

Annual Flowering Plant Trials 2007

AFES Variety Trial
2008-01

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INTRODUCTION

Each year more than 300 annual flowering plants are grown in field trials at the Georgeson Botanical Garden. The annual flower trials were planted from 30 May to 5 June, 2007 in the Annual Flower and All American Selections (AAS) Display Garden of the Georgeson Botanical Garden (64° 51' N, 147° 52' W). The Fairbanks silt loam soils (pH 6.5) have been cultivated since 1910 and have been amended repeatedly with manure and more recently compost. The field beds were fertilized with 10-20-20S (4 lbs per 100 sq. ft., 195 g per sq meter) on 30 May. Baskets and containers were filled with equal parts Triple R brand composted soil mix (Risse Greenhouses) and Pro Mix Bedding plant soilless potting mix supplemented with TerraSorb water absorbing crystals. Flowers were grown as seedling transplants with the exception of the sweet peas, swiss chard, safflower, and scarlet runner beans that were direct seeded. Transplants were hardened off outdoors for one week prior to transplanting.

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

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

Weather data were compiled annually from a U.S. Weather Service station, elevation 475ft (145m), located approximately 350ft (107m) west of the garden. The summer was warm, especially August which was the second warmest August in the past 10 years (Tables 1 and 2). The total thaw degree days ranked the 2007 season third in total heat accumulation during the growing season, second in the number of frost-free days and first in rainfall. Precipitation was lowest in May and highest in July (Table 2).

The growing season was warm, with sufficient moisture to make irrigation unnecessary except in May and early June during planting and a few days in late August. Growers across the Tanana Valley reported good growing conditions for most flowers and vegetables with the added benefit of no forest fire smoke and very few mosquitoes! The length of the growing season was

eclipsed only by the 2001 season, mostly because of a long, warm September.

Plot evaluations began immediately after planting and continued weekly through September. They consisted of flowering dates and occurrence of disease, insect pests, seed pods, off-type plants, and deformities (Table 3). From 10 Aug to 25 Aug, each cultivar was measured for plant height and flower size, rated for performance of flowers and foliage, and evaluated for fragrance and potential use as cut flowers or in dried arrangements. Frost tolerance was noted on 25 Sept., three days after the first killing frost. Deadheading data is presented in Table 4. Each cultivar grown in the garden beds is tested for at least three years depending upon the availability of seed or plugs. (Table 5).

The garden beds continue to be plagued by a severe infestation of *Sclerotinia* cottony rot. This disease was not a significant problem until the flower beds were made permanent rather than being rotated and tilled every season. The problem is so severe, petunias will be eliminated from ground bed trials in future years.

Table 1. Weather data from the U.S. Weather Service station located just west of the garden for years 1997 - 2007.

Season	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Average temperature: (°F)											
May	48	49	46	44	45	50	44	52	56	50	50
June	61	58	61	59	57	58	61	66	67	59	60
July	64	62	61	59	61	61	61	65	63	62	64
Aug	57	52	58	52	57	54	55	62	58	55	60
Sep	50	46	45	41	49	47	41	38	46	50	47
Maximum temperature (°F)	87	87	91	83	95	85	82	90	85	80	84
Growing season:											
Last frost	May 25	May 13	May 29	May 15	May 13	May 12	May 24	May 8	May 5	June 4	May 13
First frost	Aug 19	Sep 13	Sep 11	Sep 16	Sep 24	Sep 2	Sep 13	Sep 4	Sep 2	Sep 25	Sep 22
Frost free days	86	123	105	124	134	113	112	119	120	112	132
Thaw degree days*	3656	3278	3383	2943	3439	2980	3123	3751	3767	3523	3728
Rainfall (inches)	5.86	9.87	8.66	8.55	5.80	9.35	9.91	5.6	10.59	7.86	11.32
Previous winter season:											
Minimum temperature (°F)	-54	-48	-54	-50	-27	-36	-35	-45	-50	-49	-41.7
Snowfall (inches)	38.4	30.6	31.6	62.2	39.9	39.7	33.2	51.7	70.9	51.8	25.2

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

Table 2. Weather data summaries for growing season years 2005 - 2007.

	May			June			July			August			September		
Temperature °F	2005	2006	2007	2005	2006	2007	2005	2006	2007	2005	2006	2007	2005	2006	2007
Average daily maximum	68	63	62	73	69	72	74	71	76	69	65	71	54	61	57
Monthly high	77	75	80	84	80	84	81	83	84	85	72	84	66	69	71
Average daily minimum	43	38	38	50	48	49	51	52	52	46	45	48	38	38	37
Monthly low	31	27	28	43	30	41	39	46	44	33	36	39	28	29	22
Rainfall (inches)	1.66	0.20	0.90	2.97	1.15	2.66	4.09	3.42	4.12	0.39	2.48	1.85	1.48	0.61	1.79

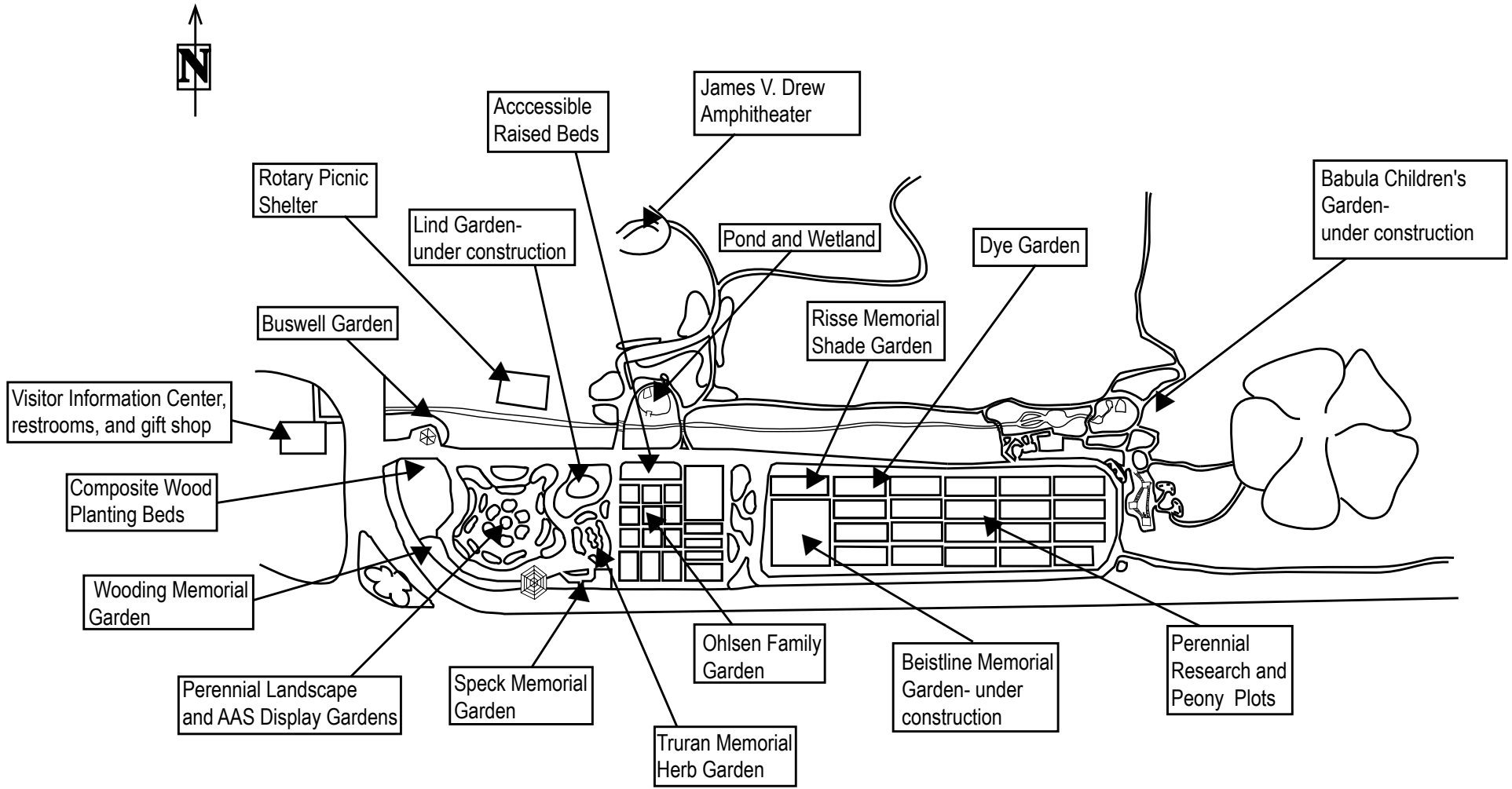


Table 3. Results of tested annual flower cultivars for 2007.

Common Name	Cultivar	Bloom color	max ht in	min ht in	flower size		June 8-15	June 16-23	June 24-30	July 1-7	July 8-15	July 16-23	July 24-31	Aug 1-7	Aug 8-15	Aug 16-23	Aug 24-31
					max in	min in											
African Daisy**	African Moon	cream w/ blue centers	28	8	2	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
African Foxglove		cream and pink	53	33	8½	4½											
Ageratum	High Tide Blue	lavender	13	5	2	¾	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Ageratum	Mexicana Tall	dark blue	27	11	1¼	¼	*☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Alternanthera	Royal Tapestry		14	8													
Alyssum, Sweet	Rosie O'Day	rosy lavender	8	2	1	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Alyssum, Sweet	Royal Carpet	purple, lavender	16	2	1	¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Amaranth	Dreadlocks	burgundy	35	24½	1¼x1/8	18½ x 3		*☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Amaranth, Feathered	Icecream Banana	pale yellow	10	6	3x3¼	2x1½		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Amaranth, Feathered**	Icecream Cherry	light red	19½	11	7 x 3	4x3	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Amaranth, Feathered**	Icecream Formula Mix	red, orange, yellow	14	12	6x3	4x3	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Amaranth, Feathered	Icecream Mango	yellow-orange	13	9	5x3½	2¼x2	*☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Amaranth, Feathered	Icecream Orange	orange	12	5	5x3	2½x1	*☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Amaranth, Feathered	Icecream Peach	pink	9½	3½	5x3	1x1	*☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Amaranth, Feathered**	Icecream Strawberry	red	12½	9½	5x4	4x2½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Ambrosia		green	11	5											☼	☼	
Angelonia	Serena Purple	rosy purple	11	7½	3½x1	1x1		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Aster, Annual Garden	Ballet Mix	white, pink, rose, lavender	17	8	5½	2¾			*☼	☼	☼	☼	☼	☼	☼	☼	☼
Aster, Annual Garden	Giant Ray Mix	lavender, red, light yellow, rose, white	20	9	5½	2½						☼	☼	☼	☼	☼	☼
Aster, Annual Garden	Serenade Mix	red, white, rose, blue, carmine, light blue, scarlet, blue/white and red/white bicolors	26	3	1½	¼				*☼	☼	☼	☼	☼	☼	☼	☼

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.

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

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

	frost tolerance		flower quantity	flower quality	foliage rating	overall rating	fragrance	cutting	drying	comments
	foliage	flowers								
	n	n	1	1	1	1	n	n	n	Bushy plant with floppy open stems; not very showy and easily overwhelmed by adjacent plants
	n	n	2	2	3	2	n	y	n	Very late blooms; smaller flowers than traditional foxglove; not showy even in warm summer
	n	n	3	3	3	3	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
	n	n	3	3	3	3	n	y	y	Nice tall ageratum with billows of blooms; great for drying and cutting as well as the garden; attracts bee flies
	n		3	3	3	3	n	y	n	Slightly trailing foliage with deep purplish red stems and small pointed leaves; becomes bushy late in the season; not the most attractive red, rather dull but fills in well and is good contrast to other container plants
	y	y	4	4	3	3	y	n	n	Compact carpet of color; fills in well; best for front of borders; All America Selections winner 1961
	y	y	4	4	4	4	y	n	n	One of the largest alyssums grown: spreads and fills in well; interesting mix of purple colors; some dead centers by mid-August; All America Selections winner 1953
	n	y	3	3	1	2	n	y	y	Drooping fingers of flowers cascade at the top of the plant; do not branch but remain a single stalk with yellow-green foliage tinged with red; poor show even with drooping flowers
	n	n	3	3	2	3	n	n	n	More branched than other amaranths; needs close spacing; ugly yellow-green, brown-spotted foliage
	n	n	2	3	2	2	n	n	n	Nice flower color; plants are small with yellowed foliage, not attractive
	n	n	2	3	2	2	n	n	n	Needs close spacing to fill in well; foliage is yellow-green, unattractive like other amaranths
	n	n	4	4	2	4	n	n	n	Tiny, upright unbranched stems topped with brilliant spikes of color; needs very close spacing for best effect; foliage is an ugly yellow green
	n	n	3	4	2	3	n	n	n	Stout spikes with yellow-green foliage and brilliant flower heads; needs close spacing; little branching; foliage is sickly yellow-green, overshadows plumes
	n	n	2	2	2	2	n	n	n	Tiny, nice color, puffy pink flower heads on very short stems; no branching; needs extremely close spacing for any show; very poor yellow-green foliage
	n	n	4	4	4	4	n	n	n	Bright red; needs close spacing to fill in well; foliage is yellow-green; very unattractive overall effect
	n	n	1	1	1	1	y	n	n	Much shorter than catalog description; unusual plant with upright spikes covered with blooms; might grow better at the front edge of the garden and with close spacing
	n	n	2	2	3	2	n	n	n	First Angelonia from seed; spiky like salvia; tiny mounded compact plants need close spacing for best effect; covered with purple spikes but needs deadheading in late summer
	n	n	4	4	4	4	n	y	y	Big powderpuff-sized blooms; great mix of colors; needs deadheading by mid-August for best show; very ragged late in season; floppy and unattractive late
	n	n	3	3	3	3	n	y	y	Needle-like petals on 5-inch blooms; needs staking for straight stems; deadhead late in season; good cut flower; holds up better than other asters
	n	n	3	2	2	2	sl	y	y	Small semidouble daisy-like flowers in clusters on very upright, almost too 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

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

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					max in	min in											
Aster, Annual Garden	Starlight Mixed Colors	bright blue, sky blue, scarlet, and rose							☼	☼	☼	☼	☼	☼	☼		
Aster, China	Matsumoto Red Stripe	burgundy	26	8	2½	1¼				☼	☼	☼	☼	☼	☼	☼	☼
Bachelor's Button	Jubilee Gem	royal blue	13	4	1	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Bacopa*	Blutopia	lavender blue	6	4	½	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Bacopa**	Blutopia	lavender blue	6	3	½	1/8	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Bacopa*	Snowtopia	white	8¼	6	½	¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Balsam	Tom Thumb	rose, salmon, scarlet, violet, white	34	10	15x4	3x3	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Begonia	Baby Wings Pink	rose, pink	11	2	1½	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Bishop's Flower	Graceland	white	29	12	5	1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Bisnaga	Casablanca	white	32	14	3	¾		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Blue Eyed Daisy	Grandis	white w/ blue centers	42	14	3¼	1½	☼	☼	☼	☼	☼	☼	☼	☼	☼		
Brachycome	Brachy Blue	lavender w/ brown or blue centers	13	2	¼	1/8	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Broom Corn**	Red Corn	reddish brown, green	70	33													
Browallia		deep lavender	27	9	1¼	½			☼	☼	☼	☼	☼	☼	☼	☼	☼
Calendula	Deja Vu	orange, yellow w/ mahogany edges	30	8½	2½	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Calendula	Orange Zinger	orange, gold highlights	31	15	2¾	1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Calendula	Sherbet Fizz	peach w/ mahogany accents	24	14	1½	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Calendula	Triangle Flashback	peach-pink w/ dark rose backs	24	9	2½	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Calendula	Victoria Sunset	orange w/ brown centers	24	7	2½	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼

