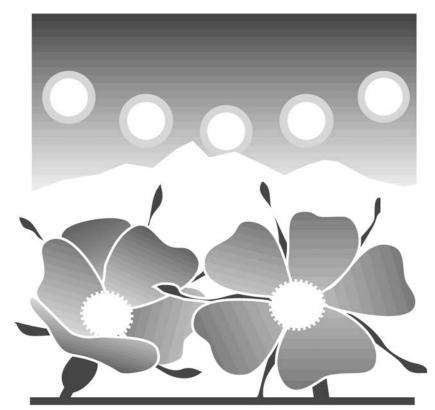
Annual Flowering Plant Evaluations 2005



by Patricia S. Holloway Professor of Horticulture

Etta Gardiner Greenhouse Manager

Grant EM. Matheke Horticulturist

Jan Hanscom Horticulturist

Eileen Van Wyhe Garden Volunteer

Victoria Hill Garden Volunteer

GEORGESON BOTANICAL GARDEN

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



Circular 131

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Introduction

Each year more than 300 annual flowering plants are included in field trials at the Georgeson Botanical Garden. In 2005, trials included an additional 50 cultivars, primarily vegetatively propagated plants, grown in baskets and containers. The annual flower trials were planted from 31 May to 3 June, 2005 in the Perennial Landscape and All American Selections (AAS) Display Garden of the Georgeson Botanical Garden (64° 51' N, 147° 52' W). In field beds, Fairbanks silt loam soil was fertilized with 10-20-20S (4 lbs per 100 sq ft, 195 g per sq meter) on 31 May. Baskets and containers were filled with equal parts Triple R brand composted soil mix (Risse Greenhouses) and Pro Mix Bedding plant soilless potting mix supplemented with Terra.sorb water-absorbing crystals. Flowers were grown as seedling transplants with the exception of the sweet peas, annual flower mixes, and scarlet runner beans which were direct seeded. Plants in containers and baskets were purchased as plugs. 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 6 June to all plots. Plots were irrigated as needed throughout the summer. A fungicide treatment, Cleary 3336, was applied on 1 July to inhibit the growth of Sclerotinia cottony rot.

Weather data were compiled annually from a U.S. Weather Service station, elevation 475 ft (145 m), located approximately 350 ft (107 m) west of the garden. The summer was long and hot, similar to the previous growing season (Tables 1 and 2). The last frost occurred in early May, leading to one of the longest growing seasons in recent years. A typical drop in temperatures the first week of September ended the season for many flowers, but others continued to bloom through a balmy September. Despite the great early season weather, data on flowering and flower performance were similar to most years because planting did not commence earlier. Gardeners who planted early were treated to at least two extra weeks of blooms.

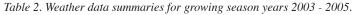
Plot evaluations began immediately after planting and continued weekly through September. They consisted of flowering dates and occurrence of disease, insect pests, seed pods, off-type plants, and deformities (Table 3). From 12 August to 22 August, each cultivar was measured for plant height and flower 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 one week after the first frost on 9 September.

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

Season	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Average temperature: (°F)											
May	52	44	48	49	46	44	45	50	44	52	56
June	59	57	61	58	61	59	57	58	61	66	67
July	62	62	64	62	61	59	61	61	61	65	63
August	56	52	57	52	58	52	57	54	55	62	58
September	51	41	50	46	45	41	49	47	41	38	46
Maximum temperature (°F)	85	82	87	87	91	83	95	85	82	90	85
Growing season:											
Last frost	May 22	June 5	May 25	May 13	May 29	May 15	May 13	May 12	May 24	May 8	May 5
First frost	Sep 4	Aug 27	Aug 19	Sep 13	Sep 11	Sep 16	Sep 24	Sep 2	Sep 13	Sep 4	Sep 2
Frost-free days	105	83	86	123	105	124	134	113	112	119	120
Thaw degree days*	3677	2811	3656	3278	3383	2943	3439	2980	3123	3751	3767
Rainfall (inches)	10.15	8.73	5.86	9.87	8.66	8.55	5.80	9.35	9.91	5.6	10.59
Previous winter season:											
Minimum temperature (°F)	-48	-48	-54	-48	-54	-50	-27	-36.3	-34.6	-44.4	-49.6
Snowfall (inches)	69	47.8	38.4	30.6	31.6	62.2	39.9	39.7	33.2	51.7	70.9

Table 1. Weather data from the U.S. Weather Service station located just west of the garden for years 1995 - 2005.

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



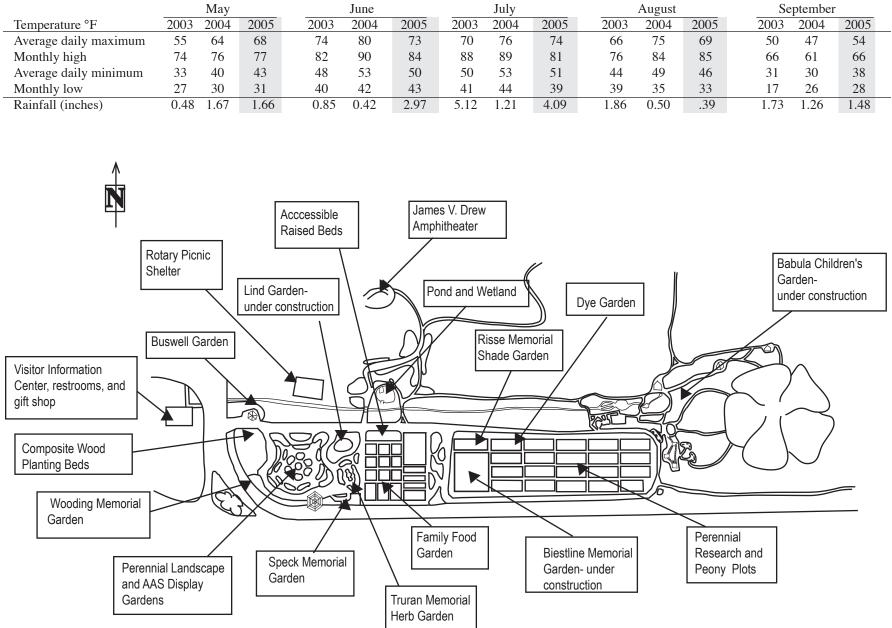


Table 3. Result Common	s of tested annual flo	wer cultivars for 2005.	Heigh	nt (in) ^w	Flower	size (in)×	Flov	wering p	eriod ^y		Fro tolera		
name	Cultivar	Flower color	min	max	min	max	Jun	Jul	Aug	Sep	foliage	flowers	-
African daisy		cream, orange, yellow w/ brown centers	8	181/2	13/4	3	******	***	* * *	* * *	n	у	
Ageratum	High Tide Blue	lavender	6	15	1/4	11/2	*****				n	n	
Ageratum	Mexicana Tall	dark blue	71/2	27	1/2	2	* 🛞 🏠 🛣 🏠	***	* * *		n	n	
Ageratum Alternanthera	Pearl Royal Cognac	lavender	1½ ₩	91/2	1/4	1/4	****	* * * *	* * *		n n	n	
Alternanthera	Creme de Menthe		*								n		
Alternanthera	Party Time		*								n		
Amaranth Tricolor	Aurora	shades of peach	7	13							n		
Annual Flower Mix	Colorscape Mixture	mixed	3	26				***	* * *	***	n	n	
Annual Flower Mix	Johnny's Butterfly & Hummingbird Mix	mixed	2	24	3/4	31/2		***	* * *	***	n	n	
Annual Flower Mix	Knee-Hi Mix	mixed	5	24	3/4	4		* * * *	* * *	***	n	n	
Annual Flower Mix	Low-Growing Mix	mixed	6	24				* * * *	* * *	***	n	У	
Annual Flower Mix	Surprise Mixture	mixed	10	45	1/2	31/2		**	**	***	n	n	
Aster, Annual	Ballet Mix	white, yellow, cream, pink, red,	12	25	2	51/2	* *	* * * *	* * *	* * *	n	n	
Garden		purple, rose, salmon											
Aster, Annual Garden	Giant Ray Mix	lavender, light yellow, red, rose, white	141/2	27	31/2	81/2		* * * *	* * *	* * *			
Aster, Annual Garden	Perser Mix	lavender, rose, purple w/ yellow centers	10	24	11/2	41/2	* * * *	**			n	n	
Aster, Annual Garden	Serenade Mix	red, white, rose, blue, carmine, light blue, scarlet, blue/white & red/white bicolors	91/2	30	1/2	2	* *	* * * *	* * *	\$ \$ \$	n	n	
Aster, Annual Garden	Standy Mixture	pink, purple, rose, lavender, white	10	321/2	13/4	33/4	æ	***	* * *	* * *	n	у	
Aster, China	California Giant	white, lavender, pink	9	271/2	13/4	51/2		* * * *			n	n	
Aster, Peony	Duchesse Formula Mix	rose, blue, yellow, white, sky blue, scarlet, silver-blue, silver-rose	17	301/2	2	4	*	* * *	* * *	* * *	n	n	
Bacopa	Blue Showers	lavender	*				* 🛞 🏠 🛣				n	n	
Bacopa	Snowstorm	white	*				* * * * 🗙				n	n	
Balsam	Tom Thumb	rose, salmon, scarlet, violet, white	17	271/2	1	11/2	* * *	* * * *	* * *		n	n	
Begonia, Wax	BabyWing Pink	pink	2	6	11/2	11/4	* * * * *	* * * *	☆ ☆ ☆		n	n	

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

^x if flower size was uniform, size is recorded under max only; sizes with an x, for example 12x3, indicate a spike flower type with the height x width.

^y * indicates just starting to bloom, & indicates 50% bloom, and **\$** indicates full bloom.

		ratings	z	_			
Flow		Foliage	Overall	Recor Fragrance	nmendeo Cuttina	tor Drying	Comments
3	3	3	3	-		,	Billowy floppy stems covered with blooms from mid-June through frost, excellent performer, best in
3	$\frac{3}{2}$	3	3	n	У		mass plantings
3	3	3	3	n	у	у	Medium height, more brown dead flower heads late in season than others tested, other tall cultivars are better
4	4	4	4	sl	y	y	Nice tall ageratum with billows of blooms
		1	1	у	n		Tiny, mounding, outstanding color and form early in season, some browning in rainy cool weather Only Alternanthera to make it to the end of the season, nice rich purple foliage, did not spread well and was not very ornamental in containers
		1 1	1 1		n	n	Interesting variegated foliage, did not grow vigorously during the season, died out by mid-August Interesting variegated foliage, did not spread, small stems did not add interest in containers
		1	1		n	n	Very poor showing, did not grow well, eventually dwarfed by neighbors, stems yellow and leaves became brown and unsightly in early August
3	3	3	3	sl	У	у	Spectacular mix of flowers in a medium-height mix, includes many cultivars rather than just wildflowers, great Shirley poppies
3	3	3	3	у	У	У	Medium-height mix but too much cosmos, many flowers engulfed with cosmos foliage, does not reach full bloom until August, great late-season show
3	3	3	3	n	У	У	Excellent color mix throughout the flowering season, found some weeds in mix
3	3	3	3	sl	У	У	Too much Linaria, good color mix, lots of lodging and bare spots
3	3	3	3	n	У	У	Excellent tall flower mix, did not come into full bloom until August due to height, spectacular late season color, lots of cosmos and poppies
3	3	3	3	sl	У	У	Interesting needle-type petals in puffball shapes, overall appearance is unkempt and floppy, good cut flower with staking
3	3	3	3	n	У	У	Needle-like 5-inch blooms on large plants, needs staking for straight stems, good cut flower
2	2	2	2	n	У	У	Grew well in the beginning of the season, died out completely by mid-August, has performed better in previous years
2	2	3	2	n	У	у	Small semidouble daisy-like flowers in clusters on very upright, almost too upright stems, plants with different colors have very uneven height, not attractive
2	2	2	2	n	У	У	Excellent mix of flower colors, poor showing compared to previous years, not as floriferous, floppy stems, needs some deadheading late in the season
4	4	4	4	n	У	у	Great mix of colors, excellent midseason blooms, needs deadheading after rain and late in season
2	4	4	3	n	У	у	Fully double flowers in blend of six colors and two bicolors, thick stems great for cutting, some leaf browning in full bloom, flowers are late to appear but worth the wait
2	2	2	2	n	n	n	Tiny flowers, not showy especially in August, ragged appearance
3	3	3	3	n	n	n	Nice early season display, needs deadheading to maintain color late in season
3	3	3	3	n	У	n	Big green bushes with lots of flowers along the stem among the leaves, display from above is mostly green, needs lots of space to spread, robust and bushy
1	1	1	1	n	n	n	Does not spread and produces few blooms in ground beds, not recommended

