

2003 Cultivar Trials of Bedding Plants

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Introduction

The Plant Sciences Department at NDSU conducted performance trials on over 400 annual bedding plants during the 2003 growing season. The main research garden is located in Fargo, on the west edge of campus. Trial gardens are also located at the research extension centers in Dickinson and Williston, ND. Official entries (usually 150-200) are grown at all three locations while an additional 150-200 cultivars are also grown at the Fargo site.

The display gardens are for educational and research purposes. They are open to the public throughout the growing season and guided tours are available upon request.

The trial garden is an official display garden of both the All-America Selections and the American Hemerocallis Society. Currently, there are over 1100 cultivars of daylilies in the collection with plans for more. The majority of the daylily cultivars in the collection are considered historic varieties, or pre-1970 introductions. There are also over 300 miscellaneous perennials and ornamental grasses in the collection. An extensive iris collection, courtesy of the Art Jensen family, was also added to the display gardens in 2003.

Culture

Plants were seeded in the horticulture and forestry greenhouses on the NDSU campus from January through April. When at the proper stage, seedlings were transplanted into cell packs containing a peat-based growing medium. Exceptions to this were geraniums and New Guinea impatiens from Fischer USA, Inc. which were received as rooted cuttings and finished in the greenhouses.

Twelve plants of the official entries as well as mixes, and 6 plants of all other cultivars were planted into the Fargo plots May 29 – June 6. Six plants of each cultivar were planted at Dickinson on May 21, and in Williston on May 22. Plants were watered in with Sterns Miracle-Gro® (15-30-15)¹ water soluble fertilizer at all three locations.

Overhead irrigation was applied as needed in Fargo. Dickinson had both overhead and drip irrigation while Williston had drip irrigation only.

Weeding was done by hand at all three locations. Razor™ and Regalkade were also used at the Fargo location for weed control.

Site Information

Fargo

The main trial garden is located in Fargo on the west side of the NDSU campus off of 18th street north. The soil is a heavy clay and irrigation is applied with overhead sprinklers when needed. The beds are in full sunlight so shade has been provided with shade cloth draped over conduit forms.

Spider mites and aphids were a bigger problem in 2003 than in the past. The pansies were lost to spider mites during August while the calendula and African daisy were covered with aphids. No insecticides were used to control the insect problems.

¹ Disclaimer – Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by NDSU or the North Dakota Agriculture Experiment Station is implied.

The weather was rather cool and wet until the first week of July after which it turned warm and dry. Although overhead irrigation was applied frequently during the end of July and August, some cultivars did show water stress. Table 1 shows weather data for Fargo.

Table 1. 2003 and 1971-2000 May-August Average Temperature and Precipitation for Fargo, ND.²

	Average Temperature (F)		Precipitation (inches)	
	2003	1971-2000	2003	Average 1971-2000
May	56	57.4	3.68	2.61
June	66	66	4.17	3.5
July	71	70.6	1.42	2.88
August	73	69	0.72	2.52

Dickinson

The Dickinson trial garden is located at the research extension center on the west side of State street. The soil here is a lighter, sandier soil than Fargo and the weather tends to be drier. Shade plants are grown in raised beds under natural shade. In 2003, petunias were also grown in raised beds. The spreading petunias do particularly well and cascade nicely down the sides of the beds by the end of the summer.

Like Fargo, Dickinson was rather wet and cool early followed by a warm, dry spell. Table 2 shows weather data from Dickinson.

Table 2. 2003 and 1971-2000 May – August Average Temperature and Precipitation for Dickinson, ND.

	Average Temperature (F)		Precipitation (inches)	
	2003	1971-2000	2003	Average 1971-2000
May	53	53.4	2.53	2.24
June	62	62.4	2.46	3.57
July	73	68.1	0.82	2.20
August	74	67.3	1.15	1.65

Williston

The Williston trial garden is located at the research extension center on Highway 2 west of Williston. The soil here is also lighter than Fargo. Drip irrigation is used for supplemental watering and shade plants are grown in the natural shade of pine trees. The zonal geraniums did particularly well in Williston this year, growing almost twice as large here with much better bloom than in either of the other two locations.

Table 3 shows weather data for Williston.

Table 3. 2003 and 1971-2000 May – August Average Temperature and Precipitation for Williston, ND.

	Average Temperature (F)		Precipitation (inches)	
	2003	1971-2000	2003	Average 1971-2000
May	55	57.1	2.45	2.09
June	62	65.7	1.97	2.72
July	72	71.1	1.42	2.45
August	75	70.2	1.01	1.63

² Temperature and precipitation data are from NDAWN and the National Climatic Data Center.

All-America Selections

The NDSU trial gardens are an official display garden of All-America Selections (AAS). AAS was founded in 1932 as a way for home gardeners to learn about new and improved varieties of flowers and vegetables. The red, white and blue AAS logo found on seeds packets, in catalogs and in garden articles usually indicates superior cultivars that have been tested in a variety of locations across the United States and Canada. AAS winners for 2004 are: *Celosia plumosa* 'Fresh Look Red' (a GOLD MEDAL flower award winner); *C. plumosa* 'Fresh Look Yellow'; *Gypsophila muralis* 'Gypsy Deep Rose'; *Petunia hybrida* 'Limbo Violet'; and *Alcea rosea* (Hollyhock) 'Queeny Purple'. AAS winners from 1999-2003 were also grown in the trial gardens this year and are identified by (AAS) behind their cultivar name.

Evaluations

Plants were evaluated twice over the growing season for height, spread, vigor, uniformity and overall appearance. In Fargo the evaluations took place July 21 and 22; and September 3-5. In Dickinson plants were evaluated July 9 and August 30. Williston plants were evaluated July 10 and August 31. The Fargo plants were also evaluated after a light frost occurred on the early morning of September 25.

Field Days

Field days in Dickinson and Williston were held July 9 and 10, respectively, in conjunction with field days at the station. The field day in Fargo was held on August 2.

Acknowledgements

Thanks go to the official supporters of the 2003 trial gardens: All-America Selections; Ball Seed Company; Ernst Benary of America, Inc.; Fischer USA, Inc.; and PanAmerican Seed. The support of these companies is greatly appreciated and we hope results from our efforts are beneficial in their research for new and improved cultivars.

Thanks also to Jerry Larson, county extension agent in Stark and Billings counties in western North Dakota; Kris Ringwall and the staff at the Dickinson research extension center; and Lorna Bradbury and the staff at the Williston Research Extension Center. The bedding plant trial evaluation program would not be possible without the help of these talented and dedicated people.

Frost Tolerances

After a 31 degree fahrenheit temperature in the early morning hours of Sept. 25th in Fargo, notes were taken on how the plants reacted to the temperature. The following table shows which plants had no damage (column 1), which plants had 90-100% damage (column 2), which plants had 50-100% damage (column 3) and which plants had varying degrees of damage (columns 4-5). Only the genus is listed unless there was a definite difference between cultivars within a genus. Genera not listed had died prior to the first frost.

1 (90-100% damage)	2 (50-90% damage)	3 (50% damage)	4 (up to 50% damage)	5 (0% damage)
<i>Ageratum</i> <i>Alternanthera</i> <i>Coleus</i> <i>Impatiens</i> <i>Melampodium</i> <i>Ocimum</i> (basil) <i>Salvia splendens</i> <i>Solenostemon</i> <i>Spilanthes</i>	<i>Alstroemeria</i> <i>Begonia</i> <i>Canna</i> <i>Capsicum</i> <i>Catharanthus</i> <i>Celosia cristata</i> 'Amigo Mix' <i>Celosia plumosa</i> 'Castle Mix' <i>Celosia plumosa</i> 'Fresh Look Red' <i>Celosia plumosa</i> 'Fresh Look Yellow' <i>Celosia plumosa</i> 'Glow Carmine' <i>Pentas</i> <i>Portulaca</i> <i>Salvia coccinea</i> 'Forest Fire' <i>Thunbergia</i> <i>Tithonia</i> <i>Tropaeolum</i>	<i>Celosia cristata</i> 'Amigo Mahogany Red' <i>Celosia cristata</i> 'Prestige Scarlet' <i>Celosia plumosa</i> 'New Look' <i>Dahlia</i> <i>Emilia</i> <i>Eustoma</i> <i>Gomphrena</i> <i>Hibiscus</i> <i>Hypoestes</i> <i>Ipomoea</i> (Moon Vine) <i>Ipomoea</i> (Firecracker Vine) <i>Ipomoea</i> (Cardinal Climber) <i>Ipomoea</i> 'Mimbar Rose' <i>Ipomoea</i> 'Heavenly Blue' <i>Ipomoea</i> 'Star of Yelta' <i>Salvia coccinea</i> 'Snow Nymph' <i>Tagetes erecta</i> <i>Tagetes patula</i>	<i>Cleome</i> <i>Euphorbia</i> <i>Ipomoea</i> 'Cypress Vine Mix' <i>Lablab</i> <i>Lobelia</i> <i>Pelargonium</i> (geranium) <i>Phaseolus</i> <i>Torenia</i> <i>Vigna</i> <i>Zinnia elegans</i> <i>Zinnia</i> hybrids <i>Zinnia tenuifolia</i>	<i>Bella</i> <i>Agastache</i> <i>Alcea</i> <i>Anni</i> <i>Antirrhinum</i> <i>Arctotis</i> <i>Asarina</i> <i>Asclepias</i> <i>Osteospermum</i> <i>Beta</i> <i>Pennisetum</i> <i>Petunias</i> <i>Brassica</i> <i>Calendula</i> <i>Celosia spicata</i> <i>Chrysanthemum</i> <i>Cobaea</i> <i>Delphinium</i> <i>Dianthus</i> <i>Senecio</i> <i>Stipa</i> <i>Dichondra</i> <i>Eucalyptus</i> <i>Gaillardia</i> <i>Tanacetum</i> <i>Gazania</i> <i>Trachelium</i> <i>Verbena</i> <i>Zinnia angustifolia</i>

2003 TOP PERFORMERS

Top performers are those that received a *, **, or *** during either evaluation time as seen on the 'Height and Spread Measurements Table' on pages 10-22.

July 21		September 3, 4	
Fargo-Top Performers		Fargo-Top Performers	
<i>Agastache</i> 'Honey Bee Blue'	<i>Pelargonium</i> 'Rocky Mtn. Dark Red'	<i>Salvia coccinea</i> 'Forest Fire'	<i>Agastache</i> 'Heather Queen'
<i>Ageratum</i> 'Blue Horizon'	<i>Pelargonium</i> 'Rocky Mtn. Lavender'	<i>S. farinacea</i> 'Victoria'	<i>Agastache</i> 'Blue Spike'
<i>Ageratum</i> 'Leilani Blue'	<i>Pelargonium</i> 'Rocky Mtn. Light Pink'	<i>S. hornimum</i> 'Marble Arch Mix'	<i>Agastache</i> 'Golden Jubilee'
<i>Antirrhinum</i> 'Bells Mix'	<i>Pelargonium</i> 'Rocky Mtn. Magenta'	<i>Senecio cineraria</i> 'Cirrus'	<i>Agastache rupestris</i>
<i>Antirrhinum</i> 'LaBella Mixture'	<i>Pelargonium</i> 'Rocky Mtn. Salmon Rose'	<i>Senecio</i> 'Silverdust'	<i>Agastache</i> 'Honey Bee Blue'
<i>Arctotis venusta</i>	<i>Pelargonium</i> 'Rocky Mtn. Scarlet'	<i>Tagetes erecta</i> 'Antigua Yellow'	<i>Agastache</i> 'Honey Bee White'
<i>Begonia</i> 'Ambassador Mix'	<i>Pelargonium</i> 'Shiva 2003'	<i>T. erecta</i> 'Inca II Gold'	<i>Agastache</i> 'Honey Bee White'
<i>Begonia</i> 'Harmony Pink Improved'	<i>Pelargonium</i> 'Tango Neon Purple'	<i>T. erecta</i> 'Inca II Orange'	<i>Ageratum</i> 'Azure Pearl'
<i>Begonia</i> 'Harmony White Improved'	<i>Pelargonium</i> 'Tango Pink'	<i>T. erecta</i> 'Inca II Primrose'	<i>Ageratum</i> 'Fields Blue'
<i>Begonia</i> 'Olympia Sprint Pink'	<i>Petunia</i> 'Bravo Lavender'	<i>T. erecta</i> 'Inca II Yellow'	<i>Alcea</i> 'Queeny Purple'
<i>Begonia</i> 'Olympia Sprint Rose'	<i>Petunia</i> 'Bravo Salmon Improved'	<i>T. erecta</i> 'Perfection Gold'	<i>Asarina</i> 'Joan Lorraine'
<i>Begonia</i> 'Prelude Pink Improved'	<i>Petunia</i> 'Bravo White'	<i>T. patula</i> 'Bonanza Bolero'	<i>Asarina</i> 'Mystic Pink'
<i>Begonia</i> 'Prelude Scarlet Improved'	<i>Petunia</i> 'Celebrity Chiffon Morn'	<i>T. patula</i> 'Bonanza Gold'	<i>Asclepias</i> 'Red Butterfly'
<i>Begonia</i> 'Prelude White Improved'	<i>Petunia</i> 'Celebrity Niagara Mix'	<i>T. patula</i> 'Bonanza Harmony'	<i>Asclepias</i> 'Silky Gold'
<i>Begonia</i> 'Queen Red'	<i>Petunia</i> 'Double Cascade Orchid Mix'	<i>T. patula</i> 'Bonanza Mix'	<i>Asclepias</i> 'Silky Red'
<i>Begonia</i> 'Vodka'	<i>Petunia</i> 'Dreams Mix Patriot'	<i>T. patula</i> 'Bonanza Orange'	<i>Begonia</i> 'Harmony Pink Improved'
<i>Calendula</i> 'Touch of Red'	<i>Petunia</i> 'Fantasy Carmine'	<i>T. patula</i> 'Durango Bolero'	<i>Begonia</i> 'Harmony Scarlet Improved'
<i>Catharanthus</i> 'Big Ruby'	<i>Petunia</i> 'Fantasy Crystal Light Salmon'	<i>T. patula</i> 'Durango Red'	<i>Begonia</i> 'Harmony White Improved'
<i>Catharanthus</i> 'Cooler Lavender Halo'	<i>Petunia</i> 'Fantasy Crystal Red'	<i>Verbena bonariensis</i>	<i>Begonia</i> 'Olympia Sprint Pink'
<i>Catharanthus</i> 'Cooler Orchid Deep'	<i>Petunia</i> 'Fantasy Pink'	<i>Verbena</i> 'Crystal Ball Mix'	<i>Begonia</i> 'Olympia Sprint Red'
<i>Catharanthus</i> 'Stardust Orchid'	<i>Petunia</i> 'Fantasy Pink Morn'	<i>Verbena</i> 'Liberty For All'	<i>Begonia</i> 'Olympia Sprint Rose'
<i>Catharanthus</i> 'Sunstorm Apricot'	<i>Petunia</i> 'Fantasy Red'	<i>Verbena</i> 'Merlot Mix Improved'	<i>Begonia</i> 'Prelude Pink Improved'
<i>Catharanthus</i> 'Sunstorm Lilae'	<i>Petunia</i> 'Fantasy Salmon'	<i>Verbena</i> 'Quartz Burgundy'	<i>Begonia</i> 'Prelude Scarlet Improved'
<i>Catharanthus</i> 'Sunstorm Orchid'	<i>Petunia</i> 'Limbo Violet'	<i>Zinnia angustifolia</i> 'Crystal Orange'	<i>Begonia</i> 'Queen Red'
<i>Catharanthus</i> 'Sunstorm White w/Eye'	<i>Petunia</i> 'Merlin Blue Morn'	<i>Z. angustifolia</i> 'Crystal White'	<i>Begonia</i> 'Dynasty White Blush'
<i>Celosia cristata</i> 'Prestige Scarlet'	<i>Petunia</i> 'Pirouette Red'	<i>Z. angustifolia</i> 'Crystal Yellow'	<i>Begonia</i> 'Dynasty Purple'
<i>C. plumosa</i> 'Fresh Look Red'	<i>Petunia</i> 'Prime Time Blue'	<i>Z. elegans</i> 'Benary's Giant Mix'	<i>Begonia</i> 'Dynasty Rose'
<i>C. plumosa</i> 'Fresh Look Yellow'	<i>Petunia</i> 'Prime Time Carmine'	<i>Z. elegans</i> 'Giant Cactus Mix'	<i>Begonia</i> 'Victory Green Leaf Mix'
<i>C. plumosa</i> 'Glow Carmine'	<i>Petunia</i> 'Prime Time Pink'	<i>Z. elegans</i> 'Peter Pan Mix'	<i>Begonia</i> 'Vodka'
<i>C. plumosa</i> 'New Look'	<i>Petunia</i> 'Prime Time Pink Morn'	<i>Z. hybrid</i> 'Profusion Cherry'	<i>Brassica</i> 'Peacock Mix'
<i>C. spicata</i> 'Flamingo Feather'	<i>Petunia</i> 'Holiday Red Blizzard'	<i>Z. hybrid</i> 'Profusion Orange'	<i>Capsicum</i> 'Chilly Chili'
<i>C. spicata</i> 'Purple Flamingo'	<i>Petunia</i> 'Holiday Rose'	<i>Rudbeckia</i> 'Autumn Colors'	<i>Capsicum</i> 'Explosive Blast'
<i>Cleome</i> 'Sparkler Blush'	<i>Petunia</i> 'Maverick Coral'	<i>Rudbeckia</i> 'Prairie Sun'	<i>Catharanthus</i> 'Big Ruby'
<i>Cleome</i> 'Sparkler Lavender'	<i>Petunia</i> 'Maverick Scarlet'	<i>Rudbeckia</i> 'Toto'	<i>Catharanthus</i> 'Cooler Lavender Halo'
<i>Coreopsis</i> 'Mahogany Midget'	<i>Petunia</i> 'Maverick Star'	<i>Rudbeckia</i> 'Toto Gold'	<i>Catharanthus</i> 'Cooler Orchid Deep'
<i>Cosmos</i> 'Bright Lights'	<i>Petunia</i> 'Maverick Violet'		<i>Catharanthus</i> 'Cooler Rose Hot'
<i>Cosmos</i> 'Cosmic Orange'	<i>Petunia</i> 'Purple Blizzard'		<i>Catharanthus</i> 'First Kiss Pink'
<i>Dianthus barbatus</i> 'Amazon Neon Cherry'	<i>Petunia</i> 'Purple Dream'		<i>Catharanthus</i> 'First Kiss Pink'
<i>D. barbatus</i> 'Amazon Neon Purple'			<i>Catharanthus</i> 'First Kiss Rose'
			<i>Catharanthus</i> 'First Kiss Ruby'

