	7.7	0.5	1.4	3	3
Salvia, Mealy-cup	Gruppenblau	4	4	18.3	33.1	1 x 0.3	9 x 1.5	4	4
Salvia, Mealy-cup	Victoria White	2	2	13.5	28.0	1 x 0.5	7 x 1.5	2	1
Salvia, Scarlet	Picante Light Purple	3	2	8.7	16.0	2.3 x 1.1	6.5 x 2.9	3	3
Snapdragon	Golden Monarch	3	3	8.0	26.2	5 x 2.3	9 x 2.8	3	2
Snapdragon	La Bella Yellow	3	3	12.0	21.3	2.8 x 2.2	5.8 x 2.8	3	3
Spanish Daisy		3	3	2.8	10.5	0.3	0.5	3	4
Stock	Giant Imperial Mix	2	2	14.0	23.7	2.8 x 1.8	5.3 x 2.4	2	2
Sunflower	Jade	2	2	32.3	49.5	3.1	6.2	2	2
Sunflower	Moonshadow	3	3	32.7	65.0	2.8	4.8	3	3
Sunflower	Prado Red	3	3	23.8	40.0	3.3	5.8	3	3
Sunflower	Supermane	3	3	46.0	56.3	5.3	7.6	3	3
Sunflower	Tarahumara	3	3	29.0	45.2	2.0	5.7	3	3
Ursinia		2	2	13.8	20.8	1.1	1.7	2	2
Verbena, Garden	Quartz Silver	2	3	3.8	12.1	1.1	2.2	2	2
Viola	Eye of the Tiger	2	2	4.7	11.1	0.6	1.5	2	2
Viola	Penny Primrose	3	3	5.0	10.7	0.8	1.4	3	4
Zinnia	Short Stuff Gold	3	4	7.1	14.2	1.7	3.0	3	3
Zinnia, Garden	Carrousel Mix	3	3	10.5	34.7	1.6	3.7	3	3
Zinnia, Garden	Magellan Coral	4	3	10.0	17.8	2.6	4.3	4	4
Zinnia, Garden	Zig Zag	3	3	14.3	34.7	1.8	3.9	3	3

<sup>0</sup>=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

<sup>s</sup>sizes with an x like 12x3 indicates a spike flower type with the height x width.

## 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 Greenhouses, 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  
<http://www.all-americanselections.org>  
Ball Seed 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 Seeds Holland, Elbaweg 35, 1607 MN Venhuizen, [www.kieftseeds.com](http://www.kieftseeds.com)  
Lawyer Nursery, 950 Hwy 200 W, Plains MT 59859, [www.lawyer-nursery.com](http://www.lawyer-nursery.com)  
Oglevee Ltd., 152 Oglevee Ln, Connellsville PA 15425, [www.oglevee.com](http://www.oglevee.com)  
PanAmerican Seeds, PO Box 438, West Chicago IL 60186, [www.panamseed.com](http://www.panamseed.com)  
The Flower Fields (Yoder Bros & Ecke Ranch), [www.theflowerfields.com](http://www.theflowerfields.com)  
USDA Plant Introduction Stations- NC7, Ames IA, [www.ars-grin.gov/ars/MidWest/Ames](http://www.ars-grin.gov/ars/MidWest/Ames)

### Garden Societies and Organizations with seed exchanges and sales for members only

Alaska Native Plant Society, PO Box 141613, Anchorage AK 99514  
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  
Applewood Seed Co., 5380 Vivian St, Aruada CO 80002, [www.applewoodseed.com](http://www.applewoodseed.com)  
B&D Lilies, PO Box 2007, Port Townsend WA 98368, [www.bdillies.com](http://www.bdillies.com)  
Bear Creek Nursery, PO Box 411, Northport WA 99157, [www.BearCreekNursery.com](http://www.BearCreekNursery.com)  
Bluebird Nursery, Inc., PO Box 460, Clarkson NE 68629, [www.bluebirdnursery.com](http://www.bluebirdnursery.com)  
Carolina Seeds, PO Box 2658 Hwy 105 Bypass, Boone NC 28607, [www.carolinaseeds.com](http://www.carolinaseeds.com)  
Clause Seed, 100 Breen Rd, San Juan Bautista CA 95045  
Connell's Dahlias, 10616 Waller Rd E, Tacoma WA 98446, [www.connells-dahlias.com](http://www.connells-dahlias.com)  
Cook's Garden, PO Box 535, Londonderry VT 05148, [www.cooksgarden.com](http://www.cooksgarden.com)  
Daehnfeldt, PO Box 947, Albany OR 97321, [www.daehnfeldt.com](http://www.daehnfeldt.com)  
Dutch Gardens, Inc., PO Box 2037, Lakewood NJ 08701, [www.dutchgardens.nl](http://www.dutchgardens.nl)