Common		wer cultivars for 2005, cont.	Heiah	nt (in) ^w	Flower s	size (in)×			Flo	SWe	eri	na	per	riod	у			Fro era	ance	
name	Cultivar	Flower color	min	max	min	max	Jun			Jı		و		ug		Sep	foliag		flowers	-
Begonia, Wax	Harmony Scarlet Improved	scarlet	11/2	8	11/4	11/4	\$	\$	ů 1	2 2	\$	\$	¢ 4	\$	ŵ		n		n	
Begonia, Wax	Prelude Pink Improved	pink	2	8	11/2	2	\$	*	ů 1	2 Q	¢	\$	û û	\$	ŵ		n		n	
Begonia, Wax	Prelude Scarlet Improved	scarlet	2	6	11/2	11/4	\$	*	ů 1	\$ \$	\$	\$	\$ \$	\$	ŵ		n		n	
Begonia, Wax Bidens	Prelude White Peters Gold Carpet	white gold	1 **	5.5	1/2	11/2	2 2 2 2									\$\$ \$\$	n n		n n	
Bishop's Flower	Green Mist	white w/greenish cast	9	27	1	41/2										**	y		y y	
Blue Eyed Daisy	Grandis	white w/blue centers	17½	331/2	11/4	3										**	У		y	
Blue Lace Flower	Madonna Mix	pink, lavender	14½	24	1	23/4			:	* *	*	\$	\$ \$	\$	\$ \$	\$	n		n	
Brachycome	Brachy Blue	lavender w/brown or blue centers	3	13	1/4	1	**	*	ů 1	2	ŵ	\$	\$ \$	\$	\$ \$	**	У		у	
Broom corn		reddish brown	48	68	5½ x 2	13 x 3						*	*	*	\$ \$	\$	n		у	
Bunny tails		tan	2	10	1/4	1	* 🕏	\$ \$	\$ \$	2 A	\$	\$	\$ \$	*	* *		n		n	
Burridge Greenthread	Philippine	gold w/mahogany centers	3	20	1	2	* *	*	æ 8	8 8	8	*	\$ \$	\$	ŵ		n		n	
Calendula	Complete Tall Mix	yellow, orange, cream, yellow w/orange tips, mahogany centers	19	281/2	1	23/4	* *	\$	ů 1	\$ \$	\$	\$	\$ \$	\$	\$ \$	**	у		У	
Calendula	Deja Vu	orange, yellow w/mahogany edges	13	34	11/2	23/4	**	*	£ 8	8	\$	\$	<u>۵</u>	\$	\$ \$	\$ \$	У		У	
Calendula	Pacific Beauty Mixed	yellow, orange, cream	11	241/2	11/2	3	** *	ŵ	۵ ۱	2 Q	ŵ	\$	<u>ث</u> \$	*	\$ %	**	у		у	
Calendula	Porcupine	orange	10	28	1	3	*	ŵ	ů i	\$ \$	ŵ	\$	<u>ث</u> ث	\$	ů û	û û	У		у	
Calendula	Red Splash	orange, yellow, cream w/red highlights	16	271/2	1	3	**	*	*	2 2	2 2	*	\$ \$	*	\$ \$	\$ \$	n		У	
Calendula	Victoria Sunset	orange w/brown centers	13	25	2	23/4	**	ŵ	\$ 1	\$ \$	ŵ	\$	<u>ث</u> \$	*	\$ \$	ů ů	У		у	
Calibrachoa	Callie Bright Red	red	*				**	_	_								n		n	
Calibrachoa	Callie Orange	rosy orange	*				* 🕯										n		n	
Calibrachoa	Callie Scarlet	red	*											2 C			n		n	
Calibrachoa		yellow	*				**										n		n	
Calibrachoa	Superbells Coral Pink		*				**					1 1		1 1			n		n	
Calibrachoa	Superbells Red	red	*				**					1 I		1 1			n		n	
Calibrachoa	Superbells Trailing Blue	lavender	*				*	*	\$\$ 1	2 2	1	1	\$ \$		* *	**	n		n	
California Poppy		gold	3	17½	1/4	13/4								1 1	\$ \$		У		у	
California Poppy		electric orange red	4	10	1/2	13/4	**										n		n	
California Poppy	Ivory Castle	creamy white	3	171/2	1	2	*	*	* *	8	\$	\$	\$ \$	\$	\$ \$	**	У		у	

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		ratings	z	_			
Flow		Foliage	Overall	Recor Fragrance	nmendeo Cuttina	d for Drying	Comments
4	4	4	4	n	n	n	Very nice plant for shade, bright, attractive color, needs close spacing for mass effect
т	- T	-	7	11	11	11	very mee plant for shade, origin, attractive color, needs close spacing for mass crieet
3	3	3	3	n	n	n	Light green foliage, need close spacing for best cover
2	2	2	2	n	n	n	Very nice color and dark foliage, need close spacing for best cover, not as floriferous or full as Harmony Scarlet
2	2	2	2	n	n	n	Needs a lot of deadheading, need close spacing for best cover
4	4	4	4	sl	у	n	Wonderful spots of color all season, individual flowers scattered in basket forming brilliant accents
3	3	3	3	n	у	n	Looks like Queen Anne's Lace, large bushy floppy stems, nice old-fashioned flower with ferny foliage
4	4	4	4	n	у	n	Bushy upright stems need room to spread, will take over a large section, attractive flower centers and light green foliage, flowers close up in cold cloudy weather, very nice display until snowfall
2	2	2	2	n	у		Plants doing poorly, disease or Preen damage, weak spreading stems, exquisite "pincushion" flowers in great mix of colors
4	3	3	3	n	n	n	Compact plants bearing masses of small daisy-like violet-blue fragrant blooms, fills in well and forms close mounds of brilliant color all summer
3	3	3	3	n	у	у	For back of the border mostly as a novelty rather than show, interesting reddish brown flowers and seed heads
1	1	1	1	n	n	y	Shorter than expected, hidden by more robust plants, cute fuzzy flower heads early, but dried up and died by mid-August
2	2	2	2	n	n	n	Billowy plant covered with blooms, wiry floppy stems, excellent edging plant when grown in masses
3	3	3	3	n	у	У	Long stems, great for cutting, nice mix of colors, some semi-doubles, most singles, solid colors and bicolors
3	3	3	3	n	у	У	Not the most floriferous, there are many better cultivars, needs deadheading
3	3	3	3	sl	у	у	Nice, reliable mix of colors, needs deadheading
4	4	4	4	sl	у	у	Petals folded under, looks like tubes of porcupine quills, unusual display, interesting two-toned color of petal
3	3	3	3	n	у	У	Good mix of colors, needs serious deadheading to maintain show all season
4	4	3	4	n	у	у	Intense double blooms fading slightly in centers, abundant blooms, one of the best Calendula colors tested
3	3	2	3	n	n	n	Great brilliant spots of intense color, moderate spread
3	3	3	3	n	n	n	Beautiful cascades of very nice color all season
4	4	3	4	n	n	n	Best of the Calibrachoas this season, huge cascading mounds of color, very striking
3	3	3	3	n	n	n	Small flowers but abundant, nice cascading show in baskets
3	3	3	3	n	n	n	Great cascades of flowers all season
3	3	3	3	n	n	n	Few flowers, not very showy late in season, better at the beginning of the season
2	2	2	2	n	n	n	Disappeared by mid-August, small but colorful early in season
4	4	4	4	n	у	n	Compact mounds of finely-dissected foliage with brilliant flowers, very attractive, stunning
3	3	3	3	n	y	n	Electric flower color, flowers close up in cold overcast weather
4	4	4	4	n	y	n	Outstanding color, nice contrast with dark green foliage, floppy stems, flowers close up in cloudy weather, needs deadheading late in season

Table 3. Results Common	of tested annual flo	ower cultivars for 2005, cont.	Heigh	nt (in) ^w	Flower s	size (in) ^x			F	=lo	we	erir	ng p	ber	iod	у			ost rance	
name	Cultivar	Flower color	min	máx	min	max	, .	Jun		I	Ju				ug		Sep	 foliage	flower	<u> </u>
California Poppy		white, pink, orange-red, cream, rose, orange	7	18	11/4	31/4	*	*	* *	8	÷ \$	ŵ	n 1	÷ 🗘	\$	\$ \$	***	n	у	
Carex	Bronze			1.01		=												n		
Celosia	Fresh Look Red	deep red	9	16½	$3\frac{1}{2} \times 1\frac{1}{2}$	5½ x 2		* 19	* *	2 1	2	\$	\$ \$	2	\$	<u>۵</u>		n	n	
Celosia	Fresh Look Yellow	yellow w/orange highlights	6	141/2	³ / ₄ x 1 ³ / ₄	3 ¹ / ₂ x 1 ¹ / ₂		:	* *	* *	* *	*	\$ \$	\$	\$	ĉ		n	n	
Celosia	Glow Carmine	carmine red	41/2	81/2	11/2	5		:	* 8	8	2	ŵ	2 Q	*	ů 1	ĉ		n	n	
Celosia	Glow Pink	dusky pink	4½	61/2	1½ x 1	3 x 2		ç	*	2	÷ 🗘	\$	2	: 2	\$	<u>ث</u> \$	**	n	n	
Chilean Glory Vine	Tresco Cream	yellow, rose	271/2	82	1	1¼					*	*	\$ \$	*	\$	\$ \$	\$ %	У	У	
Chinese Pink	Victoriana	maroon, white w/maroon markings, deep rose	41/2	11	3/4	2¾		* 1	* *	8 8	8	ŵ	0 0	2	\$ 1	¢ 🗘	**	У	У	
Chrysanthemum	Snowland	white w/yellow centers	51/2	19	1/4	11/2	*	*	<u>ث</u>	2	÷ 🗘	\$	ů 1	2	ů 1	<u>ت</u> 2	ů 0	у	у	
Chrysanthemum, Tricolor	Coconut Ice	white w/rose markings, rosy pink w/brown & yellow centers	131/2	251/2	1	21/2		*	* *	8	8	ŵ	\$ \$	*	\$	r %		n	n	
Chrysanthemum, Tricolor	Summer Festival	white w/red markings, yellow w/mahogany markings, yellow, white w/mahogany centers	71⁄2	29	1	21/2		*	* *	8	8	\$	ŵ û	2	\$ 1	* *	***	у	У	
Clarkia	Passion for Purple	purplish pink	6	15	3/4	2		\$	<u>ن</u> ۵	2	2	\$	\$	2	*	<u>ث</u> \$	**	У	У	
Cleome	Colour Fountain Mixed	purple, pink, white bicolor w/white	24	47	11/4	11/2		ę	* *	8 8	8	\$	\$ \$: :	\$	ĉ		n	n	
Cleome Coleus	Pink Queen Wizard Mosaic	pink/rose bicolor	30 3	59 7½	2½ x 5	8 x 6½		*	* *	8	8	ŵ	\$ \$	÷ 🗘	\$	ĉ		n n	n n	
Coreopsis	Quills and Thrills	red & yellow combinations	7	271/2	11/2	2				*	* *	*	* *	8	*	¢ 🌣	*	У	У	
Coreopsis	Sunfire	yellow w/burgundy center	12	17	11/4	21/4		:	* *	k 🛞	s 🗘	ŵ	2 2	2 2	ů 1	<u>ث</u>	*	у	У	
Coreopsis, Large-flowered	Early Sunrise	gold	181/2	231/2	11/4	21/4			¥	* *	8	ŵ	<u>ດ</u> ດ	2 2	\$	¢ 🌣	*	у	У	
Coreopsis, Large-flowered	Rising Sun	yellow w/red flecks	5	18	11/2	21⁄4		ç	* *	8	8	ŵ	\$ \$	\$	\$	\$ \$	*	n	n	
Cosmos	Dazzler	crimson, white, pink, rose	18	36	2	4			*	k 🥷	8	ŵ	\$ \$: 2	\$ 1	â		n	n	
Cosmos	Early Summer Mix	magenta, pink	14	34	21/4	5							\$					n	n	
Cosmos	Fairy Mix	pink, white, magenta, pink w/magenta edges	1111/2	341/2	2	5		*	* %	8	: :	\$	\$ \$: :	\$	ĉ		n	n	
Cosmos	Unique Mix	magenta, pink	12	28	21/2	51/2		*	* *	6	8	\$	\$ \$	2	\$	â		n	n	
Creeping Cuphea	Purple Star	purple w/cream center	8	201/4	1	11/2	*	*	\$ \$	2	2 2	ŵ	\$ \$	*	\$	ĉ		n	n	
Cuphea (miniata)	Summer Medley	rose	88	17	11/4	11/2	*	æ 1	* *	8	8	ŵ	\$ \$	\$	\$	ĉ		n	n	

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		ratings	Z	_			
	wer tv. quality	Foliage	Overall	Recor Fragrance	nmendec	tor Drying	Comments
3	3	3	3	y	y	n	Abundant semidouble blooms in a great mix of colors, just about the entire spectrum for California poppies, floppy weak stems spread color in large open mounds
2	3	1 2	1 2	n	n	n	Died Short spikes of color, remain tiny, if spaced close together would provide a good show, grown in raised
				11	n	n	beds, AAS Gold Medal flower award, Fleuroselect Gold Medal 2004
2	3	2	2	У	n	У	Later to bloom than its red cultivars, more branching and taller plants this season, electric colors, AAS flower award 2004, Fleuroselect Quality Award 2004
2	3	2	2	n	n	n	Short spikes of electric color, needs close spacing for good show especially in ground beds, foliage quite yellow in mid-August
2	3	2	2	n	n	у	Color is unique, needs close spacing for full color in mass plantings
3	3	3	3	n	у	n	Outstanding vine with clusters of bicolor flowers and very ornamental glossy green segmented foliage, as vigorous as scarlet runner bean as a climber, a garden favorite
2	3	3	3	sl	у	n	Beautiful feathery petals on tall stalks, great for cutting, not as floriferous as other dianthus, needs deadheading late in the season
4	4	3	4	n	у	У	Little daisy flowers, abundant blooms cover the mounded plants, nice long-lasting display, keeps going until snow
3	3	3	3	у	у	у	Beautiful mix of colors on double blooms, lots of flowers on upright and floppy stems, needs support to reduce significant lodging late in the season
4	3	3	3	у	у	у	Floppy stems, abundant blooms, outstanding mix of flower colors and shapes, solids and multicolored rings,
						n	tolerates only light frost
4	4	4	4	n	у		Outstanding color, very frilly flowers on upright stems, excellent cut flower, better show this year
3	3	3	3	n	У	n	Outstanding mix of colors on tall upright stems, standard for many years
4	4	3	4	у	у	n	Outstanding tall background plant covered with blooms, spines make it difficult to cut, old fashioned favorite
2	2	2	2	n	n	n	Dwarf and compact plant with interesting spotted and streaked foliage forming a mosaic pattern, need close spacing for mass effect, did not flower, overall effect was not attractive
3	3	3	3	n	у		Airy bushy upright flowers with fluted petals that are wider at the tip than the base, interesting bloom color combinations all summer, great planted in masses or as filler in back of borders
2	2	3	2	n	у	у	Not as floriferous as other Coreopsis tested this season, medium-sized blooms on straight stems
3	3	3	3	sl	У	y y	Medium sized plant loaded with double blooms from midseason on, straight upright stems, needs deadheading late in the season
3	3	3	3	n	У	y	Loaded with blooms this year unlike last year, tall straight-as-arrow stems
2	3	3	2	n	у	у	Big and bushy, late but nice flowers
2	3	3	3	n	y	n	Large bush needs room to spread, produced more foliage than flowers this season
2	2	3	2	n	у	n	Tall floppy stems with small flowers, not the best flower display compared to other cosmos
2	2	3	2	n	у	n	Covered with huge blooms, nice compact growth
3	3	3	3	n	у	n	Bushy with deep green foliage and tiny flowers, fills in well, flower display is disappointing, tiny and appear to be sprinkled on big green bush
3	3	3	3	n	n	n	More showy than other Cuphea tested this summer, larger flowers on slightly larger plants, bushy green plant with a few flowers, not very showy especially late in the season
·							