Fargo-Top Performers		Dickinson-Top Performers		Williston-Top Performers	
September 3,4 (cont.)		July 9		August 30	
July 10					
<i>Ipomoea</i> 'Firecracker Vine'	<i>Petunia</i> 'Fantasy Pink'	<i>Begonia</i> 'Harmony Pink Improved'	<i>Agastache</i> 'Golden Jubilee'	<i>Begonia</i> 'Harmony Pink Improved'	<i>Portulaca</i> 'Sundial Peach'
<i>Ipomoea</i> (Cardinal Climber)	<i>Petunia</i> 'Fantasy Pink Morn'	<i>Begonia</i> 'Harmony Scarlet Improved'	<i>Alcea</i> 'Queen's Purple'	<i>Begonia</i> 'Harmony Scarlet Improved'	<i>Rudbeckia</i> 'Autumn Colors'
<i>Ipomoea</i> (Cypress Vine)	<i>Petunia</i> 'Fantasy Red'	<i>Begonia</i> 'Harmony White Improved'	<i>Alternanthera</i> 'Purple Knight'	<i>Begonia</i> 'Harmony White Improved'	<i>Rudbeckia</i> 'Cherokee Sunset'
<i>Lablab</i> (Hyacinth Bean)	<i>Petunia</i> 'Fantasy Rose'	<i>Begonia</i> 'Prelude Pink Improved'	<i>Begonia</i> 'Harmony Pink Improved'	<i>Begonia</i> 'Olympia Sprint Pink'	<i>Rudbeckia</i> 'Prairie Sun'
<i>Limonium</i> 'Soiree Mix'	<i>Petunia</i> 'Limbo Violet'	<i>Begonia</i> 'Prelude Scarlet Improved'	<i>Begonia</i> 'Harmony Scarlet Improved'	<i>Begonia</i> 'Prelude Pink Improved'	<i>Rudbeckia</i> 'Toto Gold'
<i>Melampodium</i> 'Lemon Delight'	<i>Petunia</i> 'Madness Magenta'	<i>Begonia</i> 'Prelude White Improved'	<i>Begonia</i> 'Harmony White Improved'	<i>Dianthus barbatus</i> 'Amazon Neon Purple'	<i>Rudbeckia</i> 'Toto Lemon'
<i>Melampodium</i> 'Million Gold'	<i>Petunia</i> 'Madness Waterfall Mix'	<i>Begonia</i> 'Prelude White Improved'	<i>Begonia</i> 'Prelude Pink Improved'	<i>D. barbatus</i> 'Amazon Rose Magic'	<i>Rudbeckia</i> 'Toto Rustic'
<i>Melampodium</i> 'Showstar'	<i>Petunia</i> 'Merlin Blue Morn'	<i>D. barbatus</i> 'Dynasty Purple'	<i>Begonia</i> 'Prelude Scarlet Improved'	<i>D. barbatus</i> 'Amazon Rose Magic'	<i>Silene</i> 'Celma'
<i>Monarda</i> 'Lambada'	<i>Petunia</i> 'Old Glory'	<i>D. barbatus</i> 'Dynasty Red'	<i>Begonia</i> 'Prelude White Improved'	<i>D. barbatus</i> 'Dynasty Purple'	<i>Tagetes patula</i> 'Bonanza Bolero'
<i>Nicotiana glauca</i>	<i>Petunia</i> 'Prime Time Lavender'	<i>Impatiens hawkerii</i> 'Sonic Amethyst'	<i>Begonia</i> 'Prelude White Improved'	<i>D. chinensis</i> 'Corona Cherry Magic'	<i>Trachelium</i> 'Jemmy Royal Purple'
<i>Nicotiana</i> 'Domino Mix'	<i>Petunia</i> 'Prime Time Pink'	<i>I. hawkerii</i> 'Sonic Burgundy'	<i>Begonia</i> 'Prelude White Improved'	<i>Gaillardia</i> 'Sundance Bicolor'	<i>Zinnia</i> hybrid 'Profusion Cherry'
<i>Pelargonium</i> (Geranium) 'Black Magic'	<i>Petunia</i> 'Prime Time Rose'	<i>I. hawkerii</i> 'Sonic Dark Salmon'	<i>Begonia</i> 'Prelude White Improved'	<i>Gypsophila</i> 'Gypsy Deep Rose'	<i>Z. hybrid</i> 'Profusion Orange'
<i>Pelargonium</i> 'Black Velvet Rose'	<i>Petunia</i> 'Prime Time Salmon Morn'	<i>I. hawkerii</i> 'Sonic Pastel 2003'	<i>Begonia</i> 'Prelude White Improved'	<i>Impatiens hawkerii</i> 'Sonic Amethyst'	
<i>Pelargonium</i> 'Dolce Vita 2004'	<i>Petunia</i> 'Prism Sunshine'	<i>I. hawkerii</i> 'Sonic Pink'	<i>Begonia</i> 'Prelude White Improved'	<i>I. hawkerii</i> 'Sonic Scarlet Blush'	
<i>Pelargonium</i> 'Maverick Coral'	<i>Petunia</i> 'Tidal Wave Cherry'	<i>I. hawkerii</i> 'Sonic Scarlet Blush'	<i>Begonia</i> 'Prelude White Improved'	<i>I. hawkerii</i> 'Super Sonic Lilac'	
<i>Pelargonium</i> 'Maverick Light Salmon'	<i>Petunia</i> 'Tidal Wave Purple'	<i>I. hawkerii</i> 'Super Sonic Coral Ice 2003'	<i>Begonia</i> 'Prelude White Improved'	<i>I. hawkerii</i> 'Super Sonic Peach'	
<i>Pelargonium</i> 'Maverick Star'	<i>Petunia</i> 'Tidal Wave Silver'	<i>I. hawkerii</i> 'Super Sonic Lilac'	<i>Begonia</i> 'Prelude White Improved'	<i>Pelargonium</i> (Geranium) 'Black Magic'	
<i>Pelargonium</i> 'Purple Dream'	<i>Rudbeckia</i> 'Autumn Colors'	<i>I. hawkerii</i> 'Super Sonic Magenta'	<i>Begonia</i> 'Prelude White Improved'	<i>Pelargonium</i> 'Black Velvet Rose'	
<i>Pelargonium</i> 'Red Orbit'	<i>Rudbeckia</i> 'Indian Summer'	<i>Petunia</i> 'Limbo Violet'	<i>Begonia</i> 'Prelude White Improved'	<i>Pelargonium</i> 'Casanova 2003'	
<i>Pelargonium</i> 'Reggae Bright Red'	<i>Salvia coccinea</i> 'Forest Fire'	<i>Petunia</i> 'Tidal Wave Purple'	<i>Begonia</i> 'Prelude White Improved'	<i>Pelargonium</i> 'Flamingo'	
<i>Pelargonium</i> 'Rocky Mtn. Light Salmon'	<i>S. farinacea</i> 'Victoria'	<i>Petunia</i> 'Tidal Wave Silver'	<i>Begonia</i> 'Prelude White Improved'	<i>Pelargonium</i> 'Rocky Mtn. Dark Red'	
<i>Pelargonium</i> 'Rocky Mtn. Magenta'	<i>S. patens</i> 'Blue Angel'	<i>Rudbeckia</i> 'Prairie Sun'	<i>Begonia</i> 'Prelude White Improved'	<i>Pelargonium</i> 'Rocky Mtn. Light Pink'	
<i>Pelargonium</i> 'Rocky Mtn. Royal Red'	<i>Senecio</i> 'Cirrus'	<i>Rudbeckia</i> 'Toto Gold'	<i>Begonia</i> 'Prelude White Improved'	<i>Pelargonium</i> 'Rocky Mtn. Light Salmon'	
<i>Pelargonium</i> 'Rocky Mtn. Salmon Rose'	<i>Senecio</i> 'Silverdust'	<i>Rudbeckia</i> 'Toto Lemon'	<i>Begonia</i> 'Prelude White Improved'	<i>Pelargonium</i> 'Rocky Mtn. Magenta'	
<i>Pelargonium</i> 'Shiva 2003'	<i>Tagetes erecta</i> 'Antigua Primrose'	<i>Silene</i> 'Celma'	<i>Begonia</i> 'Prelude White Improved'	<i>Pelargonium</i> 'Rocky Mtn. Royal Red'	
<i>Pennisetum</i> (Fountain Grass)	<i>T. erecta</i> 'Inca II Gold'	<i>Tagetes patula</i> 'Bonanza Bolero'	<i>Begonia</i> 'Prelude White Improved'	<i>Pelargonium</i> 'Rocky Mtn. Salmon Rose'	
<i>Pentas</i> 'Butterfly Deep Rose'	<i>T. erecta</i> 'Inca II Orange'	<i>Zinnia</i> hybrid 'Profusion Cherry'	<i>Begonia</i> 'Prelude White Improved'	<i>Pelargonium</i> 'Rocky Mtn. Scarlet'	
<i>Petunia</i> 'Bravo Cool Water Mix'	<i>T. erecta</i> 'Perfection Gold'		<i>Begonia</i> 'Prelude White Improved'	<i>Pelargonium</i> 'Tango'	
<i>Petunia</i> 'Bravo Lavender'	<i>T. erecta</i> 'Perfection Yellow'		<i>Begonia</i> 'Prelude White Improved'	<i>Pelargonium</i> 'Tango Dark Red'	
<i>Petunia</i> 'Bravo Salmon Improved'	<i>T. patula</i> 'Bonanza Bolero'		<i>Begonia</i> 'Prelude White Improved'	<i>Pelargonium</i> 'Tango Hot Pink'	
<i>Petunia</i> 'Bravo White'	<i>T. patula</i> 'Durango Red'		<i>Begonia</i> 'Prelude White Improved'	<i>Pelargonium</i> 'Tango Neon Purple'	
<i>Petunia</i> 'Celebrity Chiffon Morn'	<i>Tanacetum</i> 'Silver Feather'		<i>Begonia</i> 'Prelude White Improved'	<i>Pelargonium</i> 'Tango Pink'	
<i>Petunia</i> 'Celebrity Niagara Mix'	<i>Thunbergia</i> (Black-eyed Susan Vine)		<i>Begonia</i> 'Prelude White Improved'	<i>Pelargonium</i> 'Tango Violet'	
<i>Petunia</i> 'Double Cascade Orchid Mix'	<i>Verbena bonariensis</i>		<i>Begonia</i> 'Prelude White Improved'	<i>Petunia</i> 'Blue Wave'	
<i>Petunia</i> 'Dreams Mix Patriot'	<i>Verbena</i> 'Crystal Ball Mix'		<i>Begonia</i> 'Prelude White Improved'	<i>Petunia</i> 'Limbo Violet'	
<i>Petunia</i> 'Fantasy Carmine'	<i>Zinnia angustifolia</i> 'Crystal White'		<i>Begonia</i> 'Prelude White Improved'	<i>Petunia</i> 'Limbo Violet'	
<i>Petunia</i> 'Fantasy Crystal Light Salmon'	<i>Z. elegans</i> 'Giant Cactus Mix'		<i>Begonia</i> 'Prelude White Improved'	<i>Petunia</i> 'Pirouette Red'	
<i>Petunia</i> 'Fantasy Crystal Red'	<i>Z. hybrid</i> 'Profusion Orange'		<i>Begonia</i> 'Prelude White Improved'	<i>Petunia</i> 'Tidal Wave Purple'	
			<i>Begonia</i> 'Prelude White Improved'	<i>Petunia</i> 'Tidal Wave Silver'	