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	frost tolerance		flower quantity	flower quality	foliage rating	overall rating	fragrance	cutting	drying	comments
	foliage	flowers								
	n	n	1	1	1	1		y	y	Plants overwhelmed by neighbors; died out in midsummer
	n	n	4	4	4	4	n	y	y	Excellent bunches of blooms on branched stems; rich color; great cut flower
	n	n	3	4	3	3	n	y	y	Beautiful old-fashioned flower; blooms early, showy all season; All America Selections winner 1937
	n	n	4	3	3	3	y	n	n	Recommended for containers; grew well in partially shaded containers; bloomed all season; great filler
	n	n	3	3	3	3	n	n	n	Tiny leaves and small lavender flowers on cascading branches; bloomed nearly all summer; very nice filler for containers
	n	n	4	3	3	3	y	n	n	Beautiful bushy, cascading plant covered with tiny white blooms all summer; some deadheading needed
	n	n	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
	n	n	3	3	3	3	n	n	n	Surprising amount of growth this season; tall, bushy and fill in the beds well; very ornamental; very nice display in ground beds
	n	n	2	2	2	2	sl	y	y	Floppy stems make the plant appear shorter than it is; umbels not as compact as other Bishop's flowers grown this year; more like the wild Queen Anne's lace
	y	y	4	4	4	4	y	y	y	Similar to Ammi (Bishop's flower) with smaller umbel heads; stronger, straighter stems than Ammi; recommended by catalogs for greenhouse and field cut-flower production; should be planted instead of Ammi
	y	y	4	4	4	4	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
	y	y	3	3	3	3	n	n	n	Compact plants bearing masses of small daisy-like violet-blue blooms; fills in well and forms close mounds of brilliant color; color becomes sparse by mid-August
	n	y	1	1	1	1	n	y	y	Just beginning to tassel in mid-August; ornamental late in the season; grow for dried arrangements, not summer display
	n	n	4	4	4	4	sl	y	n	Bushy plants covered with blooms; vivid color and display; no maintenance needed; well worth planting
	y	y	3	2	2	2	sl	y	n	Abundant flowers on tall stems excellent for cutting; elegant mahogany accents on petals; mix of light and dark flowers; deadheading required
	y	y	3	3	2	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
	y	n	2	2	2	2		y	n	Tiny flowers compared to other calendulas; bushy, fills in well; needs significant deadheading
	y	y	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
	y	y	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

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					max in	min in											
California Poppy	Summer Sorbet	rose fading to cream in centers, pink outer petals	16½	2	2½	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Cardoon**			60	40												☼	☼
Castor Bean**	Zanzibarensis Mix	red	72	53	12x4	6x3	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Celosia**	Burgundy Supercrest	rose	20	16	1½	1					☼	☼	☼	☼	☼	☼	☼
Celosia	Century Mixture	red, orange, yellow	12½	7	4x2	2¼x2			☼	☼	☼	☼	☼	☼	☼	☼	☼
Celosia	Fireglow	red	8	4	2½	1¼					☼	☼	☼	☼	☼	☼	☼
Celosia	Fresh Look Gold	gold	11½	5	4x1	1x1½		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Chiastophyllum*	Solar Yellow	yellowish brown													☼	☼	☼
Chinese Foxglove																	
Chinese Pink	Victoriana	maroon, white w/ maroon markings, deep rose	14	6	2½	1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Chrysanthemum	Moonlight	yellow	14½	4	1	¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Cigar Plant		orange red w/ white ring	18	9	4x2	½x1½		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Clarkia	Chieftain	hot pink	22	13	1½	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Coleus	Chocolate Mint	lavender	26	14	9½x1	2x1					☼	☼	☼	☼	☼	☼	☼
Coleus	Kong Mosaic		8	5	4x½	1x¼			☼	☼	☼	☼	☼	☼	☼	☼	☼
Coleus	Velvet	lavender	25	19	6x1	1x1					☼	☼	☼	☼	☼	☼	☼
Coleus	Wizard Mosaic		13	2½	1x¼	¼x¼						☼	☼	☼	☼	☼	☼
Coleus	Wizard Mosaic		13	5½	9½x1	2x1					☼	☼	☼	☼	☼	☼	☼
Collinsia	Mystic Lilac																
Coreopsis	Quills and Thrills	mahogany and yellow bicolor and solids	21	5	2	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼

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	frost tolerance		flower quantity	flower quality	foliage rating	overall rating	fragrance	cutting	drying	comments
	foliage	flowers								
	y	y	3	3	3	3	n	y	n	Attractive ruffled petals; outstanding color; some flowers a light rose pink, others a pale peachy pink; holds up well in wet weather
	n	n			3	3	n	y	y	Attractive silvery foliage; huge plants with dissected, spiky leaves; flowering shoots emerged late in season with flower buds by mid-September; did not bloom; needs lots of space to spread
	n	n	4	4	4	4	n	n	n	Huge foliage, very tropical-looking plant; bloomed early and produced spiny seed pods; whole plant had maroon coloring; needs a lot of space to spread
	n	n	1	3	2	2	n	n	n	Old-fashioned cock's comb; medium-sized spikes of yellowish foliage tinged with red; spikes do not branch; cockscombs are tiny; appear late in the season; are unattractive; not any better in raised beds than ground
	n	n	1	1	1	1	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
	n	n	3	3	3	3	n	n	n	Short, unbranched spikes of brilliant color; interesting flower heads but needs closer spacing for best effect; All America Selections winner 1964
	n	n	2	3	2	2	n	n	n	Tiny, thin spikes of electric color; needs very close spacing in ground beds for best display; colors are eye-catching but display is not very ornamental
	y	n	1	1	3	1	y	n	n	Started from seed in 2006 and overwintered; bloomed very early before placed into containers; flowers were nondescript, brownish yellow, cut off and never bloomed again; formed mats of succulent leaves all summer; not recommended for containers
	n	n			1	1		y	n	Flowering shoots formed very late, but did not bloom; poor growth this year
	n	n	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
	y	y	4	4	4	4	n	n	y	Excellent mounds of yellow blooms that perform very well all season; showy even after frost
	n	n	1	3	2	2	n	n	n	Interesting tubes with white ring at tip; not showy and were easily overwhelmed by neighbors; needs mass plantings in front of borders
	n	n	2	2	2	2	y	y	n	Tall stems becoming floppy in late season; very attractive flowers, but mostly on the ground; many dead plants
	n	n	4	4	4	4	n	n	n	Chocolate foliage edged in mint green, recommended for bedding and containers; rich, velvety appearance; fill in well in containers in shade; loaded with flowers late in the season; very attractive
	n	n	1	1	1	1	n	n	n	Huge leaves; interesting mix of variegated foliage; did not get very big before setting flowers; grew poorly in ground beds; better in containers, still not very attractive
	n	n	4	4	4	4	n	n	n	Outstanding mounds of deep red foliage; a few flowers; fills in containers well; rich velvety appearance
	n	n	1	1	1	1	n	n	n	Dwarf and compact plant with interesting spotted and streaked foliage forming a mosaic pattern; needs close spacing for mass effect; okay in mixed containers, although small most of the season; poor growth in ground beds, little spread
	n	n	1	1	1	1	n	n	n	Dwarf and compact plant with interesting spotted and streaked foliage forming a mosaic pattern; need close spacing for mass effect; very poor in ground beds even in shade
	n	n						n	n	Died after planting; no ornamental value this year
	y	y	4	4	4	4	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 all summer; great planted in masses or as filler in back of borders; needs lots of space to spread out

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Table 3. Results of tested annual flower cultivars for 2007.

Common Name	Cultivar	Bloom color	max ht in	min ht in	flower size		June 8-15	June 16-23	June 24-30	July 1-7	July 8-15	July 16-23	July 24-31	Aug 1-7	Aug 8-15	Aug 16-23	Aug 24-31		
					max in	min in													
Coreopsis, Large-flowered	Early Sunrise	gold	25	11	3	1½			*	*	☼	☼	☼	☼	☼	☼	☼	☼	
Corn Parsley	Goldspray	yellow	36	7	3½	¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Cosmos	Double Click	white, crimson, pink, rose	40	20	½	1	*	*	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Cosmos	Happy Ring	pink/rose bicolor	42	12	3	1½	*	*	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Creeping Cuphea	Purple Star	lavender w/ cream center	14	5	2x2	1x¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Cuphea (miniata)	Summer Medley	lavender, rose, red	17	4½	3x1½	1x1	*	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Cypress vine	Red																		
Dahlia**	Beaucon White	white	72	49	7	3¾					☼	☼	☼	☼	☼	☼	☼	☼	☼
Dahlia**	Bloomquist Dawn	dark pink w/ yellow center	48	42	6	3½								*	☼	☼	☼	☼	☼
Dahlia**	Chimicum Topaz	yellow w/ orange tips																	
Dahlia**	Citron De Cap	yellow w/ rose highlights	63	42	6½	4				*	*	☼	*	☼	☼	☼	☼	☼	☼
Dahlia**	Clydes Choice	pink w/ burgundy edges	30	26	5	3½								*	☼	☼	☼	☼	☼
Dahlia**	Emory Paul	rosy purple, lighter toward tips	47	38	9½	6								☼	☼	☼	☼	☼	☼
Dahlia**	Fidalgo Lisa	pink	58	54	7	4½			☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Dahlia**	Jo	pale yellow	35½	31	5½	4½								*	☼	☼	☼	☼	☼
Dahlia**	Mel's Misty Sunrise	creamy yellow w/ pink highlights	70	14	6½	4½								*	☼	☼	☼	☼	☼
Dahlia**	Papageno	yellow w/ pink tips	41	36	5	3½						*	☼	☼	☼	☼	☼	☼	☼
Dahlia**	Pat Feary	yellow w/ pink highlights	69	54	5	3½					*	☼	☼	☼	☼	☼	☼	☼	☼
Dahlia**	Philothea	pink w/ white centers	44	31	7	2½								*	☼	☼	☼	☼	☼
Dahlia**	Robert Too	purple and white	61	43	3½	2¼						*	*	☼	☼	☼	☼	☼	☼
Dahlia**	Scarborough Brilliant	red fading to pink in centers	60	46	6	3							*	☼	☼	☼	☼	☼	☼
Dahlia**	Snowbound	creamy white	41	34	7	5								☼	☼	☼	☼	☼	☼
Dahlia**	Spartacus	dark red	65	45	5	4½								☼	☼	☼	☼	☼	☼

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

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	frost tolerance		flower quantity	flower quality	foliage rating	overall rating	fragrance	cutting	drying	comments
	foliage	flowers								
	y	y	4	4	4	4	sl	y	y	Medium-sized plant loaded with double gold blooms from midseason on; flowers on very straight upright stems; needs a little deadheading late in the season; All America Selections winner 1989
	n	n	2	2	2	2	n	y	n	Looks like dill in bloom; nice filler; floppy, weak stems; overwhelmed by neighbors late in season
	n	n	3	3	3	3	n	y	y	Very interesting double blooms and singles; loaded with blooms; attractive early blooming cosmos for Fairbanks; needs deadheading
	n	n	2	2	3	2	n	y	n	Some flowers with distinct dark rose ring in center of petals; bushy, floppy stems; more bush than flowers
	n	n	1	1	3	2	n	y	n	Single stem branches out at the top in a vase-like growth habit; very nice, bushy plants in this warm season; flowers are not showy
	n	n	3	3	3	3	n	n	n	Compact and bushy; fills in well and has a great mix of flower colors; flowers are tiny and not showy; effect is mostly green with spots of color.
						0				Very poor survival in greenhouse; not planted outdoors
	n	n	4	4	4	4	sl	y	n	Medium-sized small flowers just beginning in late season; not the most decorative of blooms; informal decorative bloom style
	n	n	4	4	4	4	sl	y	n	Very attractive bicolor flowers; loaded with blooms in late season; very attractive, semicactus bloom style
	n	n					sl	y	n	Diseased, possibly virus, weak; not many blooms until late season; semi cactus-style blooms
	n	n	2½	2½	2½	2½	sl	y	n	Lots of blooms too late in the season for great display; heavily lacinated petals give lacy appearance
	n	n	3	3	3	3	n	y	n	Small flowers, plants covered with blooms; very nice flowers
	n	n	3	4	3	4	y	y	n	Huge blooms with giant floppy petals; great when newly opened but ratty when old; needs deadheading
	n	n	2	3	2	2		n	n	
	n	n	3	3	3	3	y	y	n	Medium-sized, waterlily-type blooms; outstanding pale yellow color; great contrast against dark green foliage
	n	n	4	4	4	4	y	y	n	Lacinated flower form; very interesting two-toned flowers with distinct feathery appearance; large blooms
	n	n	3	3	3	3	sl	y	n	Huge blooms on short plant; very attractive in late season
	n	n	2	2	2	2	sl	y	n	Abundant tiny blooms on very tall plants, nice display late in season; interesting pink stripes on back of petals
	n	n	2½	2½	2½	2½	y	y	n	Medium-sized dark pink blooms with distinct creamy white center; beautiful lacinated flower type; very attractive blooms, showy
	n	n	3	3	3	3	sl	y	n	Outstanding abundant flowers on tall plant; great show through midseason to frost; miniature formal decorative bloom style
	n	n	4	4	4	4	y	y	n	Outstanding hot pink blooms; one of the tallest plants; great show in late season
	n	n	3	3	3	3		y	n	Large flowers, yellow speckled foliage; needs deadheading
	n	n	4	4	4	4	y	y	n	Formal decorative style; petals fold back toward stem

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Common Name	Cultivar	Bloom color	max ht in	min ht in	flower size		June 8-15	June 16-23	June 24-30	July 1-7	July 8-15	July 16-23	July 24-31	Aug 1-7	Aug 8-15	Aug 16-23	Aug 24-31
					max in	min in											
Dahlia**	The Boss	dark pink	40	31	5½	4½							☼	☼	☼	☼	☼
Dianthus	Bouquet Rose Magic	rose, pink, white w/ dark pink markings	19½	6½	¾	¾		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Dianthus	Dynasty Orchid	deep purplish rose	23	7	1¼	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Dianthus	Ideal Violet	violet rose	14½	2½	1½	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Dianthus*	Magic Charms	red, white, pink	12	8½	2	1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Dianthus**	Snowfire	white w/ red centers	14	3	1¾	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Dianthus	Supra Purple	rose	14	6½	2½	1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Dianthus	Sweet Scarlet	scarlet	23	7	3½	¾			☼	☼	☼	☼	☼	☼	☼	☼	☼
Diascia	Diamonte Apricot	peach	11	2	¾	¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Diascia*	Diamonte Coral Rose	coral	16	8	¾	¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Dicranostigma		yellow	19	8	2	1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Dusty Miller	New Look		14	1													
Everlasting Pea**	White Pearl	white	24	12	¾	½									☼	☼	☼
Fennel Flower	African Bride	white petals, maroon anthers	21	11½	2	½			☼	☼	☼	☼	☼	☼	☼	☼	☼
Flowering Flax	Charmer Mixed	white, red, peach	22	6	1¼	¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Foxglove	Camelot Rose	deep rose	41	17	19x5	10x3							☼	☼	☼	☼	☼
Gaillardia	Razzledazzle Mixed Colors	deep red, gold tips	28	8	2½	¾		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Gaillardia	Sundance Bicolor	red and orange bicolor	20	10	2	1¼		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Gazania	Kontiki Stars & Stripes	orange, rose, cream, red striped	11½	5	3	1¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Gentian sage	Blue Angel	royal blue	36½	20	4½x3	3x2		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Geranium	Maverick Star	pink w/ rose centers	23	17	2¼	1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Geranium	Multibloom Capri	coral	17	8½	4¼	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼

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	frost tolerance		flower quantity	flower quality	foliage rating	overall rating	fragrance	cutting	drying	comments
	foliage	flowers								
	n	n	3	3	3	3	y	y	n	Huge blooms late in season; very nice display on medium-sized bush
	y	n	4	4	4	4	sl	y	y	Large balls of flowers on tall, upright stems; very colorful display especially with mix of flower colors in a single ball; needs deadheading late in season; attracts butterflies
	y	y	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 midseason for best display; excellent cut flower
	y	y	3	3	3	3	sl	y	y	All America Selections winner 1992; compact plants covered with lacy flowers nearly all season; very attractive display of electric solid colors
	n	n	4	4	4	4	n	y	y	Mounds of brilliant color nearly all season; excellent display for the fronts of borders; no maintenance; All America Selections winner 1974; very nice mix of colors
	y	y	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
	n	n	4	3	4	4	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 winner 2006
	n	n	3	4	4	3	sl	n	n	Large balls of scarlet on upright and some floppy stems; intense color; great display in hot summer; excellent cut flower
	y	y	3	3	3	3	n	y	n	Mounding, dense habit, can spread up to 18 inches when mature; excellent cover; jammed with blooms nearly all season
	y	y	2	2½	2	2½	n	n	n	First All America Selections 2006 Cool Season Bedding Plant Award winner; good coral color early in season, flower display is not nearly as attractive as Diamonte Apricot; few flowers in mid-August; needs deadheading
	n	n	1	1	1	1	n	n	n	Poor growth, few flowers, very ragged appearance; died out early; not at all showy
	y				4	4	n	y	y	Outstanding addition to dusty millers grown for their foliage; larger leaves than others; fills in well and forms a great carpet for edging; superb show long after last frost
	n	n	1	3	2	2	sl	y	n	Very poor growth this summer; did not produce large vines and only a few flowers; not good for trellises
			1	1	1	1	sl	n	n	Small plants overwhelmed by neighbors; died out in midseason; few flowers; not showy
	y	n	2	3	3	3	n	y	n	Tall, delicate stems topped with brilliant blooms; nice in mass plantings or as filler in borders
	y	y	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
	n	n	2	3	2	2½	n	y	y	Floppy stems; unkempt appearance; not a great display until very late in the season
	n	n	2	2	2	2	sl	y	y	All America Selections winner 2003; bushy, free flowering, masses of double bicolor blooms; not the most attractive display despite the masses of blooms
	n	n	3	3	3	3	y	n	n	Outstanding striped petals; filled in well and covered with bright blooms; very colorful display; closes up in evening
	n	n	4	4	4	4	y	y	n	Tall spikes top dark green foliage; blue flowers begin early and continue all summer; great background plant or accent, especially in warm summers; best show for this plant in three years
	n	n	3	3	4	3	sl	n	n	Nice bushy plants with plenty of bicolor pink flowers; heads appear ragged and needs a lot of deadheading for ornamental appeal
	n	n	3	3	3	3	sl	y	n	Excellent color on medium-sized flower heads; needs deadheading for best display especially in cool, wet seasons

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					max in	min in											
Gerbera*	Revolution Vanilla	creamy yellow	8	6½	3	2					☼	☼	☼	☼	☼	☼	☼
Godetia	Fruit Punch	rose, pink, white bicolors and solids	12	3	2	½			☼	☼	☼	☼	☼	☼	☼	☼	☼
Gypsophila	Gypsy	pink	8	1	¼	⅛	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Helenium	Goldfield	gold	20	6	1¼	¾			☼	☼	☼	☼	☼	☼	☼	☼	☼
Hibiscus*	Luna Rose	deep rose pink	17	14½	3½	1				☼	☼	☼	☼	☼	☼	☼	☼
Hollyhock	Indian Spring	pink, white, red	40	16	4	2	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Impatiens, Garden	Dazzler Burgundy	burgundy	9½	4	2	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Impatiens, Garden	Dazzler Violet Improved	lavender	7	2	1¾	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Impatiens, Garden	Fanciful Mix Stardust	rose, orange, red	13½	4½	2	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Impatiens, Garden	Fanciful White	white	13	2½	1¾	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Impatiens, Garden	Super Elfin XP Pink Deep	dark pink	8½	3½	2½	1¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Impatiens, Garden	Super Elfin XP Punch	cherry red	11	2½	2¼	¾	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Impatiens, Garden	Super Elfin XP Red	red	9½	2½	2	¾	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Impatiens, Garden	Super Elfin XP Star Cherry	cherry rose margin w/ white center star	8	2	1½	1¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Impatiens, Garden	Super Elfin XP Star Salmon	salmon edges w/ white center star	10	3	2	1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Impatiens, Garden	Super Elfin XP Violet	violet	13	4	1¾	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Impatiens, Garden	Xtreme Mixture	red, white, pink, lavender, magenta, orange-red	9½	3	2	1¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Impatiens, New Guinea	Divine Mix	lavender, rose	5	2	1½	1			☼	☼	☼	☼	☼	☼	☼	☼	☼
Jewels of Opar**	Limon	rose pink	23	7	7x4	1x3		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Juncus*	Javelin	green	49½	34													
Laurentia**	Avant-garde Blue	lavender	16	9	1½	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼

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frost tolerance		flower quantity	flower quality	foliage rating	overall rating	fragrance	cutting	drying	comments
foliage	flowers								
y	y	2	3	3	3	y	y	n	Poor display in ground beds; better in containers; plants and flowers are short and easily overgrown; outstanding flowers in containers
n	n	2	2	2	2	sl	y	n	Dwarf, compact, uniform plants with early blooms in a mostly pink colors; have grown better cultivars; short for cutting; needs deadheading late in season; more than half of plants died by midseason
n	n	4	4	3	4	n	n	n	Tiny mounds of baby flowers fill in bed well with color nearly all season; some plants died in midsummer; All America Selections winner 1997
n	n	3	3	2	3	sl	y	y	Bushy gold daisies; floppy, wiry stems; colorful display nearly all season
y	n	2	3	2	2	n	n	n	Dramatic hibiscus for containers with 6-8 inch diameter flowers; stems were very small and hidden by petunias in containers; effect was not showy because it was too short; perhaps older plants would grow well; flowers are huge!
n	n	4	4	4	4	sl	y	n	Very tall spikes with attractive blooms; a real crowd pleaser in the garden; huge blooms; excellent color mix in the garden; All America Selections winner 1939
n	n	2	2	2	2	n	n	n	Nice color; not as good as other burgundy cultivars; smaller flowers, not as floriferous as other impatiens
n	n	2	2	2	2	n	n	n	Rich, deep flower color; yellow foliage late in season; not as good as Super Elfin Violet, shorter and not as floriferous
n	n	4	4	4	4	n	n	n	Only rose with white centers; no other color; great tall mounds; very ornamental bicolor
n	n	3	3	3	3	n	n	n	Beautiful semidouble flowers; medium size; yellow foliage late in season; needs deadheading to remove brown, spent flowers
n	n	3	2	3	3	n	n	n	Huge blooms; clear color; very nice mounds of color
n	n	3	3	3	3	n	n	n	Medium-sized blooms with rich clear color; not as floriferous as other impatiens
n	n	3	2	2	2	n	n	n	Uneven height of plants; ragged appearance; medium flower size; not the best impatiens
n	n	3	2	3	3	n	n	n	Not as good as Fanciful Mix; nice color with star in centers; short plants
n	n	4	3	3	3	n	n	n	Very ornamental star pattern on petals; medium-sized blooms; fills in well and forms solid mats of blooms
n	n	3	2	3	2	n	n	n	Huge blooms, great clear color; fills in well and forms mat of solid blooms
n	n	3	2	2	2	n	n	n	Interesting mixture of colors; not as floriferous as other mixes; needs deadheading for best show
n	n	1	1	1	1	n	n	n	Huge flowers; needs close spacing for mass effect; did not spread, flowers were confined to top of single stems; not showy
n	n	1	2	2	1	n	y	y	Chartreuse foliage; nondescript tiny flowers overwhelmed by neighboring plants; not showy in garden beds
y	y	3	3	4	4	n	y	y	Tall, green background plant; recommended for winter interest with very tall, stiff straw-colored stems; expanded well beyond the edges of the container; people thought it was giant chives; definitely a visitor favorite
n	n	3	3	3	3	n	y	n	Bushy plant with tiny feathery leaves; covered with star-shaped lavender flowers all summer; excellent filler, especially with osteospermum

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					max in	min in											
Laurentia*	Avant-garde Blue	lavender	23½	15	2¼	1	✱	✿	✿	✿	✿	✿	✿	✿	✿		
Lavatera	Twins Hot Pink	pink w/ rose markings	18	8	2½	1½	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Linaria**	Enchantment	purplish red w/ yellow lip	13½	3	6x1½	½x½	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Love Grass**	Wind Dancer	green maturing to tan	36	26			✿	✿									
Lupine	Giant King Mix	lavender, white	24	10	6x1½	2½ x 1½	✱	✿	✿	✱	✿	✿	✿	✿	✿	✿	✿
Lupine	Tutti Frutti	pink, yellow, rose, purple	30	19	13x3	4x2				✱	✱	✿	✿	✿	✿	✿	✿
Marigold	Cottage Red	orange red w/ orange centers	38	5	2	½	✱	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Marigold, African	Capriccio	yellow, gold	34	17	4½	2¼				✱	✿	✿	✿	✿	✿	✿	✿
Marigold, African	Crackerjack Mixed	orange, gold, yellow	34	8	4½	1½			✱	✿	✿	✿	✿	✿	✿	✿	✿
Marigold, African	First Lady	orange, gold	18	7	4	1¼				✱	✿	✿	✿	✿	✿	✿	✿
Marigold, African	Orange Jubilee	orange	22	6	3¾	2			✿	✿	✿	✿	✿	✿	✿	✿	✿
Marigold, African	Simba	orange	31	17	3½	2½				✱	✿	✿	✿	✿	✿	✿	✿
Marigold, African	Vanilla	cream	19	12	3½	1½			✱	✿	✿	✿	✿	✿	✿	✿	✿
Marigold, French	Aurora Fire	orange w/ mahogany overtones, mahogany trimmed w/ orange	11	2	2¼	1¼	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Marigold, French	Aurora Light Yellow	lemon yellow	11	3	2½	1	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Marigold, French	Disco Granada	gold w/ red markings, gold center	10	2	2½	1	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Marigold, French	Little Hero Gold	gold	5½	1	1¼	1	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Marigold, French	Mars	mahogany w/ gold centers	12	4	2¼	1	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Marigold, French	Naughty Marietta	gold w/ mahogany blotch	21	5	2¼	1⅞	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿

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	frost tolerance		flower quantity	flower quality	foliage rating	overall rating	fragrance	cutting	drying	comments
	foliage	flowers								
	n	n	2	2	2	2	y	y	n	Billowy masses of star-shaped blooms; ferny foliage; fills in well in raised beds
	y	y	2	2	2	2	n	y	n	Many plants died early from disease; remaining plants with upright stalks loaded with flowers through late July; disease ruined the effect
	y	y	2	3	3	3	sl	y	n	Outstanding early season color on compact, upright, bushy plants; loaded with blooms; some die out by mid-August; appearance ratty if not deadheaded; attracts bees and bumblebees
	y	y	3	3	3	3	n	n	y	Upright, spreading, attractive feathery display; best in mass plantings in raised beds or containers
	y	y	2	2	2	2	n	y	n	Tiny spikes of flowers, not the best lupine for gardens; floppy; show is nice but not outstanding like Russell Hybrids; All America Selections winner 1933
	y	y	2	3	3	3	y	y	n	Vigorous, upright spikes great for the background; very nice mix of flower colors; especially attractive for late-season gardens; not as showy as other seasons
	n	n	4	4	4	4	y	y	y	Airy, billowy marigold that definitely needs lots of room; draped all over the bed and swallowed up neighbors; intense, orange-red masses of blooms covered the plant, provided quite a display; very ornamental
	n	n	4	4	4	4	y	y	y	Probably the largest double-flowered African marigold we have ever grown; huge blooms in gold and deep orange cover plant; interesting fluted edges, outstanding display well worth testing in the back of borders
	n	n	3	3	3	3	y	y	y	Big, rounded flower heads with frilly petals; very showy and bright; some deadheading needed late in season; more open habit than other African marigolds
	n	n	4	4	4	4	y	y	y	Large balls of flowers cover the tall somewhat floppy stems; orange flowers taller by at least 6 inches over the gold, thus not an attractive mix; All America Selections winner 1968; needs deadheading late in the season; old flowers turn brown
	n	n	3	3	4	3	n	y	y	Very nice tall marigold with large ball flowers; needs lots of deadheading; All America Selections winner 1968
	n	n	3	3	3	3	y	y	y	Looks like small football mums with incurved wrinkled petals; not as floriferous as other marigolds but unique blooms
	n	n	2	3	4	3	y	y	y	Replacement for Sweet Cream; fully double heads; supposed to avoid turning brown longer than Sweet Cream; needs deadheading late in season
	n	n	3	3	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
	n	n	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
	n	n	4	4	4	4	sl	n	y	An extra dwarf selection of single-petaled marigolds in gold and red; blooms early and all season until frost; excellent show; no maintenance required
	n	n	2	3	3	2½	y	n	y	Extra dwarf cultivar; not as floriferous as other marigolds, lots of open space between plants; needs deadheading especially in cool, wet weather
	n	n	4	4	4	4	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; maintenance free
	n	n	4	4	4	4	sl	y	y	All America Selections winner 1947; billowy mounds of single-petaled flowers with striking deep mahogany pattern in the centers of the blooms; needs lots of room to expand; one of the best medium-height marigolds

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					max in	min in											
Marigold, French	Queen Sophia	orange w/ mahogany markings	14	3	2½	1	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Marigold, Signet	Starfire	orange, gold, red, yellow	21	3	1½	¼		*	✿	✿	✿	✿	✿	✿	✿	✿	✿
Mexican hat	Red Midget	mahogany w/ yellow edges, green cone center	31	8	2x1½	1x1½	*	*	✿	✿	✿	✿	✿	✿	✿	✿	✿
Morning Glory**	Milky Way	white w/ purple stripes	96+		2¾	1	*	*	✿	✿	✿	✿	✿	✿	✿	✿	✿
Nasturtium**	Black Velvet	deep red	13½	9	2	1	*	*	✿	✿	✿	✿	✿	✿	✿	✿	✿
Nasturtium**	Golden Gleam	gold	23	4	2½	1½	*	*	✿	✿	✿	✿	✿	✿	✿	✿	✿
Nasturtium**	Princess of India	dark orange	10½	4	2	1		*	✿	✿	✿	✿	✿	✿	✿	✿	✿
Nasturtium**	Scarlet Gleam	orange	24	2	3½	2	*	*	*	*	✿	✿	✿	✿	✿	✿	✿
Nasturtium**	St. Clements	gold	13	2	2¼	1½	*	*	✿	✿	✿	✿	✿	✿	✿	✿	✿
Nasturtium**	Tall Climbing Single Mix	red, gold, yellow, mahogany, orange	22½	1	2	1	*	*	✿	✿	✿	✿	✿	✿	✿	✿	✿
Nasturtium**	Whirlybird Mahogany	burnt orange w/ yellow centers	17	2	2½	1	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Nemesia	Poetry White	white w/ yellow lip	14	2½	1¼	¼	*	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Nicotiana	Marshmallow	rose, pink, white	48	13	1½	1							*	✿	✿	✿	✿
Nicotiana	Perfect Mix	white, rose, pink	37	14	4½x6	1x3	*	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Nicotiana	Perfume Deep Purple	dark purple	22½	9	5x3	3x3	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Nicotiana, Garden	Nicki Red	red	28	11	11x6	8x5	*	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Nicotiana, Hybrid	Tinkerbelle	dusky rose/ green	18	11	10x2	2x1½		*	✿	✿	✿	✿	✿	✿	✿	✿	✿
Nierembergia	Purple Robe	lavender	10½	5	1	¼	*	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Nierembergia	Robe Mixed	lavender, white	12	1½	1	½	*	*	*	*	✿	✿	✿	✿	✿	✿	✿
Nierembergia	White Rose	white	14	1	1	½	*	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿

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	frost tolerance		flower quantity	flower quality	foliage rating	overall rating	fragrance	cutting	drying	comments
	foliage	flowers								
	n	n	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
	n	n	4	4	4	4	y	y	y	Outstanding mounds of starry flowers pack this plant, produce a solid display of color; excellent in mass plantings at the edges of garden beds; some plants dead by mid-August
	y	y	3	4	3	3	sl	y	n	Tall, open, floppy stems topped with unusual flowers with large upright central cone, petals reflexed beneath the cone; great cut flower; advertised with black centers but ours were green; more foliage than flowers; sparse
	n	n	3	3	3	3	n	n	n	Vigorous, thick vine covered with blooms; very attractive display all summer; grew rapidly and covered the trellis by midsummer
	n	n	3	3	2	3	y	y	n	Abundant deep mahogany blooms; very striking and unusual; many flowers hidden beneath foliage; one orange-flowered plant
	n	n	3	3	2	3	n	y	n	Large blooms; excellent show; light green foliage; fills in well
	n	n	2	2	4	3	n	y	n	Tiny foliage, smaller mounded plants than other nasturtiums; abundant flowers, showy; needs closer spacing to fill in well
	n	n	3	3	3	3	n	y	n	Huge flowers, excellent spread; very nice show of flowers above the foliage
	n	n	4	4	3	3	n	y	n	Mostly double flowers; yellowish foliage; not many blooms; appears sick late in the season
	n	n	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
	n	n	4	4	4	4	y	n	n	Spurless bloom; huge flowers; very attractive color contrasts well with foliage
	y	y	2	2	2	2	n	n	n	Bushy plants covered with tiny white blooms; excellent for garden borders and mixed containers; attractive display in mass plantings nearly all season; some die out in mid-August
	n	n	3	3	3	3	y	y	n	Tall annual for the back of borders; sprawling branches covered with flowers and buds need lots of room; flower stalks have a mixture of rose, pink, and white blooms; catches your eye because of its size; has an open, airy flowering habit; striking
	n	n	3	2	3	2	y	y	n	Bushy plant with floppy stems, needs room to spread; great show through most of season; old flowers are ugly; needs significant deadheading
	n	n	4	3	3	3	y	y	n	Tall nicotiana with very unusual purple blooms; outstanding as background plant in borders; delicate fragrance in evening; All American Selections Bedding Plant Award winner 2006; works well in beds with purple-leaved chokecherries
	n	n	4	4	4	4	y	y	n	Outstanding solid mass of color nearly all season; amazing display of same-height blooms; no maintenance required; a visitor favorite; All America Selections winner 1979
	n	n	4	4	4	4	sl	y	n	Tiny clusters of trumpet-shaped flowers with green outer petals and rosy pink insides and bright blue stamens; very unusual color combination; loaded with blooms on tall, airy stalks; visitors either liked them very much or hated them; attracts bees
	n	n	1	1	3	2	n	n	n	Short bushy flowers covered with blooms nearly all summer; a bit sparse late in season; fills in well and provides a great show for the edges of borders; a few dead plants in mid-August; All America Selections winner 1942
	y	n	3	3	2	2	n	n	n	Small mounds loaded with blooms for most of the summer; some plants dry up in mid-August; excellent edging for front of borders
	y	y	3	3	2	2½	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

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					max in	min in											
Nolana*	Sun Belle Mixed Colors	blue	10	7	1½	¾	*	*	*	*	☼	☼	☼	☼	☼	☼	☼
Ornamental Cabbage	Northern Lights		19	13	27	16											
Osteospermum*	Asti White	white w/ blue centers	15	10½	2¼	¾		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
20 Pansy	Acquarelle	yellow, rose, white, some clearfaced	14	5		½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Chalon Supreme Mix	cream, lavender, yellow, mahogany w/ dark face	14½	3½	2¼	¾	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Fraidy Cat	light blue and black	17½	7	3	2½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Frizzle Sizzle Blue	lavender w/ deep purple face	15	4	1¾	¾	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Frizzle Sizzle Formula Mix	yellow, rose, purple, cream w/ mahogany face					☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	
Pansy	Frizzle Sizzle Yellow	yellow w/mahogany face, lavender highlights	6½	2	1½	6½	☼	☼	☼	☼		*	☼	☼	☼		
Pansy	Frosty Rain	lavender and cream	15½	6	1½	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Jolly Joker	orange w/ deep purple wings	14	7	2	1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Majestic Giants Mix	lavender, purple, red/yellow bicolor, rose, scarlet, white, yellow w/ dark face	12½	3	2½	1¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Matrix Blue Frost	lavender or purple w/ purple face	12½	3	3	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Matrix Deep Blue Blotch	deep lavender	10	4½	2½	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Matrix Ocean	lavender w/ deep purple face	14	4	2	¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Matrix Red Blotch	deep red w/ mahogany face	9	1	1½	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Matrix Rose Blotch	rose w/ maroon face	14	2	2½	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Matrix White Blotch	white w/ maroon face	12	4	2½	1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼

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	frost tolerance		flower quantity	flower quality	foliage rating	overall rating	fragrance	cutting	drying	comments
	foliage	flowers								
	n	n	1	3	1	1	n	n	n	Attractive blue flowers but entire plant is small and overwhelmed in mixed containers; only one or two blooms open on a stem at one time; not worth growing
	y				2	2		n	n	Foliage with pink or white markings; color developed very late in season and was only showy in mid-September
	y	n	3	3	3	3	n	y	y	The first white color single flower color osteospermum from seed; thick fleshy foliage; All America Selections Bedding Plant Award winner 2008; very attractive blooms nearly all summer
	y	y	2	2	3	2	y	y	y	Another combination of mostly pastel pansies; nothing special about this one; uneven mixture of colors, i.e. one brilliant yellow plant in midst of mostly lavenders; some with frilly edges
	y	y	3	3	3	3	n	y	y	Old-fashioned mix with frilly edges on petals; very nice effect; plants are compact and do not fill in as well as other pansies; need close spacing; interesting mix of colors
	y	y	3	2	3	2		y	y	Nice individual plants but color mix is very unattractive; too much contrast between nearly black and light colors; appearance in mix is blotchy
	y	y	3	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 and holds up all season
	y	y	2	3	2	2	sl	y	y	Ruffled petals; small plants don't fill in as well as other pansies; poor show this year; tiny, ragged plants
	y	y	3	3	3	3	n	y	y	Old-fashioned ruffled petals; fills in well, better than Chalon Mix; needs deadheading late in season; small flower size
	y	y	4	4	4	4	n	y	y	Outstanding mounds of solid cream and cream/lavender bicolors; excellent blooms all summer; mounds grow all summer and overrun neighbors
	y	y	4	4	4	4	y	y	y	Nice mounding plant covered with blooms; variation in flower color from pale orange to deep orange with purple highlights did not occur in earlier years; All America Selections winner 1990
	y	y	3	3	3	3	n	y	y	All America Selections winner 1966; large flowers with contrasting dark face; very attractive display all season; needs some deadheading late in the season
	y	y	4	3	4	3	n	y	y	Advertised as cream with lavender face but most flowers lavender and purple with purple face; nice large flowers; abundant blooms; little maintenance
	y	y	3	3	3	3	sl	y	y	Tiny flowers but abundant; attractive solid color on mounding plants; excellent display all season; needs some deadheading
	y	y	4	3	3	3	sl	y	y	Advertised as all lavender but had several cream flowers with purple face; nice-sized blooms cover the plants well; very attractive; needs deadheading
	y	y	4	3	3	3	sl	y	y	Very nice, uniform color; rich, dark blooms cover the small mounding plants; needs close spacing for best results
	y	y	3	3	3	3	n	y	y	Outstanding bicolor combination; not as full and bushy as some pansies, but very attractive; little deadheading needed
	y	y	4	3	3	3	n	y	y	Short, upright plants do not fill in as well as other pansies; lots of bare spaces between plants; ragged blooms in late season; needs deadheading

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					max in	min in											
Pansy	Matrix Yellow	clear yellow, orange-yellow bicolor	14	4	2¾	1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Panola Rose Picotee	rose or lavender w/ purple and yellow face	11	4½	1¾	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Promise Antique Shades	rose, yellow bicolors w/ purple face	13½	5		1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Promise Beaconsfield	cream, deep bluish purple	15	2	2½	1¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Promise Blue Blotch	deep lavender w/ purple face	15	4	2½	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Promise Deep Orange	orange	11	4	2	1¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Promise Lemon Splash	yellow w/ orange-yellow face	9	4	2	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Promise Marina	lavender w/ white-edged deep purple face	11½	3	2¼	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Promise Primrose Blotch	yellow w/ mahogany face	13	6	2¼	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Promise Pure Lilac Shades	lavender w/ dark lavender face	14	4	2½	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Promise Pure Silver Azure	clear lavender	17	4	4	2	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Promise Pure Yellow	yellow or gold w/ mahogany face	14	4	2½	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy**	Promise Red Blotch	dark red w/ mahogany face, yellow center	12½	2	2¾	1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Promise Rose Shades	rose w/ maroon face	12	1	2¼	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Promise True Blue	bluish lavender	12½	2	2	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Promise White Blotch	white w/purple face	14	2	2¼	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy**	Promise Yellow Blotch	yellow, mahogany face	12	4	2¼	1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Promise Yellow Purple Wing	yellow w/ mahogany wing and face	10¾	5½	2¼	1¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Promise Yellow Red Wing	yellow w/ mahogany wings and face	13¼	5½	2¾	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼

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

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

frost tolerance		flower quantity	flower quality	foliage rating	overall rating	fragrance	cutting	drying	comments
foliage	flowers								
y	y	4	4	4	4	n	y	y	Interesting two-toned petals; fills in well; covered with flowers nearly all season
y	y	3	3	3	3	n	y	y	Short, bushy growth covered with blooms all summer; attractive display and no maintenance needed; very nice color; contrasts well with other maroon plants
y	y	3	3	3	3	n	y	y	Ragged appearance; needs a lot of deadheading for best results; different colors have different heights leading to ragged appearance
y	y	2	3	2	3	y	y	y	Interesting bicolor flowers with cream on top and deep bluish purple on bottom; lots of scarring on petals from cold, wet weather
y	y	3	3	3	3	sl	y	y	Variable colors; some with creamy petals, most are uniform purple; very nice contrasting shades of purple; abundant mounding plants; excellent color all season
y	y	2	2	2	2	sl	y	y	Very nice solid color pansy with mounds of color nearly all season; needs deadheading for best results; not the biggest orange-flowered pansy, but does well in containers
y	y	3	3	3	3	sl	y	y	Mostly pale yellow but some plants brilliant gold; nice carpet of flowers nearly all summer; needs deadheading in late summer; splotched and streaked petals in cold, rainy weather
y	y	3	3	3	3	n	y	y	Very nice compact growth that fills in the bed early; flowers are ragged; ugly in cool wet weather; needs more deadheading than other pansies
y	y	3	2	2	2	sl	y	y	Very nice yellow color; uniform plants; not as floriferous as other pansies; excellent contrasting colors; mounds of color all season
y	y	4	4	4	4	n	y	y	Beautiful assortment of lavender shades; large and abundant flowers; very attractive overall display; beautiful purple whiskers on most flowers
y	y	4	3	4	3	sl	y	y	Large flowers, may be hardy in some areas; nice mounds of flowers, but ragged appearance late in the season; needs deadheading
y	y	4	4	4	4	n	y	y	Great mounds of color nearly all season; brilliant yellow contrasts well with dark centers; fills in well; very little maintenance needed
y	y	4	3	3	3	n	y	y	Rich red velvety color; small plants need closer spacing to fill in well; very nice uniform color and size of plants
y	y	3	4	4	4	y	y	y	Excellent contrasting color; fills in well; very ornamental; no deadheading needed
y	y	3	3	3	3	n	y	y	Uniform large blooms with the bluest color of all the mixes; abundant blooms; fills in well; lots of deadheading needed late in season
y	y	2	2	2	2	y	y	y	Excellent early in season but ragged and open late due to massive deadheading; splotchy flowers in cool rainy season; very attractive color
y	y	3	3	3	3	n	y	y	Very nice clear face with striking mahogany face; brilliant show with mounds of flowers; best of the yellow/face pansies this year
y	y	4	4	4	4	n	y	y	Unusual combination of colors was either liked or hated by visitors; hard to combine with other flowers
y	y	4	4	4	4	n	y	y	Bright yellow contrasts well with mahogany face; fills in well and covered with blooms; interesting mahogany highlights

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Table 3. Results of tested annual flower cultivars for 2007.

Common Name	Cultivar	Bloom color	max ht in	min ht in	flower size		June 8-15	June 16-23	June 24-30	July 1-7	July 8-15	July 16-23	July 24-31	Aug 1-7	Aug 8-15	Aug 16-23	Aug 24-31
					max in	min in											
Pansy	Swiss Giant Pure Orange	orange	18	4	1½	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Swiss Giant Violet Blue	deep violet	19	3	2¾	1¾	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	Universal Plus Primrose	light yellow	14	5	2	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
24 Pansy	Whiskers Light Blue	pale lavender, cream face w/ dark "whiskers"	13	5	2¼	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pansy	XXL Golden Yellow	yellow w/ gold highlights	12	2½	2¼	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Penstemon	Esprit Mix	pink, rose, red w/ white throats	36	20	15x3	1¾x1¼			☼	☼	☼	☼	☼	☼	☼	☼	☼
Pentas*	Butterfly Lavender Shades	lavender	11½	8½	3	1			☼	☼	☼	☼	☼	☼	☼	☼	☼
Pentas*	Butterfly Pink	pink	11	4¼	3½	2											
Pepper, Ornamental**	Black Pearl	black foliage and fruit	19	14	¾	¼					☼	☼	☼	☼	☼	☼	☼
Pepper, Ornamental	Chilly Chili	white	12	9	3	1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pepper, Ornamental	Garda Tricolore	cream, orange, red fruit	22	16					☼	☼	☼	☼	☼	☼	☼	☼	☼
Pepper, Ornamental	Peppa Blanca/Rosu	cream, rose fruit	11	8	1	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pepper, Ornamental	Peppa Lila/Naranja	orange, red fruit	12	8	1	1/8			☼	☼	☼	☼	☼	☼	☼	☼	☼
Pepper, Ornamental	Peppa Orangina	orange fruit	8½	5	2	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Pepper, Ornamental	Peppa Pepperoni	red, cream, orange fruit	11	10	3¾	¾	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Petunia	Alderman		11	6	2	1¼	☼	☼	☼	☼	☼	☼	☼	☼	☼		
Petunia	Baby Duck Yellow	soft yellow	16	3	1½	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Petunia**	Carpet Pink Improved	pink	12½	2	2½	1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Petunia	Carpet Pink Morn	pink w/ creamy throat	7	2	2½	2	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Petunia	Carpet Pink Morn	pink w/ creamy throat	9½	5½	1½	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Petunia	Dreams Rose Morn	rose w/ white centers and yellow throat	16	5	3¼	2¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼

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	frost tolerance		flower quantity	flower quality	foliage rating	overall rating	fragrance	cutting	drying	comments
	foliage	flowers								
	y	y	3	3	2	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
	y	y	4	4	4	4	y	y	y	Outstanding velvety petals invite touching; not as floriferous as other pansies; medium-sized blooms, needs deadheading
	y	y	3	3	3	3	n	y	y	Excellent mounding plants with creamy, light colors; some flowers tinged with lavender
	y	y	3	3	3	3	sl	y	y	Beautiful flowers appear to be painted with dark whiskers; nice mounding plant; very attractive blooms; needs deadheading late in season
	y	y	2	2	2	2	y	y	y	Medium-sized mounding plants covered with solid color blooms; very attractive; needs deadheading in late season especially in wet weather; petals prone to spotting and discoloration
	y	n	3	3	3	3	sl	y	n	Outstanding spikes of large, showy flowers; similar display to foxgloves but shorter; excellent mix of colors; best display from midseason onward
	n	n	2	2	2	2	n	n	n	Best growth in containers; short stems overwhelmed by taller plants; beautiful clusters of flowers
	n	n	3	3	2	3	n	n	n	Short plants with large clusters of star-shaped flowers; grows well only in containers or raised beds
	n	n	3	3	3	3	n	n	y	Nearly black purplish leaves in full sun; small, shiny black peppers; ripe fruits are red; very ornamental, great in raised beds; most fruit remain black
	n	n	4	4	4	4	n	n	fruit	Medium-sized bushy plants loaded with yellow and orange oblong fruit many with flower parts stuck to the ends, not very attractive; needs close spacing in ground beds
	y	n	1	1	1	1	n	y	n	Bloomed in late August; no fruit; bushy but not ornamental
	n	n	3	3	2	3	n	n	y	Short, rounded plant loaded with blooms, and oblong or oval fruit late in season; fruit is creamy yellow with purple streaks; better in containers than ground beds; poor growth this season in ground beds; lots of dead plants
	n	n	4	4	4	4	n	n	fruit	Short, oblong fruit late in season; flowers are not ornamental
	n	n	3	3	2	2	n	n	fruit	Upright tree-like plant covered with tiny blooms and round berry-like fruit; ornamental appeal very late in the season; fills in well, bushy; better than other peppers in ground beds
	n	n	4	4	4	4	n	n	y	Sparse foliage, lots of oblong fruit; pot and patio ornamental pepper; looks like a Medusa head full of pepper fruits; does not fill in well; needs close spacing
	n	n	1	1	1	1	y	n	n	Dead by midseason; very susceptible to <i>Sclerotinia</i> rot
	y	n	1	1	1	1	y	n	n	Small, trumpet-shaped blooms; slightly upright spreading habit; killed by mid-August by <i>Sclerotinia</i> rot
	y	n	1	1	1	1	y	n	n	Compact shape; mid-sized blooms; excellent branching; severe <i>Sclerotinia</i> rot in mid-August
	y	n	1	1	1	1	y	n	n	Beautiful carpets of blooms through the first part of the season; killed by <i>Sclerotinia</i> rot in mid-August
	y	n	2	2	2	2		n	n	Beautiful carpets of blooms through the first part of the season; killed by <i>Sclerotinia</i> rot in mid-August
	y	n	1	2	1	1		n	n	Tightly branched, free-flowering; very nice bicolor early in season, killed by <i>Sclerotinia</i> rot in mid-August