Common			Heigh	nt (in) ^w	Flower	size (in) ^x			=lov	veri	ing p					olera		_
name	Cultivar	Flower color	min	max	min	max	Ju	n		Jul		Au	g	Sep	folia	age	flowers	
Cupid's Dart		blue	18	341/4	1	2		* *	* *	ů	1	2 2 1	û û		y		у	
Dahlia	Amorus	variegated orange-red	45	65	21/2	9					**	< 🔹 🕯	* *		n		n	
Dahlia	Blue Angel	lavender blue	18	36	21/4	41/2			*	\$ \$	2 2	2 22	û û		n		n	
Dahlia	Citron du Cap	lemon yellow													n		n	
Dahlia	Fidalgo Lisa	lavender pink fading to light lavender in center	81/2	21	21/2	4					* *	* \$ *	û û		n		n	
Dahlia	Gloriosa	variegated yellow w/red splotches	24	30	4	6						\$	û û		n		n	
Dahlia	Hello Gorgeous Mixture	red, yellow, orange, white, pink, rose	6	15	21/2	33/4	*	\$ \$	* * *	\$ \$	2 2 2	2	û û		n		n	
Dahlia	Hillcrest Fiesta	yellow w/orange tips	38	42	31/2	7				*	2 2	2 2	۵ û		n		n	
Dahlia	Jo	pale yellow	45	481/2	5	9					**	: 2	\$ \$		n		n	
Dahlia	Mel's Misty Sunrise	creamy yellow w/pink highlights	33	441/2	6½	71/2			Ш	Т	1	2 22	α α		n		n	
Dahlia	Mom's Special	pale lavender w/dark lavender flecks	401/2	441/2		81/2					* 1	* **	¢ ¢		n		n	
Dahlia	Philothea	pink w/white centers	16	50	7	7					**	< \$	¢ \$		n		n	
Dahlia	Picotee Coral Beauty	coral	411/2	60	4	51/2			*	\$ \$	2 2	2 2	û û		n		n	
Dahlia	Prince Valient	variegated red & white																
Dahlia	Senior Ball	lavender & white	281/2	36	41/2	6						2	۵ û		n		n	
Dahlia	Star-Gazer	white, rose, orange, yellow, pink, burgundy, some bicolors	13	30	21/2	33/4	**	*	8	\$ \$	2 2	2	\$ \$		n		n	
Dianthus	Amazon Neon Cherry	cherry red	6½	271/2	3/4	1				*	* *	* * *	à à 8	* * *	n		У	
Dianthus	Amazon Neon Purple	purplish pink	19	26	13/4	3				*	* * 1	* * *	¢ ¢ 1	* * *	У		У	
Dianthus	Amazon Rose Magic	white ages to pinks & rose	14	251/2	11/2	4	*	* *	* *	* *	2 2	2 0	0 0 1	2 2 2	n		у	
Dianthus	Dynasty Orchid	deep purplish rose	9 ³ / ₄	21	3/4	11/2						1 1	Å Å 8		y		y	
Dianthus	Dynasty Purple	rosy purple								_				* * *	y		у	
Dianthus	Dynasty Red	dark velvety red	10	20	1	11/2	**	*	è 🔹	\$ \$	2 2	2	\$	* * *	У		У	
Dianthus	Dynasty Rose Lace	rose pink w/ white edge	10	20	1/2	11/2	**	* *	8	ů	2 2	2 2	û û 1	* * *	у		У	
Dianthus	Dynasty White Blush		7	17	1/2	11/4	*	*	*	\$ \$	2 2	2	a a 9	* *	y y		y	
Dianthus	Panda Mix	white, pink, crimson	4	11	3/4	21/2	*	* *	8 🔹	0 0	2 2	*	* * *	* *	y		y	
Dianthus	Supra Purple	rose	51/2	161/2	11/4	21/4								* * *	y		у	
Diascia	Darla Pink	pink	*				**	* *	8 8	* *	8	8 8 9	* * 1	2 2 2	у		у	
Diascia	Darla Red	red	*				**	* *	8	* *	* * *	8 8	* *	* * *	y y		y	
Diascia	Darla White	white	*							_				* * *	n		n	
Diascia	Diamonte Coral Rose	coral	6	17	3/4	1					1 1	1 1		* * *	У		У	
Diascia	Sun Chimes Coral	coral pink	*					\$	2	* *	8 8 8	8 8 9	* * 1	* * *	у		У	

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^x if flower size was uniform, size is recorded under max only; sizes with an x, for example 12x3, indicate a spike flower type with the height x width.

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

10

4		- - 1'			a second a second a se	6		
4		Follage	Overall		nmended Cutting		Comments	
4	3	3	3	n	У		Look like bachelor's buttons but longer stems, needs deadheading for best results, best as filler or accent	
	4	3	4	n	У		Compact symmetrical flowers in perfectly round button form, outstanding flecked colors	
2	4	4	4	n	У		Spectacular medium-sized blooms, especially attractive color	
				n	n		Blooms with twisted tattered edges, cactus form, outstanding bloom shape	
	3	3	3	n	У	n	Medium-sized blooms, interesting quill petals	
3	3	3	3	n	у	n	Outstanding colored blooms, great contrast of blooms with glossy foliage, late to bloom but worth the wait	
2	3	3	3	у	у	n	Medium-sized semidouble blooms, excellent mix of colors with lots of flowers, needs deadheading	
	4	4	4	n	У		Nice bicolor semicactus-type flowers, shorter than most grown in the garden	
	3	3	3	n	У		Small-sized waterlily-type blooms, outstanding color, great contrast against dark green foliage	
	3	3	3	n	У		Large laciniated flower form, very interesting two-toned flowers with distinct feathery appearance	
2	4	4	2	sl	У	n	One spectacular huge bloom, too late for best show	11
3	3	3	3	n	у	n	Medium-sized blooms, beautiful laciniated flower type	
4	4	4	4	n	у	n	Outstanding medium-sized blooms on tall plants, great late season show formal decorative style, small flower	
3	3	3	3	n	У	n	Small-sized ball flower form with beautiful symmetrical blooms showy in late season	
3	3	3	3	n	У	n	Abundant cactus-type blooms on plants much taller than advertised, covered with blooms, nice mix of colors	
3	4	3	3	У	У	n	Huge balls of flowers on tall stems, needs closer spacing than shorter Dianthus to fill in the beds, very attractive colorful display, excellent for cutting	
3	3	3	3	n	У	n	Huge balls of electric flowers on tall straight stems, very colorful in mass plantings, doesn't branch out far, needs closer spacing that shorter Dianthus cultivars, great in mixed borders or background	
3	3	3	3	V	V	n	Huge balls of flowers, plant something in front of these tall unbranching stems	
	3	3	3	y sl	у у		Very attractive open clusters of double blooms on tall, upright stems, needs deadheading by mid season	
	2	3	2		y y	y n	Does not branch and fill in bed, needs closer spacing than other shorter Dianthus, nice large flower	
	2	5	2	у	y	11	clusters but overall effect is poor, performed poorly	
2	3	2	3	sl	у	У	Rich velvety flowers on tall stems, loose open-flower clusters, must have close spacings or be interplanted with other flowers for best effect	
2	3	2	2	у	у	у	Late to come into full bloom, not many blooms this season, great stem length for cutting	
4	3	2	3	n	у	у	Tall open stems with small flowers, needs close spacing, tolerates light frost	
2	2	2	2	у	у	у	Performed better in raised beds than ground beds, not as showy this year, needs deadheading in late season	
4	4	4	4	У	у	У	Bred as a short-stemmed cut flower, lacy highly fringed petal edges, no maintenance, very attractive and loaded with blooms, AAS flower award 2006	
3	3	3	3	n	n	n	Good filler early in the season, gets leggy and sparse by mid-August, great color	
2	3	2	3	n	n	n	Good filler early in the season, gets leggy and sparse by mid-August, great color	
2	2	2	2	n	n		Nice filler early in season but died out by mid August	
3	2	3	3	n	n	n	First AAS cool Season Bedding Plant Award Winner 2006, outstanding color, leggy and floppy late in season, probably best used in mixed containers or beds, renewed growth in fall with nice display until snowfall	
3	3	3	3	n	n	n	Outstanding color and great display nearly all season, needs some deadheading	

Common	s of tested annual flo	wer cultivars for 2005, cont.	Heiał	nt (in) ^w	Flower	size (in) ^x		F	low	erin	iq p	erioc	У			ost ance	
name	Cultivar	Flower color	min	máx	min	max	Jur			lul	• •	Aug		Sep	foliage	flowers	-
Diascia	Sun Chimes Peach	pink	*				**	12 1	* * *	* * *	û û	û û	* %		У	У	
Dusty Miller	New Look		8	13											У		
Flaxleaf Pimpernel		blue	3	11	1/4	1	*	*	8 2 2	* * *	û û	*	û û	**	У	У	
Flowering Kale Gaillardia	Pigeon Formula Mix Arizona Sun	mixed cream, purple mahogany red w/bright yellow tips	10 9	14 18	1¾	21/4							*	* *	y y	У	
Gaillardia	Goblin	red w/yellow tips w/yellow & red centers	6	13	11/4	41/4		*	* * *	* *	û û	\$ \$	\$ \$	\$ \$	У	У	
Gazania	Frosty Kiss Mixture	orange, red, yellow, rose w/gold centers	8	10	21/2	4	*	*	8 8 9	8 8 1	û û	\$ \$	* *	**	n	У	
Gazania	Kiss Mixture	orange, red, gold, pink, yellow, white	9	13	11/2	3	* \$	\$ \$	* * *	8 8 1	û û	\$ \$	\$ \$	**	n	У	
Gentian sage	Blue Angel	royal blue	11	34	1	11/4	* *	* *	* * *	2 2 1	ĉ				n	n	
Geranium	Black Velvet Appleblossom	pink fading to white in center	9	17	11/2	3¾	* 🕏	\$ \$	* * *	2 2 2	û û	*	\$		n	n	
Geranium	Designer Dark Red	red	*				**	\$ \$	2 2 2	2 2 2	û û	\$\ \$\ \$\	\$		n	n	
Geranium	Designer Rose	rose	*				**	\$ \$	2 C C	2 2 1	۵ 🔉	\$ \$	\$		n	n	
Geranium	Designer Salmon Rose	salmon	*				**	\$ \$	2 C C	2 2 1	<u>ث</u>	\$ \$	\$		n	n	
Geranium	Gloria	orange	*				**	* 8	s 🔹 🕯	2 2 1	۵ 🔉	\$ \$	\$		n	n	
Geranium	Multibloom Capri	coral rose	7	121/2	11/2	5	* 🕯	\$ \$	2 22 2	2 2 2	û û	\$ \$	\$		n	n	
Geranium	Pink Expectations	pink	*				**	\$ \$	• 🗙 🕈	2 2 1	<u>۵</u>	\$ \$	ů		n	n	
Geranium	Rocky Mountain Coral	coral pink	*				**	* 8	• * *	2 2 1	<u>ث</u>	\$ \$	\$		n	n	
Geranium	Rocky Mountain Lavender	light lavender	*				\$	\$ \$	* * *	* * *	û û	\$ \$	\$		n	n	
Geranium	Rocky Mountain White	white	*				*	* %	* *	2 2 1	\$ \$	* *	*		n	n	
Geranium	Schoen Helena	salmon pink	*					* 8	s 🔹 🕯	2 2 2	<u>ث</u>	û û	\$		n	n	
Geranium	Tango Orange	orange	*				**	* *	: : :	2 2 1	ů ů	* *	* *	**	n	n	
Geranium	Multibloom Red	red	41/2	181/2	1	2						\$			у	у	
Geranium	Orbit Deep Salmon	salmon pink	12	14	21/2	31/2	ů	\$ \$	* * *	2 2 2	۵ û	*	\$		У	У	
Godetia	Fruit Punch	rose, pink, white bicolors & solids	6	14	11/2	21/2	*	*	* * *	2 2 1	û û	*	û		n	n	
Gypsophila	Gypsy Deep Rose	rose pink	1	5	1/4	1/4	* *	\$ \$	* * *	2 2 2	û û	* *	* *	**	n	n	
Hollyhock	Queeny Purple	dark rose	15	20	2	5	*	*	8 X X	2 2 1	û û	* *		*	n	n	

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

	i iain	ratings	2				
Flow		E a l'a a a	0		nmended		Ormanata
quantity	quality	Follage		Fragrance	Cutting	Drying	
2	2	2	2	n	n	n	Billowy masses of color early in the season, ragged late in the season, color confined to tips of branches with lots of green seed pods
		4	4	n	у	У	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 frost
3	4	3	3	n	n	n	Tiny mounding plants covered early in the season with tiny flowers, becomes open, leggy and few- flowered at end of season, recommended for containers, flowers close up in cold, cloudy weather
		4	4	n	n	n	Great mix of foliage colors, fills in bed well with large mounded plants, performs well from planting to snow
3	3	3	3	n	У	У	Not nearly as spectacular as Goblin, flowers are very late but huge, AAS Award Winner 2005, Fleuroselect Gold Medal winner for 2005
3	4	3	3	n	У	У	Outstanding blanket of huge flowers, gets better every year, mounds of plants choked with blooms, great two-toned effect on flowers, no maintenance required, great show from midseason on
3	3	3	3	n	n	n	Flowers not as abundant as other Gazanias, interesting silvery foliage, flowers close up in cold cloudy weather, Fleuroselect Quality Award
3	3	3	3	n	у	n	Compact plants with excellent color mix, closes up in cloudy cold weather, fine silvery foliage
2	3	2	2	sl	у	n	Tall spikes top dark green foliage, flowers begin early but are nearly nonexistent by mid August, a few flowers appear at any one time, not very showy but great color
2	2	4	3	У	n	n	Continues the tradition of dark leaves that contrast nicely with flowers, attractive blooms against the foliage but blooms are small, too open for spectacular display, grows well and fills in beds
3	3	3	3	sl	у	n	Rich velvety blooms, intense color, needs deadheading throughout the season
3	3	3	3	sl	у	n	Excellent vibrant color, great height in baskets, needs deadheading
3	3	3	3	sl	у	n	Good color and size of blooms, needs deadheading and significant leaf removal in late summer
2	2	3	2	sl	n	n	Medium-sized blooms, nice color but few blooms, not as showy as other geraniums
3	3	3	3	sl	у	n	Excellent color on medium-sized flower heads, needs deadheading for best display
2	2	2	2	sl	n	n	Better pink cultivars available, not as showy as others
2	2	3	2	sl	n	n	Nice color but flower heads were small, entire plant was overwhelmed by other plants in the container
3	3	3	3	sl	У	n	Large flower heads, good height for baskets, needs deadheading and leaf removal especially in late season
2	2	3	2	sl	n	n	Medium-sized flower heads, needs serious deadheading to remove brown spent flowers, not the best tested
2	2	3	2	sl	у	n	Small flower heads, not as floriferous as other geraniums, needs deadheading
3	3	3	3	sl	у	n	Brilliant display of large flower clusters, covered with blooms all summer, needs some deadheading
4	4	4	4	sl	n	n	Brilliant balls of flowers, fills in well, very attractive display through most of summer, needs deadheading
4	4	4	4	У	у	n	Outstanding cover of medium-sized balls of flowers, very attractive color, blooms all season, some deadheading needed in late season
3	4	4	3	sl	у	n	Dwarf compact uniform plants with early blooms in a mostly pink colors, have grown better cultivars, a little short for cutting, needs deadheading in late season
3	3	2	2	n	n	n	Mostly double flowers, abundant blooms early, some Sclerotinia late in season, no maintenance needed, many plants died by mid-August, AAS bedding plant award 2004, Fleuroselect Quality Award 2004
2	4	2	3	n	n	n	Bright flowers to 5 inches in size, short, flowers often hidden by foliage and new upright branches, AAS flower award winner 2004, Fleuroselect Quality Mark 2004, died out by mid August, needs deadheading