Williston-Top Performers

August 31

<i>Agastache</i> 'Golden Jubilee'	<i>Pelargonium</i> 'Rocky Mtn. Magenia'
<i>Begonia</i> 'Harmony Scarlet Improved'	<i>Pelargonium</i> 'Rocky Mtn. Orange'
<i>Begonia</i> 'Olympia Sprint Pink'	<i>Pelargonium</i> 'Rocky Mtn. Red 2003'
<i>Begonia</i> 'Prelude Pink Improved'	<i>Pelargonium</i> 'Rocky Mtn. Royal Red'
<i>Capsicum</i> 'Chilly Chili'	<i>Pelargonium</i> 'Rocky Mtn. Salmon 2004'
<i>Catharanthus</i> 'Cooler Lavender Halo'	<i>Pelargonium</i> 'Rocky Mtn. Scarlet'
<i>Catharanthus</i> 'Cooler Orchid Deep'	<i>Pelargonium</i> 'Tango Hot Pink'
<i>Catharanthus</i> 'Cooler Rose Hot'	<i>Pelargonium</i> 'Tango Lavender'
<i>Catharanthus</i> 'First Kiss Apricot'	<i>Pelargonium</i> 'Tango Magenia'
<i>Catharanthus</i> 'First Kiss Pink'	<i>Pelargonium</i> 'Tango Neon Purple'
<i>Catharanthus</i> 'First Kiss Rose'	<i>Pelargonium</i> 'Tango Violet'
<i>Catharanthus</i> 'First Kiss Sunrise'	<i>Pennisetum</i> (Fountain Grass)
<i>Catharanthus</i> 'Jato Dark Red'	<i>Petunia</i> 'Blue Wave'
<i>Catharanthus</i> 'Jato Scarlet Eye'	<i>Petunia</i> 'Easy Wave Salmon'
<i>Catharanthus</i> 'Stardust Orchid'	<i>Petunia</i> 'Lavender Wave'
<i>Celosia plumosa</i> 'Fresh Look Red'	<i>Petunia</i> 'Limbo Violet'
<i>C. plumosa</i> 'Fresh Look Yellow'	<i>Petunia</i> 'Pirouette Red'
<i>C. plumosa</i> 'Glow Carmine'	<i>Petunia</i> 'Tidal Wave Purple'
<i>Dianthus barbatus</i> 'Amazon Neon Cherry'	<i>Petunia</i> 'Tidal Wave Silver'
<i>D. barbatus</i> 'Amazon Neon Purple'	<i>Rudbeckia</i> 'Autumn Colors'
<i>D. barbatus</i> 'Amazon Rose Magic'	<i>Rudbeckia</i> 'Cherokee Sunset'
<i>D. barbatus</i> 'Dynasty Purple'	<i>Rudbeckia</i> 'Cordoba'
<i>D. caryophyllus</i> 'Can Can Scarlet'	<i>Rudbeckia</i> 'Prairie Sun'
<i>D. chinensis</i> 'Panda Mix'	<i>Rudbeckia</i> 'Toto Gold'
<i>Dichondra</i> 'Silver Falls'	<i>Spilanthes</i> 'Peek-A-Boo'
<i>Gaillardia</i> 'Sundance Bicolor'	<i>Zinnia</i> hybrid 'Profusion Orange'
<i>Gypsophila</i> 'Gypsy Deep Rose'	<i>Z.</i> hybrid 'Profusion White'
<i>Hibiscus</i> 'Luna Red'	
<i>Iresine</i> 'Purple Lady'	
<i>Pelargonium</i> (Geranium) 'Black Velvet Rose'	
<i>Pelargonium</i> 'Holiday Rose'	
<i>Pelargonium</i> 'Purple Dream'	
<i>Pelargonium</i> 'Reggae Bright Red'	
<i>Pelargonium</i> 'Rocky Mtn. Dark Red'	
<i>Pelargonium</i> 'Rocky Mtn. Lavender'	
<i>Pelargonium</i> 'Rocky Mtn. Light Salmon'	

2003 STAR PERFORMERS

Star performers received *, **, or *** during *both* evaluation times as seen on the 'Height and Spread Measurement Table' on pages 10-22.

Fargo	Dickinson	Williston
<i>Agastache</i> 'Honey Bee Blue'	<i>Petalagonium</i> 'Maverick Star'	<i>Begonia</i> 'Harmony Scarlet Improved'
<i>Begonia</i> 'Harmony Pink Improved'	<i>Petalagonium</i> 'Purple Dream'	<i>Begonia</i> 'Olympia Sprint Pink'
<i>Begonia</i> 'Harmony White Improved'	<i>Petalagonium</i> 'Rocky Mtn. Magenta'	<i>Begonia</i> 'Prelude Pink Improved'
<i>Begonia</i> 'Olympia Sprint Mix Improved'	<i>Petalagonium</i> 'Rocky Mtn. Salmon Rose'	<i>Dianthus barbatus</i> 'Amazon Neon Purple'
<i>Begonia</i> 'Olympia Sprint Pink'	<i>Petalagonium</i> 'Shiva 2003'	<i>D. barbatus</i> 'Amazon Rose Magic'
<i>Begonia</i> 'Olympia Sprint Rose'	<i>Petunia</i> 'Bravo Lavender'	<i>D. barbatus</i> 'Dynasty Purple'
<i>Begonia</i> 'Prelude Pink Improved'	<i>Petunia</i> 'Bravo Salmon Improved'	<i>Gaillardia</i> 'Sundance Bicolor'
<i>Begonia</i> 'Prelude Scarlet Improved'	<i>Petunia</i> 'Bravo White'	<i>Gypsophila</i> 'Gypsy Deep Rose'
<i>Begonia</i> 'Queen Red'	<i>Petunia</i> 'Celebrity Chiffon Morn'	<i>Petalagonium</i> 'Black Velvet Rose'
<i>Begonia</i> 'Vodka'	<i>Petunia</i> 'Celebrity Niagara Mix'	<i>Petalagonium</i> 'Rocky Mtn. Dark Red'
<i>Catharanthus</i> 'Big Ruby'	<i>Petunia</i> 'Double Cascade Orchid Mix'	<i>Petalagonium</i> 'Rocky Mtn. Light Salmon'
<i>Catharanthus</i> 'Cooler Lavender Halo'	<i>Petunia</i> 'Dreams Mix Patriot'	<i>Petalagonium</i> 'Rocky Mtn. Magenta'
<i>Catharanthus</i> 'Cooler Orchid Deep'	<i>Petunia</i> 'Fantasy Carmine'	<i>Petalagonium</i> 'Rocky Mtn. Royal Red'
<i>Catharanthus</i> 'Stardust Orchid'	<i>Petunia</i> 'Fantasy Crystal Light Salmon'	<i>Petalagonium</i> 'Rocky Mtn. Scarlet'
<i>Catharanthus</i> 'Sunstorm Orchid'	<i>Petunia</i> 'Fantasy Crystal Red'	<i>Petalagonium</i> 'Tango Hot Pink'
<i>Celosia cristata</i> 'Prestige Scarlet'	<i>Petunia</i> 'Fantasy Pink'	<i>Petalagonium</i> 'Tango Neon Purple'
<i>C. plumosa</i> 'Fresh Look Red'	<i>Petunia</i> 'Fantasy Pink Morn'	<i>Petalagonium</i> 'Tango Violet'
<i>C. plumosa</i> 'Fresh Look Yellow'	<i>Petunia</i> 'Fantasy Red'	<i>Petunia</i> 'Blue Wave'
<i>C. plumosa</i> 'Glow Carmine'	<i>Petunia</i> 'Fantasy Rose'	<i>Petunia</i> 'Limbo Violet'
<i>C. plumosa</i> 'New Look'	<i>Petunia</i> 'Limbo Violet'	<i>Petunia</i> 'Pirouette Red'
<i>C. spicata</i> 'Purple Flamingo'	<i>Petunia</i> 'Merlin Blue Morn'	<i>Petunia</i> 'Tidal Wave Purple'
<i>Cleome</i> 'Sparkler Blush'	<i>Petunia</i> 'Prime Lime Pink'	<i>Petunia</i> 'Tidal Wave Silver'
<i>Cleome</i> 'Sparkler Lavender'	<i>Petunia</i> 'Prism Sunshine'	<i>Rudbeckia</i> 'Autumn Colors'
<i>Dianthus barbatus</i> 'Amazon Neon Cherry'	<i>Petunia</i> 'Tidal Wave Purple'	<i>Rudbeckia</i> 'Cherokee Sunset'
<i>D. barbatus</i> 'Amazon Neon Purple'	<i>Rudbeckia</i> 'Autumn Colors'	<i>Rudbeckia</i> 'Prairie Sun'
<i>D. barbatus</i> 'Amazon Rose Magic'	<i>Salvia coccinea</i> 'Forest Fire'	<i>Rudbeckia</i> 'Toto Gold'
<i>D. barbatus</i> 'Dynasty Purple'	<i>S. farinacea</i> 'Victoria'	<i>Zinnia</i> hybrid 'Profusion Orange'
<i>D. barbatus</i> 'Dynasty Red'	<i>Senecio</i> 'Cirrus'	
<i>D. barbatus</i> 'Dynasty White Blush'	<i>Senecio</i> 'Silverdust'	
<i>D. chinensis</i> 'Panda Mix'	<i>Tagetes erecta</i> 'Inca II Gold'	
<i>Gaillardia</i> 'Sundance Bicolor'	<i>T. erecta</i> 'Inca II Orange'	
<i>Impatiens hawkerii</i> 'Super Sonic Cherry Cream'	<i>T. erecta</i> 'Perfection Gold'	
<i>I. hawkerii</i> 'Super Sonic Peach'	<i>T. patula</i> 'Bonanza Bolero'	
<i>Ipomoea</i> (Firecracker Vine)	<i>T. patula</i> 'Durango Red'	
<i>Lablab</i> (Hyacinth Bean)	<i>Verbena bonariensis</i>	
<i>Melampodium</i> 'Lemon Delight'	<i>Verbena</i> 'Crystal Ball Mix'	
<i>Monarda</i> 'Lambada'	<i>Zinnia angustifolia</i> 'Crystal White'	
<i>Petalagonium</i> 'Black Magic'	<i>Z. elegans</i> 'Giant Cactus Mix'	
<i>Petalagonium</i> 'Black Velvet Rose'	<i>Z. hybrid</i> 'Profusion Orange'	
<i>Petalagonium</i> 'Maverick Coral'		

Height and Spread Measurements

NDSU Bedding Plant Trials-2003

Note - An * preceding a cultivar measurement indicates it was done well during that evaluation time but lacking uniformity in height or bloom; ** indicates a top performer with good bloom, vigor and uniformity; *** indicates outstanding performance. All measurements are in inches except where noted and () indicates missing data. Shaded areas show that cultivars weren't tested at that location. Seed source list is on the last page of the report.

Genus species 'Cultivar' (seed source)	Fargo			Dickinson			Williston		
	July 21 Height Spread	September 3, 4 Height Spread	July 9 Height Spread	August 30 Height Spread	July 10 Height Spread	August 31 Height Spread			
<i>Abutilon x hybridum</i> 'Bella Apricot' (PAS)	3-5"	2-5"	7-10"	6-10"					
<i>A. x hybridum</i> 'Bella Coral Deep' (PAS)	3-4	2-4	6-8	7-9					
<i>A. x hybridum</i> 'Bella Pink' (PAS)	4-6	3-5	9-12	10-12					
<i>A. x hybridum</i> 'Bella Salmon' (PAS)	2-5	2-5	6-8	6-11					
<i>Agastache cana</i> 'Heather Queen' (Pk)	9-14	3-7	*28-32	*14-16					
<i>A. foeniculum</i> 'Blue Spike' (Pk)	7-12	4-7	**22-26	**12-14					
<i>A. foeniculum</i> 'Golden Jubilee' (AAS '03)	4-7	4-7	**20-22	**14-16	*24-27"	*18-20"			
<i>A. rupestris</i> (Pk)	1-5	7-9	**22-24	**14-16	4-6"	4-6"			
<i>A. urticifolia</i> 'Honey Bee Blue' (Pk)	**7-8	**6-8	**18-20	**12-16					
<i>A. urticifolia</i> 'Honey Bee White' (Pk)	11-12	6-9	*18-26	*9-11					
<i>Ageratum houstonianum</i> 'Azure Pearl' (WG)	3-4	3-6	**5-6	**7-9					
<i>A. houstonianum</i> 'Blue Horizon' (Pk)	**14-16	**10-14	22-24	18-22					
<i>A. houstonianum</i> 'Fields Blue' (S&G)	3-6	4-8	**7-10	**11-13					
<i>A. houstonianum</i> 'Lellani Blue' (GS)	*8-14	*8-12	14-20	14-18					
<i>A. houstonianum</i> 'Neptune Blue' (GS)	4-5	5-6	4-8	5-10					
<i>A. houstonianum</i> 'Pearl Royal' (PAS)	3-4	3-7	4-6	9-13	2-4	3-7			
<i>A. houstonianum</i> 'Silver Pearl' (WG)	3-5	4-7	4-8	7-11	4-6	8-12			
<i>Alcea rosea</i> 'Queenly Purple' (AAS '04)	7-12	6-10	**22-24	**14-16	4-11	8-11			
<i>Astroemeria x hybrida</i> 'Jazze Purple Rose' (PAS)	2-3	3-4	4-7	3-8					
<i>A. x hybrida</i> 'Jazze Rose Deep' (PAS)	3-4	3-7	4-11	5-12					
<i>A. x hybrida</i> 'Jazze Rose Frost' (PAS)	2-5	3-6	8-11	7-11					
<i>Alternanthera dentata</i> 'Purple Knight' (PAS)	4-6	3-7	4-6	4-14	2-5	8-11			
<i>Amni visagna</i> 'Green Mist' (Pk)	12-16	18-20	16-18	20-24	5-9	15-20			
<i>Ammobium alatum</i> 'Bikini' (Pk)	3-12	4-9	7-13	8-12					
<i>Antirrhinum majus</i> (Snapdragons) 'Bells Mix' (GS)	*4-7	*4-7	5-8	6-11					
<i>A. majus</i> 'LaBella Mixture' (GS)	**11-14	**6-8	10-13	9-13					
<i>A. majus</i> 'Ribbon Mix' (GS)	6-14	6-8	9-14	7-12					
<i>A. majus</i> 'Solstice Orange Tricolor' (PAS)	7-10	7-9	9-11	7-10					
<i>A. majus</i> 'Solstice Yellow' (PAS)	7-10	5-7	9-11	8-10					
<i>Arctotis venusta</i> (African Daisy) (Pk)	**15-20	**12-16	24-27	24-26					
<i>Asarina scandens</i> 'Joan Lorraine' (Pk)	to 25	4-6	**36-48	**4-6					
<i>A. scandens</i> 'Mystic Pink' (Pk)	to 6	4-7	*32-40	*4-7					
<i>A. x wislizenis</i> 'Red Dragon' (Pk)	4-7	4-6	3-5	2-7					
<i>Asclepias curassavica</i> 'Red Butterfly' (Pk)	12-15"	9-12"	**22-25"	*14-17"					