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					max in	min in											
Petunia*	Easy Wave Coral Reef	salmon pink	15	4	3	2	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia	Easy Wave Mystic Pink	pink, white	16	3	3	2¼	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia	Fantasy Pink Morn	pink w/ cream center	12	7	2¾	1½	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia	Frillytunia White	white	13	2	2½	½	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia	Madness Lavender Glow	rosy lavender w/ lighter centers	15	3	2¼	1	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia	Madness Red Improved	deep red	13	5	2½	1	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia	Madness Red Morn	red w/ white throat	11	2	2½	2	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia	Madness Red Picotee	deep red w/ white edges	14	5	2	¾	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia	Madness Rose Morn	rose w/ cream centers	19	2	3	1	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia	Madness Salmon Morn	salmon	13	5	2	1	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia	Opera Supreme Pink Morn	pink w/ cream throat	11	2	1¼	1	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia	Prism Sunshine	light yellow	15	7	2½	1½	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia	Shock Wave Ivory	cream w/ soft yellow throat	9	2	1½	¾	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia	Shock Wave Pink Vein	light pink w/ violet rose throat and veins	13	2	2	½	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia	Shock Wave Purple	purple w/ deep purple throat	9	3	1¼	½	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia	Shock Wave Rose	rose w/ white throat	13	2	1¾	¾	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Petunia	Ultra Crimson Star	crimson w/ white stripes	12	3	2¼	1¼	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Phlox, Annual	Promise Scarlet	scarlet	13	3	2¼	½	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Poppy, Horned	Burnt Orange																
Poppy, Mexican Tulip	Sunlite	yellow	17	4	2½	2	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Portulaca	Margarita Coral	light orange	7	2	1½	1/8	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿

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	frost tolerance		flower quantity	flower quality	foliage rating	overall rating	fragrance	cutting	drying	comments
	foliage	flowers								
	y	y	4	4	3	3½	sl	n	n	Solid coral color with lighter pink throat; fair growth in containers; not as full and floriferous as other petunias, ragged appearance late in the season; needs deadheading
	y	n	3	3	3	3	y	n	n	Soft to medium pink and white flower; some <i>Sclerotinia</i> rot damage in mid-August; needs deadheading
	y	n	3	3	3	3	y	n	n	Fill in well and are covered with light pink flowers; blooms all summer; very attractive display
	y	y	1	1	1	1	n	n	n	Huge blooms, not as heavily fringed as other petunias in the "Frillytunia" series; disappointing; needs deadheading late in season; dead by mid-August from <i>Sclerotinia</i> rot
	y	y	1	1	1	1	n	n	n	Good early season display; many plants died from <i>Sclerotinia</i> rot; needs deadheading
	y	n	3	3	1	1	sl	n	n	Nice deep red, rich color; great show early, but died in mid-August by <i>Sclerotinia</i> rot
	n	n	2	2	2	2	n	n	n	Nice carpet of bright red blooms; excellent cover in early summer; killed by <i>Sclerotinia</i> rot in late August; also recommended for containers
	y	n	2	3	1	1	sl	n	n	Very attractive early but dead from <i>Sclerotinia</i> rot by mid-August.
	y	y	3	3	3	3	sl	n	n	Excellent display early in the season, susceptible to <i>Sclerotinia</i> rot; many plants died early; nice two-toned flower color
	y	y	2	2	2	2	y	n	n	Nice two-toned flowers; some <i>Sclerotinia</i> rot late in season; needs deadheading; very ragged and sparse by mid-August
	y	y	1	2	2	2	y	n	n	Low-growing carpet that spreads and fills in nicely with medium-sized trumpet flowers; dead in late July from <i>Sclerotinia</i> rot
	y	y	1	1	1	1	y	n	n	Excellent display of creamy yellow blooms early in season; killed by <i>Sclerotinia</i> rot by midseason; All America Selections winner 1998
	n	n	2	2	2	2	y	n	n	Mounded spreading plants; tiny flowers; killed by <i>Sclerotinia</i> rot in midseason
	y	n	1	1	1	1	sl	n	n	Recommended for containers; mounded spreading plants; small flowered plants; killed by <i>Sclerotinia</i> rot in mid-August
	n	n	1	1	1	1	n	n	n	Recommended for containers; mounded spreading plants; small-flowered; dead from <i>Sclerotinia</i> rot by mid-August
	y	n	2	2	2	2		n	n	Recommended for containers; mounded spreading plants; small flowered; severe damage from <i>Sclerotinia</i> rot in mid-August
	y	n	1	2	2	2	sl	n	n	Ruffled petals; attractive star pattern; bloomed well through mid-August; killed by <i>Sclerotinia</i> rot
	y	n	4	4	3	4	n	y	n	Double and semidouble flowers; loaded with blooms; fills in well; great carpet for the front of borders; needs some deadheading late in season
						0				Seeded twice but no germination; not planted
	y	y	1	3	3	2½	sl	y	n	Large lemon-yellow tulip-like flowers; attractive but not abundant blooms nearly all summer; interesting pale green feathery foliage; plant in mass plantings for best effect
	n	n	4	4	4	4	n	n	n	Tiny bunches of flowers; normally does not do well in ground beds but growth was superb in this warm summer; loaded with blooms in late season and spread well

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					max in	min in											
Rudbeckia	Cordoba	mahogany w/ gold tips	15	6	3½	2	*	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Rudbeckia	Goldsturm	yellow w/ chocolate centers															
Rudbeckia	Hot Chocolate	mahogany w/ orange tips, brown centers	20	4½	3½	1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Rudbeckia	Maya	gold	16	5	4	1¼		*	☼	☼	☼	☼	☼	☼	☼	☼	☼
Safflower	Quadricolor						*										
Salvia, Mealy-cup	Evolution	violet	28	12	8x1½	1x½	*	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Salvia, Scarlet	Lighthouse FSN	scarlet	25	19	6x2½	1x2					*	☼	☼	☼	☼	☼	☼
Salvia, Scarlet	Red Hot Mama	red	25	19	8x2½	2½x1				*	*	☼	☼	☼	☼	☼	☼
Salvia, Scarlet	Red Hot Sally II	red	12	6	5x3	1x1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Salvia, Scarlet	Saluti Deep Red	red	12	9	5x3	1½x1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Salvia, Scarlet	Saluti Formula Mix	red, salmon	16	7	11x2	3x1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Salvia, Scarlet	Saluti Lilac	lavender	14	3	6x3½	2x1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Salvia, Scarlet	Saluti Red	scarlet	19	6	6x2	1½x1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Salvia, Scarlet	Saluti Salmon/Pink	salmon pink	14¼	6	6½x2	1¼x¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Salvia, Scarlet**	Saluti Scarlet/White	red and white bicolor	14	6	6x4	2x3	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Salvia, Scarlet	Saluti White	white	13	9	6½x1½	3½x1¼	☼	☼	*	☼	☼	☼	☼	☼	☼	☼	☼
Salvia, Scarlet	Vista Rose	rose	12	4	4½x2	2x1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Scarlet Runner Bean**	Scarlet Emperor	scarlet	96+		2½	1					*	☼	☼	☼	☼	☼	☼
Scarlet Runner Bean**	Painted Lady	scarlet and white bicolor	96+		2½	1½					*	☼	☼	☼	☼	☼	☼
Shasta Daisy	Amelia	white w/ yellow centers	34	20	4¾	2					*	☼	☼	☼	☼	☼	☼
Shasta Daisy	Giant Marconi Double	white w/ yellow centers	44	4	4½	2¾						*	☼	☼	☼	☼	☼

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	frost tolerance		flower quantity	flower quality	foliage rating	overall rating	fragrance	cutting	drying	comments
	foliage	flowers								
	y	y	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
	n	n	1	1	2	1	n	y	y	Bloomed in 2006 but not in the hotter 2007 season
	y	n	3	3	3	3	n	y	y	Very nice mostly rich mahogany flowers tipped with dark orange; abundant blooms on medium sized mounds; some deadheading late in season
	n	n	3	3	3	3	y	y	y	Excellent dwarf rudbeckia with wonderful double and semidouble flowers; Fleuroselect Gold Medal winner; very showy
	n	n	1	1	1	1	n	y	y	Direct seeded in mid-June; few seeds germinated, none matured to produce flowers; previously, grown from transplants; tiny, scraggly stems died out early
	y	y	4	4	4	4	sl	y	y	First violet colored mealy cup salvia; shorter spikes than Victoria, but distinct color is attractive and vibrant; outstanding as background plant; bushy
	n	n	1	2	2	2	y	y	n	Very tall, bushy plant; short flower clusters; not the most attractive salvia in the garden
	n	n	4	4	4	4	n	y	n	One of the tallest scarlet salvias we have grown; flowering is better in warm summers; sparse color this year; mostly green mounds
	n	n	3	3	4	3	n	y	n	Original in this series introduced 25 yrs ago, a garden favorite; mounding plant; dark green foliage and striking red spikes; some die-out by mid-August; deadheading require to maintain ornamental appeal
	n	n	3	3	3	3	n	y	n	Rich red color, very attractive early; needs deadheading in late season
	n	n	3	2	3	2½	n	n	n	Only red, salmon colors this year; others died early
	n	n	2	2	3	2	n	y	n	Very nice spikes of lavender color; held up well all summer; needs a little deadheading especially late in season
	n	n	3	3	3	3	n	y	n	Tall spikes of brilliant color; not as good as Red Hot Mama this season; some deadheading needed; branches well and fills in with color
	n	n	3	3	3	3	n	n	n	Bushy plants, good color all season; interesting two-toned blooms; needs deadheading late in season
	n	n	1	1	1	1	n	n	n	Small flowers, not as showy as other salvias; yellow-spotted foliage
	n	n	1	1	1	1	sl	n	n	Medium-sized spikes produce an okay show through midseason; flowers turn brown; significant deadheading needed; by season's end, lots of plants died out, others looked ragged
	n	n	2	2	2	2	n	n	n	Not as floriferous as other salvias; needs close spacing; nice deep rose color; needs deadheading in midseason
	n	n	4	4	4	4	n	y	n	Robust vine, huge beans; excellent climber and fills in well; thick, bushy vines with abundant scarlet blooms
	n	n	4	4	4	4	n	y	n	Very attractive blooms with beautiful contrasting color; great alternative to scarlet runner beans; vigorous vine, fills in well; huge beans
	y	y	3	3	3	3	n	y	y	Huge blooms and floppy stems; more delicate plant than Giant Marconi but the same huge flowers
	y	y	3	3	3	3	n	y	y	Huge blooms on upright stems; very uniform linear petals; great for cutting; abundant blooms; needs lots of room for floppy stems

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Table 3. Results of tested annual flower cultivars for 2007.

Common Name	Cultivar	Bloom color	max ht in	min ht in	flower size		June 8-15	June 16-23	June 24-30	July 1-7	July 8-15	July 16-23	July 24-31	Aug 1-7	Aug 8-15	Aug 16-23	Aug 24-31
					max in	min in											
Shasta Daisy	Snow Lady	white, yellow centers	12	6	4	1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Shoo Fly Plant**	Splash of Cream	blue	47	38	1	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Slipper Flower		yellow	22	7½	1x2	1¼x½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Snapdragon	Costa Mix	burgundy, rose, light pink, lavender, white	28½	8	9x3	3x2½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Snapdragon	Liberty Classic Mixture	orange, cherry, red, lavender, pink, rose, scarlet, white, yellow	26	7	5x2½	3x2	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Snapdragon	Rocket Rose	light rose	24	2	1½x3	1¾x1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Snapdragon	Scarlet Giant	red	29	15	10 x 3	4x1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Snapdragon	Snapshot Rose	rose	14	2	4x3	1½x2	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Snapdragon	Snapshot White	white w/ yellow throat	8½	4	2½x2½	1¼x1¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Snapdragon**	Snapshot Yellow	yellow	9½	1½	9x3	1x1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Snapdragon	Speedy Sonnet Rose	rose	18	6	5x3	2x1¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Snapdragon	Speedy Sonnet White	white	17	9½	4x2½	2x2	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Spanish Lavender	Fragerant Butterflies	violet/lavender, purple	14	6	1/8x¼	1/8x¼	☼							☼	☼	☼	☼
Statice	QIS Mixture	pink, white, lavender, yellow	37	17	3½	¾				☼	☼	☼	☼	☼	☼	☼	☼
Sunflower**	American Giants Hybrid	yellow w/ brown centers	72	55	14	10								☼	☼	☼	☼
Sunflower**	Bicentenary	mahogany w/ gold tips, brown centers	57	24	8½	4½						☼	☼	☼	☼	☼	☼
Sunflower	Key Lime Pie	creamy yellow w/ green centers	58	23	4½	2½			☼	☼	☼	☼	☼	☼	☼	☼	☼
Sunflower	Peach Passion	light orange-yellow	40	17	2	1			☼	☼	☼	☼	☼	☼	☼	☼	☼
Sunflower**	Pro Cut Yellow Lite	yellow w/ greenish centers	51	40	5½	3½				☼	☼	☼	☼	☼	☼	☼	☼
Sunflower**	Soraya	gold w/ brown centers	80	48	7	3				☼	☼	☼	☼	☼	☼	☼	☼

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	frost tolerance		flower quantity	flower quality	foliage rating	overall rating	fragrance	cutting	drying	comments
	foliage	flowers								
	y	n	2	3	3	3	n	y	y	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
	n	n	3	3	3	3	n	n	y	This cultivar with variegated leaves is not as vigorous as the green type; appears sickly and does not grow to the stature of the species
	n	n	4	4	4	4	n	y	n	Interesting, tiny "pocket books;" tall, bushy plants; flowers are not showy, but would be a great filler; needs deadheading late in season
	y	n	2	2	2	2		y	n	Strong stems for cutting; very nice color combination but blooms finished by mid-August; rocket mixes are better
	y	y	1½	3	2½	3	sl	y	n	Excellent mix of flower colors, nice straight, tall stems for cutting
	n	y	3	3	3	3	n	y	n	Attractive tall straight spikes, excellent for cutting; great show all season; All America Selections winner 1960
	y	y	1	2	2	2	n	y	n	Rich, velvety red flowers on tall spikes; lots of dieback in midsummer possibly from disease; poor performance this season
	y	n	3	3	2	2	y	n	n	Does not fill in well; needs significant deadheading to bloom all season; not for cutting
	y	y	1	1	1	1	n	n	n	Short snapdragon, does not fill in well; many died out by mid-August; poor show this season
	y	y	3	2	2	2	n	y	n	Short snapdragon forms mats rather than spikes; needs deadheading to keep display all season
	y	n	3	3	3	3	y	y	n	Shorter than many snapdragons but not a true dwarf; bloomed early but finished early; nice light rose color; not for cutting
	y	n	3	3	3	3	n	y	n	Short stems; blooms early and is done early; few flowers; needs deadheading
	n	n	1	1	1	1	y	y	y	Tiny bushes, did not bloom; very poor growth in ground beds this season
	y	y	4	4	4	4	n	y	y	Bushy upright plants; excellent mix of colors; very productive; colorful from midseason onward; maintenance free
	n	n	4	4	4	4	y	n	y	Huge heads and very thick stems; a great addition to the giant, single-headed cultivars
	n	n	3	3	3	3	y	y	y	Large gold and bronze bicolored flowers and silver-green foliage; multiple heads, great for the back of borders; some multistemmed plants, others single
	n	n	3	3	3	3	y	y	y	Small flowers in clusters; good cut flower; needs support in open beds; some lodging late in season; good show from midseason on
	n	n	1	1	1	1	n	y	y	Very short plants with mostly downward-facing blooms; flowers are small but abundant; nice display early in season; dies out starting in mid-August beginning with yellow, spotted foliage.
	n	n	3	3	3	3	n	y	n	Very early medium-sized blooms on medium-sized stems; excellent cut flower; multiple blooms from midseason onward
	n	n	3	3	3	3	y	y	n	Tall, multistemmed sunflower; straight stems excellent for cutting; All America Selections winner 2000