Common		wer cultivars for 2005, cont.	Heigh	ıt (in) ^w	Flower s	size (in)×		Flowe	ering p	periody		Fro tolera		
name	Cultivar	Flower color	min	max	min	max	Jun	Ju	1 - I	Aug	Sep	foliage	flowers	-
Hyacinth Bean	White	white	24	48	3/4	1			* * *	* * * *		n	n	
Impatiens, Garden	Dazzler Apricot Improved	apricot pink	1	5	1	11/2	**	**	\$ \$ \$			n	n	
Impatiens, Garden	Dazzler Pink Deep Improved	pink	2	8	3/4	1¾	**	**	***	* * * *		n	n	
Impatiens, Garden	Dazzler Burgundy	burgundy	11/2	61/2	13/4	21/4	222	☆ ☆ ☆	12 12 12	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		n	n	
Impatiens, Garden	Dazzler Cranberry Improved	dark wine red	1	8	1	2	***	***	* * *	* * * *		n	n	
Impatiens, Garden	Dazzler Violet Improved	lavender	11/2	7	11/4	2	**	***	* * *	* * * *		n	n	
Impatiens, Garden	Dazzler Lilac Splash Improved	deep violet w/dark magenta eye	2	81/2	11/2	2	**	**	***	000		n	n	
Impatiens, Garden	Deco Orange	orange	2	8	11/4	13/4	\$\frac{1}{2} \$\\fr	☆ ☆ ☆	☆ ☆ ¢	1 12 12 12 1		n	n	
Impatiens, Garden		white	1	61/2	3/4	13/4	\$ \$ \$	\$\frac{1}{2} \$\\fr	\$\$ \$\$ \$	* * * *		n	n	
Impatiens, Garden	Showstopper Burgundy Improved	burgundy	3	11½	11/2	21/4	***	* * *	* * *	* * * *		n	n	
Impatiens, Garden	Showstopper Deep Orange Improved	orange	11/2	9	11/2	1¾	***	***	* * *	* * * *		n	n	
Impatiens, Garden	Showstopper Lilac Improved	lilac pink	1	8	11/2	13⁄4	**	***	***	* * *		n	n	
Impatiens, Garden	Showstopper Pink Improved	pink	1	8	1/2	2¼	**	**	* * *	* * * *		n	n	
Impatiens, Garden	Showstopper Red Improved	red	1	5	1	2	**	* * *	* * *	* * * *		n	n	
Impatiens, Garden	Showstopper Soft Blue Improved	lavender pink	1	8	3/4	1¾	**	* * *	* * *	* * * *		n	n	
Impatiens, Garden	Showstopper White	white	4	8	11/4	11/2	\$ \$ \$	☆ ☆ ☆	12 12 12	* * * *		n	n	
Impatiens, Garden	Stardust Cherry	white & cherry red bicolor	1	3	3/4	11/2	<u></u>	**	☆ ☆ ☆	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		n	n	
Impatiens, Garden	Swirl Mix Monet	pink or rose fading to light pink at centers	1	6	3/4	2	**	***	***	* * * *		n	n	
Impatiens, Garden	Swirl Raspberry	light rose w/dark rose edges & centers	1	4	1	13/4	**	**	* * *	* * * *		n	n	
Impatiens, Garden Impatiens, New Guinea	Xtreme Mixture Divine Mix	lilac, pink, red, violet, white lavender, rose	1 2½	5 6	1½ 1	2 2½				☆ ☆ ☆ 3 % % %		n n	n n	
Juncus	Quartz Creek		*									n		
Lavatera	Twins Hot Pink	pink w/rose markings	81/2	24	11/2	31/2	* 🗘 🗘	* * *	* *	* * * *	* * *	у	у	
Lobelia	Laguna Pink	pink	*							1 12 12 12 12 1		n	n	
Lobelia	Laguna Sky Blue	lavender	*							1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		n	n	
Lupine	Band of Nobles	pink/rose, purple/white, purple /red bicolors	25	39	2 ¹ / ₂ x 1 ¹ / ₄	11½ x 3	* *	* * *	* \$ 1	* * * *	***	у	У	
Lupine	Gallery Yellow	yellow w/white highlights	111/2	211/2	3 x 1¼	8½ x 1¾	** *	* * *	* *	* * * *	\$ % %	у	у	

Table 3 Results of tested annual flower cultivars for 2005 cont

* 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.

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

	Plant	ratings	Z				
Flow		Fallers	0		nmended		O
. ,		-		Fragrance	Cutting	Drying	
2	2	3	2	n	У	n	Not as vigorous as Scarlet Runner Bean for trellises, nice contrasting color
2	2	2	2	n	n	n	Interesting color, uneven height, ragged overall appearance
3	3	3	3	n	n	n	Large flowers, attractive color, great cover
3	3	3	3	n	n	n	Nice color, not as good as other burgundy cultivars, smaller flowers and not as floriferous
3	3	3	3	n	n	n	Uneven height and ragged appearance, needs deadheading for better show, excellent color
3	3	3	3	n	n	n	Rich deep flower color, yellow foliage late in season
3	3	3	3	n	n	n	Compact uniform habit with masses of blooms, flowers freely to frost, abundant blooms in warm summer
3	3	3	3	n	n	n	Heat made this cultivar grow well, excellent growth and spread, nice contrast between flowers and foliage
2	2	2	2	n	n	n	Beautiful semidouble flowers, medium size, yellow foliage late in season, needs deadheading
4	4	4	4	n	n	n	Outstanding height and spread this season, best show for mounds of color, huge flowers
3	3	3	3	n	n	n	Good in containers, excellent flower color, abundant blooms, deep rich color contrasts well with foliage, needs some deadheading
3	3	3	3	n	n	n	Flowers freely, good in containers, excellent solid color with medium-sized blooms, uneven height
2	2	2	2	n	n	n	Good-sized flowers with two-toned color, beautiful contrast of pink ground color and rose overtones, uneven height through the bed, not as floriferous as other Impatiens, ragged look this year
3	3	3	3	n	n	n	Outstanding color, excellent contrast with dark foliage, more blooms this season than last, short but nice
3	3	3	3	n	n	n	Flowers freely, good in containers, popular color, needs deadheading
2	2	2	2	n	n	n	Brilliant white for shade, great contrasting foliage, uneven height and flower display, more floriferous other years
3	3	3	3	n	n	n	Great flower color, not as floriferous as some other cultivars
2	2	2	2	n	n	n	Mixed colors, not as attractive as solid colors, medium-sized flowers, uneven height
3	3	3	3	n	n	n	Interesting colors with swirl patterns on all petals, attractive large flowers, needs deadheading, fills in well
2	2	2	2	n	n	n	Not as showy as other Impatiens, good flower size but sparse
2	2	2	2	n	n	n	Huge flowers, needs close spacing for mass effect, did not spread, flowers confined to top of single stems
		3	3				Interesting cluster of spiking greens added height to containers, not visible among riots of flower colors
2	3	1	2	n	у	n	Many died early from disease, remaining were upright stalks loaded with flowers, disease ruined the effect
2	3	3	3	n	n	n	Great filler early in season, needs significant pruning to maintain color
3	3	3	3	n	n	n	Nice airy filler in baskets, needs significant deadheading late in the season
3	3	3	3	n	у	n	Excellent tall flower stalks for mid- and late-season show, fuzzy seed pods in late August, not as floriferous
3	3	3	3	n	у	n	Attractive spikes, excellent contrast with dark green foliage, best show late in season after light frost

Common	or tested annual no	wer cultivars for 2005, cont.	Heigh	nt (in) ^w	Flower	size (in)×	Frost Flowering period ^y tolerance
name	Cultivar	Flower color	min	max	min	max	Jun Jul Aug Sep foliage flowers
Lupine	Tutti Frutti	pink, yellow, rose, purple	17	41	3 x 1	17 x 2 ³ / ₄	* * * * * * * * * * * * * * * * * * *
Marigold	Cottage Red	red	16½	30	1	2	
Marigold, African	Capriccio	gold, deep orange	27	32	11/4	4¼	* * * * * * * * *
Marigold, African	Cempoalxochitl	yellow & orange striped	14	34	11/2	21/4	n n
Marigold, African	Flagstaff	dark orange	16	26	13⁄4	4	
Marigold, African	Perfection Mixture	yellow, gold, orange	101/2	19	2	4	* * * * * * * * * * * * n n
Marigold, French		orange w/mahogany overtones, mahogany w/orange	3	13	11/4	21/2	\overline{\beta} \overline{\beta} \overline{\beta} \overline{\beta} \overline{\beta} \overline{\beta} \overline{\beta} \overline{\beta} \overline{\beta} \overline{\beta} \overline{\beta} \overline{\beta} \overline{\beta} \overline{\beta} \overline{\beta}
Marigold, French	Aurora Light Yellow	lemon yellow	3	101/2	11/4	21/2	* 🕸 🏟 🏟 🏟 🏟 🏟 🏟 🏟 🏟 🏟 🐘 👘 👘 👘 👘
Marigold, French	Disco Granada	gold w/red markings, gold center	31/4	9	1	21/2	(a)
Marigold, French	Durango Mix Outback	yellow, orange, red/yellow & red/orange bicolors	31/2	14	3/4	1	
Marigold, French	Little Hero Gold	gold	13/4	91/2	1	21/2	🕸 🏟 🏟 🏟 🏟 🏟 🏟 🏟 🏟 🏟 🏟 🔹 👘 👘 👘 👘 👘
Marigold, French	Mars	mahogany w/gold centers	41/2	181/2	1	2	🛞 🛞 🕸 🕸 🏟 🏟 🏟 🏟 🏟 🏟 🏟 🏟
Marigold, Signet	Starfire	orange, gold, red, yellow	41/2	20	3/4	11/4	* * * * * * * * * * * * * * * * * * *
Melampodium	Lemon Delight	light yellow w/dark yellow centers	11/2	1111/2	1/2	1	* * * * * * * * * * * * * * * * * * *
Mexican Hat	Red Midget	mahogany w/yellow edges, green cone center	10	26	3/4	21/4	* * * * * * * * * * * * * * * * * * *
Nasturtium	Black Velvet	deep red, mahogany	10	14	13/4	21/4	* * * * * * * * * * * * * * * * * n n
Nasturtium	Caribbean Cocktail	rosy pink, yellow, orange	1	13	2	21/2	* * * * * * * * * * * * * * * * * * *
Nasturtium	Fiery Festival	brilliant orange red	1	261/2	21/2	3	* * * * * * * *
Nasturtium	Primrose Jewel	yellow	1	141/2	21/4	21/2	8 8 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Nasturtium	Vesuvius	salmon pink w/dark red markings	3	24	11/2	21/4	* * * * * * * * * * * *
Nasturtium	Whirlybird Cherry Rose	rose	3	181/2	13/4	21/2	* * * * * * * * * * *
Nemesia	Sunsatia Cranberry	red	*				☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ★ n n n
Nemesia	Sunsatia Lemon	yellow					Image:
Nicotiana	Marshmallow	rose, pink, white	36	55	1/2	1.5	* * * * * * * * * * * * * * * * * * *
Nicotiana	Perfume Deep Purple	dark purple	6½	21	2	4	* 🗘 🌣 🌣 🔅 🌣 🌣 🌣 🌣 🌣 🌣
Nicotiana (alata)	Sensation White	creamy white	21	49	3/4	2	* * * * * * * * * * * * * * * * * * *
Ornamental Millet	Jester	burgundy, purple	22	19			* % * n n
Ornamental Millet	Purple Baron	burgundy	23	34	5 x 1	11 x 1½	n y
	Glistening White	white w/deep blue centers	6	14	11/2	31/2	Image:

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

	Plant	ratings	Z				
Flow			Overall		mmende		Commente
 	quality	-		Fragrance	-	Drying	
3	4	4	3	n	У	n	Vigorous upright spikes great for backgrounds, very nice mix of flower colors, attractive in late season
4	4	3	4	У	У	У	Airy billowy marigold that needs room, draped over garden bed, swallowed up neighbors, intense blooms covered plant, provided quite a display, very ornamental
4	4	4	4	37	N 7	N /	Largest double-flowered African marigold we've grown, huge blooms cover plant, interesting
+	4	4	4	У	У	У	fluted edges, outstanding display well worth testing in the back of borders
2	2	2	2	sl	у	у	Nice bushy marigold covered with medium-sized flowers, slightly reflexed petals, needs deadheading
3	4	3	3	У	У	у	Attractive large flowers with fluted petals, needs deadheading through season, intense color, probably the darkest orange marigold we have seen, very attractive
3	3	3	3	у	у	у	Very large flowers cover the plant nearly all season, excellent mix of colors, little maintenance required
4	3	3	3	y	n	y	Brilliant mix of dark and light color patterns on petals, very attractive, slight variation in height
				5		5	but not unattractive, needs deadheading late in the season, bushy, fills in well
4	3	3	3	sl	n	у	Outstanding blooms, great in mass plantings at the edges of beds, needs deadheading late in season
4	4	4	4	sl	n	у	Dwarf selection, single-petaled, blooms early and all season until frost, excellent show, no maintenance
3	3	3	3	У	n	У	Very good color display all season, needs a small amount of deadheading, uniform height
2	2	2	2	У	n	у	Extra dwarf, not as floriferous as other marigolds, lots of open spaced between plants needs deadheading
4	4	4	4	y	У	y	Stunning in mass plantings, bushy mounds covered with blooms, very attractive and colorful nearly all summer
4	4	4	4	y	у	y	Outstanding mounds of starry flowers, solid display of color, excellent in mass planting at the edges of beds
4	4	4	4	n	n	У	Neat mounds covered with daisy-like blooms, needs close spacing, Fleuroselect Quality Award
2	3	3	3	sl	У	n	Tall, open, sometimes floppy stems topped with unusual flowers, petals reflexed beneath large upright central green cone, would work well as a filler with Rudbeckias and others, still beautiful after frost
3	3	3	3	у	У	n	Abundant blooms, very striking and unusual, flowers hidden beneath foliage
4	4	4	4	n	У	n	Miniature leaves, flowers held just above the foliage, showy
3	3	3	3	у	У	n	Bright showy colors, plenty of blooms above the foliage
3	3	3	3	у	У	n	Trailing, plenty of flowers above foliage, very showy, excellent color, some double flowers, fluted edges
3	3	3	3	n	у	n	Very attractive flower color, excellent vegetative growth, lots of flowers hidden by foliage
4	4	4	4	n	У	n	Mounds of foliage covered with huge blooms, huge flowers, showy, great color
2	2	2	2	n	n	n	Nice color early in season, leggy and scraggly later
2	2	2	2	sl	у	n	Nice color early in season, faded by mid-August, might be better with serious deadheading
3	1	2	2	У	y	n	Tall annual for back of borders, sprawling branches covered with flowers and buds, old flowers are brown, flower stalks have mixed colored blooms, plant catches your eye because of its size
4	4	3	4	У	У	n	Tall with very unusual-colored blooms, outstanding as background plant in borders, delicate fragrance in evening, AAS Bedding Plant Award Winner 2006
3	3	3	3	n	У	n	Tall with clusters of white flowers, excellent for background in borders
		2	2	n	n	У	Did not reach advertised height and hidden by adjacent flowers, just beginning to form flower stalks in late August, yellowish foliage early in season was not attractive
3	3	3	3	n	у	у	Flower spikes develop late in season, excellent deep purple foliage and flowers
2	2	1	2	n	y	n	Few flowers all season, ragged late in the season, needs deadheading especially late in the season, flowers
							close in cold wet weather

Common	s of tested annual flo	wer cultivars for 2005, cont.	Heiał	nt (in) ^w	Flower	size (in)×	Frost Flowering period ^y tolerance
name	Cultivar	Flower color	min	max	min	max	Jun Jul Aug Sep foliage flowers
Osteospermum	Lemon Symphony	yellow	*				û û û û û û û û û û û û û
Osteospermum	Orange Symphony	light orange	*				* * * * * * * * * * * * * * * * * * *
Osteospermum	Passion Mix		6	16	15	3	* * *
Osteospermum	Peach Symphony	peach	*				(a)
Osteospermum	Tradewinds Deep Purple	dark purple	*				
Osteospermum	Tradewinds Light Purple	lavender & purple	*				* * * * * * * * * * * * * * * * * * *
Osteospermum	Tradewinds Pink	lavender pink	*				* * * * * * * * * * * * * *
Palafoxia		lavender pink	4	181/2	1/2	11/4	* * * * * * * * * * * * * * * * * * *
Pansy	Accord Daffodil Mixture	orange, white, yellow, gold clear face	4	13	11/4	21/2	\$\overline{a}\$ \$\overl
Pansy	Accord Peace Mixture	white, blue, burnt orange	4	101/2	11/2	3	•• •
Pansy	Acquarelle	yellow, rose, white, some clearfaced	4	12	13⁄4	3	$\textcircled{\begin{tabular}{cccccccccccccccccccccccccccccccccccc$
Pansy	Atlas Windjammer Mix	orange, purple, lavender, white w/lavender face	4	11	11/4	3	$ \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \begin{array}{c} \end{array}{} \end{array}{} \end{array}{} \begin{array}{c} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \begin{array}{c} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \begin{array}{c} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \begin{array}{c} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \begin{array}{c} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \begin{array}{c} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \begin{array}{c} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \begin{array}{c} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \end{array}{} \end{array}{$
Pansy	Bronze Tone	burnt orange edged in yellow w/mahogany face	4	81/4	1	2	(a)
Pansy	Brunig	mahogany face edged in bright yellow	31/4	11½	1	2	* * * * * * * * * * * * * * * * * * *
Pansy		Cream, lavender, yellow, mahogany w/dark face	2	12	1	2	
Pansy	Coronation Gold	gold, some mahogany whiskers		101/2	3/4	21/2	* * * \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
Pansy	Fama Orange	orange	101/2	13	11/4	21/2	$ \begin{array}{c} \mathbf{x} \mathbf{x} \\ x$
Pansy	Karma Rose	dark rose	4	9	11/2	21/4	x x x x x x x x x x x x x x x x x x x
Pansy	Majestic Patricia	creamy yellow & lavender w/ rose or lavender face	4	10	11/2	23/4	(a)
Pansy	Swiss Giant Violet Blue	deep violet	5	181/2	11/4	21/2	û
Penstemon	Violet Dusk	rosy lavender	9	19	3/4	1	* * * * * * * * * * * * * * * * * * *
Pentas	Lavender Light	pink	11	141/2	1/4	1/4	8 8 8 8 a a a a a a a a a a
Petunia	Carpet Pink Morn	pink w/white centers	2	15	2	31/4	1 1
Petunia	Cloud Snow	white	3	16½	3	5	(a)
Petunia	Double Cascade Blue	deep purple	51/2	15	23/4	31/4	(a)
Petunia	Dreams Burgundy Picotee	burgundy w/white edges	5	15	2	31/4	(a) (
Petunia	Dreams Rose Picotee	rose w/white edges	7	15½	2	31/2	

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^x if flower size was uniform, size is recorded under max only; sizes with an x, for example 12x3, indicate a spike flower type with the height x width.

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

Flow		ratings	z	Pacar	nmendeo	for	
		Foliage	Overall	Fragrance		Drying	Comments
3	3	3	3	n	n	n	Bloomed well all season, spread well in baskets
3	3	3	3	n	n	n	Excellent color in baskets, fills in well and produced lots of blooms all season
3	3	3	3	n	n	n	Great color, needs closer spacing for better mass effect
2	3	3	3	n	у	n	Beautiful addition to baskets early in the season, leggy and ragged late in season
3	3	3	3	n	у	n	Intensely colored petals, small flowers but lots of them, great bushy displays fill containers
3	3	3	3	n	n	n	Great two tone effect, nice bushy plants fill in containers well
2	2	3	2	n	n	n	Not as ornamental as other Osteospermum, seemed to have a lot of dead foliage, more so than others tested
2	2	2	2	sl	у	n	Bushy with tufts of flowers, needs close spacing and deadheading, best used as filler
2	2	2	2	У	у	У	Beautiful well-balanced mix of colors, blooms all summer until snowfall, no maintenance, other mixes more showy
3	3	3	3	у	у	у	Mix of mostly pastel colors, so-so performance
2	2	3	2	У	у	У	Combination of mostly pastel, nothing special, some with frilly edges
3	3	3	3	У	У	У	Excellent combination of colors, some flowers with ruffled edges, most with dark faces
3	3	3	3	У	у	У	Interesting color combination, works well with Rudbeckias and other gold/brown flowers, flowers abundantly, no maintenance
2	3	3	3	sl	у	У	Interesting sharply contrasting colors on petals
2	2	2	2	У	у	У	Old-fashioned mix with frilly edges on petals, very nice effect, not enough flowers
4	4	3	4	у	у	у	Huge abundant blooms, mostly solid colors, very bright, continuous color all season, Tolerates light frost
3	3	3	3	y	y y	y	Attractive blooms, flowers and foliage tolerate light frost, good color and size all season, best orange pansy in the trials
3	3	3	3	у	у	У	Outstanding color, abundant blooms, very nice performer all season
2	2	2	2	sl	у	У	Large flowers, attractive bicolor, not as attractive as previous years
3	3	3	3	sl	у	У	Outstanding velvety petals, a few plants with yellow markings take away from rich velvety appearance
1	1	1	1	n	n	n	Smaller than advertised, tiny flowers not showy, get lost, needs close spacing and mass planting
3	3	2	3	n	у	n	Surprisingly fast growth once planted outdoors, bloomed well all summer in raised beds
3	3	2	2	у	n	n	Beautiful two-toned blooms, susceptible to Sclerotinia, one of the most diseased petunias this season
4	4	2	3	n	n	n	Huge flowers on mounding plants, one of the best white petunias we've tried, needs some deadheading, some Sclerotinia late in the season
4	3	3	3	У	n	n	Outstanding huge blooms, very frilly flowers on strong upright stems, held up well all season, very little evidence of Sclerotinia
4	2	4	3	У	n	n	Outstanding, large showy flowers, little evidence of Sclerotinia, variable "picotee" markings, most flowers have no white edges, others intensely marked, mostly not picotee but still nice
4	4	4	4	у	n	n	Outstanding performer, huge showy flowers with stunning white picotee edges, little evidence of Sclerotinia, holds up well in cold wet weather

Common	Cultiver			nt (in)∞		size (in) [×]				ing	peric		0		ance	_
name	Cultivar	Flower color	min	max	min	max	Jun	_	Jul		Aug	-	Sep	foliage	flowers	
Petunia	Dreams Sky Blue	lavender fading to light lavender in centers	3	13	11/2	33/4	***	\$	\$ \$	* * *	* * %	8 8 9	* *	n	У	
Petunia	Easy Wave® Pink	pink w/white throat	*				* *	\$	û û	2 🗘 🕄	2 2 2	2 2 9	* * *	у	у	
Petunia	Easy Wave [®] Salmon	salmon pink	*				2 2 2	ů ů	û 0	2 2 2	2 2 2	2 2 2	* * *	n	y	
Petunia	Easy Wave® White	white	*				**	\$	û û	2 2 2	2 2 2	2 2 3	* * *	у	y	
Petunia	Easy Wave [®] Blue	deep lavender w/darker throat	2	14	11/4	23/4	2 2 2	*	ů ů		2 2 2	• ® 1	* *	v	v	
Petunia	Easy Wave [®] Red	dark red fading w/age	*				222	*	û û	: a :	2 2 2	2 22		y	y	
Petunia	Easy Wave [®] Shell Pink Imp.	light pink	*				**						* * *	n	n	
Petunia	Fantasy Crystal Red	pink w/rose throat & burgundy markings	3	10½	1	2	**	\$	\$ \$	* * *	* * *	* * *	€	n	n	
Petunia	Frillytunia White	white	4	13	21/4	31/2	* \$ \$	\$	\$ \$	* * *	2 2 2	\$	* *	У	У	
Petunia	Frost Mixture	purple, rose, red, coral w/white picotee edges	7	22	23/4	3¾	* 🏞	\$	\$ \$	* * *	* * *	\$	* *	У	У	
Petunia	Limbo Violet	violet	21/2	11½	21⁄4	3¾	****	\$	\$	* * *	2 2 2	2		n	У	
Petunia	Madness Lavender Glow	lavender w/lighter centers	5	14	2	3	**	\$	\$	* * *	* * *	2 2 1	* *	У	У	
Petunia	Madness Rose Morn	rose w/cream centers	4	141/2	11/4	31/2	**	û û	ů 0	2 22 2	* * *	8 88 9	€	у	у	
Petunia	Madness Salmon Morn	salmon	5	181/2	2	3	* *	ů ů	ů	2 2 3	2 2 2	2 2 3	* *	y	y	
Petunia	Merlin Blue Morn	purple w/light purple throat	4	18	11/2	23/4	* *	\$	\$ \$	* * *	* * *	8 8 9	* *	У	У	
Petunia	Primetime Twilight Mixture	lavender, pink, pink w/white throat	3	19	13/4	2¾	** 🕷 🏠	\$	\$	* * *	2 2 2	\$	*	У	У	
Petunia	Stars & Stripes	red w/white stripe, purple, white, purple w/white stripe	5	18	3	3¾	***	**	\$	* * *	* * *	* * *	? %%	У	n	
Petunia	Tidal Wave Purple	purplish pink	6	28	11/2	21/2	***	ů ů	û	2 2 2	2 2 2	2		у	у	
Petunia	Tidal Wave Silver	silvery lavender w/purple veins & throat	91/2	31½	11/4	21/2	* * *	\$	\$ \$	* * *	2 2 2	* * *	8	У	У	
Petunia	Ultra Pastel Pink	pastel pink w/rose overtones & cream throat	4	131/2	13/4	4	****	\$	\$	* ** *	* * *	8 %		У	n	
Petunia	Whispers Appleblossom	light pink	*				**	ů ů	û û	2 22 2	2 2 2	2 2	* * *	у	у	
Petunia	Whispers Red	red	*				**	ů ů	ů	2 2 3	2 2 2	2 2	2 2 2	y	y	
Phlox	Intensia Lavender Glow	lavender	*				* *	ů ů	ů	2 2 2	2 2 2	2 2 1	\$ \$ \$		-	
Phlox	Intensia Neon Pink	pink	*				* *	\$	\$	3 88 9	8 8 8	8 88 8	* * *	у	у	
Phlox, Garden	21st Century Blue Star	rosy burgundy fading to pink at edges	2	9¾	3/4	11/4	****	*	\$ \$	* * *	2 2 2	* % 1	* * *	У	У	
Phlox, Garden	21st Century Rose Star	pink w/deep rose centers	2	13	1	11/4	** **	\$	û û	2 C 1	* * *	* * *	* * *	У	У	
Phlox, hybrid	Peppermint Candy	cream w/red edges & stripes	3	17	3⁄4	11/4	* *	*	* *	8 88 8	8 8 9	8 %		n	n	

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^y * indicates just starting to bloom, & indicates 50% bloom, and & indicates full bloom.