<i>A. curassavica</i> 'Silky Gold' (Pk)	12-15	10-16	*24-27	*16-18					
<i>A. curassavica</i> 'Silky Red' (Pk)	12-14	10-14	*24-27	*16-20					
<i>Begonia x semperflorens-cultorum</i> 'Ambassador Mix' (Da)	*3-6	*3-6	7-10	5-8					
<i>B. x semperflorens-cultorum</i> 'Harmony Pink Improved' (Ball)	**5-6	**4-7	*7-10	*6-10					5-6" 7-9"
<i>B. x semperflorens-cultorum</i> 'Harmony Scarlet Improved' (Ball)	4-8	5-8	**6-9	**6-9					**6-8 **8-9
<i>B. x semperflorens-cultorum</i> 'Harmony White Improved' (Ball)	*6-7	*5-7	*7-9	*6-9					6-7 7-9
<i>B. x semperflorens-cultorum</i> 'Lotto White' (Ben)	5-8	6-7	9-12	7-11					
<i>B. x semperflorens-cultorum</i> 'Olympia Sprint Bicolor' (Ben)	2-6	3-6	3-7	3-7					
<i>B. x semperflorens-cultorum</i> 'Olympia Sprint Mix Improved' (Ben)	*3-7	*3-7	*4-8	*3-10					4-7 6-9
<i>B. x semperflorens-cultorum</i> 'Olympia Sprint Pink' (Ben)	**5-6	**5-6	**6-7	**7-9					*4-6 *7-9
<i>B. x semperflorens-cultorum</i> 'Olympia Sprint Red' (Ben)	3-7	4-7	**5-9	**6-9					
<i>B. x semperflorens-cultorum</i> 'Olympia Sprint Rose' (Ben)	**3-5	**3-5	**5-7	**7-9					
<i>B. x semperflorens-cultorum</i> 'Olympia Sprint White' (Ben)	4-6	4-6	4-8	4-9					
<i>B. x semperflorens-cultorum</i> 'Prelude Pink Improved' (Ball)	**5-6	**5-7	*6-10	*5-9					**6-7 **7-9
<i>B. x semperflorens-cultorum</i> 'Prelude Scarlet Improved' (Ball)	**5-6	**5-6	**6-10	**5-10					
<i>B. x semperflorens-cultorum</i> 'Prelude White Improved' (Ball)	*4-6	*4-7	4-9	5-9					4-7 5-9
<i>B. x semperflorens-cultorum</i> 'Queen Pink' (Da)	3-7	4-6	6-10	6-10					5-7 7-9
<i>B. x semperflorens-cultorum</i> 'Queen Red' (Da)	**5-6	**4-6	**6-7	**7-9					
<i>B. x semperflorens-cultorum</i> 'Queen White' (Da)	5-6	5-7	4-8	5-10					
<i>B. x semperflorens-cultorum</i> 'Senator Mix' (Da)	3-6	2-5	3-7	3-7					
<i>B. x semperflorens-cultorum</i> 'Victory Green Leaf Mix' (GS)	4-5	4-6	*6-7	*6-9					
<i>B. x semperflorens-cultorum</i> 'Victory Total Mix' (GS)	4-5	3-7	6-7	4-9					
<i>B. x semperflorens-cultorum</i> 'Vodka' (Ben)	*4-6	*5-7	**5-10	**6-10					
<i>B. x tuberhybrida</i> 'Pin Up Flame' (AAS '99)	3-5	5-7	2-4	2-6					3-6 5-9
<i>Beta vulgaris</i> var. <i>cicla</i> (Swiss Chard) 'Bright Lights' (Pk)	10-18	9-22	20-24	16-20					
<i>Brassica oleracea</i> (Ornamental Cabbage/Kale) 'Peacock Mix' (Pk)	8-15	8-16	*18-22	*14-18					
<i>B. oleracea</i> 'Sunset' (Pk)	10-15	9-12	16-22	12-18					
<i>B. oleracea</i> 'White Crane' (Pk)	12-16	8-10	12-16	9-12					
<i>Calendula officinalis</i> 'Prince Mix' (Pk)	13-22	10-15	15-20	12-16					
<i>C. officinalis</i> 'Touch of Red' (Pk)	**12-13	**9-11	12-15	12-14					
<i>Canna x generalis</i> 'Tropical Red' (Pk)	10-15	9-12	18-20	10-12					
<i>C. x generalis</i> 'Tropical Rose' (Pk, AAS '92)	8-13	9-12	22-25	15-18					
<i>C. x generalis</i> 'Tropical Salmon' (Pk)	11-13	10-12	24-26	15-18					
<i>C. x generalis</i> 'Tropical Yellow' (Pk)	9-14	8-12	22-24	15-18					
<i>Capiscum annuum</i> 'Chilly Chili' (AAS '02)	6-8	4-9	*6-8	*6-10					**5-9 **5-9
<i>C. annuum</i> 'Explosive Blast' (S&G)	3-5	3-4	*4-5	*4-6					
<i>C. annuum</i> 'Explosive Ember' (S&G)	5-7	4-6	6-8	6-12					
<i>Catharanthus roseus</i> (Vinca) 'Big Ruby' (PAS)	**6-7	**7-9	**13-15	**9-14					
<i>C. roseus</i> 'Cooler Lavender Halo' (PAS)	**7-9	**7-9	**13-15	**11-14					**11-14" **14-16"

<i>C. roseus</i> 'Cooler Orchid Deep' (PAS)	**4-6	**5-8	**9-12	**11-15	4-6	3-6	**8-10	**12-14	3-5	4-6	**9-11	**9-14
<i>C. roseus</i> 'Cooler Red' (PAS)	3-6	4-7	9-12	9-13								
<i>C. roseus</i> 'Cooler Rose Hot' (PAS)	3-7	4-8	**10-12	**9-15	4-6	4-6	**8-12	**12-14	3-6	4-7	**10-11	**12-14
<i>C. roseus</i> 'First Kiss Apricot' (Ben)	3-6	3-6	7-11	7-12	4-5	3-5	9-11	11-14	3-5	4-6	*9-12	*9-14
<i>C. roseus</i> 'First Kiss Coral' (Ben)	3-5	3-7	7-9	8-11	4-6	4-6	7-11	9-12	3-5	3-6	9-11	10-12
<i>C. roseus</i> 'First Kiss Icy Pink' (Ben)	2-6	2-7	*9-12	*12-15	5-6	5-6	9-11	13-16	4-5	5-6	9-11	12-15
<i>C. roseus</i> 'First Kiss Peach' (Ben)	4-6	4-6	8-11	7-11								
<i>C. roseus</i> 'First Kiss Pink' (Ben)	4-6	5-7	*9-11	*10-13	3-6	4-6	9-11	10-12	3-5	3-5	**9-11	**9-12
<i>C. roseus</i> 'First Kiss Rose' (Ben)	3-6	4-7	*10-11	*9-13	4-5	4-6	*8-10	*12-14	3-4	4-6	**10-11	**12-14
<i>C. roseus</i> 'First Kiss Ruby' (Ben)	3-6	3-6	**9-11	**8-12								
<i>C. roseus</i> 'First Kiss Sunrise' (Ben)	3-5	3-6	7-10	9-11	3-5	4-6	9-12	9-12	3-5	3-6	**9-11	**9-12
<i>C. roseus</i> 'Jato Dark Red' (AAS '03)	3-7	3-7	*8-11	*9-12	3-5	3-6	**8-12	**8-12	3-5	4-6	**12-14	**12-14
<i>C. roseus</i> 'Jato Scarlet Eye' (AAS '02)	3-7	3-7	**9-11	**8-12	3-5	3-6	*8-12	*10-12	3-5	4-6	**11-12	**12-14
<i>C. roseus</i> 'Stardust Orchid' (AAS '00)	**5-8	**5-7	**10-11	**11-14	3-6	4-6	*8-11	*11-13	3-4	3-6	**9-11	**12-15
<i>C. roseus</i> 'Sunstorm Apricot' (S&G)	4-5	5-6	**8-9	**10-11								
<i>C. roseus</i> 'Sunstorm Bright Red' (S&G)	3-5	3-5	8-10	9-12								
<i>C. roseus</i> 'Sunstorm Lilac' (S&G)	5-8	5-9	**10-12	**12-16								
<i>C. roseus</i> 'Sunstorm Orchid' (S&G)	**7-8	**6-7	**11-12	**12-15								
<i>C. roseus</i> 'Sunstorm Rose' (S&G)	2-6	2-6	9-11	9-13								
<i>C. roseus</i> 'Sunstorm White w/Eye' (S&G)	5-7	6-9	*8-10	**11-13								
<i>Celosia cristata</i> 'Amigo Mahogany Red' (Ben)	4-5	4-5	4-5	5-6								
<i>C. cristata</i> 'Amigo Mix' (Ben)	3-7	4-7	3-11	3-9								
<i>C. cristata</i> 'Prestige Scarlet' (AAS 97)	*7-11	*4-9	**8-14	**9-15								
<i>C. plumosa</i> 'Castle Mix' (Pk)	4-9	3-7	8-15	6-11								
<i>C. plumosa</i> 'Fresh Look Red' (Ben, AAS '04)	*8-10	*5-9	**16-22	**12-16	3-8	3-7	**15-18	**13-15	4-7	3-6	*12-16	*12-15
<i>C. plumosa</i> 'Fresh Look Yellow' (Ben, AAS '04)	*6-10	*6-9	**16-22	**12-14	3-7	3-6	7-11	6-11	3-7	2-6	*10-15	*10-15
<i>C. plumosa</i> 'Glow Carmine' (PAS)	**5-7	**5-8	*7-12	*7-13	2-3	2-5	3-4	4-7	3-4	3-6	*5-7	*7-12
<i>C. plumosa</i> 'New Look' (Ben)	*6-10	*5-9	**14-16	**14-18								
<i>C. spicata</i> 'Flamingo Feather' (Bur)	*14-20	*6-9	24-30	12-15								
<i>C. spicata</i> 'Kosmo Purple Red' (Pk)	3-6	4-7	4-7	4-11								
<i>C. spicata</i> 'Purple Flamingo' (Pk)	*11-15	*8-12	**24-32	**24-34								
<i>Chrysanthemum carinatum</i> 'Merry Mix' (Pk)	8-13	6-10	18-22	15-20								
<i>Cleome hasslerana</i> 'Mix' (Pk)	18-22	10-15	28-32	18-24								
<i>C. spinosa</i> 'Sparkler Blush' (AAS '02)	**16-18	**12-14	**28-32	**18-24								
<i>C. spinosa</i> 'Sparkler Lavender' (Pk)	**16-18	**12-14	**28-34	**18-24								
<i>C. spinosa</i> 'Sparkler Rose' (Pk)	14-18	9-14	24-30	18-24								
<i>Cleome spinosa</i> 'Sparkler White' (Pk)	15-17"	10-12"	**26-30"	**24-28"								
<i>Cobaea scandens</i> 'Key Lime' (Pk)	to 30	6-10	*3-4'	* ()								
<i>C. scandens</i> 'Royal Plum' (Pk)	6-24	6-10	*3-6'	* ()								

<i>Coleus x blumei</i> 'Giant Exhibition - Copper Queen' (Pk)	5-7	5-7	12-22"	10-14										
<i>C. x blumei</i> 'Giant Exhibition - Limelight' (Pk)	6-9	7-10	18-22	10-17										
<i>C. x blumei</i> 'Giant Exhibition - Palisandra' (Pk)	4-7	4-7	9-22	8-12										
<i>C. x blumei</i> 'Giant Exhibition - Scarlet II' (Pk)	6-22	6-9	7-24	7-11										
<i>C. x blumei</i> 'Giant Exhibition - Tartan' (Pk)	3-8	3-7	7-18	6-14										
<i>Coreopsis tinctoria</i> 'Mahogany Midget' (Pk)	**10-12	**8-12	died											
<i>Cosmos sulphureus</i> 'Bright Lights' (Pk)	*18-20	*15-18	20-26	18-22										
<i>C. sulphureus</i> 'Cosmic Orange' (AAS '00)	*10-12	*9-12	11-15	12-16										
<i>Dahlia hortensis</i> 'Bishop's Children' (Pk)	10-15	10-14	24-30	15-20										
<i>D. hortensis</i> 'Figaro Mix' (Pk)	5-10	5-9	11-15	12-15										
<i>D. variabilis</i> 'Garden Pride' (Ben)	5-11	5-10	11-15	11-14										
<i>Delphinium grandiflorum</i> 'Summer Blues' (Ben)	1-3	2-3	4-5	4-5										
<i>D. grandiflorum</i> 'Summer Nights' (Ben)	2-3	2-3	3-5	3-5										
<i>Dianthus barbatus</i> 'Amazon Neon Cherry' (PAS)	**8-14	**8-10	**11-15	**9-11										
<i>D. barbatus</i> 'Amazon Neon Purple' (PAS)	**8-15	**8-10	**11-15	**9-12										
<i>D. barbatus</i> 'Amazon Rose Magic' (PAS)	**9-12	**7-10	**12-16	**9-12										
<i>D. barbatus</i> 'Dynasty Purple' (Ball)	**10-12	**10-12	**12-15	**11-13										
<i>D. barbatus</i> 'Dynasty Red' (Ball)	**10-12	**10-12	**12-15	**11-13										
<i>D. barbatus</i> 'Dynasty White Blush' (Ball)	**8-12	**7-12	*9-11	*9-11										
<i>D. caryophyllus</i> 'Can Can Scarlet' (AAS '03)	6-14	6-9	9-12	9-13										
<i>D. chinensis</i> 'Charm Mix' (GS)	5-8	5-8	4-9	4-10										
<i>D. chinensis</i> 'Corona Cherry Magic' (AAS '03)	**3-6	**3-7	4-7	4-9										
<i>D. chinensis</i> 'Melody Pink' (AAS '00)	8-12	6-9	*12-15	*9-12										
<i>D. chinensis</i> 'Panda Mix' (Ball)	*5-8	*5-8	**6-9	**8-11										
<i>D. chinensis</i> 'Super Parfait Raspberry' (GS)	3-6	4-7	5-6	5-8										
<i>D. chinensis</i> 'Super Parfait Strawberry' (GS)	4-6	5-8	5-7	5-11										
<i>D. chinensis</i> 'Valentine' (PAS)	*3-6	*4-7	4-7	6-11										
<i>Dichondra argentea</i> 'Silver Falls' (PAS)	1	12-14	1-2	12-15										
<i>D. repens</i> 'Emerald Falls' (PAS)	1-2	3-7	1-2	8-12										
<i>Emilia flammula</i> 'Scarlet Magic' (Pk)	18-22	15-18	20-24	14-16										
<i>Eucalyptus cinerea</i> (Pk)	12-15	6-10	16-20	16-20										
<i>E. ficifolia</i> (Pk)	7-9	5-7	15-18	14-16										
<i>E. gunnii</i> (Pk)	5-12	3-10	12-20	12-20										
<i>Euphorbia</i> 'Kilimanjaro' (Pk)	12-15	7-10	11-13	14-16										
<i>Eustoma grandiflorum</i> 'Lisianthus' 'Echo Blue' (Pk)	12-16	4-7	14-17	5-8										
<i>Eustoma grandiflorum</i> 'Echo Mix' (Pk)	14-16"	3-7"	14-18"	6-9"										
<i>E. grandiflorum</i> 'Echo Pink' (Pk)	12-16	4-7	9-15	6-9										
<i>E. grandiflorum</i> 'Echo Yellow' (Pk)	14-16	3-6	18-20	6-8										
<i>E. grandiflorum</i> 'Forever Blue' (AAS '01)	3-7	3-8	8-11	7-12										