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Common Name	Cultivar	Bloom color	max ht in	min ht in	flower size		June 8-15	June 16-23	June 24-30	July 1-7	July 8-15	July 16-23	July 24-31	Aug 1-7	Aug 8-15	Aug 16-23	Aug 24-31	
					max in	min in												
Sunflower	Waooh!	gold w/ brown centers	36	17	6½	3						*	☼	☼	☼	☼	☼	☼
Sunflower, Cucumber-leaf	Pan	gold, brown centers	54	23	4½	2			☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Sweet Pea**	Cuthbertson Floribunda Choice Mix	pink, red, white, lavender, purple, maroon	56	22	2	1								*	☼	☼	☼	☼
Sweet Pea**	Fantasia Formula Mix	pink, red, maroon	58	10	1½	½							*	*	☼	☼	☼	☼
Sweet Pea**	Old Spice Mix	lavender, pink, red, rose, maroon, white	22	5	1½	½								*	☼	☼	☼	☼
Sweet Pea**	Royal Mix	pink, red, rose, white, lavender, maroon	51	40	2	1							*	*	☼	☼	☼	☼
Sweet Pea**	Spencer Ripple Formula Mix	purple/white bicolor, white, lavender, pink, rose	61	59	2	1								*	☼	☼	☼	☼
Sweet Pea**	Supersnoop Mix	pink, white, rose	18	3	1½	1½							*	*	☼	☼	☼	☼
Swiss chard	Bright Lights		23½	9														
Tasselflower	Harvest Mixture	deep red-orange	38	25	0.2	1/8	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Tithonia	Torch	orange, light orange centers	53	18	4	1¾			*	*	☼	☼	☼	☼	☼	☼	☼	☼
Venidium	Exotic	orange w/ chocolate centers	32	18	3	2			*	☼	☼	☼	☼	☼	☼	☼	☼	☼
Verbena	Peaches & Cream	peach and orange-peach	14½	4	2	¾	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Verbena, Garden	Mango	peach	12	3	1½	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Verbena, Garden	Quartz X P Purple	velvet purple	12½	1½	1	¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Verbena, Garden	Quartz X P Red Eye	red w/ white eye	11	5	2¼	1¾	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Verbena, Garden	Quartz X P Scarlet	red w/ white centers	13½	2½	1	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Verbena, Garden	Quartz X P Silver	lavender-silver	11	3½	2½	1¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Verbena, Garden	Quartz X P White	white	12	5	¾	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viola	Bilbo Baggins	lavender/yellow bicolor w/ mahogany face	13	4	1¼	¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼

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	frost tolerance		flower quantity	flower quality	foliage rating	overall rating	fragrance	cutting	drying	comments
	foliage	flowers								
	n	n	4	4	4	4	n	y	n	Excellent short sunflower blooms all summer, most short sunflowers finish blooming early and set seed; abundant blooms on each stalk
	n	n	3	3	3	3	n	y	n	Buckets of small blooms; very bushy plant; needs room to spread; great cut flower
	y	y	3	3	3	3	n	y	n	Huge blooms; excellent fragrance; vigorous growth this season
	y	y	2	3	3	3	y	y	n	Tall stems but fewest flowers of those grown this year; just starting to bloom in late August
	y	y	3	3	3	3	y	y	n	The best flowering sweet pea this year; excellent blooms at nose level; sturdy thick vines
	y	y	2	2	3	2	sl	y	n	The best fragrance of all sweet peas this year; not as floriferous as others; great growth
	y	y	2	3	3	3	y	y	n	Very attractive blooms some bicolors; tall, stocky vines; some flowers but late; not the most floriferous; fragrant; had fewest flowers of all sweet peas this year
	y	y	3	3	3	3	y	y	n	Dwarf plant with few flowers this year; sturdy stems but few of them
	y	y			3	3	n	n	n	Outstanding colorful stems on this ornamental vegetable; looked great as green backdrop in flower garden; All America Selections winner 1998
	n	n	1	2	1	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; does not work well in mass plantings
	n	n	4	4	4	4	sl	y	n	Gorgeous velvety rich flowers; tall, floppy stems need ample room to spread; bushy, open growth; All America Selections winner 1951
	y	y	1	2	1	2	n	y	n	Tall, floppy stems with brilliant flowers; needs lots of room to spread; flower buds are fuzzy, ornamental; great early in the season, sparse later; lots of dieback by mid-August
	y	y	3	3	4	3	N	n	n	Very attractive flowers, abundant blooms nearly all summer; interesting two-toned color; needs deadheading; All America Selections winner 1992
	n	n	2	2	3	2	sl	n	n	Interesting peach shades range from dark peach to pale shades; very few flowers; does not fill in the bed like other verbenas; need close spacing and deadheading for best display
	y	n	4	4	4	4	y	y	n	Attractive rich velvety purple color; great blooms all summer; holds up better than other verbenas; Fleuroselect Novelty Winner
	y	n	4	4	4	4	n	y	n	Clear red, rich color; abundant blooms all summer; very nice show
	y	y	2	3	2	2½	n	n	n	Very attractive bicolor flowers, vibrant red with pure white centers; not as floriferous as other verbenas; ragged appearance; needs deadheading for best show
	n	n	2	2	2	2	n	y	n	Uniform height, compact growth; not as floriferous as other cultivars; nice pale, pale lavender blooms
	y	y	2	2	2	2	sl	y	n	Poor flower display when compared with other verbenas; spreads well, but few flowers; needs a lot of deadheading
	y	y	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

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					max in	min in											
Viola	Microla Lavender	lavender w/ cream face and purple whiskers	10	5	1½	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viola	Microla Plum	purple w/ light purple face	14½	4½	1¼	¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viola**	Skippy Experimental Pastel Blue Improved	lavender w/ deep lavender face	15	3	2½	¾	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viola**	Skippy Pastel Blue	lavender shades	12	3	1½	¾	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viola	Skippy Purple Improved	deep purple bicolor	16	4	1½	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viola	Skippy XL Blue-Yellow	yellow w/ lavender wings, purple whiskers	15	2½	1½	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viola	Skippy XL Deep Blue-Blotch	purple w/ deep purple face	16	1½	1¾	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viola	Skippy XL Plum-Gold	gold face w/ purple around the face, purple whiskers	13	5¼	1¼	¾	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viola	Skippy XL Purple Duet	purple/lavender bicolor shades, purple whiskers, yellow centers	16	5	1½	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viola	Skippy XL Red-Gold	maroon gold face, maroon lower petals	15	35	1½	1¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viola	Skippy Yellow/Purple Wing	yellow w/ deep purple wings, purple whiskers	15	10	1½	1	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viola	Sorbet Blue Babyface	deep lavender, purple eye	17½	2	1½	¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Viola	Sorbet Peach Frost	orange, cream, peach, lavender	12	5	1¼	¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Wallflower	Citrona Orange	orange	19½	3	1½	¼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Wallflower	Citrona Yellow	gold	22	4½	2	½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Zinnia, Garden	Magellan Orange	orange	16	5	4½	1½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼
Zinnia, Garden	Peggy's Delight	orange shades from burnt orange to cream, pink, rose	40	24	6	2½	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼

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	frost tolerance		flower quantity	flower quality	foliage rating	overall rating	fragrance	cutting	drying	comments
	foliage	flowers								
	Y	Y	2	2	2	2	sl	Y	Y	Poor growth; plenty of plants died this year
	y	y	3	3	3	3		y	y	Tiny blooms, huge mounds; not as floriferous as other violas; some deadheading late in season
	y	y	4	4	4	4	y	y	y	Abundant blooms, excellent mounding display; great show all summer; no maintenance
	y	y	4	4	4	4	y	y	y	Nice mounding habit; small abundant flowers, bloom all season; excellent two-toned lavender effect
	y	y	4	4	4	4	n	y	y	Mounds of velvety rich flowers in deep purple with slightly lighter purple centers; very ornamental all season
	y	y	4	4	4	4	y	y	y	Abundant blooms, great mounds of flowers; fills in well; deadheading unnecessary
	y	y	4	4	4	4	n	y	y	Floriferous mounds bloom all summer; very nice compliment to mixed beds; rich velvety appearance
	y	y	4	4	4	4		y	y	Bred for winter bloom season in southern states; All America Selections Cool Season Bedding Plant Award winner 2008
	y	y	4	4	4	4	sl	y	y	Outstanding very uniform mounds of color; rich, velvety appearance in attractive bicolor; packed with blooms
	y	y	4	4	3	3½	n	y	y	Nice mounds of color all season; fills in well; less maintenance than other violas; unusual color; best in mass plantings
	y	y	4	4	4	4	n	y	y	Very attractive bicolor flowers; huge mounds covered with blooms all summer; a visitor favorite
	y	y	4	4	4	4	n	y	y	Outstanding mounds of deep purple blooms with dark eye; fills in bed well and requires no maintenance; one of the best violas this year; visitor favorite
	y	y	4	4	4	4	n	y	y	Flowers open as peach with dark orange center and creamy wings and mature to shades of cream and orange with lavender wings; huge mounds of color with blooms nearly all season; very attractive
	n	n	3	3	3	3	sl	y	n	Great mounds of color nearly all season; very attractive in mass plantings; prominent seed heads in late season; some lodging; needs deadheading from planting onward
	n	n	3	3	3	3	y	y	n	Mountains of color most of the season; in late August color only at tips; prominent seed pods from mid season onward; needs lots of deadheading from early season
	n	n	4	4	4	4	n	y	y	Outstanding, brilliant orange blooms cover plants; one of the most intense, solid color displays in the garden; huge flowers really glow!; variable flower height best for edges of borders
	n	n	2	3	3	3	n	n	y	Selected from Vietnamese germplasm by Seeds of Change; square-edged petals; colors are creamy, not brilliant like other zinnias; nice mix of colors; variable height; wide range of flower sizes

*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 2007.

Common Name	Cultivar	Bloom color	max ht in	min ht in	flower size		June 8-15	June 16-23	June 24-30	July 1-7	July 8-15	July 16-23	July 24-31	Aug 1-7	Aug 8-15	Aug 16-23	Aug 24-31
					max in	min in											
Zinnia, Garden	Profusion Fire	reddish orange	16	5	2¼	1	*	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Zinnia, Garden	Profusion Knee High Red	dark orange red	26	2	2¼	1¼	*	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Zinnia, Garden	Profusion Knee High White	creamy white, gold centers	21	3	3	1⅛	*	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Zinnia, Garden	Solcito																
Zinnia, Garden	Swizzle Cherry & Ivory	cherry red w/ creamy white tips	15	9	4	1¼	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Zinnia, Garden	Thumbelina Mix	red, orange, yellow, pink, scarlet w/yellow centers	23	9	2	¾	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Zinnia, Garden	Zowie! Yellow Flame	scarlet/rose centers w/ yellow tips	30	12	3½	1¼	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Zinnia, Garden	Uproar	rose	32	13	4¾	2¾	*	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Zinnia, Mexican	Aztec Sunset	mahogany/yellow bicolor, yellow, gold	24	3	2	¾	*	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿
Zinnia, Mexican	Persian Carpet	bicolors in red, mahogany, gold, purple, cream	24	5	1¼	1	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿	✿

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Table 4. Deadheading data 2007.

Chrysanthemum	Moonlight	@		@														\$
Cigar Plant																		
Clarkia	Chieftain									@								@
Coleus	Chocolate Mint																	
Coleus	Kong Mosaic																	
Coleus	Velvet																	
Coleus	Wizard Mosaic																	
Coleus	Wizard Mosaic																	
Collinsia	Mystic Lilac																	
Coreopsis	Quills and Thrills																	@
Coreopsis, Large-flowered	Early Sunrise						@		@		@		@					\$
Corn Parsley	Goldspray																	
Cosmos	Double Click																	
Cosmos	Happy Ring																	

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.

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

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

	frost tolerance		flower quantity	flower quality	foliage rating	overall rating	fragrance	cutting	drying	comments
	foliage	flowers								
	n	n	4	4	4	4	sl	y	y	Bushy mounds loaded with reddish orange flowers, intense and showy; brilliant display on a no-maintenance plant; outstanding
	n	n	4	4	4	4	n	y	y	Very attractive color; open floppy mounds covered with blooms; excellent show nearly all season; some disease late in season
	n	n	4	4	4	4	n	y	y	Bushy mounding plant covered with blooms; excellent display nearly all season; great solid masses of color for edges of borders; some disease late in season
						0				Seeds did not germinate after two tries
	n	n	3	3	3	3	sl	y	y	Interesting bicolor flowers on bushy, upright plants; not the most floriferous of zinnias; variable, ragged plant heights
	n	n	4	4	4	4	n	y	y	Miniature flowers on tall stalks; striking early summer display; abundant blooms all season; some deadheading needed by midseason; All America Selections winner 1963
	n	n	4	4	4	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
	n	n	4	4	4	4	sl	y	y	Outstanding, tall solid-color zinnias; very floriferous, blooms hold up well all season; some deadheading late in season
	n	n	4	4	4	4	n	y	y	Tiny multicolored flowers bloom all season; great in mass plantings or as accents to larger zinnias; good cut flower
	n	n	3	3	3	3	n	y	y	All America Selections winner 1952; double and semidouble blooms; small but abundant flowers in a variety of patterns; some disease in mid-August

Table 4. Deadheading data 2007.

Common Name	Cultivar	June 15-23	June 23-30	July 1-7	July 8-15	July 16-23	July 24-31	Aug 1-7	Aug 8-15
African Daisy	African Moon			#	\$				
African Foxglove									
Ageratum	High Tide Blue					@			@
Ageratum	Mexicana Tall					@			@
Alternanthera	Royal Tapestry								
Alyssum, Sweet	Rosie O'Day								#
Alyssum, Sweet	Royal Carpet								
Amaranth	Dreadlocks								
Amaranth, Feathered	Icecream Banana								
Amaranth, Feathered	Icecream Cherry								
Amaranth, Feathered	Icecream Formula Mix								
Amaranth, Feathered	Icecream Mango								
Amaranth, Feathered	Icecream Orange								

*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 2007.

Common Name	Cultivar	June 15-23	June 23-30	July 1-7	July 8-15	July 16-23	July 24-31	Aug 1-7	Aug 8-15
Amaranth, Feathered	Icecream Peach								
Amaranth, Feathered	Icecream Strawberry								
Ambrosia									
Angelonia	Serena Purple				@				#
Aster, Annual Garden	Ballet Mix						@	@	@
Aster, Annual Garden	Giant Ray Mix								#
Aster, Annual Garden	Serenade Mix							@	
Aster, Annual Garden	Starlight Mixed Colors								
Aster, China	Matsumoto Red Stripe								
Bachelor's Button	Jubilee Gem	#		#	@	@	#		@
Bacopa	Blutopia								
Bacopa	Blutopia								
Bacopa	Snowtopia								
Balsam	Tom Thumb					@		@	@
Begonia	Baby Wings Pink								
Bishop's Flower	Graceland	#				@			
Bisnaga	Casablanca								
Blue Eyed Daisy	Grandis	#		@	@	#		#	@
Brachycome	Brachy Blue								#
Broom Corn	Red Corn								
Browallia									
Calendula	Deja Vu	#		#	@	#	#	#	#
Calendula	Orange Zinger	@		#	@	#	#	\$	@
Calendula	Sherbet Fizz								
Calendula	Triangle Flashback	@		@	@	#		@	\$
Calendula	Victoria Sunset	@		@	#	#	#	\$	@
California Poppy	Summer Sorbet	@		@				@	#
Cardoon									
Castor Bean	Zanzibarensis Mix								
Celosia	Burgundy Supercrest								
Celosia	Century Mixture								
Celosia	Fireglow								
Celosia	Fresh Look Gold								
Chiastophyllum	Solar Yellow								
Chinese Foxglove									
Chinese Pink	Victoriana			@	#	@	#	#	\$

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

Table 4. Deadheading data 2007.