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		ratings	z	-			
Flow quantity		Foliage	Overall	Recol Fragrance	mmendec Cutting		Comments
3	3	3	3	у	n	n	Outstanding mounds of abundant flowers, very nice color, needs deadheading, Sclerotinia late in season
3	3	3	3	у	n	n	Very nice trailing habit, looks good all summer
3	3	3	3	n	n	n	Outstanding color, spreads well to form solid mats of color, also recommended for containers and baskets
3	3	3	3	у	n	n	Small flowers hold up well all season, great contrast in vivid multicolor baskets, needs some deadheading
3	3	3	3	у	n	n	Outstanding color, great spread, moderate-sized flowers, some sclerotinia late in the season
3	3	3	3	У	n	n	Needs significant deadheading, new flowers great but fade as get old, not attractive, small flowers
2	2	3	2	У	n	n	Beautiful small-flowered cascading color early in season, died out mid-August; there are better petunias
3	3	3	3	У	n	n	Petite mounds covered with two-toned flowers, needs close spacing, excellent performance all summer, some deadheading needed late in summer, still great show till frost
4	3	3	3	У	n	n	Huge blooms, not as heavily fringed as others in "Frillytunia" series, disappointing, needs deadheading late in season, some Sclerotinia
3	3	3	3	У	n	n	Interesting mix of frilly-edged petunias, some picotee, others solids, will match just about anything
3	3	3	3	У	n	n	Attractive early in season, great uniform color, better performers exist later in season, AAS bedding plant award 2004, Fleuroselect Quality Award winner
3	3	2	2	У	n	n	Good early season display, plants died from Sclerotinia, needs deadheading
3	3	3	3	у	n	n	Excellent display early, susceptible to Sclerotinia, many plants died early, nice two-toned flower color
4	4	2	3	у	n	n	Nice two-toned flowers, some Sclerotinia rot late in season, needs deadheading
4	3	3	3	У	n	n	Outstanding flower color, very striking and showy, fills in well forming mounds, AAS flower award 2003, some Sclerotinia late in season
4	4	4	4	У	n	n	Smaller flowers than many other petunias, unusual mix of pastel colors with solids and dark-edged two tones, needs deadheading late in season, lavender flowers smaller than pinks in the mix
4	4	2	3	У	n	n	Slightly ruffled, nice mix colors, fills in well, susceptible to Sclerotinia late in season, tolerates light frost
4	4	4	4	у	n	n	Huge mounds of color, no maintenance, no pests and no evidence of Sclerotinia, well worth growing
4	4	4	4	sl	n	n	Outstanding mounds of color, fills in the entire bed, AAS flower award 2002, AAS flower award 2003, Fleuroselect Quality Mark winner, tolerates light frosts
4	3	3	3	У	n	n	Attractive huge abundant blooms, needs plenty of deadheading, Sclerotinia late in the season
3	2	3	3	У	n	n	Beautiful pastel addition to baskets in early summer, fades in late summer
2	2	3	2	у	n	n	Medium-sized flowers on cascading branches, nice growth, not the best red petunia for baskets
4	4	4	4				Great flower show all summer even in cold wet weather, excellent compliment to petunias
4	4	3	4	n	У	n	Outstanding addition to baskets, large colorful clusters of flowers, holds up well all season
2	2	2	2	sl	у	n	Many bare spots, did not seem to thrive, beautiful star pattern on petals
3	3	2	3	У	У	n	Some plants died, remainder grew well, formed bushy mounds of color, yellow foliage in mid-August, blooming and very ornamental long after other flowers have died of frost
1	1	1	1	n	n	n	Grew well in containers in past years, did poorly in ground beds, tiny mounds with poorly colored flowers, plants died out by end of season, Fleuroselect Quality Award winner

	s of tested annual flo	wer cultivars for 2005, cont.	Hoigh	t (in)w	Flower							rine		riad	lv			Fro		
Common name	Cultivar	Flower color	min	nt (in) ^w max	min	size (in) ^x max		Jur			Ju			riod		Sep		tolera foliage	flowers	
	Silver Shield TM					Пах	+			-			+	.ug	-		-	-	nowere	
Plectranthus	Sliver Shield		6	14														n		
Poppy, Shirley	Cedric Morris	pastels	6	13	1	21/2	*	*	*	2	*							n	n	
Portulaca	Margarita Peppermint	rosy pink w/dark pink flecks, deep pink	31/4	7	1/4	13/4	*	*	\$ 3	8	*	\$ \$	\$ 1	* % 4	* *	**		n	n	
Portulaca	Sundial Mango	orange red	2	51/2	3/4	11/2		*	÷ 1	2	*	\$ \$	<u> </u>	: 🔹 🤤	€			n	n	
Rudbeckia	Autumn Colors	two-toned mahogany w/ mahogany centers, some yellow tipped, yellow streaked petals		23	3	5								* * *				n	У	
Rudbeckia	Cordoba	mahogany w/gold tips	81/2	13	21/4	33/4		1	* 18	8 🔹	*	<u>ث</u> ث	\$: 🗘 🕯	* *	**		у	у	
Rudbeckia	Hot Chocolate	burgundy w/gold tips, brown centers	101/2	17	2	5		*	\$ \$	2	\$	\$ \$	\$ 1	r 🗘 🕯	* *	*		у	n	
Rudbeckia	Maya	gold	5	161/2	2	21/2		*	\$ \$	2	*	<u>ث</u> ث	\$ \$: 🗘 1	\$			у	у	
Salvia, Mealy-cup	Evolution	violet	16	251/2	³ / ₄ x ¹ / ₄	6 x 1½	*	*	<u>ن</u> ۵	2	*	\$ \$	<u>0</u>	: 🔹 🕯	<u>ث</u>	ů ů		у	y	
Salvia, Mealy-cup		silver & lavender bicolor	11	18	1 x ½	6¼ x 1¼	\$8	*	\$ \$	2	\$	\$ \$	\$ 1	* * *	\$ \$	\$		У	У	
Salvia, Mealy-cup	Victoria White	silvery white	9	261/2	11/2 x 3/4	5½ x 1¼	*	ů l	ά ť	2	*	\$ \$	<u>0</u>	: 🗘 1	û û	**		у	у	
Salvia, Mealy-cup	Gruppenblau	royal blue	20	331/4	³ / ₄ x ¹ / ₂	10¾ x 1	*	*	* *	8	*	\$ \$	<u>0</u>	: 🔹 🕯	<u>ث</u>	ů ů		n	y	
		two-toned lavender & purple	6	16	1¼ x ¾	6 x 3 ³ / ₄	*	\$	\$ \$	2	ŵ	\$ \$	\$ \$	* * *	<u>۵</u>			n	n	
Salvia, Scarlet	Red Arrows	scarlet	7	19	2 x 1½	5½ x 4	*	*	*	2	\$	\$ \$	\$ \$	* * *	¢		Τ	n	n	
Salvia, Scarlet	Red Hot Mama	red	16	25	2 x 1½	4¼ x 4					*	\$ \$	\$ 1	* * *	\$			n	n	
Shasta Daisy	Amelia	white w/yellow centers	19	31	2	4 ³ / ₄		T				* 🕏	*	: 🗘 1	2 2	**		у	у	
Shasta Daisy	Giant Marconi Double	white w/yellow centers	23	311/2	11/2	33/4						* *	<u> </u>	: 🗘 1	<u>م</u>	**		у	y	
Shoo Fly Plant	Splash of Cream	blue	16	40	1/2	11/2	*	*	* *	8	\$	\$ \$	\$ \$: : :	<u>۵</u>			n	n	
Snapdragon, Summer	Angel Mist Basket Purple	purple	*						T	Γ		¢ ¢	\$ \$	r 🗘 1	â		T	n	n	
Snapdragon	Double Madame Butterfly Mixed	white, pink, rose, red, peach	19	32	21/2	41/2	:	*	*	2	\$	¢ ¢	ث 1	* * *	* *	**		У	У	
Snapdragon	Freesong Pink	pink	13	21	3 x 1½	9 x 2 ¹ / ₂	*	*	* *	8	\$	¢ ¢	\$ \$: <u>\$</u> 1	<u>ث</u>	**		у	у	
Snapdragon	Golden Monarch	yellow	8	261/2	5 x 2	8½ x 2½	*	*	* *	8	*	* *	2 2	: 🔹 🕯	2 2	**		y	y	
Snapdragon	La Bella Yellow	yellow	11	23	2½ x 2	8 x 2 ¹ / ₂	*	å	¢ (2	\$	¢ ¢	\$ \$	2 2	* *	**		y	y	
Snapdragon	Purple & White Bells		1	6	1½ x 1	3¼ x 2								8 8				n	n	
Snapdragon	Scarlet Giant	red	16	371/2	3½ x 1	10 x 3	*	*	<u>a</u> 2	2	\$	* *	*	2 6 8 8	* *	**		у	у	
Snapdragon	Snapshot Mix	red, yellow, orange, rose, white	3	11	11/2											**		n	n	
Snapdragon	Summer Skies	lavender	2	91/4	1/4	1/4		*	\$ \$	2	\$	\$ \$	\$	\$	8			n	n	

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

x if flower size was uniform, size is recorded under max only; sizes with an x, for example 12x3, indicate a spike flower type with the height x width.

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

Flow		ratings		Reco	mmendeo	d for	
		Foliage	Overall	Fragrance		Drying	Comments
		4	4		У	У	Grew out of control in containers in 2004, In ground beds filled in well and produced a solid mass of silver foliage and no flowers, very similar to Dusty Miller, very attractive
1	1	1	1	n	у	n	Grew well early, died out in midseason, may be longer-lived when direct seeded, beautiful pastel flowers early, not worth the effort unless something else is planted in midseason
2	3	3	2	S	n	n	Spread better in raised beds than in ground beds, nice clumping mounds, needs close spacing
2	3	3	3	n	n	n	Very tight compact mounds covered with tiny flowers, needs close spacing and sunny spots
3	3	3	3	n	у	У	Interesting mix of flower colors, nice addition to Rudbeckia choices, flowers and foliage tolerate light frost, Fleuroselect Quality Award winner
3	3	3	3	n	у	У	Outstanding short with very large blooms, great mix of dark and light-colored blooms
2	2	2	2	n	y y	y	Heat tolerant, large bicolor blooms, variable height, nice mix of dark and light-colored flowers
3	3	3	3	n	у	у	Excellent dwarf with double and semidouble flowers, Fleuroselect Gold Medal winner, very showy
3	3	3	3	у	у	у	First violet colored mealy-cup Salvia, shorter spikes than Victoria but distinct color is attractive and vibran
3	3	3	3	n	У	У	Interesting spikes, great stems for cutting, dries well, not as showy as solid color Salvias, AAS flower away winner 1996
3	3	3	3	у	у	у	Not as showy as Victoria, okay as filler or companion plant
4	4	4	4	sl	У	У	Excellent tall spikes, great background plant, excellent as cut flower
4	3	3	3	n	n	n	Attractive color, shorter clusters of flowers than other Salvias, needs close spacing, petals turn brown, unsightly when old, not as showy as other scarlet Salvias
4	4	3	3	n	n	n	Bright red spikes of flowers similar to Red Hot Mama but more compact, blooms well all season, needs some deadheading, showy
3	3	3	3	n	У	n	One of the tallest scarlet Salvias we have grown, great bushes covered with tall spikes, excellent backgrouplant in mass plantings or alone for low borders
3	2	3	3	n	у	у	Huge blooms, floppy stems, late to bloom, many buds when frost hit
2	3	3	3	n	у	у	Huge blooms, floppy stems, very uniform linear petals, not many flowers for the size of the plant
3	2	1	2	n	n	У	Variegated leaves, not as vigorous as the green type, look sickly, do not grow to stature of species, lodging this year because of heavy rain
2	2	2	2	n	n	n	Interesting filler early in season, disappeared by mid-August
3	3	3	3	sl	у	n	Excellent straight stems with ample length for cutting, very nice mix of colors, Azalea petals are very showy, completely double
3	3	3	3	sl	у	n	Straight tall flower stalks with abundant blooms, great for cutting
2	3	3	3	n	у	n	Tall yellow spikes from midseason onward, not as floriferous as other Snapdragons, good cut flower
4	4	4	4	У	У	n	Beautiful clear butterfly-type blooms on tall stalks, great for cutting, solid masses of color
2	2	2	2	n	n	n	Abundant mass of solid color early in season, very attractive flowers, needs deadheading for all-season display, very attractive dwarf Snapdragon
2	3	2	2	n	у	n	Rich velvety red flowers on tall spikes, very showy in mass plantings, excellent height for cutting
3	2	2	2	n	n	У	Dwarf carpet with a great mix of colors, needs deadheading to keep blooming
2	2	2	2	sl	n	n	Similar to Linaria in growth and form, fills in well to form nice ground cover, makes nice filler in containe some dieback late in season