<i>E. grandiflorum</i> 'Forever White' (AAS '03)	4-7	4-8	7-9	8-10									
<i>E. grandiflorum</i> 'Heidi Hybrid' (Pk)	12-16	3-5	12-18	7-9									
<i>E. grandiflorum</i> 'Red Glass' (Pk)	4-12	3-4	9-12	4-7									
<i>Gaillardia pulchella</i> 'Red Plume' (AAS '91)	7-10	10-12	**12-14	**12-15									
<i>G. pulchella</i> 'Sundance Bicolor' (AAS '03)	**7-10	**8-12	**12-15	**12-15									**20-22 **27-30
<i>Gazania rigens</i> 'Daybreak Orange Cream' (PAS)	4-7	4-9	5-7	8-11									
<i>G. rigens</i> 'Kiss Mixture' (GS)	3-6	4-9	4-6	5-10									
<i>G. rigens</i> 'Talent Orange' (Ben)	4-6	5-9	4-7	8-12									
<i>G. rigens</i> 'Talent Rose Shades' (Ben)	4-6	6-10	4-7	8-12									
<i>G. rigens</i> 'Talent White' (Ben)	4-7	5-9	5-9	8-13									
<i>G. rigens</i> 'Talent Yellow' (Ben)	3-7	4-9	5-9	6-12									
<i>G. rigens</i> 'Tiger Mix' (Ball)	4-7	6-8	5-7	8-12									
<i>Gomphrena globosa</i> 'Mix' (Pk)	4-7	3-8	18-20	12-16									
<i>G. haageana</i> 'Strawberry Fields' (Pk)	4-8	3-8	14-16	16-18									
<i>Gypsophila muralis</i> 'Garden Bride' (Da)	3-5	3-6	2-3	3-4									
<i>G. muralis</i> 'Gypsy' (AAS '97)	**3-5	**4-7	()	()									
<i>G. muralis</i> 'Gypsy Deep Rose' (AAS '04)	3-4	3-5	3	3									**6-8 **12-15
<i>Helianthus annuus</i> 'Ring of Fire' (AAS '01)	*18-30	*9-14	30-36	16-18									36-40 22-26
<i>H. annuus</i> 'Soraya' (AAS '00)	30-36	10-15	28-32	12-15									43-48 27-30
<i>Helichrysum bracteatum</i> 'Bright Bikini Mix' (Pk)	3-15	4-8	6-15	5-9									
<i>H. bracteatum</i> 'Fiery Mix' (Pk)	15-18	6-10	18-24	9-14									
<i>H. monstrosum</i> 'Mix' (Pk)	12-20	6-10	24-32	12-16									
<i>H. petiolare minus</i> 'Silver Mist' (Pk)	5-9	9-12	7-9	14-16									
<i>Hibiscus moscheutos</i> 'Luna Blush' (Ball)	1	1	6-8	7-10									20-22 18-20
<i>H. moscheutos</i> 'Luna Red' (Ball)	1	1	6-8	7-10									*22-24 *27-30
<i>Hypoestes phyllostachya</i> 'Confetti Mix' (Da)	3-6	4-9	**8-16	**9-14									
<i>Impatiens hawkerii</i> 'Sonic Amethyst' (FG)	*3-6	*4-8	4-6	5-8									4-6 6-9
<i>I. hawkerii</i> 'Sonic Burgundy' (FG)	3-5	4-7	5-6	6-8									3-5 6-9
<i>I. hawkerii</i> 'Sonic Dark Salmon' (FG)	4-6	4-7	4-7	5-8									3-5 5-8
<i>I. hawkerii</i> 'Sonic Hot Rose' (FG)	4-6	5-8	5-6	5-9									3-6 6-9
<i>I. hawkerii</i> 'Sonic Light Lavender' (FG)	5-7	5-8	*6-7	*6-8									3-5 5-8
<i>I. hawkerii</i> 'Sonic Light Pink' (FG)	4-5	3-7	4-6	4-7									3-5 6-8
<i>I. hawkerii</i> 'Sonic Orange' (FG)	*3-6	*6-8	5-7	6-9									3-6 5-11
<i>I. hawkerii</i> 'Sonic Pastel 2003' (FG)	3-6	5-8	*5-7	*5-8									5-6 8-10
<i>Impatiens hawkerii</i> 'Sonic Pink' (FG)	*3-6"	*4-8"	5-6"	6-8"									3-5" 5-8"
<i>I. hawkerii</i> 'Sonic Red 2003' (FG)	4-6	5-7	**6-7	**7-9									5-7 6-11
<i>I. hawkerii</i> 'Sonic Salmon' (FG)	3-6	4-7	5-6	5-8									3-5 4-9
<i>I. hawkerii</i> 'Sonic Salmon Ice' (FG)	*3-4	*4-6	4-5	4-7									3-5 4-7
<i>I. hawkerii</i> 'Sonic Scarlet Blush' (FG)	3-6	4-8	*5-7	*7-9									5-6 7-10

<i>I. hawkerii</i> 'Sonic Sweet Cherry' (FG)	3-6	4-6	5-7	4-8	4-6	5-8	3-5	5-8	3-4	5-7	4-5	6-9
<i>I. hawkerii</i> 'Sonic White 2003' (FG)	3-5	4-8	4-5	5-7	3-5	5-8	3-5	4-7	4-5	5-7	4-6	7-9
<i>I. hawkerii</i> 'Super Sonic Cherry Cream' (FG)	*6-10	*6-9	*6-8	*5-7	4-6	5-9	5-6	5-8	4-5	5-7	4-7	7-11
<i>I. hawkerii</i> 'Super Sonic Coral Ice 2003' (FG)	*5-8	*9-12	7-9	8-10	*4-6	*7-9	5-8	8-10	4-5	5-7	5-7	8-11
<i>I. hawkerii</i> 'Super Sonic Dark Salmon' (FG)	4-6	5-8	5-7	5-8	4-6	5-8	4-6	6-8	4-5	5-7	5-6	8-10
<i>I. hawkerii</i> 'Super Sonic Lavender' (FG)	*5-7	*7-9	7-8	7-9	4-6	6-8	4-6	5-9	4-6	5-7	4-7	6-10
<i>I. hawkerii</i> 'Super Sonic Lilac' (FG)	5-7	5-9	6-7	7-9	**3-5	**5-8	3-5	6-8	**3-5	**5-8	3-5	5-8
<i>I. hawkerii</i> 'Super Sonic Magenta' (FG)	*5-7	*4-9	6-7	7-9	*4-5	*6-8	3-5	4-8	4-5	6-9	5-7	9-11
<i>I. hawkerii</i> 'Super Sonic Orchid' (FG)	*5-7	*6-9	6-7	5-8	3-5	5-7	3-4	6-8	3-4	4-6	3-6	4-9
<i>I. hawkerii</i> 'Super Sonic Peach' (FG)	*4-6	*5-8	*5-7	*7-10	3-5	6-9	5-6	9-11	*4	*6-9	5-6	8-12
<i>I. hawkerii</i> 'Super Sonic White 2003' (FG)	3-5	6-7	6-7	6-8	4-6	6-8	4-5	5-9	3-4	3-7	4-6	6-9
<i>I. wallerana</i> 'Accent Limited Edition Mix' (GS)	2-5	1-6	3-10	5-12								
<i>I. wallerana</i> 'Accent Pastel Mix' (GS)	1-3	3-6	3-6	8-14								
<i>I. wallerana</i> 'Accent Peppermint Mix' (GS)	1-2	3-4	3-5	7-10								
<i>I. wallerana</i> 'Circus Orange White' (PAS)	1-4	2-6	3-8	5-12								
<i>I. wallerana</i> 'Dazzler Blue Pearl' (PAS)	2-3	4-7	4-5	7-9								
<i>I. wallerana</i> 'Dazzler Orange Imp' (Ball)	1-2	2-3	2	8								
<i>I. wallerana</i> 'Dazzler Rose Swirl' (Ball)	2-4	4-7	5-6	9-13								
<i>I. wallerana</i> 'Fanciful Coral' (Ball)	2-3	4-6	6-9	7-14								
<i>I. wallerana</i> 'Fanciful Red' (PAS)	2-4	2-5	3-6	3-12								
<i>I. wallerana</i> 'Mosaic Lilac' (GS)	2-4	4-6	5-6	8-11								
<i>I. wallerana</i> 'Mosaic Rose' (GS)	3-4	5-7	5-6	10-12								
<i>I. wallerana</i> 'Mosaic Violet' (GS)	2-3	4-7	4-6	6-12								
<i>I. wallerana</i> 'Stardust Salmon' (PAS)	1-3	3-7	*6-9	*8-14								
<i>I. wallerana</i> 'Super Elfin Pink Deep' (PAS)	1-2	2-3	2-3	4-5								
<i>I. wallerana</i> 'Super Elfin Ruby' (PAS)	1-3	2-5	3-5	8-11								
<i>I. wallerana</i> 'Swirl Coral Imp' (PAS)	2-3	3-5	4-6	7-12								
<i>Ipomoea alba</i> (Moon Vine) (Pk)	to 24	6-8	*4-6'?	*()								
<i>I. (Mina) lobata</i> (Firecracker Vine) (Pk)	**over 36	**4-6	*4-6'?	*()								
<i>I. x multifida</i> (Cardinal Climber) (Pk)	over 36	4-6	*3-5'?	*()								
<i>I. nil</i> 'Heavenly Blue' (Pk)	over 36	6-8	5-6'?	()								
<i>I. nil</i> 'Mimbar Rose' (Pk)	4-8	3-5	6-8	()								
<i>I. purpurea</i> 'Star of Yella' (Pk)	to 25	3-5	()	()								
<i>Ipomoea quamoclit</i> (Cypress Vine) 'Mix' (Pk)	4-7"	3-5"	*36-40"	*6-8"								
<i>Iresine herbstii</i> 'Purple Lady' (PAS)	1-3	3-4	3	5								
<i>Kniphofia uvaria</i> 'Flamenco' (AAS '99)	10-18	6-9	8-12	()								
<i>Lablab purpureus</i> (<i>Dolichos lablab</i>) (Hyacinth Bean) (Pk)	**Over 36	**8-12	**5-7'?	**								
<i>Lavandula angustifolia</i> 'Lady' (Pk, AAS '94)	4-8	1-7	8-12	6-11								
<i>Leonotis leonurus</i> 'Lion's Ear' (Pk)	14-24	10-14	48-72	24-30								

<i>Limonium sinuatum</i> 'Soiree Mix' (Pk)	8-18	10-14	**24-27	**18-20					
<i>Linaria maroccana</i> 'Fantasy Mix' (Pk)	6-11	4-7	7-10	7-10					
<i>Lobelia erinus</i> 'Blue Moon' (S&G)	2-4	2-5	4-9	7-12					
<i>L. erinus</i> 'Half Moon' (S&G)	1-5	3-5	4-5	5-12					
<i>L. erinus</i> 'Midnight Moon' (S&G)	3-5	3-4	4-9	5-12					
<i>L. erinus</i> 'Rose Moon' (S&G)	3-4	3-5	3-6	4-8					
<i>L. erinus</i> 'Sky Moon' (S&G)	1-3	1-2	3-5	3-7					
<i>Lobularia maritima</i> 'Golf' (Cl)	*3-5	*3-10	4-9	9-14					
<i>L. maritima</i> 'Pastel Carpet' (Pk)	3-4	5-9	5-8	9-15					
<i>L. maritima</i> 'Snow Crystals' (Pk)	*3-5	*4-9	6-9	10-16					
<i>Melampodium paludosum</i> 'Lemon Delight' (Pk)	**6-7	**7-9	**14-18	** ()					
<i>M. paludosum</i> 'Million Gold' (Pk)	4-7	4-9	**10-15	**12-15					
<i>M. paludosum</i> 'Showstar' (Ben)	5-10	5-10	*18-22	*20-22					
<i>Monarda x hybrida</i> 'Lambada' (Pk)	*18-20	*10-14	*30-36	*28-32					
<i>Nicotiana alata</i> (Pk)	8-20	6-12	**24-36	**24-36					
<i>N. alata</i> 'Dominio Mix' (Pk)	7-12	4-8	*5-14	*5-11					
<i>N. alata</i> 'Saratoga Mix' (GS)	4-8	4-7	5-11	4-12					
<i>N. x sanderae</i> 'Perfume Mix' (Pk)	3-9	5-10	10-18	7-12					
<i>Ocimum basilicum</i> 'Magical Michael' (AAS '02)	5-8	5-9	9-12	12-14					
<i>Osteospermum ecklonis</i> 'Passion Mix' (AAS 99)	7-8	5-7	12-15	9-12					
Pelargonium x hortorum - Zonal Geraniums									
Appleblossom Orbit (GS)	8-10	7-11	9-11	9-12					
Black Velvet Rose (AAS '02)	*8-12	*9-12	*9-14	*10-13					**16-18 **24-27
Casanova 2003 (FG)	7-9	8-11	5-7	8-11					**7-9 **9-11 12-14 18-22
Cherry Elite (GS)	7-9	8-12	9-13	10-13					
Deep Salmon Orbit (GS)	7-10	7-11	7-12	8-13					
Dolce Vita 2004 (FG)	6-8	7-9	**7-9	**10-12					
Flamingo (FG)	**8-10	**9-11	5-9	8-12					14-16 18-20
Glow Orbit (GS)	5-10	9-11	9-11	9-13					7-8 9-11 12-15 22-24
Maverick Coral (GS)	**8-10	**9-12	*11-15	*12-15					
Maverick Light Salmon (GS)	9-11	7-11	*11-14	*12-15					
Maverick Pink (GS)	7-9	8-11	9-12	9-11					
Zonal geraniums (cont.) Maverick Red (GS)	9-11"	9-12"	9-13"	10-14"					
Maverick Salmon (GS)	9-11	8-11	10-12	8-13					
Maverick Scarlet (GS)	*8-10	*8-12	9-12	11-13					
Maverick Star (GS)	*8-12	*8-12	*9-13	*12-14					
Maverick Violet (GS)	*8-10	*7-12	8-12	9-14					
Maverick White (GS)	9-12	7-9	10-14	8-14					
Multibloom Capri (GS)	6-9	9-11	7-9	7-10					