F.W. Schumacher Co., Inc., 36 Spring Hill Rd, Sandwich MA 02563, [www.treeshrubseed.com](http://www.treeshrubseed.com)  
Farmer Seed & Nursery Co., 818 NW 4th St, Fairbault MN 55021, [www.farmerseed.com](http://www.farmerseed.com)  
Ferry-Morse Seed Co., PO Box 4938, Modesto CA 95352, [www.ferry-morse.com](http://www.ferry-morse.com)  
Fred C. Gloeckner & Co., Inc., 15 E 26th St, New York NY 10010, [www.fredgloeckner.com](http://www.fredgloeckner.com)  
Gardens North, 5984 Third Line Rd N, North Gower ON K0A 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, PO Box 338, Sarcoxie MO 64862, [www.gilberthwild.com](http://www.gilberthwild.com)  
H.G. German Seeds, Inc., PO Box 398, Smethport PA 16749  
Harris Seeds, PO Box 24966, Rochester NY 14624-0966, [www.harrisseed.com](http://www.harrisseed.com)  
Henry Field's Seed and Nursery Co., 415 N Burnett, Shenandoah IA 51602, [www.HenryFields.com](http://www.HenryFields.com)  
Home Harvest Seeds, 3807 Bank St, Baltimore MD 21224, [www.homeharvestseeds.com](http://www.homeharvestseeds.com)  
Irish Eyes & Garden City Seeds, PO Box 307, Thorp WA 98946, [www.irish-eyes.com](http://www.irish-eyes.com)  
J.L. Hudson, PO Box 1058H, Redwood City CA 94064, [www.jlhudsonseeds.net](http://www.jlhudsonseeds.net)  
Jackson & Perkins, PO Box 1028, Medford OR 97501, [www.jacksonandperkins.com](http://www.jacksonandperkins.com)  
John Scheepers Kitchen Garden Seeds, PO Box 638, Bantam CT 06750, [www.kitchengardenseeds.com](http://www.kitchengardenseeds.com)  
Johnny's Selected Seeds, 1 Foss Hill Rd, Albion ME 044910, [www.johnnyseeds.com](http://www.johnnyseeds.com)  
Jung Quality Seeds, 335 S High St, Randolph WI 53957, [www.jungseed.com](http://www.jungseed.com)  
K. Van Bourgondien & Sons, Inc., PO Box 1000, Babylon NY 11702, [www.dutchbulbs.com](http://www.dutchbulbs.com)  
Lamb Nurseries, 101 E Sharp Ave, Spokane WA 99202  
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.milkranch.com](http://www.milkranch.com)  
Nichols Garden Nursery, 1190 N Pacific Hwy, Albany OR 97321, [www.gardennursery.com](http://www.gardennursery.com)  
Nourse Farms, Inc., Box 485 RFD, South Deerfield MA 01373, [www.noursefarms.com](http://www.noursefarms.com)  
Park Seeds, 2 Parkton Ave, Greenwood SC 29649, [www.parkseed.com](http://www.parkseed.com)  
Peter de Jager Bulb Co., PO Box 2010, So Hamilton MA 01982  
Pinetree Garden Seeds, PO Box 300, New Gloucester ME 04260, [www.superseeds.com](http://www.superseeds.com)  
Richters, 357 Highway 47, Goodwood ON LOC 1A0 Canada, [www.richters.com](http://www.richters.com)  
R.H. Shumway's Seeds, 334 W. Stoud St, Randolph WI 53956-1274  
Roseaie at Bayfields, Box R, Waldoboro ME 04572, [www.roseaie.com](http://www.roseaie.com)  
Royal Sluis, Inc., 1293 Harkins Rd, Salinas CA 93901  
Rupp Seeds, Inc., 17919 County Rd B, Wauseon OH 43567, [www.ruppseeds.com](http://www.ruppseeds.com)  
Seeds of Change, PO Box 15700, Santa Fe NM 87501, [www.seedsofchange.com](http://www.seedsofchange.com)  
Seeds of Distinction, PO Box 86 Station A, Toronto ON M9C 4V2 Canada, [www.seedsofdistinction.com](http://www.seedsofdistinction.com)  
Seedway, Inc., PO Box 250, Hall NY 14463, [www.seedway.com](http://www.seedway.com)  
Select Seeds, 180 Stickney Hill Rd, Union CT 06076, [www.selectseeds.com](http://www.selectseeds.com)  
Seymour's Selected Seeds, PO Box 1346, Randolph WI 53956, [www.seymourseeduk.com](http://www.seymourseeduk.com)  
Shepherd's Garden Seeds, 30 Irene St, Torrington CT 06790, [www.shepherdseeds.com](http://www.shepherdseeds.com)  
Smith Nursery Co., PO Box 515, Charles City IA 50616  
Song Sparrow Perennial Farm, 13101 East Rye Rd, Avalon WI 53505, [www.songsparrow.com](http://www.songsparrow.com)  
Stokes Seeds, PO Box 548, Buffalo NY 14240, [www.stokeseeds.com](http://www.stokeseeds.com)  
T & T Seeds, Ltd., Box 1710, Winnipeg MB R3C 3P6 Canada, [www.ttseeds.mb.ca](http://www.ttseeds.mb.ca)  
Territorial Seed Co., PO Box 157, Cottage Grove OR 97424, [www.territorial-seed.com](http://www.territorial-seed.com)  
Thompson & Morgan Seed Co., Box 1308, Jackson, NJ, [www.thompson-morgan.com](http://www.thompson-morgan.com)  
Twilley Seeds, 121 Gary Rd, Hodges SC 29653, [www.twilleyseed.com](http://www.twilleyseed.com)  
Valley Nursery, Box 4845, Helena MT 59604  
Van Bloem USA, Inc., 500 Pendley Industrial Park, Cumming GA 30130  
Vaughan's Seed Co., 5300 Katrine Ave, Downers Grove IL 60515  
Vermont Bean Seed Co., Garden Ln, Fair Haven VT 05743, [www.vermontbean.com](http://www.vermontbean.com)  
Vesey's Seeds, Ltd., PO Box 9000, Calais ME 04619-6102, [www.veseys.com](http://www.veseys.com)  
W. Atlee Burpee & Co., 300 Park Ave, Warminster PA 18991, [www.burpee.com](http://www.burpee.com)  
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)  
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

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