Table 3. Results Common	s of tested annual flo	ower cultivars for 2005, cont.	Heiah	nt (in) ^w	Flower	size (in) ^x			Flov	wer	ina	per	iod ^y		Fro toler	ost ance	
name	Cultivar	Flower color	min	max	min	max	Ju			Jul	-	A		Sep	foliage	flowers	-
Spanish Daisy		white, pink w/yellow centers	11/2	11	1/4	1/2	**	*	û û	û û	: 2	<u>ث</u>	* * *	* * *	У	У	
Statice	Gold Coast	yellow	15	36	2 x 1½	5¾ x 2	*	*	* *	* 1	r & 1	¢ ¢	* * *	2 2 2	У	У	
Sunflower	American Giants Hybrid	yellow w/brown centers	90	95	51/2	141/2					1	<u>۵</u>	* * *	2	n	n	
Sunflower	Bicentenary	gold and bronze bicolored	49	80	31/2	8		*	* *	<u> </u>	: 🌣	<u>ث</u>	\$ \$		n	n	
Sunflower	Double Dandy	red w/burgundy centers	14	25	2	51/4	*	\$	۵ û	ث 1	: 🌣	* *	* *		n	n	
Sunflower	Dwarf Yellow Spray	yellow	21	321/2	2	6				Ω Ω	r û	ά ά	\$ \$		n	n	
Sunflower	Earthwalker	mostly mahogany, gold w/ brown centers	38	68	5	6	*	*	* *	\$	r & 1	<u>۵</u>	û û		n	n	
Sunflower	Jade	creamy lime w/light green centers	48	67	4	9	*	*	* *	* 1	: 2	\$ \$	* *		n	n	
Sunflower	Moonshadow	white w/tinge of rose, brown centers	24	43	3	31/2	**	\$	<u>۵</u>	\$ \$: 2	\$ \$	\$		n	n	
Sunflower	Peach Passion	light orange-yellow	18	25	21/2	41/2			* *	<u> </u>	: ¢	<u>ث</u> ث	12 12 1		n	n	
Sunflower	Prado Red	burgundy, chocolate w/brown centers	291/2	42	21/4	6¼	*						* *		n	n	
Sunflower	Summer Sunset Mix	rose, yellow, mahogany w/brown centers	421/2	63	21/2	6		ŵ	\$ \$	Ω Ω	r 🗘	\$			n	n	
Sunflower	Supermane	golden yellow	40	53	3	41/4		*	* *	* 1	: \$	α α	ά ά		n	n	
Sunflower	Tarahumara	yellow w/green centers	40	65	3	8			* *	<u> </u>	: \$	û û	\$ \$		n	n	
Sunflower	The Bee's Knees	gold w/brown centers	25	58	41/4	7	*	*	* *	\$ \$: : :	\$ \$	* *		n	n	
Sunflower	Tiffany	yellow w/orange highlights, brown centers	29	64	4	7		*	* *	Ω Ω	r û i	ά ά	\$\ \$		n	n	
Sweet Alyssum	Snow Crystals	white	1	8	1/4	1/4	\$ \$	\$	۵ û	<u> </u>	: 🌣	û û	☆ ☆ ☆	2 2 2 C	у	у	
Sweet Pea	Bijou Bush Mixed	pink, white, red, lavender, rose, magenta	13	59	11/2	2					*	* *	\$ \$	* * *	У	У	
Sweet Pea	Cuthbertson Mixture		27	84	2	21/4					*	* *	\$ \$ \$	* * *	У	У	
Sweet Pea	Explorer Mix	pink, white, red, lavender, rose, magenta	6	22	1	3		*	* *	* *	:*	* *	* * *	* * *	У	У	
Sweet Pea	Mammoth Series Mixed	pink, white, red, lavender, rose, magenta	33	71	2	21/2					*	* *	* * *	2 2 2	У	У	
Sweet Peas	Finest Mixed	pink, white, red, lavender, rose, magenta	27	80	11/2	2					*	* *	* * *	* * *	У	У	
Tasselflower	Harvest Mixture	deep red-orange	131/4	35	1/4	3/4	**	\$	۵ û	Ω.	: 2	۵ û	û û		n	n	
Thunbergia	Smoothie Apricot	apricot	*				*	\$	0 0	<u>0</u>		<u>0</u>	\$ \$		n	n	

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	er	ratings [;]			nmendeo		
quantity	quality	Foliage	Overall	Fragrance	Cutting	Drying	Comments
3	3	2	3	sl	n	n	Tiny daisies with abundant needle-like petals, mounds of thin tangled stems and leaves topped with mass of flowers, immature flowers are pink, great in mass plantings
4	4	4	4	У	у	У	Interesting mix of shades, lots of blooms, great for cutting or drying, flowers and foliage tolerate light frost, floppy stems
4	4	4	4	n	n	У	Huge heads and very thick stems, great addition to the giant single-headed cultivars
3	3	3	3	n	у	у	Large flowers, silver-green foliage, multiple heads, great for the back of borders
4	3	3	3	n	у		Unusual double petals, quite showy early in season, finished by midseason, dwarf, matured seeds
3	3	3	3	n	у	У	Short plant completed blooms early, matured seeds, recommended for use as a short hedge in children's gardens and in containers
3	3	3	3	у	у	У	Straight tall stems with good mix of colors
2	2	2	2	sl	У	У	Unusual petal color, pollen free
2	2	2	2	n	У	У	Very tall background plant, many small flowers on multiple branching stems, good mixed with other larger- flowering sunflowers, pollen free
1	1	1	1	n	у	n	Some blooms with light colored discs, not a great show, small and few flowers
3	3	3	3	n	у	У	Multi-flowering, branching plant with burgundy stems, covered with small heads that tend to lean downward at maturity, nice short sunflower, finished by mid-August
2	2	2	2	n	У	n	Single, semidouble and double flowers, pollenless, ragged appearance late in season, showed some damage from Sclerotinia
3	3	3	3	n	У	n	Best of this year's Sunflowers, excellent heads packed with petals in solid mound, most "asked about" sunflower in the garden, shorter than catalog description but a great show
3	3	3	3	n	у	у	Very attractive single-headed, medium-height Sunflower
4	4	4	4	n	У	n	Some double blooms, extremely variable flower size, pollen free, strong stems for cutting, finishes early in garden, great show while it lasts
3	3	3	3	sl	У	У	Bushy multiple branching flower stalks with medium-sized flowers, blooms well from mid-July onward, pollen free
4	4	3	4	у	n	n	Nice carpet, uniform growth excellent for edging, very fragrant, Fleuroselect Gold Medal winner
2	2	2	2	у	у	n	Fragrant dwarf covered with blooms, excellent color mix, great grown as edging with taller Sweet peas
4	4	4	4	У	у	n	Reliable, tall, covered in blooms, extremely fragrant, best tested for amount and quality of blooms
3	4	4	3	У	у	n	Short, covered in fragrant blooms, excellent cut flower
3	3	3	3	У	У	n	Tallest this year, outgrew the trellis, excellent color mix with abundant flowers
3	3	3	3	У	у	n	Very good flower mix and fragrance, good cut flower
3	3	3	3	n	n	n	Interesting tufted flowers looks a lot like Hawkweed, low foliage topped with floppy, airy stems and many clusters of blooms, seeds mature in mid-August
2	3	3	3	n	n	n	Showy climber and trailer, excellent in mixed baskets

Table 3. Results Common	s of tested annual flo	wer cultivars for 2005, cont.	Heigh	nt (in) ^w	Flower	size (in)×		Flov	werin	ng pe	riod ^y		Fro tolera		
name	Cultivar	Flower color	min	max	min	max	Jun	1	Jul		ug	Sep	foliage	flowers	-
Venidium	Exotic	orange	24	34	2	31/2	* *	* *	*	12 12 12	û û	****	у	у	
Verbena	Babylon Blue	lavender	*				**	\$	*	a a a	\$	* * *	y	y	
Verbena	Babylon Light Blue	lavender	*				** **						y	y	
Verbena	Babylon Neon Rose	rose pink	*				** *	\$	**	a a a	\$	* * *	y	y	
Verbena	Babylon White	white	*				** 🕱 🏠	*	*	12 12 12	* *	* * *	y	y	
Verbena	Peaches and Cream	shades of peach	*				* *	*	*	☆ ☆ ☆	* *	* * *	y	y	
Verbena	Superbena Burgundy	red	*				** 🕷 🏠	\$	*	☆ ☆ ☆	ů ů	* * *	y	y	
Verbena	Superbena Dark Blue	lavender	*				** * *	*	* *	0 0 0	* *	* * *	у	у	
Verbena	Superbena Large Lilac Blue	lilac	*				***	\$	**	* * *	* * *	\$8 %	У	у	
Verbena	Temari Bright Pink	pink	*				** **	\$	* *	* * *	3 🛞 🛞	* * *	у	у	
Verbena	Temari Patio Red	red	*				\$ \$\$ \$\$	\$	**	a a a	\$		y	y	
Verbena	Turkana Scarlet	Scarlet	*				* *	\$	**	a a a	\$	* * *	y	y	
Verbena, Garden	Quartz Burgundy Eye	burgundy w/white center	5	1111/2	1/4	1⁄4	** *	* * *	**	0 0 0	* * *	\$ % %	У	y	
Verbena, Garden	Quartz Silver	very pale silvery lavender, nearly white	3	131/2	1/2	2	****	\$	**	0 0 0	* * *	** **	У	у	
Verbena, Garden	Snowy River	white	21/2	17	1/4	1/4	** * *	* *	* * *	* * *	8 8 8	* * *	у	у	
Verbena, Garden		peach shades	6	9	3/4	23/4	** 🕷 🏠	*	*	☆ ☆ ☆	û û	***	y	y	
Verbena, Moss	Lavender Mist	lavender, white	11	26	1/4	1/4	** *	\$	\$ \$	0 0 0	û û	***	y	у	
Vinca	First Kiss Blueberry	lavender											n	n	
Vinca Vine	Wojo's Gem		*				\$	*	* *	0 0 0	* *		n		
Viola	Bilbo Baggins	lavender/yellow bicolor w/ mahogany face	21/2	101/2	3/4	11/4	***	\$	**	0 0 0	\$	**	У	У	
Viola	Eye of the Tiger	yellow w/brown markings	3	12	1/4	11/2	**	\$	**	0 0 0	ů 0	***	у	у	
Viola	Penny Primrose	white w/yellow center & mahogany whiskers	3	10	1	11/4	**	\$	**	0 0 0	* * *	\$ % %	У	у	
Viola	Penny Violet	violet	2	13	3/4	11/2	**	*	* *	2 2 Q	* * *	***	у	у	
Viola	Sorbet Coconut Swirl	lavender w/cream centers, purple whiskers	2	14	1	11/2	**	\$	**	0 0 0	\$	**	У	у	
Viola	Sorbet Orange Delight	light orange, mahogany whiskers	4	9	3/4	11/2	**	\$	**	0 0 0	\$	**	У	у	
Viola	Sorbet Orange Duet	light orange/purple bicolor	7	14	3/4	11/2	***	\$	**	0 0 0	* * *	**	У	у	
Wildflower Mix	Sunburst Ground cover	mixed	6	26	1/2	3							n	у	
Zinnia	Short Stuff Gold	creamy gold	9	14½	13/4	3	* *	\$	**	0 0 0	\$		n	n	
Zinnia (angustifolia)	Tropic Snow	white w/yellow centers	7	20	1/2	1¾		* *	* * 1	0 0 0	\$		n	n	
Zinnia, Garden	Carrousel Mix	yellow/red, pink, coral, orange, apricot	9	34	11/2	31/2	* 🌣	\$	* *	0 0 0	\$		n	n	

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^x if flower size was uniform, size is recorded under max only; sizes with an x, for example 12x3, indicate a spike flower type with the height x width.

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

_	Flow		ratings ²	2	Deser		d for	
	Flow guantity		Foliage	Overall	Fragrance	nmendeo Cutting	Drying	Comments
	4	4	4	4	n	у	n	Tall floppy stems with brilliant flowers, needs lots of room to spread
	3	3	3	3	n	n	n	Excellent color and size of flowers, works well with other flowers in mixed baskets
	3	3	3	3	n	n	n	Large clusters of flowers add great color all season, Needs some deadheading
	2	2	3	2	n	n	n	Not the most vigorous in baskets, few flowers visible, effect is not striking in mixed baskets
	3	3	3	3	n	у	n	Excellent for contrast in colorful baskets, produced plenty of flowers in medium-sized clusters
	3	3	3	3	n	y	n	Outstanding color, nice sized flower clusters
	3	3	3	3	n	y	n	Medium sized flower clusters, striking color, not the most prolific
	3	3	3	3	n	y	n	Excellent growth all summer, large vibrant flower clusters
	3	3	3	3	n	n	n	Beautiful large flower clusters, great addition to baskets all season
	U U			C.				
	3	3	3	3	n	n	n	Large clusters of flowers with interesting two-toned effect, very ornamental all season
	4	4	3	4	n	n	n	Brilliant color, best basket Verbena tested this summer, produced plenty of flowers all season
	2	3	3	3	n	у	n	Vibrant intense color, adds some brilliance to baskets, large but few flower clusters
	3	2	3	3	у	у	n	Small flower clusters, needs deadheading, outstanding flower display in warm summer, very attractive
								brilliant color with eye
	2	2	3	2	n	у	n	Better cultivars are available, lacked fullness of blooms and great show of other verbenas, very nice color,
								needs constant deadheading for best show
	2	3	3	3	n	у	n	Tiny blooms, not very showy in mass plantings, best as filler with other larger specimen flowers
	1	2	2	1	sl	n	n	Very few flowers, poor display nearly all season, needs deadheading for best show
	3	3	3	3	у	У	n	Small clusters of billowy flowers, plants covered with blooms, nice display all season, Tolerates light frost
	1	1	1	1	n	n	n	Did not grow well, no branching, few flowers on top of single stems, poor show in sun and shade
			2	2		у	n	Vines reached impressive length by end of season, but too sparse to have an impact, nice variegated foliage
	4	4	4	4	у	у	У	Interesting flower color and pattern, petite blooms covered plant and bloomed from top to bottom nearly all
								summer
	3	4	3	3	n	у	У	Striking flowers, plants remain small, need close spacing to fill in bed
	4	4	3	4	у	у	У	Mountains of tiny flowers cover the foliage, very attractive, no maintenance, great color all season
	4	3	3	3	sl	у	У	Excellent uniform color, abundant blooms on mounding plants, no maintenance
	4	4	4	4	у	у	У	Artistic flower patterns appear hand painted, superb display, choked with blooms all season through frost,
								tolerates light frost
	4	4	4	4	У	У	У	Mounds of flowers, shorter this year probably because of summer heat, excellent show all season, some deadheading late in season
	4	4	4	4	n	у	у	Attractive, unusual bicolor flowers, older flowers fade slightly, huge mounds of flowers, no maintenance,
							-	Flueroselect Gold Medal winner 2003
	3	3	3	3	n	у	у	Mix contains cultivars rather than wildflowers, greatest color from California Poppies, looks bad in
						-	-	cool cloudy weather
	4	4	4	4	n	n	у	Compact flowers with uniform color, variable height and flower size this season, looks ragged in bed when
								planted in masses
	2	2	3	2	n	у	у	Still not the best angustifolia-type Zinnia, lots of foliage, few flowers, nice contrast of flowers and dark
								green foliage
	3	3	3	3	n	у	у	Tall upright stems with many sizes and colors of flowers, nice mix of solids and bicolors, singles, doubles