Multibloom Red (GS)	7-10	8-11	7-10	9-12							
Multibloom Salmon (GS)	6-9	7-10	7-9	7-9							
Red Orbit (GS)	9-12	9-12	**14-15	**14-17	6-8"	8-12"	6-9"	7-14"	*7-9"	*9-12"	***14-17"
Rocky Mtn. Dark Red (FG)	**7-10	**10-13	7-11	8-13	6-9	8-12	5-9	8-12	6-8	7-11	***22-24"
Rocky Mtn. Deep Rose (FG)	8-9	9-12	7-11	9-12	6-8	8-12	6-9	8-12	7-9	7-11	14-16
Rocky Mtn. Lavender (FG)	*7-10	*9-12	9-12	9-15	8-10	9-12	7-12	11-15	8-10	12-14	**16-20
Rocky Mtn. Lavender Pink 2004 (FG)	7-10	8-11	7-9	8-11	7-9	7-12	6-11	6-12	7-10	10-12	15-18
Rocky Mtn. Light Pink (FG)	*7-10	*7-10	7-10	8-12	6-8	6-10	4-8	6-10	*8-9	*10-12	15-20
Rocky Mtn. Light Salmon (FG)	6-8	9-12	**9-13	**9-15	3-7	3-8	4-6	3-7	*8-9	*11-13	**15-18
Rocky Mtn. Magenta (FG)	**7-9	**9-12	*8-12	*11-13	5-8	6-10	6-8	7-12	**7-9	**9-11	**13-15
Rocky Mtn. Orange (FG)	7-10	9-12	8-12	9-12	7-9	9-12	6-8	10-14	7-9	11-12	**14-17
Rocky Mtn. Red 2003 (FG)	8-11	7-12	8-13	12-15	6-11	10-14	7-12	7-14	7-12	10-12	**14-16
Rocky Mtn. Royal Red (FG)	7-10	10-12	**9-12	**12-14	6-8	9-12	7-10	10-14	*7-9	*9-12	**15-18
Rocky Mtn. Salmon 2004 (FG)	7-9	9-12	9-13	9-12	5-7	3-9	4-10	4-12	7-10	9-12	**15-18
Rocky Mtn. Salmon Rose (FG)	**7-10	**9-12	*9-15	*9-15	6-8	7-10	7-10	9-12	*10-11	*11-13	15-18
Rocky Mtn. Scarlet (FG)	*7-9	*8-12	10-13	11-14	6-11	8-11	6-11	7-14	*9-11	*10-12	**16-20
Rocky Mtn. Violet (FG)	7-10	8-11	8-10	8-11	5-10	5-8	3-9	3-12	8-9	7-11	17-20
Rocky Mtn. White (FG)	6-9	8-10	7-12	9-12	4-8	6-8	4-6	4-7	9-10	10-13	14-16
Rose Orbit (GS)	7-10	9-12	9-15	9-13							20-24
Scarlet Elite (GS)	7-9	8-12	8-11	8-14							
Scarlet Orbit (GS)	9-12	8-10	11-13	9-15							
Tango (FG)	8-10	8-10	10-12	9-12	6-8	8-12	6-10	7-12	*7-9	*9-11	14-16
Tango Dark Red (FG)	6-10	9-12	8-10	9-11	6-8	8-10	6-9	9-14	**7-9	**9-11	12-14
Tango Hot Pink (FG)	5-8	6-12	6-9	7-11	6-8	5-11	4-7	6-10	**6-8	**8-10	**14-17
Tango Lavender (FG)	8-10	7-12	8-11	7-11	7-9	7-10	5-10	7-12	7-9	9-11	**16-18
Tango Lavender Pink (FG)	6-8	7-10	5-8	6-9	5-7	5-11	4-7	5-10	7-9	9-11	14-16
Tango Light Orchid (FG)	5-7	4-8	5-7	5-9	5-7	6-8	4-6	6-10	6-9	7-10	10-12
Tango Magenta (FG)	8-10	7-11	6-10	7-10	7-8	7-9	3-7	5-9	7-9	7-10	**12-14
Tango Neon Purple (FG)	*6-9	*8-10	6-11	9-13	6	6-9	5-8	7-12	*7-9	*8-11	**16-19
Tango Pink (FG)	**7-10	**8-10	6-8	7-10	6-8	7-8	4-7	4-8	**7-9	**9-11	15-18
Tango Violet (FG)	6-8	7-10	5-8	5-9	5-8	7-10	3-7	4-9	*6-8	*7-9	**14-16
Zonal geraniums (cont.) Tango White (FG)	5-7"	7-9"	4-9"	6-10"	3-6"	6-8"	4-6"	5-7"	6-9"	7-11"	9-14"
White Elite (GS)	7-10	6-9	7-10	9-11							10-24"
White Orbit (GS)	8-10	7-9	8-12	7-10							
<i>Pelargonium peltatum</i> - Ivy Geraniums											
Black Magic (FG)	*7-8	*10-13	*8-10	*12-15	5-7	7-9	4-10	6-14	*6-9	*10-12	9-11
Holiday Rose (FG)	*7-8	*9-12	8-12	8-14	4-6	7-9	4-8	5-12	7-9	9-12	*9-13
Purple Dream (FG)	**7-8	**9-12	*8-10	*12-14	5-7	7-10	4-9	4-14	8-9	11-13	*10-13
Reggae Bright Red (FG)	6-8	7-9	*9-12	*12-15	2-8	7-10	4-11	6-14	8-9	7-10	**20-22

Shiva 2003 (FG)	*7-8	*9-11	*9-12	*12-14	5-7	6-10	3-8	()	9-10	9-12	10-13	18-22
Blizzard Cascades												
Holiday Red Blizzard (FG)	*6-8	*9-12	7-11	11-13	4-6	5-7	4-8	4-9	6-8	9-12	9-11	15-18
Purple Blizzard (FG)	**7-9	**12-14	8-10	12-14	4-6	6-10	3-9	3-15	6-11	12-15	14-16	18-20
<i>Pennisetum glaucum</i> 'Purple Majesty' (PAS, AAS '03)	25-40	6-16	()	()	24-30	6-10	dicted	dicted	6-24	3-4	dicted	
<i>P. setaceum</i> (Fountain Grass) (Pk)	20-24	22-24	**40-42	**36-40	12-14	12-14	**24-30	**24-30	18-20	12-15	**to 36	**22-24
<i>Pentas lanceolata</i> 'Butterfly Deep Rose' (Ball)	2-6	2-5	*6-11	*6-10	3-5	2-5	dicted	dicted	4-6	3-5	6-11	7-11
<i>P. lanceolata</i> 'New Look Pink' (Ben)	3-4	3-4	5-9	6-10								
<i>P. lanceolata</i> 'New Look Red' (Ben)	2-4	2-5	5-7	6-9								
<i>P. lanceolata</i> 'New Look Rose' (Ben)	2-4	2-4	3-7	4-8								
<i>P. lanceolata</i> 'New Look Violet' (Ben)	1-3	1-3	5-7	6-9								
<i>P. lanceolata</i> 'New Look White' (Ben)	1-4	1-4	4-9	3-10								
<i>Petunia hybrida</i> - Floribunda Petunias												
Celebrity Chiffon Morn (AAS '95)	*6-8	*13-15	**10-11	**20-24								
Celebrity Niagara Mix (Bod)	*7-9	*9-13	*11-13	*16-20								
Celebrity Watercolors Mix (Bod)	7-9	9-12	11-14	10-18								
Madness Clear Mix (Ball)	5-10	8-12	9-13	10-18								
Madness Magenta (Ball)	5-6	9-13	**10-11	**13-15								
Madness Red and White (Ball)	7-9	7-10	10-12	13-18								
Madness Waterfall Mix (Ball)	5-9	5-12	*9-12	*13-18								
<i>Petunia hybrida</i> - Grandiflora Petunias												
Bravo Blue (S&G)	5-9	5-12	10-12	12-18								
Bravo Blue Veined (S&G)	7-9	9-12	10-13	14-18								
Bravo Cool Water Mix (S&G)	6-11	9-12	*11-13	*12-18								
Bravo Lavender (S&G)	*7-10	*8-13	*11-15	*16-22								
Bravo Red (S&G)	7-9	8-12	6-10	10-14								
Bravo Salmon Improved (S&G)	*4-7	*9-14	*9-13	**20-24								
Bravo White (S&G)	**4-8	**8-13	**11-13	**18-22								
Double Cascade Mix (PAS)	6-10	9-15	7-16	11-16								
Double Cascade Orchid Mix (PAS)	**5-11	**7-14	*12-15	*18-22								
Grandiflora petunias (cont.) Dreams Mix Patriot (PAS)	*6-9"	*9-14"	*11-13"	*15-18"								
Limbo Violet (AAS '04)	**4-7	**9-12	**6-7	**12-16	**5-7"	**8-13"	**8-10"	**15-18"	**5-6"	**7-12"	**6-8"	**20-22?"
Prouette Red (PAS)	**7-10	**9-12	10-13	12-16	6-12	12-13	12-15	**15-19	*6-8	*8-14	*12-20	*20-24
Prism Sunshine (Pk, AAS '98)	**7-9	**12-14	*10-14	*16-22								
Stars and Stripes (Ball)	8-10	9-14	9-14	15-20								
<i>Petunia hybrida</i> - Hedgiflora Petunias												
Tidal Wave Cherry (Ball)	6-10	12-20	**11-14	**28-32								
Tidal Wave Purple (Ball)	*7-12	*14-18	*12-17	*18-24	**10-12	**20-28	***20-24	***36?	**10-12	**26-30	***12-18	***48?
Tidal Wave Silver (AAS '02)	3-10	7-15	**11-14	**24-30	***5-8	**24-28	***12-15	***48?	**2-6	**28-30	***16-18	***48?

<i>Petunia hybrida</i> - Milliflora Petunias												
Fantasy Blue (GS)	5	6-8	8-10	14-16								
Fantasy Carmine (GS)	*5-7	*7-12	**7-8	**12-16								
Fantasy Crystal Light Salmon (GS)	*4-6	*5-9	**5-9	**9-14								
Fantasy Crystal Red (GS)	*4-8	*5-9	**6-10	**9-14								
Fantasy Ivory (GS)	2-5	4-7	5-7	9-12								
Fantasy Pink (GS)	*4-6	*5-10	*5-9	*10-14								
Fantasy Pink Morn (GS, AAS '96)	*3-5	*5-9	*5-8	*9-13								
Fantasy Red (GS)	*4-8	*5-9	*8-10	*12-16								
Fantasy Rose (GS)	*3-6	*3-8	**6-9	**12-14								
Fantasy Salmon (GS)	*4-7	*6-9	5-10	11-15								
<i>Petunia hybrida</i> - Multiflora Petunias												
Merlin Blue Morn (AAS '03)	**7-10	**11-13	*10-12	*13-16								
Old Glory (Ball)	7-10	9-18	*10-13	*14-18								
PrimeTime Blue (GS)	**7-10	**12-14	13-15	18-20								
PrimeTime Carmine (GS)	**7-9	**9-14	13-18	15-24								
PrimeTime Lavender (GS)	9-12	7-12	*12-14	*15-18								
PrimeTime Light Blue (GS)	3-8	4-12	12-14	16-20								
PrimeTime Pink (GS)	*7-9	*9-12	*10-13	*12-18								
PrimeTime Pink Morn (GS)	**7-9	**8-12	11-13	15-18								
PrimeTime Rose (GS)	6-7	9-12	**9-11	**13-18								
PrimeTime Rose Frost (GS)	4-8	8-12	6-9	10-15								
PrimeTime Salmon Morn (GS)	4-6	9-12	*11-13	*18-22								
<i>Petunia hybrida</i> - Spreading or Prostrate Petunias												
Blue Wave (AAS '03)	2-5	7-12	6-8	12-24	2-3	13-15	**6-9	**36?	*2-4	*15-20	**6-8	**30-36
Easy Wave Pink (PAS)	1-4	3-9	6-8	12-22								
Easy Wave Salmon (PAS)	1-3	6-9	3-5	6-16	2	6-10	4-6	15-30	2-3	14-24	**4-5	**36-40
Lavender Wave (AAS '02)	1-3	8-12	3-6	12-18	2-3	8-20	**6-9	**36?	2-3	12-22	**6-8	**40-48?
Pink Wave (PAS)	1-3	6-12	3-5	18-30								
Spreading Petunias (cont.) Purple Wave (AAS '95)	1-4"	4-12"	4-6"	22-26"								
<i>Phaseolus coccineus</i> (Scarlet Runner Bean) 'Hestia' (Pk)	10-14	6-10	8-12	9-15								
<i>P. coccineus</i> 'Scarlet Emperor' (Pk)	10-12	10-12	12-24	12-20								
<i>Portulaca grandiflora</i> 'Margarita Rosita' (AAS '01)	2-4	3-8	2-3	5-7	2-3"	5-8"	3-6"	4-8"	2-3"	4-6"	3-5"	6-12"
<i>P. grandiflora</i> 'Margarita Scarlet' (PAS)	2-4	4-7	3-4	8	3-5	5-7	3-6	5-12	3-4	4-8	3-4	6-9
<i>P. grandiflora</i> 'Sundial Peach' (AAS '99)	1-4	7-10	5-6	12-16	2-3	12-14	4-5	12-15	*3-4	*12-14	3-5	12-16
<i>Rudbeckia hirta</i> 'Autumn Colors' (Ben)	*7-14	*5-10	*14-18	*12-16	5-8	6-8	8-14	9-12	*8-13	*12-14	*20-22	*22-24
<i>R. hirta</i> 'Cherokee Sunset' (AAS '02)	8-12	7-10	15-20	10-15	10-13	6-10	25-27	18-20	*10-15	*12-15	**20-24	**22-24
<i>R. hirta</i> 'Cordoba' (Ben)	5-11	3-7	6-10	5-12	4-7	4-6	6	6	7-12	6-12	*12-15	*12-18
<i>R. hirta</i> 'Indian Summer' (AAS '95)	7-20	9-12	*22-25	*20-25								