Common Name	Cultivar	June 15-23	June 23-30	July 1-7	July 8-15	July 16-23	July 24-31	Aug 1-7	Aug 8-15
Creeping Cuphea	Purple Star			@	@	#	#	@	@
Cuphea (miniata)	Summer Medley					@			@
Cypress vine	Red								
Dahlia	Beaucon White			#		@			
Dahlia	Bloomquist Dawn								@
Dahlia	Chimicum Topaz								
Dahlia	Citron De Cap	@		#		@		@	@
Dahlia	Clydes Choice								
Dahlia	Emory Paul								@
Dahlia	Fidalgo Lisa							@	
Dahlia	Jo	#					#	#	
Dahlia	Mel's Misty Sunrise			#	@			@	@
Dahlia	Papageno			#	@	@			#
Dahlia	Pat Feary			#	@	@	@	@	
Dahlia	Philothea								
Dahlia	Robert Too	@		#	@				
Dahlia	Scarborough Brilliant								
Dahlia	Snowbound								
Dahlia	Spartacus								
Dahlia	The Boss								@
Dianthus	Bouquet Rose Magic							@	@
Dianthus	Dynasty Orchid					@		@	#
Dianthus	Ideal Violet	@		@	@	@	@	@	
Dianthus	Magic Charms	@		@	@	@	#	\$	\$
Dianthus	Snowfire	@		@	@	@	@	@	#
Dianthus	Supra Purple			@	@	#	#	\$	@
Dianthus	Sweet Scarlet								
Diascia	Diamonte Apricot								
Diascia	Diamonte Coral Rose								
Dicranostigma									
Dusty Miller	New Look								
Everlasting Pea	White Pearl								
Fennel Flower	African Bride								
Flowering Flax	Charmer Mixed								
Foxglove	Camelot Rose								
Gaillardia	Razzledazzle Mixed Colors								
Gaillardia	Sundance Bicolor	@						@	#

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

Table 4. Deadheading data 2007.

Common Name	Cultivar	June 15-23	June 23-30	July 1-7	July 8-15	July 16-23	July 24-31	Aug 1-7	Aug 8-15
Gazania	Kontiki Stars & Stripes	#			@	#	#	\$	\$
Gentian sage	Blue Angel	@						@	@
Geranium	Maverick Star							@	
Geranium	Multibloom Capri	@				@	@	@	@
Gerbera	Revolution Vanilla			#	@		@	@	#
Godetia	Fruit Punch				@	@	@	@	#
Gypsophila	Gypsy								
Helenium	Goldfield								
Hibiscus	Luna Rose								
Hollyhock	Indian Spring	@							
Impatiens, Garden	Dazzler Burgundy	@		@					
Impatiens, Garden	Dazzler Violet Improved	@							@
Impatiens, Garden	Fanciful Mix Stardust								
Impatiens, Garden	Fanciful White	@							
Impatiens, Garden	Super Elfin XP Pink Deep								
Impatiens, Garden	Super Elfin XP Punch								
Impatiens, Garden	Super Elfin XP Red								
Impatiens, Garden	Super Elfin XP Star Cherry								
Impatiens, Garden	Super Elfin XP Star Salmon								
Impatiens, Garden	Super Elfin XP Violet								
Impatiens, Garden	Xtreme Mixture	@							
Impatiens, New Guinea	DivineMix								
Jewels of Opar	Limon								
Juncus	Javelin								
Laurentia	Avant-garde Blue								
Laurentia	Avant-garde Blue								
Lavatera	Twins Hot Pink	@			@	#	#	@	@
Linaria	Enchantment								
Love Grass	Wind Dancer								
Lupine	Giant King Mix								@
Lupine	Tutti Frutti								#
Marigold	Cottage Red					@	@	@	@
Marigold, African	Capriccio			@					@
Marigold, African	Crackerjack Mixed					@			
Marigold, African	First Lady							@	#
Marigold, African	Orange Jubilee							@	\$
Marigold, African	Simba								

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

Table 4. Deadheading data 2007.

Common Name	Cultivar	June 15-23	June 23-30	July 1-7	July 8-15	July 16-23	July 24-31	Aug 1-7	Aug 8-15
Marigold, African	Vanilla								
Marigold, French	Aurora Fire			@	@	@	#	#	
Marigold, French	Aurora Light Yellow				@	@	@	#	#
Marigold, French	Disco Granada	@			@	@	#	#	@
Marigold, French	Little Hero Gold	@		@	@	#	#	#	@
Marigold, French	Mars					@		@	@
Marigold, French	Naughty Marietta						@	@	@
Marigold, French	Queen Sophia	@		@	@	@	@	#	#
Marigold, Signet	Starfire								
Mexican hat	Red Midget			@				@	
Morning Glory	Milky Way								
Nasturtium	Black Velvet	@		@					@
Nasturtium	Golden Gleam								
Nasturtium	Princess of India								
Nasturtium	Scarlet Gleam								
Nasturtium	St. Clements								
Nasturtium	Tall Climbing Single Mix								@
Nasturtium	Whirlybird Mahogany	@							@
Nemesia	Poetry White								
Nicotiana	Marshmallow								@
Nicotiana	Perfect Mix								
Nicotiana	Perfume Deep Purple	@		#	#		#	#	\$
Nicotiana, Garden	Nicki Red							@	\$
Nicotiana, Hybrid	Tinkerbelle								#
Nierembergia	Purple Robe								
Nierembergia	Robe Mixed								
Nierembergia	White Rose								
Nolana	Sun Belle Mixed Colors								
Ornamental Cabbage	Northern Lights								
Osteospermum	Asti White								
Pansy	Acquarelle								
Pansy	Chalon Supreme Mix								
Pansy	Fraidy Cat								
Pansy	Frizzle Sizzle Blue								
Pansy	Frizzle Sizzle Formula Mix								
Pansy	Frizzle Sizzle Yellow								
Pansy	Frosty Rain								

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

Table 4. Deadheading data 2007.

Common Name	Cultivar	June 15-23	June 23-30	July 1-7	July 8-15	July 16-23	July 24-31	Aug 1-7	Aug 8-15
Pansy	Jolly Joker			@					
Pansy	Majestic Giants Mix			@	@				@
Pansy	Matrix Blue Frost								
Pansy	Matrix Deep Blue Blotch			#					
Pansy	Matrix Ocean								
Pansy	Matrix Red Blotch								
42 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					@			
Pansy	Promise Deep Orange			@					
Pansy	Promise Lemon Splash								
Pansy	Promise Marina							@	
Pansy	Promise Primrose/Blotch			@					
Pansy	Promise Pure Lilac Shades								
Pansy	Promise Pure Silver Azure								
Pansy	Promise Pure Yellow								
Pansy	Promise Red/Blotch			#					
Pansy	Promise Rose Shades								
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	Whiskers Light Blue								
Pansy	XXL Golden Yellow			@					
Penstemon	Esprit Mix								
Pentas	Butterfly Lavender Shades								
Pentas	Butterfly Pink								
Pepper, Ornamental	Black Pearl								
Pepper, Ornamental	Chilly Chili								

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

Table 4. Deadheading data 2007.

Common Name	Cultivar	June 15-23	June 23-30	July 1-7	July 8-15	July 16-23	July 24-31	Aug 1-7	Aug 8-15
Pepper, Ornamental	Garda Tricolore								
Pepper, Ornamental	Peppa Blanca/Rosu								
Pepper, Ornamental	Peppa Lila/Naranja								
Pepper, Ornamental	Peppa Orangina								
Pepper, Ornamental	Peppa Pepperoni								
Petunia	Alderman								
Petunia	Baby Duck Yellow								
Petunia	Carpet Pink Improved								
Petunia	Carpet Pink Morn	#		@	@	@			
Petunia	Carpet Pink Morn	#		@	@	@			
Petunia	Dreams Rose Morn								
Petunia	Easy Wave Coral Reef	@		@	@	#	@	@	@
Petunia	Easy Wave Mystic Pink								
Petunia	Fantasy Plnk Morn								
Petunia	Fillytunia White	@		@	@	@	@		@
Petunia	Madness Lavender Glow	#		@	#	#	@	@	#
Petunia	Madness Red Improved								
Petunia	Madness Red Morn	#		@	2	@	@	#	
Petunia	Madness Red Picotee								
Petunia	Madness Rose Morn	@		@	#	@	@	#	#
Petunia	Madness Salmon Morn	@		@	@	@		@	@
Petunia	Opera Supreme Pink Morn	#		@	@	@	#	@	#
Petunia	Prism Sunshine	#		#	@	2	@	@	@
Petunia	Shock Wave Ivory								
Petunia	Shock Wave Pink Vein								
Petunia	Shock Wave Purple								
Petunia	Shock Wave Rose								
Petunia	Ultra Crimson Star	@		@	@	@	#	@	
Phlox, Annual	Promise Scarlet								
Poppy, Horned	Burnt Orange								
Poppy, Mexican Tulip	Sunlite								@
Portulaca	Margarita Coral					@			@
Rudbeckia	Cordoba					@			
Rudbeckia	Goldsturm							@	@
Rudbeckia	Hot Chocolate				@	@	@	@	@
Rudbeckia	Maya								@
Safflower	Quadricolor								

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

Table 4. Deadheading data 2007.

Common Name	Cultivar	June 15-23	June 23-30	July 1-7	July 8-15	July 16-23	July 24-31	Aug 1-7	Aug 8-15
Salvia, Mealy-cup	Evolution								
Salvia, Scarlet	Lighthouse FSN								
Salvia, Scarlet	Red Hot Mama								
Salvia, Scarlet	Red Hot Sally II					@	@	@	@
Salvia, Scarlet	Saluti Deep Red								
Salvia, Scarlet	Saluti Formula Mix			@	#	#			
Salvia, Scarlet	Saluti Lilac								
Salvia, Scarlet	Saluti Red	@						@	
Salvia, Scarlet	Saluti Salmon/Pink	@		@	@	@	@		@
Salvia, Scarlet	Saluti Scarlet/White								
Salvia, Scarlet	Saluti White	@		#	@	@		@	@
Salvia, Scarlet	Vista Rose								
Scarlet Runner Bean	Scarlet Emperor								
Scarlet Runner Bean	Painted Lady								
Shasta Daisy	Amelia								
Shasta Daisy	Giant Marconi Double								
Shasta Daisy	Snow Lady			#	@	@	@	@	@
Shoo Fly Plant	Splash of Cream				#	#	#		
Slipper Flower									
Snapdragon	Costa Mix								
Snapdragon	Liberty Classic Mixture					@			@
Snapdragon	Rocket Rose								#
Snapdragon	Scarlet Giant						@		@
Snapdragon	Snapshot Rose								
Snapdragon	Snapshot White								
Snapdragon	Snapshot Yellow								
Snapdragon	Speedy Sonnet Rose								
Snapdragon	Speedy Sonnet White								
Spanish Lavender	Fragerant Butterflies								
Statice	QIS Mixture								
Sunflower	American Giants Hybrid								@
Sunflower	Bicentenary								@
Sunflower	Key Lime Pie				@	@			#
Sunflower	Peach Passion				@	@		#	\$
Sunflower	Pro Cut Yellow Lite								
Sunflower	Soraya								
Sunflower	Waooh!								

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

Table 4. Deadheading data 2007.

Common Name	Cultivar	June 15-23	June 23-30	July 1-7	July 8-15	July 16-23	July 24-31	Aug 1-7	Aug 8-15
Sunflower, Cucumber-leaf	Pan								
Sweet Pea	Cuthbertson Floribunda Choice Mix								
Sweet Pea	Fantasia Formula Mix								
Sweet Pea	Old Spice Mix								
Sweet Pea	Royal Mix								
Sweet Pea	Spencer Ripple Formula Mix								
Sweet Pea	Supersnoop Mix								
Swiss chard	Bright Lights								
Tasselflower	Harvest Mixture	@				@		@	#
Tithonia	Torch					@	@	#	#
Venidium	Exotic			@	@	@	@	#	#
Verbena	Peaches & Cream	@			@		#		#
Verbena, Garden	Mango					@	@	#	@
Verbena, Garden	Quartz X P Purple								
Verbena, Garden	Quartz X P Red Eye								
Verbena, Garden	Quartz X P Scarlet								
Verbena, Garden	Quartz X P Silver								
Verbena, Garden	Quartz X P White								
Viola	Bilbo Baggins								
Viola	Microla Lavender	@							
Viola	Microla Plum								
Viola	Skippy Experimental Pastel Blue Improved								
Viola	Skippy Pastel Blue								
Viola	Skippy Purple Improved								
Viola	Skippy XL Blue-Yellow								
Viola	Skippy XL Deep Blue-Blotch								
Viola	Skippy XL Plum-Gold								
Viola	Skippy XL Purple Duet								
Viola	Skippy XL Red-Gold								
Viola	Skippy Yellow/Purple Wing								
Viola	Sorbet Blue Babyface			@					
Viola	Sorbet Peach Frost								
Wallflower	Citrona Orange	@						@	#
Wallflower	Citrona Yellow	@						@	\$
Zinnia, Garden	Magellan Orange	@		@	@	@	@	@	@

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

Table 4. Deadheading data 2007.

Common Name	Cultivar	June 15-23	June 23-30	July 1-7	July 8-15	July 16-23	July 24-31	Aug 1-7	Aug 8-15
Zinnia, Garden	Peggy's Delight				#				#
Zinnia, Garden	Profusion Fire					@	@	@	
Zinnia, Garden	Profusion Knee High Red								
Zinnia, Garden	Profusion Knee High White								
Zinnia, Garden	Solcito								
Zinnia, Garden	Swizzle Cherry & Ivory	@		@	@	@	@	@	#
Zinnia, Garden	Thumbelina Mix	@				\$	#	@	#
Zinnia, Garden	Zowie! Yellow Flame								
Zinnia, Garden	Uproar	#		@	@	@			@
Zinnia, Mexican	Aztec Sunset								
Zinnia, Mexican	Persian Carpet	@		#			@	@	@

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

Table 5. Results on cultivars completed three years' testing.

common name	cultivar	ave overall	ave foliage	ave min flower ht in	ave max flower ht in	ave min flower size in	ave max flower size in	ave flower quality	ave flower quantity
Ageratum	High Tide Blue	3.3	3	6.8	15	0.8	2.1	3.3	3.3
Ageratum	Mexicana Tall	3.7	3.3	11.2	26.8	0.6	1.3	3.7	3.7
Aster, Annual Garden	Giant Ray Mix	3.3	3	14.4	25.3	3.5	6.7	3.3	3.3
Aster, Annual Garden	Serenade Mix	2	2.3	9.8	26	0.6	1.7	2	2.3
Balsam	Tom Thumb	3	3	14.4	30.3	0.9	1.75	3	3
Blue Eyed Daisy	Grandis	3.3	3.3	12.8	34.5	1.4	2.7	3.3	3.3
Brachycome	Brachy Blue	3	3	26	37	1.1	3.9	3	3.3
Broom Corn	Red Corn	1.7	1.7	31.4	57.2	5.5 x 2	13 x 3	1.7	1.7
Calendula	Deja Vu	2.7	2.7	12	30.5	1.4	2.7	2.7	3
Calendula	Victoria Sunset	2	2	12.9	25.7	1	1.8	2	2
Chinese Pink	Victoriana	3	3	5.5	13.2	1.3	2.3	3	2.7
Chrysanthemum	Moonlight	3.7	3.7	4.4	15.5	0.4	0.8	3.7	3.7
Coleus	Wizard Mosaic	2	2	4.1	9.7	1.2	5.2	1	1
Coreopsis	Quills and Thrills	3.3	3.3	10.3	27.5	1.3	2	3.3	3.7
Coreopsis, Large-flowered	Early Sunrise	3.3	3.3	19.3	25.7	1.3	2.6	3.7	3.7
Creeping Cuphea	Purple Star	2.3	2.7	7	17.1	3.9	8.3	2	2
Cuphea (miniata)	Summer Medley	3	3	6.7	17.3	1	1.4	3	3
Dahlia	Fidalgo Lisa	1.3	1.7	20.8	40.7	2.3	3.7	1.3	1
Dahlia	Jo	3	3	25.3	44.9	4.5	6.5	3	3
Dahlia	Mel's Misty Sunrise	3.3	3.3	15.7	54.8	5	6.8	3.3	3.3
Dahlia	Philothea	2.8	2.8	15.7	46.8	4	6.4	2.8	2.8

Table 5. Results on cultivars completed three years' testing.