Table 3. Results Common		Height	· (in) ^w	Flower	١×	Flowering period ^y						y	Fro tolera									
name	Cultivar		Flower color			nin	max	min	max		un		Jul		A		Sep	-	foliage	flow	ers	
Zinnia, Garden	Envy		greenish yellow		1	181/2	331/2	2	3	ę	* *	*	* * *	ŵ	¢ ¢	\$	2		n	n		
Zinnia, Garden	Magellan C	Coral	coral pink			8	19	21/2	41/4	1	\$ \$	\$ \$	2 2 2	\$	¢ ¢	\$	5		n	n		
	Magellan C		orange			10	16¼	21/4	33/4				2 2 2						n	n		
Zinnia, Garden	Profusion F	Fire	reddish orange			5	141/2	11/4	23/4	2	* *	*	2 2 2	\$	\$ \$	\$ 1	3		n	n		
Zinnia, Garden	Zig Zag		pink, rose, scarlet, yellow, orange, cream solids & bicolors			19	31	21/2	41/2		* *	*	2 & ¢	\$	¢ ¢	\$ 1	2		n	n		
Zinnia, Garden Zinnita Mix		ζ.	orange, rose, white, red, yellow		llow	5	13	1	2	*	\$ \$	\$ \$	* * *	\$	¢ ¢	\$ 1	2		n	n		
Zinnia, Garden	Zowie! Yell	low Flame	scarlet/rose cente yellow tips	rs w/		19	271/2	11/4	4	ą	\$ \$ \$	\$ \$	***	\$	* *	*	È		n	n		
Table 4 Results or	n cultivars com	pleted three	e years testing.	Ave. ^z	Ave. ^z		Ave.	Av		Ave.			Ave				ve. ^z		Ave. ^z			
Name		Cultivar		Overall Rating	Foliage Rating		flower nt (in)	Max F ht	lower (in)	Min Flo Size (ax Flo Size (ower uality		ower uantity			
African daisy				3	3		8.0	2	20.3	1.			2				3		3			
Ageratum		Pearl Roy	,	2	2		0.8		7.6	0.3			0				2		2			
Aster, Annual G	larden	Perser M	ix	3	3		9.7		23.0	1.'	7		4				3		3			
Aster, Annual G	larden	Standy M		3	3		9.3		30.3	1.'			3				3		3			
Aster, China		Californi		4	4		7.2		22.7	2.3			4				4		4			
Begonia, Wax			Pink Improved	3	3		4.0		0.0	0.8			1.				3		3			
Begonia, Wax			Scarlet Improved	3 2	3		3.3		2.0	0.8			1.				3		3			
Begonia, Wax		Prelude V	Prelude White		2		3.7		8.5	0.			1				2		3			
Blue Lace Flow		Madonna	n Mix	2	2		13.0		24.0	1.2			2.				2		2			
Burridge Greent	thread	Philippin		2	2		5.7		21.2	0.8			1				2		2			
Calendula			e Tall Mix	3	3		15.3		26.8	1.2			2				3		3			
Calendula			eauty Mixed	3	3		13.7		25.5	1.			2				3		3			
Calendula		Porcupin		3	3		11.3		25.3	1.			2				3		4			
Calendula		Red Spla	sh	3	3		15.7		25.3	1.2			2				3		3			
California Popp		Inferno		4	4		6.3		4.0	0.8			2.				4		3			
California Popp		Ivory Ca	stle	3	3		3.7		7.3	0.8			2				3		3			
California Popp	У	Mission 1	Bells	2	2		5.7	2	20.0	0.9	9		2	.8			2		2			
Celosia		Fresh Lo	ok Red	2	2		7.2	1	3.2	2.3 x	1.5		5.2 2	κ 2.	.3		3		2			
Celosia		Fresh Lo	ok Yellow	2	2		6.2	1	3.0	1.4 x	0.6		3.3 2	x 1.	.3		3		2			
Celosia		Glow Ca	rmine	3	3		4.8		8.2	1.4 x	0.5		4.0 2	κ 3.	.0		3		3			
Chilean Glory V	Vine	Tresco C	ream	4	4		57.2	1	11.3	0.8	8		1	1			4		4			
Chrysanthemum		Snowland	d	4	4		4.8	1	9.3	0.0	6		1	.4			4		4			
Chrysanthemum	· ·	Coconut		3	3		7.0	2	21.3	1.3			2	3			3		3			
Chrysanthemum	n, Tricolor	Summer	Festival	2	2		8.8	2	27.0	0.9	9		2	.5			2		2			

Flow		ratings	z	Recor	mmendec	l for	
-	-	Foliage	Overall	Fragrance		Drying	Comments
2	2	2	2	n	у	у	Unusual color, not a great show, huge flower centers give ragged appearance, brown spots on petals, only worth growing for unusual color
4	4	4	4	n	У	У	Outstanding color on huge fully double flowers, very attractive in mass plantings, needs some deadheading late in the season
4	4	4	4	n	у	у	Outstanding blooms cover these plants providing intense solid color display, huge flowers really glow
4	4	4	4	n		У	Bushy mounds loaded with flowers that are very intense and showy, brilliant display, no-maintenance, outstanding
3	3	3	3	n	у	у	Abundant small blooms on tall upright stems, vibrant mix of colors
3	4	3	3	n	n	у	Small pompon-type flowers cover compact bushy plants, excellent color mix, needs close spacing and warmest part of garden for best effect
4	4	4	4	n	у	У	Brilliant eye-popping bicolor, tall, loaded with upright blooms, biggest challenge will be finding great combinations with other flowers, may be best in mass plantings, worth growing for the novel color

Table 4 Results on cultive	ars completed three years testing, cor	nt. Ave.² Overall	Ave. ^z Foliage	Ave. Min flower	Ave. Max Flower	Ave. Min Flower	Ave. Max Flower	Ave. ^z Flower	Ave. ^z Flower
Name	Cultivar	Rating	Rating	ht (in)	ht (in)	Size (in)	Size (in)	Quality	Quantity
Clarkia	Passion for Purple	3	3	5.0	17.0	0.9	1.8	3	3
Cleome	Pink Queen	3	3	28.0	47.0	2.7 x 4.0	6.5 x 6.0	3	3
Cupid's Dart		2	3	17.8	30.1	1.3	2.2	2	2
Dahlia	Citron du Cap	2	2	40.0	63.0	3.0	5.0	2	2
Dahlia	Gloriosa	2	2	29.0	37.0	4.0	6.5	2	2
Dahlia	Hillcrest Fiesta	3	3	29.0	37.7	3.7	6.7	4	3
Dianthus	Amazon Neon Cherry	3	3	6.8	18.8	0.8	1.2	4	3
Dianthus	Amazon Neon Purple	3	3	10.3	16.7	1.7	3.7	3	3
Dianthus	Amazon Rose Magic	3	3	11.3	19.8	1.8	3.7	3	3
Dianthus	Dynasty Purple	1	1	3.0	10.5	1.3	2.0	1	1
Dianthus	Dynasty Red	3	2	8.8	17.0	0.8	1.5	3	2
Dianthus	Dynasty White Blush	2	2	5.7	12.7	0.8	1.4	2	2
Gaillardia	Goblin	3	3	7.7	16.5	1.3	3.6	4	3
Gypsophila	Gypsy Deep Rose	2	2	1.3	5.8	0.3	0.3	3	3
Hollyhock	Queeny Purple	3	3	12.7	22.0	2.1	4.7	3	3
Impatiens, Garden	Dazzler Apricot Improved	3	3	1.0	4.8	1.0	1.3	3	3
Impatiens, Garden	Dazzler Pink Deep Improved	3	3	2.3	7.0	0.9	1.4	3	3
Impatiens, Garden	Deco Orange	3	3	1.3	14.0	1.2	1.7	3	3
Impatiens, Garden	Showstopper Pink Improved	3	3	1.3	8.3	0.9	1.6	3	3
Impatiens, Garden	Swirl Mix Monet	2	3	1.0	12.0	0.9	1.5	2	3
Impatiens, Garden	Swirl Raspberry	3	3	2.3	8.0	1.0	1.5	3	3
Lupine	Band of Nobles	3	3	18.5	31.7	8.0 x 3.0	11.0 x 24.0	3	3
Marigold, African	Flagstaff	3	3	11.3	25.7	1.6	3.5	3	3
Melampodium	Lemon Delight	4	4	1.8	10.0	0.5	0.8	4	4

<i>Table 4 Results on cultiva</i> Name	rs completed three years testing, cont. Cultivar	Ave. [∞] Overall Rating	Ave. Foliage Rating	Ave. Min flower ht (in)	Ave. Max Flower ht (in)	Ave. Min Flower Size (in)	Ave. Max Flower Size (in)	Ave. ^z Flower Quality	Ave. [∞] Flower Quantity	
Nasturtium	Caribbean Cocktail	4	4	2.5	14.0	1.4	2.5	4	4	
	Fiery Festival	3	3	4.3	21.8	1.8	2.7	3	3	
	Primrose Jewel	3	3	5.5	15.8	1.6	2.3	3	3	
	Sensation White	3	3	18.7	50.3	0.8	1.3	3	3	
. ,	Glistening White	2	2	6.3	15.0	1.6	3.3	2	2	
Palafoxia	- 8	1	1	7.0	19.0	0.5	1.1	1	2	
Pansy	Atlas Windjammer Mix	3	3	4.3	13.3	1.3	2.8	3	3	
	Bronze Tone	3	3	4.8	13.4	1.1	2.2	3	3	1
2	Brunig	3	3	4.8	10.8	1.2	2.1	3	3	
	Coronation Gold	3	3	4.0	14.2	1.0	2.8	3	3	1
2	Fama Orange	2	2	6.0	12.5	1.4	2.5	2	2	
	Majestic Patricia	3	3	4.7	14.0	1.3	2.5	3	4	
	Easy Wave [®] Pink	4	4	4.0	12.0	2.0	3.0	4	4	
	Easy Wave [®] Salmon	3	3	2.5	6.7	1.5	2.7	3	3	
	Easy Wave [®] White	3	3	1.0	9.0	1.0	2.3	3	3	
	Limbo Violet	3	3	3.5	9.8	1.8	3.6	3	3	
	Merlin Blue Morn	3	3	5.7	16.7	1.5	2.8	3	3	
	Stars & Stripes	3	2	5.0	15.8	2.7	3.8	3	3	ĺ
	Tidal Wave Purple	4	4	6.5	28.3	1.3	2.4	4	4	
	Tidal Wave Silver	4	4	5.8	21.8	1.4	2.8	4	4	ĺ
Rudbeckia	Autumn Colors	3	3	10.3	23.2	2.2	5.1	3	3	
	Strata	3	3	12.3	20.7	3.4 x 0.9	7.5 x 1.2	3	3	1
	Red Arrows	3	3	7.3	17.8	3.0 x 1.5	6.7 x 2.7	3	3	
,	Double Madame Butterfly Mixed	3	3	12.7	29.8	4.5 x 2.3	9.5 x 3.5	3	3	
	Freesong Pink	2	2	9.5	19.7	2.5 x 1.5	7.5 x 2.5	2	2	
	Gold Coast	4	4	12.0	32.3	1.9 x 1.0	7.9 x 3.0	4	3	
	Double Dandy	2	2	16.7	23.7	1.9	4.7	2	3	
	Dwarf Yellow Spray	3	2	17.7	30.2	2.7	5.8	3	3	
	Earthwalker	3	3	30.0	58.3	4.1	6.5	3	3	
	Summer Sunset Mix	2	2	34.5	54.7	3.5	6.2	2	2	1
Sunflower	The Bee's Knees	3	3	30.7	57.7	4.1	8.3	3	3	
	Snow Crystals	4	3	0.7	5.8	0.3	0.3	4	4	1
Verbena, Garden	Quartz Burgundy Eye	3	3	3.7	12.5	0.3	0.3	3	3	
Verbena, Moss	Lavender Mist	3	3	6.3	18.0	0.8	1.1	3	3	1
	Penny Violet	2	2	3.3	13.7	0.9	1.8	2	2	
	Sorbet TM Coconut Swirl	4	4	2.8	11.5	1.0	1.6	4	4	
	Sorbet TM Orange Delight	4	4	3.7	11.8	0.8	1.5	4	4	
	Sorbet [™] Orange Duet	3	3	4.8	14.2	0.8	1.5	3	3	1
	Tropic Snow	2	2	5.3	16.2	1.0	2.0	2	2	
	Envy	2	2	15.2	25.2	2.0	2.9	2	2	
	Zinnita Mix	3	3	4.2	13.0	0.8	1.8	4	3	

Seed and Plant Sources

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

Alaska Sources

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

Commercial Wholesale and Research Sources (seeds and plants not sold directly to the public)

All American Selections, 1311 Butterfield Rd Suite 310, Downer's Grove IL 60515 http://www.all-americanselections.org
Ball Seed Co., PO Box 335, West Chicago IL 60185 (wholesale only), www.ballseed.com
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
Lawyer Nursery, 950 Hwy 200 W, Plains MT 59859, www.lawyermursery.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), www.theflowerfields.com
USDA Plant Introduction Stations - NC7, Ames IA, www.ars-grin.gov/ars/MidWest/Ames

Garden Societies and Organizations with seed exchanges and sales for members only Alaska Native Plant Society, PO Box 141613, Anchorage AK 99514 American Horticultural Society, PO Box 6118, Alexandria VA 22308, www.ahs.org 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 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 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 2TO 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.harrisseeds.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 Johnny's Selected Seeds, 1 Foss Hill Rd, Albion ME 044910, www.johnnyyseeds.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 Lamb Nurseries, 101 E Sharp Ave, Spokane WA 99202 McClure & Zimmerman, PO Box 368, Friesland WI 53935, www.mzbulb.com Milk Ranch Specialty Potatoes LLC, 20094 Hwy 149, Powderhorn CO 81243, www.milkranch.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 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 Smith Nursery Co., PO Box 515, Charles City IA 50616 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, www.thompson-morgan.com Twilley Seeds, 121 Gary Rd, Hodges SC 29653, www.twilleyseed.com Vallev Nurserv, Box 4845, Helena MT 59604 Van Bloem USA, Inc., 500 Pendlev Industrial Park, Cumming GA 30130 Vaughan's Seed Co., 5300 Katrine Ave, Downers Grove IL 60515 Vermont Bean Seed Co., Garden Ln, Fair Haven VT 05743, www.vermontbean.com 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 White Flower Farm, PO Box 50, Litchfield CT 06759, www.whiteflowerfarm.com Wildseed, Inc., PO Box 308, Eagle Lake TX 77434

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