<i>R. hirta</i> 'Prairie Sun' (AAS '03)	*7-14	*4-7	8-12	12-18	8-12	*12-15	*8-12	**20-24	**15-20	**11-15	**12-15	**20-22	**20-24
<i>R. hirta</i> 'Sonora' (Ben)	5-12	4-9	8-14	12-16	8-14								
<i>R. hirta</i> 'Toto' (Ben)	**4-7	**3-6	4-8	4-6	4-8								
<i>R. hirta</i> 'Toto Gold' (Ben)	**4-8	**3-7	5-11	6-11	5-11	*4-8	*4-7	3-7	2-7	**6-8	**6-9	**10-14	**12-15
<i>R. hirta</i> 'Toto Lemon' (Ben)	4-7	3-6	8	7	8	*4-6	*4-6	3-5	2-3	*5-8	*6-8	6-11	6-12
<i>R. hirta</i> 'Toto Rustic' (Ben)	5-8	3-6	5-7	5-9	5-7	2-7	2-6	6	6	**5-8	**6-9	9-11	6-10
<i>Salvia coccinea</i> 'Forest Fire' (Pk)	*6-11	*7-9	*12-16	*14-18	*12-16								
<i>S. coccinea</i> 'Snow Nymph' (Pk)	8-18	5-9	14-20	22-24	14-20								
<i>S. farinacea</i> 'Reference' (Ben)	4-12	5-7	8-15	12-20	8-15								
<i>S. farinacea</i> 'Victoria' (Pk)	**13-16	**8-10	**13-15	**18-22	**13-15								
<i>S. hornimum</i> (<i>S. viridis</i>) 'Marble Arch Mix' (Pk)	*12-20	*4-12	10-14	18-24	10-14								
<i>S. patens</i> 'Blue Angel' (Ben)	5-24	6-9	*15-20	*26-28	*15-20								
<i>S. splendens</i> 'Blue Ribbon' (PAS)	4-9	3-8	3-8	5-11	3-8								
<i>S. splendens</i> 'Salsa Mix' (GS)	3-6	2-4	3-6	3-7	3-6								
<i>S. splendens</i> 'Salvador Red' (S&G)	3-9	3-6	3-5	6-10	3-5								
<i>Scabiosa atropurpurea</i> 'Giant Imperial Mix' (Pk)	16-24	7-10	10-12	22-24	10-12								
<i>S. atropurpurea</i> 'QIS Scarlet' (Pk)	16-20	6-9	12-16	20-26	12-16								
<i>S. atropurpurea</i> 'Sweet Scabious Mix' (Pk)	16-30	7-12	12-16	24-26	12-16								
<i>Senecio cineraria</i> 'Cirrus' (Pk)	**4-7	**7-9	**10-12	**6-9	**10-12								
<i>S. cineraria</i> 'Silverdust' (Pk)	**5-6	**4-8	**6-9	**7-9	**6-9								
<i>Silene pendula</i> 'Celina' (Ben)	2-4	2-5	ditcd	ditcd	ditcd	*4-5	*6-10	ditcd	ditcd	*4-5	*6-10	3-5	9-12
<i>Solenostemon scutellaroides</i> 'Carefree Mix' (Pk)	4	4	9	7	9								
<i>S. scutellaroides</i> 'Park's Brilliant Mix' (Pk)	2-6	4-7	3-12	2-16	3-12								
<i>Spilanthes oleracea</i> 'Peek-A-Boo' (PAS)	4-7	4-12	9-16	6-9	9-16								
<i>Stipa tenuissima</i> 'Angel Hair' (Pk)	12-15	6-9	8-11	18-20	8-11								
<i>Tagetes erecta</i> 'Antigua Gold' (GS)	6-10	9-12	12-18	10-14	12-18								
<i>T. erecta</i> 'Antigua Orange' (GS)	6-8	8-10	12-15	9-11	12-15								
<i>T. erecta</i> 'Antigua Primrose' (GS)	5-9	3-12	**13-17	**11-13	**13-17								
<i>Tagetes erecta</i> 'Antigua Yellow' (GS)	**7-8"	**8-9"	10-12"	8-10"	10-12"								
<i>T. erecta</i> 'Inca II Gold' (GS)	**10	**12-15	*16-20	*13-15	*16-20								
<i>T. erecta</i> 'Inca II Orange' (GS)	*9-14	*9-12	*17-20	*13-18	*17-20								
<i>T. erecta</i> 'Inca II Primrose' (GS)	*8-15	*12-15	15-20	12-15	15-20								
<i>T. erecta</i> 'Inca II Yellow' (GS)	**9-11	**9-12	15-20	12-15	15-20								
<i>T. erecta</i> 'Perfection Gold' (GS)	**13-18	**12-15	*22-26	*15-22	*22-26								
<i>T. erecta</i> 'Perfection Orange' (GS)	10-12	10-14	18-22	13-20	18-22								
<i>T. erecta</i> 'Perfection Yellow' (GS)	7-15	9-12	*18-24	*15-24	*18-24								
<i>T. patula</i> 'Bonanza Bolero' (AAS '99)	**6-8	**9-11	*12-15	*8-11	*12-15	**5-6"	**7-9"	6-7"	10-12"	**6"	**9-12"	9-11"	11-14"
<i>T. patula</i> 'Bonanza Gold' (PAS)	**7-11	**10-12	13-15	7-13	13-15								
<i>T. patula</i> 'Bonanza Harmony' (PAS)	*4-8	*6-12	10-15	6-11	10-15								

<i>T. patula</i> 'Bonanza Mix' (PAS)	**5-7	**6-10	6-11	7-13																
<i>T. patula</i> 'Bonanza Orange' (PAS)	**6-11	**12	12-16	14-18																
<i>T. patula</i> 'Durango Bolero' (PAS)	**7-8	**9-11	7-10	12-15																
<i>T. patula</i> 'Durango Mix' (PAS)	7-9	7-11	7-13	9-15																
<i>T. patula</i> 'Durango Red' (PAS)	**8-10	**10-12	**11-14	*10-15																
<i>T. patula</i> 'Durango Tangerine' (PAS)	**9-11	**10-12	12-16	12-18																
<i>T. patula</i> 'Durango Yellow Improved' (PAS)	7-9	8-11	7-12	9-14																
<i>T. tenuifolia</i> 'Luna Lemon Yellow' (Da)	9-12	10-15	12-14	12-16																
<i>T. tenuifolia</i> 'Starfire Mix' (Pk)	7-12	9-13	9-12	10-16																
<i>Tanacetum ptarmiciflorum</i> 'Silver Feather' (Pk)	5-9	3-7	**10-13	**11-14																
<i>Thumbergia alata</i> (Black-eyed Susan Vine) (Pk)	6-8	to 18	**14-16	**22-26																
<i>Tithonia rotundifolia</i> 'Fiesta del Sol' (AAS '00)	6-12	9-12	14-20	10-18																
<i>Torenia fournieri</i> 'Duchess Blue and White' (GS)	2-3	2-3	2-5	3-7																
<i>T. fournieri</i> 'Duchess Burgundy' (GS)	2-3	2-3	2-3	3-4																
<i>T. fournieri</i> 'Duchess Light Blue' (GS)	3	4	2-4	2-4																
<i>T. fournieri</i> 'Duchess Pink' (GS)	2	3	2-3	2-3																
<i>Trachelium caeruleum</i> 'Jenny Antique Rose' (Ben)	2-8	2-6	7-13	5-10																
<i>T. caeruleum</i> 'Jenny Royal Purple' (Ben)	2-9	2-6	9-14	4-9																
<i>T. caeruleum</i> 'Jenny Violet' (Ben)	2-6	2-4	9-11	6-10																
<i>T. caeruleum</i> 'Jenny White' (Ben)	2-8	2-4	7-15	7-9																
<i>Tropaeolum majus</i> 'Alaska' (Pk)	2-4	2-5	4-9	4-13																
<i>T. majus</i> 'Empress of India' (Pk)	4-11	6-11	5-8	4-9																
<i>T. majus</i> 'Moonlight' (Pk)	2-6	2-7	6-9	8-13																
<i>Verbena bonariensis</i> (Pk)	**36-40	**22-26	**36-40	**30-36																
<i>V. x hybrida</i> 'Crystal Ball Mix' (PAS)	*5-9	*7-14	*7-11	*10-16																
<i>V. x hybrida</i> 'Liberty For All' (Ball)	*4-7	*5-11	7-10	11-14																
<i>V. x hybrida</i> 'Merlot Mix Improved' (Ball)	*4-7	*8-10	7-9	12-14																
<i>Verbena x hybrida</i> 'Quartz Burgundy' (AAS '99)	*5-7"	*8-11"	5-8"	9-14"																
<i>V. x hybrida</i> 'Quartz Burgundy w/ Eye' (PAS)	3-6	4-10	6-8	12-14																
<i>V. x hybrida</i> 'Quartz Red Eye' (PAS)	3-6	6-12	7-9	14-16																
<i>V. x hybrida</i> 'Quartz Scarlet' (PAS)	3-6	4-9	5-6	9-12																
<i>V. x hybrida</i> 'Quartz Waterfall Mix' (PAS)	3-7	7-10	5-9	9-14																
<i>Vigna caracalla</i> (Snail Vine) (Pk)	4-10	6-8	12-48	()																
<i>Viola cornuta</i> 'Penny Deep Blue' (GS)	3-5	3-5	died	died																
<i>V. cornuta</i> 'Penny Orange Jump-up' (GS)	3-6	3-7	died	died																
<i>V. cornuta</i> 'Penny White' (GS)	3-5	3-6	died	died																
<i>V. witrockiana</i> 'Acquarelle Mix' (Pk)	3-5	4-6	died	died																
<i>V. witrockiana</i> 'Flamenco Mix' (Pk)	3-5	()	died	died																
<i>V. witrockiana</i> 'Ultimo Morpho' (AAS '02)	4-6	3-6	died	died																

<i>V. wittrockiana</i> 'Universal Plus Citrus Mix' (GS)	3-7	3-6	died						
<i>V. wittrockiana</i> 'Universal Plus Mariner Mix' (GS)	2-6	3-6	died						
<i>V. wittrockiana</i> 'Universal Plus Rhapsody Mix' (GS)	3-6	3-6	died						
<i>Zinnia angustifolia</i> 'Crystal Orange' (Pk)	*5-8	*5-9	8-11	7-13					
<i>Z. angustifolia</i> 'Crystal White' (AAS '97)	*4-7	*7-9	*9-12	*13-18					
<i>Z. angustifolia</i> 'Crystal Yellow' (Pk)	**6-8	**3-6	8-11	11-13					
<i>Z. elegans</i> 'Benary's Giant Mix' (Ben)	*13-20	*4-12	20-28	12-18					
<i>Z. elegans</i> 'Candy Stripe' (Pk)	14-18	7-12	22-24	12-16					
<i>Z. elegans</i> 'Envy' (Pk)	13-16	9-14	24-26	14-16					
<i>Z. elegans</i> 'Giant Cactus Mix' (Pk)	*12-20	*12-15	**26-28	**12-16					
<i>Z. elegans</i> 'Park's Picks Mix' (Pk)	8-24	5-16	18-28	12-20					
<i>Z. elegans</i> 'Peter Pan Mix' (GS)	*8-12	*8-11	12-16	9-13					
<i>Z. elegans</i> 'Short Stuff Mix' (GS)	*5-7	*7-9	5-10	9-12					
<i>Z. elegans</i> 'Zinnita Orange' (Ben)	3-7	4-8	5-11	6-14					
<i>Z. elegans</i> 'Zinnita White' (Ben)	3-6	4-7	6-9	9-11					
<i>Z. elegans</i> 'Zinnita Yellow' (Ben)	3-6	4-7	5-8	7-9					
<i>Z. tenuifolia</i> 'Red Spider' (Pk)	14-20	10-12	20-24	12-14					
<i>Z. hybrid</i> 'Profusion Cherry' (AAS '99)	**6-9	**8-12	10-14	11-14	*6-10	*8-12	12-15	14-16	**6-8
<i>Z. hybrid</i> 'Profusion Orange' (AAS '99)	**5-7	**9-12	*9-11	*10-16	6-8	4-8	8-11	10-14	**3-9
<i>Z. hybrid</i> 'Profusion White' (AAS '01)	3-7	4-9	6-14	8-15	7-9	7-11	**10-12	**12-14	4-7
									**6-12
									**8-12
									**6-12
									6-9
									13-15
									**10-14
									**9-11
									15-20
									**14-18
									**14-18

Visual Observations

NDSU Bedding Plant Trials - 2003

	Fargo July 21, 22 and September 4, 5	Dickinson July 9 and August 30	Williston July 10 and August 31
Cultivar tested (seed source)			
<i>Abutilon x hybridum</i> 'Bella Apricot' (PAS)	Pale orange; Not uniform in size all season; bloom was best late in summer but flowers hard to see.		
<i>A. x hybridum</i> 'Bella Coral Deep' (PAS)	Deep salmon; Not too vigorous all season; not blooming in July; small but uniform in size in September.		
<i>A. x hybridum</i> 'Bella Pink' (PAS)	Salmony pink; Similar to others early; best of the abutilon in September with good vigor and bloom but flowers hard to see.		
<i>A. x hybridum</i> 'Bella Salmon' (PAS)	Pale salmon; Not uniform in size all season; similar to others in bloom and vigor.		
<i>Agastache cana</i> 'Heather Queen' (Pk)	Rosy-mauve; Just starting to bloom by July 21 but had a good show by September; lacked uniformity in height all season.		
<i>A. foeniculum</i> 'Blue Spike' (Pk)	Dusty blue; Good vigor all season; not uniform in size or bloom early but putting on a nice show by early September.		
<i>A. foeniculum</i> 'Golden Jubilee' (AAS '03)	Dusty blue-greenish yellow leaves; Just starting to bloom at end of July but putting on a good show later.	Plants healthy in July but not blooming or uniform in height; nice later with good bloom and uniformity.	Not blooming for July evaluation but uniform in size; nice in August with good bloom, vigor and uniformity.
<i>A. rupestris</i> (Pk)	Salmon flower with finely dissected foliage; Good size uniformity all season; nice show by August.		
<i>A. urticifolia</i> 'Honey Bee Blue' (Pk)	Gray blue; This one did well all season with good bloom and uniformity in size.		
<i>A. urticifolia</i> 'Honey Bee White' (Pk)	Not as uniform in size or bloom as 'Honey Bee Blue'; nice bloom by September but lacked uniformity in height.		
<i>Ageratum houstonianum</i> 'Azure Pearl' (WG)	Blue; Smaller than other ageratum early but bloom was alright; nice in September with good bloom and size uniformity.		
<i>A. houstonianum</i> 'Blue Horizon' (Pk)	Blue; Nicest in July with good bloom; not as vigorous as usual by September and had a spider mite problem.		
<i>A. houstonianum</i> 'Fields Blue' (S&G)	Blue; Good bloom all season but not uniform in size early; nicest by the end of the season.		
<i>A. houstonianum</i> 'Leilani Blue' (GS)	Good bloom in July but not as vigorous as 'Blue Horizon'; by September, dead heads detracted from its appearance.		
<i>A. houstonianum</i> 'Neptune Blue' (GS)	Smaller plants than other ageratum early but good bloom; lots of dead heads by September and a loss of vigor.		
<i>A. houstonianum</i> 'Pearl Royal' (PAS)	Lavender; Healthy with good bloom in July but one small plant; not uniform in size or bloom later and had spider mites.	Lacked uniformity in size all season; nicer appearance in July because of dead heads detracting in September.	Good bloom here all season but not uniform in height.
<i>A. houstonianum</i> 'Silver Pearl' (WG)	White; Lacked size uniformity all season; not as floriferous as others and dead heads more evident later in the season.		
<i>Alcea rosea</i> 'Queenly Purple' (AAS '04)	Rosy mauve; Rabbits were chewing on this early in the season but it recovered nicely with a good flower show later.	Not blooming for July evaluation; nice bloom by end of summer but not uniform in size and some leaf curl.	Only one plant blooming for July evaluation; better bloom by the end of the season, one dying plant.
<i>Alstroemeria x hybrida</i> 'Jazze Purple Rose' (PAS)	Small plants all season; not blooming for July evaluation; only two plants blooming by September.		
<i>A. x hybrida</i> 'Jazze Rose Deep' (PAS)	Small plants all season and not blooming by July evaluation; 3 nice, floriferous plants by September.		
<i>A. x hybrida</i> 'Jazze Rose Frost' (PAS)	Best of the three alstroemeria in the Fargo trials; a few blooms by July evaluation; nice, little plants by September.		
<i>Alternanthera dentata</i> 'Purple Knight' (PAS)	Burgundy foliage-no flowers; Not as vigorous or nice as last year; did much better in Dickinson and Williston.	Lacked uniformity in spread early but very nice later with good vigor and uniformity.	Did alright here but was more vigorous in Dickinson.