common name	cultivar	ave overall	ave foliage	ave min flower ht in	ave max flower ht in	ave min flower size in	ave max flower size in	ave flower quality	ave flower quantity
Dianthus	Dynasty Orchid	3	3	8.5	88.5	0.8	1.4	3	3
Dianthus	Supra Purple	3.7	3.7	6.4	14.8	1.4	2.4	3.3	4
Diascia	Diamonte Coral Rose	2.5	2.3	6.7	14.8	0.4	0.8	2.17	2.3
Foxglove	Camelot Rose	4	3.7	24	47.7	10 x 3	19 x 5	4	4
Gentian sage	Blue Angel	3	3	16.8	35.3	1.5	1.9	3.3	3
Geranium	Multibloom Capri	3	3	8.8	14.2	1.3	4.4	3	3
Godetia	Fruit Punch	2.7	3	6.7	14.5	1.1	2.3	3	2.7
Impatiens, Garden	Dazzler Burgundy	2.7	2.7	2.8	8.3	1.5	2.2	2.7	2.7
Impatiens, Garden	Dazzler Violet Improved	2.7	2.7	1.8	7	1.3	2.2	2.7	2.7
Impatiens, Garden	Fanciful White	2.3	2.3	2.2	9.1	0.8	1.7	2.7	2.3
Impatiens, Garden	Xtreme Mixture	2	2	1.7	6.8	1.3	2.1	2	2.3
Impatiens, New Guinea	DivineMix	1.7	1.7	2.3	5.5	1.2	2.3	1.7	1.7
Lavatera	Twins Hot Pink	1.7	1.3	9.2	20.7	1.5	3	2	1.7
Love Grass	Wind Dancer	1.7	1.7	19	27			2	2
Lupine	Tutti Frutti	3.3	3.7	19.7	39	3.5 x 1.5	15 x 2.9	3.7	3
Marigold	Cottage Red	4	3.7	13.5	33.7	0.8	2.1	4	4
Marigold, African	Capriccio	4	3.7	22.3	36	2.7	4.9	4	4
Marigold, French	Aurora Fire	3	3	3.7	11.3	1.3	2.3	3.3	3.7
Marigold, French	Aurora Light Yellow	3	3	4	11	1.2	2.4	3	3.3
Marigold, French	Disco Granada	3.7	3.7	2.8	8.4	1.1	2.5	3.7	3.7
Marigold, French	Little Hero Gold	2.5	2.7	2.1	7.5	1.2	2.2	2.7	2
Marigold, French	Mars	3.7	3.7	5.3	15.4	1	2.1	4	4
Marigold, Signet	Starfire	3.7	3.7	6.3	20.7	0.5	1.5	3.7	4
Mexican hat	Red Midget	2	2	9.2	30.1	4.6	9.1	2.3	2
Nasturtium	Black Velvet	2.7	2.7	12	16.8	1.4	2.2	2.7	2.7
Nicotiana	Marshmallow	3	3	28.3	58.4	0.8	1.4	2.7	3.3
Nicotiana	Perfume Deep Purple	2.3	2	14.3	23.7	1.3	3	2.3	2.7
Pansy	Acquarelle	2.3	3	5.3	14	1.3	1.7	2	2.3
Pansy	Chalon Supreme Mix	2.7	2.7	2.8	12	1.1	2.1	2.7	2.7
Pansy	Swiss Giant Pure Orange	3	2.7	4.4	15.5	1.3	1.8	3	3
Pansy	Swiss Giant Violet Blue	3.7	3.3	4.9	17.1	1.5	2.5	3.7	3.7
Pansy	Universal Plus Primrose	2	2	5	11.5	1.1	2	2	2
Petunia	Frillytunia White	2.3	2.3	3.2	12.7	1.3	2.8	2.3	2.7
Petunia	Madness Lavender Glow	1.7	1.7	4.3	15	1.6	2.5	2	2
Petunia	Madness Rose Morn	2.7	2.7	3.8	15.3	1.2	2.9	2.7	2.7
Petunia	Madness Salmon Morn	2.7	2.3	5	13.2	1.6	2.5	3	3

Table 5. Results on cultivars completed three years' testing.

common name	cultivar	ave overall	ave foliage	ave min flower ht in	ave max flower ht in	ave min flower size in	ave max flower size in	ave flower quality	ave flower quantity
Poppy, Mexican Tulip	Sunlite	2.8	3.3	9.5	18.5	2	2.7	3.3	1.7
Rudbeckia	Cordoba	3	3	8.3	15.6	2.3	3.8	3	3
Rudbeckia	Hot Chocolate	3	3	9	20.3	2.2	4.5	3	3
Rudbeckia	Maya	2	2	6.7	16.3	2	3.7	2	2
Salvia, Mealy-cup	Evolution	3.3	3.3	14.8	25.7	0.9 x .4	7 x 1.5	3.3	3.3
Salvia, Scarlet	Red Hot Mama	3	3.3	16.3	24.5	2.3 x 1.3	6.1 x 3.3	3	3
Shasta Daisy	Amelia	3.3	3	19.7	35.3	2.5	4.8	3	3.3
Shasta Daisy	Giant Marconi Double	3.3	3.3	15.3	38.8	2	4.1	3.3	3
Shoo Fly Plant	Splash of Cream	2.3	2.3	23.2	47.7	0.8	1.3	2.3	2.7
Snapdragon	Liberty Classic Mixture	3.7	3.2	11.1	28.7	2.8 x 2	6.5 x 2.8	3.7	3.2
Snapdragon	Scarlet Giant	2.3	2.3	15	34.2	3.8 x 1.3	10 x 3	2.7	2
Sunflower	American Giants Hybrid	3.3	3.3	60.5	81.3	6.3	12.8	3.7	3.3
Sunflower	Bicentenary	2.7	3	40.7	75	3.7	7.8	2.7	2.7
Sunflower	Peach Passion	1.3	1.3	18.3	32.2	1.6	2.8	1.3	1.7
Tasselflower	Harvest Mixture	2.3	2	15.9	33.7	0.3	0.6	2.3	2
Venidium	Exotic	3	2.7	14.7	23.2	1.8	3.3	3	2.7
Verbena, Garden	Mango	1.7	2.7	5.2	10.9	0.8	2.1	2	1.7
Viola	Bilbo Baggins	4	4	4.3	12.3	0.6	1.3	4	4
Zinnia, Garden	Magellan Orange	4	4	9	16	1.8	4.1	4	4
Zinnia, Garden	Profusion Fire	4	3.7	5.1	15	1.2	2.5	4	4
Zinnia, Garden	Swizzle Cherry & Ivory	2	2	10	21.9	1.2	3.8	2	2
Zinnia, Garden	Zowie! Yellow Flame	4	3.7	15.5	27.7	1.5	3.5	4	4

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Seed and Plant Sources

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

ALASKA SOURCES

Ann's Greenhouse, 780 Sheep Creek Rd, Fairbanks AK 99709

Alaska Greenhouse, 1301 Muldoon Rd, Anchorage AK 99514

Clair's Cultivations, 1364 Esro Rd, Fairbanks AK 99712

Denali Seed, PO Box 111425, Anchorage AK 99511, www.denaliseed.com

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 PO Box 313, Nenana AK 99760, www.woodlandfarmsalaska.com

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

All American Selections, 1311 Butterfield Rd Suite 310, Downer's Grove IL 60515, www.all-americanselections.org

Ball Seed Co., PO Box 335, West Chicago IL 60185 (wholesale only), www.ballseed.com

EuroAmerican Propagators (Proven Winners), PO Box 289, Bonsall CA 92003, www.euroamprop.com

Fischer USA, 6899 Winchester Circle Suite 102, Boulder CO 80301, www.fischerusa.com

Goldsmith, PO Box 1349, Gilroy CA 95021, www.goldsmithseeds.com

Green Leaf (Yoder Bros.) 2369 Old Philadelphia Pike, Lancaster PA 17602, www.green-leaf-ent.com

Kieft Pro Seeds Holland, PO Box 63 1606 ZH, Venhuizen Holland, www.kieftseeds.com

Lawyer Nursery, 950 Hwy 200 W, Plains MT 59859, www.lawyer nursery.com

Oglevee Ltd., 152 Oglevee Ln, Connellsville PA 15425, www.oglevee.com

PanAmerican Seeds, PO Box 438, West Chicago IL 60186, www.panamseed.com

The Flower Fields (Yoder Bros & Ecke Ranch) Carlsbad CA 92008, www.theflowerfields.com

USDA Plant Introduction Stations NC7, Ames IA 50011, www.ars-grin.gov/ars/MidWest/Ames

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

Alaska Native Plant Society, PO Box 141613, Anchorage AK 99514, www.aknps.org

American Horticultural Society, PO Box 6118, Alexandria VA 22308, www.ahs.org

North American Rock Garden Society, PO Box 67, Millwood NY 10546, www.nargs.org

Hardy Fern Foundation, Box 60034, Richmond Beach WA 98160, www.hardyferns.org

New England Wildflower Society, 180 Hemenway Rd, Framingham MA 01701, www.newfs.org

RETAIL SOURCES OF PLANTS/SEEDS

Agway, Inc. Seed Plant, 1225 Zeager Rd, Elizabethtown PA 17022

Alberta Nurseries & Seeds Ltd., PO Box 20, Bowden AB TOM 0K0 Canada, www.gardenersweb.ca

Applewood Seed Co., 5380 Vivian St, Aruada CO 80002, www.applewoodseed.com

B&D Lilies, PO Box 2007, Port Townsend WA 98368, www.bdlilies.com

Bear Creek Nursery, PO Box 411, Northport WA 99157, www.BearCreekNursery.com

Bluebird Nursery, Inc., PO Box 460, Clarkson NE 68629, www.bluebirdnursery.com

Carolina Seeds, PO Box 2658 Hwy 105 Bypass, Boone NC 28607, www.carolinaseeds.com

Clause Seed, 100 Breen Rd, San Juan Bautista CA 95045, www.clauseetzier.com

Connell's Dahlias, 10616 Waller Rd E, Tacoma WA 98446, www.connells-dahlias.com

Cook's Garden, PO Box 535, Londonderry VT 05148, www.cooksgarden.com

Daehnfeldt, PO Box 947, Albany OR 97321, www.daehnfeldt.com

Dutch Gardens, Inc., PO Box 2037, Lakewood NJ 08701, www.dutchgardens.nl

F.W. Schumacher Co., Inc., 36 Spring Hill Rd, Sandwich MA 02563, www.treeshrubseed.com

Farmer Seed & Nursery Co., 818 NW 4th St, Fairbault MN 55021, www.farmerseed.com

Ferry-Morse Seed Co., PO Box 4938, Modesto CA 95352, www.ferry-morse.com

Fred C. Gloeckner & Co., Inc., 15 E 26th St, New York NY 10010, www.fredgloeckner.com

Gardens North, 5984 Third Line Rd N, North Gower ON K0A 2T0 Canada, www.gardensnorth.com

Germania Seed Co., 5978 N Northwest Hwy, Chicago IL 60631, www.germaniaseed.com

Gilbert H. Wild & Sons, P O Box 338, Sarcoxie MO 64862, 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

Henry Field's Seed and Nursery Co., 415 N Burnett, Shenandoah IA 51602, www.HenryFields.com

Home Harvest Seeds, 3807 Bank St, Baltimore MD 21224, www.homeharvestseeds.com

Irish Eyes & Garden City Seeds, PO Box 307, Thorp WA 98946, www.irish-eyes.com

J.L. Hudson, PO Box 1058H, Redwood City CA 94064, www.jlhudsonseeds.net

Jackson & Perkins, PO Box 1028, Medford OR 97501, www.jacksonandperkins.com

John Scheepers Kitchen Garden Seeds, PO Box 638, Bantam CT 06750, www.kitchengardenseeds.com

Johnny's Selected Seeds, 955 Benton Avenue, Winslow ME 04910, www.johnnyseeds.com

Jung Quality Seeds, 335 S High St, Randolph WI 53957, www.jungseed.com

K. Van Bourgondien & Sons, Inc., PO Box 1000, Babylon NY 11702, www.dutchbulbs.com

McClure & Zimmerman, PO Box 368, Friesland WI 53935, www.mzbulb.com

Milk Ranch Specialty Potatoes LLC, 20094 Hwy 149, Powderhorn CO 81243, www.milk ranch.com

Nichols Garden Nursery, 1190 N Pacific Hwy, Albany OR 97321, www.gardennursery.com

Nourse Farms, Inc., Box 485 RFD, South Deerfield MA 01373, www.noursefarms.com

Park Seeds, 2 Parkton Ave, Greenwood SC 29649, 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

Richters, 357 Highway 47, Goodwood ON LOC 1A0 Canada, www.richters.com

R.H. Shumway's Seeds, 334 W. Stoud St, Randolph WI 53956-1274, www.rhshumway.com

Roseraie at Bayfields, Box R, Waldoboro ME 04572, www.roseraie.com

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

Rupp Seeds, Inc., 17919 County Rd B, Wauseon OH 43567, www.ruppseeds.com

Seeds of Change, PO Box 15700, Santa Fe NM 87501, www.seedsofchange.com
 Seeds of Distinction, PO Box 86 Station A, Toronto ON M9C 4V2 Canada, www.seedsofdistinction.com
 Seedway, Inc., PO Box 250, Hall NY 14463, www.seedway.com
 Select Seeds, 180 Stickney Hill Rd, Union CT 06076, www.selectseeds.com
 Seymour's Selected Seeds, PO Box 1346, Randolph WI 53956, www.seymourseeduk.com
 Shepherd's Garden Seeds, 30 Irene St, Torrington CT 06790, www.shepherdseeds.com
 Song Sparrow Perennial Farm, 13101 East Rye Rd, Avalon WI 53505, www.songsparrow.com
 Stokes Seeds, PO Box 548, Buffalo NY 14240, www.stokeseeds.com
 T & T Seeds, Ltd., Box 1710, Winnipeg MB R3C 3P6 Canada, www.ttseeds.mb.ca
 Territorial Seed Co., PO Box 157, Cottage Grove OR 97424, www.territorial-seed.com
 Thompson & Morgan Seed Co., Box 1308, Jackson NJ 08527, www.thompson-morgan.com
 Twilley Seeds, 121 Gary Rd, Hodges SC 29653, www.twilleyseed.com
 Valley Nursery, Box 4845, Helena MT 59604
 Van Bloem USA, Inc., 500 Pendley Industrial Park, Cumming GA 30130, www.vanbloem.com
 Vaughan's Seed Co., 5300 Katrine Ave, Downers Grove IL 60515
 Vermont Bean Seed Co., Garden Ln, Fair Haven VT 05743, www.vermontbean.com
 Vesey's Seeds, Ltd., PO Box 9000, Calais ME 04619-6102, www.veseys.com
 W. Atlee Burpee & Co., 300 Park Ave, Warminster PA 18991, www.burpee.com
 Waushara Gardens, N 5491 5th Dr, Plainfield WI 54966
 Wayside Gardens, 1 Garden Ln, Hodges SC 29695, www.waysidegardens.com
 West Coast Seeds, 3925 64 St, Delta BC V4K 3N2 Canada, www.westcoastseeds.com
 White Flower Farm, PO Box 50, Litchfield CT 06759, www.whiteflowerfarm.com
 Wildseed, Inc., PO Box 308, Eagle Lake TX 77434

About the Agricultural and Forestry Experiment Station

The federal Hatch Act of 1887 authorized establishment of agricultural experiment stations in the U.S. and its territories to provide science-based research information to farmers. The Morrill Act established the land-grant colleges in 1862. The Alaska Agricultural Experiment Station was not originally part of the Alaska land-grant college system. In 1898, the station was established in Sitka, also the site of Alaska's first experiment farm. Subsequent branches were opened at Kodiak, Kenai, Rampart, Copper Center, Fairbanks, and Matanuska. The latter two remain as the Fairbanks Experiment Farm and the Matanuska Experiment Farm. The USDA established the Fairbanks experiment station in 1906 on a site that in 1915 provided land for a college. In 1931, the experiment station was transferred from federal ownership to the college, and in 1935 the college was renamed the University of Alaska. Early experiment station researchers developed adapted cultivars of grains, grasses, potatoes, and berries, and introduced many vegetable cultivars appropriate to Alaska. Animal and poultry management was also important. This work continues, as does research in soils and revegetation, forest ecology and management, and rural and economic development. As the state faces new challenges in agriculture and resource management, the Agricultural and Forestry Experiment Station continues to bring state-of-the-art research information to the people of Alaska.

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

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