<i>Ammi visagna</i> 'Green Mist' (Pk)	White; Nice bushy plants all season with good bloom; flower heads disfigured by September; can be a weed problem.		
<i>Ammobium alatum</i> 'Bikini' (Pk)	White; Not uniform in size all season; bloom was good but past prime by September evaluation.		
<i>Antirrhinum majus</i> (Snapdragons)'Bells Mix' (GS)	Good color mix; Nice in July with good bloom and uniformity; past peak bloom later but most floriferous of the snapdragons. Very nice show in July with a nice mix of colors; past peak bloom by September.		
<i>A. majus</i> 'LaBella Mixture' (GS)	Not as floriferous or uniform in size as 'LaBella Mix'; past peak bloom for September evaluation.		
<i>A. majus</i> 'Ribbon Mix' (GS)	Nice in July with fairly good size uniformity and bloom; past peak bloom by Sept. evaluation.		
<i>A. majus</i> 'Solstice Orange Tricolor' (PAS)	Nice in July with fairly good size uniformity and bloom; past peak bloom by Sept. evaluation.		
<i>A. majus</i> 'Solstice Yellow' (PAS)	Good bloom and uniformity of size in July; aphids a problem by the end of the season and bloom declined.		
<i>Arctotis venusta</i> (African Daisy) (Pk)	Purple; Good vigor and twining all season but nicest by the end of the summer.		
<i>Asarina scandens</i> 'Joan Lorraine' (Pk)	Pink; Not blooming for July evaluation and only a few flowers by September; better vigor in September than July.		
<i>A. scandens</i> 'Mystic Pink' (Pk)	Not blooming for July evaluation; small with no vigor all season.		
<i>A. x wislizenis</i> 'Red Dragon' (Pk)	Similar to 'Silky Red' in July but slightly less bloom; nice by September-good bloom and fairly uniform in size.		
<i>Asclepias curassavica</i> 'Red Butterfly' (Pk)	Gold; Just starting to bloom by July evaluation; good size uniformity all season; bloom best later in the summer.		
<i>A. curassavica</i> 'Silky Gold' (Pk)	Gold/orange-red; Just starting to bloom for July evaluation but good vigor; good bloom and size uniformity later.		
<i>A. curassavica</i> 'Silky Red' (Pk)	Nice in July with good bloom and uniformity; alright in Sept. but not as floriferous and nice as some other begonia cultivars.		
<i>Begonia x semperflorens-cultorum</i> 'Ambassador Mix' (Da)	Nicer in July with good bloom and size uniformity; still good bloom by September but lost the uniformity in height.		Good bloom early but not quite as vigorous as some others; did alright overall but other cultivars performed better here.
<i>B. x semperflorens-cultorum</i> 'Harmony Pink Improved' (Ball)	Deep red leaves with red flowers-nice color combination; Not uniform in size early; nice in Sept. with good show of color.		Did well all season with good bloom, vigor and size uniformity.
<i>B. x semperflorens-cultorum</i> 'Harmony Scarlet Improved' (Ball)	Lacked size uniformity all season but had good bloom and vigor.		Good bloom early but not as uniform in size as some others; dead heads more obvious at the end of the season.
<i>B. x semperflorens-cultorum</i> 'Harmony White Improved' (Ball)	Did alright all season but wasn't as floriferous or uniform in size as many other cultivars.		Nice all season with good bloom, vigor and size uniformity.
<i>B. x semperflorens-cultorum</i> 'Lotto White' (Ben)	Plants smaller than other begonia cultivars all season; bloom good in September but not uniform in size.		
<i>B. x semperflorens-cultorum</i> 'Olympia Sprint Bicolor' (Ben)	Really good bloom all season but a few plants were considerably smaller than the others.		Not uniform in size all season but bloom was alright.
<i>B. x semperflorens-cultorum</i> 'Olympia Sprint Mix Improved' (Ben)	Nice all season with good bloom, vigor and size uniformity.		Good bloom in July but size uniformity could have been better; bloom not as good in August but size uniformity better.
<i>B. x semperflorens-cultorum</i> 'Olympia Sprint Pink' (Ben)	Not uniform in size or bloom in July; better in September with a nice show of red.		
<i>B. x semperflorens-cultorum</i> 'Olympia Sprint Red' (Ben)	Nice all season with good bloom, vigor and size uniformity.		
<i>B. x semperflorens-cultorum</i> 'Olympia Sprint Rose' (Ben)	Not as floriferous or uniform in size as other begonia cultivars.		
<i>Begonia x semperflorens-cultorum</i> 'Olympia Sprint White' (Ben)			

<i>B. x semperflorans-cultorum</i> 'Prelude Pink Improved' (Ball)	Bloom and vigor were good all season; size uniformity was better in July.	Nice all season with good bloom, vigor and size uniformity.	Good bloom early but lacked uniformity in size; by August had good bloom and better size uniformity.
<i>B. x semperflorans-cultorum</i> 'Prelude Scarlet Improved' (Ball)	Nice all season with good bloom, vigor and size uniformity.	Good bloom, vigor and size uniformity in July, lost size uniformity by August.	Not uniform in size all season with one really small plant; bloom was good, though.
<i>B. x semperflorans-cultorum</i> 'Prelude White Improved' (Ball)	Not as floriferous or vigorous as others all season; nicest bloom in July.	Good bloom all season but lacked uniformity in size.	Did alright all season but other cultivars did better.
<i>B. x semperflorans-cultorum</i> 'Queen Pink' (Da)	Not much bloom in July but fairly uniform in size; by September, bloom was alright but it lacked size uniformity.		
<i>B. x semperflorans-cultorum</i> 'Queen Red' (Da)	Nice all season with good bloom, vigor and size uniformity.		
<i>B. x semperflorans-cultorum</i> 'Queen White' (Da)	Not uniform in size or bloom all season; not as floriferous as other begonia cultivars.		
<i>B. x semperflorans-cultorum</i> 'Senator Mix' (Da)	Small for July evaluation with less bloom and vigor than other begonias; good bloom later but lacking size uniformity.		
<i>B. x semperflorans-cultorum</i> 'Victory Green Leaf Mix' (GS)	Not uniform in size all season; bloom was best by the September evaluation.		
<i>B. x semperflorans-cultorum</i> 'Victory Total Mix' (GS)	Nice color mix but similar to 'Victory Green Leaf Mix' as far as uniformity and bloom.		
<i>B. x semperflorans-cultorum</i> 'Vodka' (Ben)	Fairly uniform in size and bloom early; best show in September with good vigor, bloom and uniformity.		
<i>B. x tuberhybrida</i> 'Pin Up Flame' (AAS '99)	A few flowers all season; not too vigorous or floriferous, as usual.	Did better here than in Fargo but still not as vigorous as it should be.	Not uniform in size, bloom or vigor all season.
<i>Beta vulgaris</i> var. <i>cicla</i> (Swiss Chard) 'Bright Lights' (Pk)	Good vigor all season but not much color variation in stalks; not uniform in height.		
<i>Brassica oleracea</i> (Ornamental Cabbage/Kale) 'Peacock Mix' (Pk)	Good vigor all season but not uniform in size; coloration better for September evaluation.		
<i>B. oleracea</i> 'Sunset' (Pk)	Good vigor early but not uniform in height; by September stalks were falling over and were leafless at the bottoms.		
<i>B. oleracea</i> 'White Crane' (Pk)	Similar to 'Sunset'.		
<i>Calendula officinalis</i> 'Prince Mix' (Pk)	All golden yellow flowers; Good bloom in July but not uniform in July; covered with aphids at the end of the summer.		
<i>C. officinalis</i> 'Touch of Red' (Pk)	Pale salmon; Very nice in July with good vigor and bloom; aphids by the end of summer with decline of bloom and vigor.		
<i>Canna x generalis</i> 'Tropical Red' (Pk)	bloom; good vigor later but dead heads detracted from appearance.		
<i>C. x generalis</i> 'Tropical Rose' (Pk, AAS '92)	Good vigor early but not uniform in size and only one bloom; nice in September but dead heads detracted.		
<i>C. x generalis</i> 'Tropical Salmon' (Pk)	Not blooming for July evaluation; most vigorous of the 'Tropical' cannas in September.		
<i>C. x generalis</i> 'Tropical Yellow' (Pk)	Similar growth pattern to other 'Tropical' cannas.		
<i>Capsicum annuum</i> 'Chilly Chili' (PAS, AAS '02)	Lacked uniformity in size all season but nice show of flowers and peppers, especially by September.	Good uniformity in size; good show of peppers, especially by the end of August.	Plants small and not uniform in size in July; by August they were very showy and full of peppers.
<i>C. annuum</i> 'Explosive Blast' (S&G)	Smaller plants than other ornamental peppers but loaded with flowers and peppers.		
<i>Capsicum annuum</i> 'Explosive Ember' (S&G)	Purple leaves with red peppers that turned purple; not uniform in size all season; peppers not too showy against purple leaves.		
<i>Catharanthus roseus</i> (Vincea) 'Big Ruby' (PAS)	Deep burgundy red; One of the most vigorous and uniform vincea cultivars all season; especially nice in September.		

<i>C. roseus</i> 'Cooler Lavender Halo' (PAS)	Lavender with white eye; Nice all season with good bloom, vigor and uniformity.	Uniform in bloom and size early; very nice show in August.	Probably the most vigorous and floriferous vinca in the Williston trial-very nice show.
<i>C. roseus</i> 'Cooler Orchid Deep' (PAS)	Deep, lavender rose; Nice all season with good bloom, vigor and uniformity.	One of the more vigorous vinca cultivars in the Dickinson trials uniform and floriferous all season.	One of the nicer vinca cultivars with good vigor and bloom all season.
<i>C. roseus</i> 'Cooler Red' (PAS)	Deep cherry red; Not uniform in size all season; nice bright color but didn't bloom as well as some other vinca cultivars.		
<i>C. roseus</i> 'Cooler Rose Hot' (PAS)	the September evaluation with good bloom, vigor and uniformity.	Just starting to bloom in July but not uniform in bloom; better in August with a good show of color.	Vigorous in July but not many blooms; better show in August with good vigor, uniformity and bloom.
<i>C. roseus</i> 'First Kiss Apricot' (Ben)	White to peachy pink; Not as floriferous or uniform in size as other cultivars.	Did alright but was not as vigorous or floriferous as other vinca cultivars in Dickinson.	good bloom in August but not as uniform in size as other cultivars.
<i>C. roseus</i> 'First Kiss Coral' (Ben)	Deep rose; Good vigor but not as floriferous or uniform as other vinca cultivars.	Not uniform in size or bloom early; good vigor but not as floriferous or uniform as other cultivars in August.	Didn't do as well as other vinca cultivars here, less bloom and vigor.
<i>C. roseus</i> 'First Kiss Icy Pink' (Ben)	Pale pink; Not uniform in size or bloom early; bloom good by September evaluation but still not uniform in size.	bloom; by August not as vigorous or floriferous as other groups.	Smaller plants in July but bloom was alright; lacking size uniformity in August.
<i>C. roseus</i> 'First Kiss Peach' (Ben)	Pale pink to almost white; Not much bloom or vigor early; lacked uniformity in size and not as floriferous as others later.		
<i>C. roseus</i> 'First Kiss Pink' (Ben)	Bright rose; Not uniform in size or bloom time early; bloom good by September but not uniform in size.	Nice bloom early; similar to other 'First Kiss' cultivars-not as vigorous or floriferous in August as others.	Fairly floriferous and vigorous in July; very nice show in August.
<i>C. roseus</i> 'First Kiss Rose' (Ben)	Rosy pink; Only a few plants blooming early and not uniform in size; good bloom later but still not uniform in size.	Good size uniformity in July but just starting to bloom; good bloom in August but not as uniform in size as others.	Good size uniformity in July but not many blooms; nice show by the end of August.
<i>C. roseus</i> 'First Kiss Ruby' (Ben)	Deep burgundy red; Only a few blooms early and not uniform in size; very nice in September.		
<i>C. roseus</i> 'First Kiss Sunrise' (Ben)	Deep cherry red; Not uniform in size all season, and bloom not as good as some other cultivars.	Alright in July but not uniform in size or bloom; nice in August but not as floriferous as some others.	Smaller plants with good bloom in July; nice show in August.
<i>C. roseus</i> 'Jaito Dark Red' (AAS '03)	Deep magenta; Fairly vigorous but not too many blooms in July; not uniform in size all season; good bloom by September.	Slow to bloom and lacked uniformity in size early but by August was putting on a good show of color.	Also slow to bloom here and plants somewhat small in July; by August very nice and showy.
<i>C. roseus</i> 'Jaito Scarlet Eye' (AAS '02)	Deep cherry red; Not uniform in bloom or size early, one small plant in September otherwise floriferous and uniform.	Lacked uniformity in size all season but bloom and vigor were good.	Good vigor all season but not much bloom early; very nice in August with good bloom and uniformity.
<i>C. roseus</i> 'Stardust Orchid' (AAS '00)	Deep lavender pink with white eye; Nice all season with good bloom, vigor and uniformity.	Not uniform in bloom or vigor early; not uniform in size later but good vigor and bloom.	Not uniform in size or bloom early; by August very nice and showy.
<i>C. roseus</i> 'Sunstorm Apricot' (S&G)	very nice by September with good bloom, vigor and uniformity.		
<i>C. roseus</i> 'Sunstorm Bright Red' (S&G)	Deep cherry red; Not as floriferous or vigorous as other vinca cultivars.		
<i>C. roseus</i> 'Sunstorm Lilac' (S&G)	uniform in size or bloom; nicer later with good bloom and vigor.		
<i>C. roseus</i> 'Sunstorm Orchid' (S&G)	Deep lavender rose; Nice all season with good bloom, vigor and uniformity.		
<i>C. roseus</i> 'Sunstorm Rose' (S&G)	Rosy pink; Not uniform in size all season; bloom was alright but other cultivars were better.		
<i>C. roseus</i> 'Sunstorm White w/Eye' (S&G)	Pale pink-almost white with red eye; Not much bloom early but very nice by September.		
<i>Celosia cristata</i> 'Amigo Mahogany Red' (Ben)	Deep burgundy foliage and flowers; Small, uniform plants with good bloom.		
<i>Celosia cristata</i> 'Amigo Mix' (Ben)	No flowers for July evaluation-rabbit damage; not much bloom by September and not uniform in size or vigor.		
<i>C. cristata</i> 'Prestige Scarlet' (AAS '97)	Good bloom all season; lacked uniformity in height early but better by September.		
<i>C. plumosa</i> 'Castle Mix' (Pk)	Plants not too vigorous early but bloom was alright; lacked uniformity in size later and flowers looked 'dirty'.		

<i>C. plumosa</i> 'Fresh Look Red' (Ben, AAS '04)	Red plumes; Good bloom all season; lacked uniformity in height early; one of the nicest performers in Fargo this year.	but healthy; very nice in August with good bloom, uniformity, etc.	Not too vigorous for the July evaluation; good bloom by August but not uniform in size.
<i>C. plumosa</i> 'Fresh Look Yellow' (Ben, AAS '04)	Yellow plumes; Similar in performance to 'Fresh Look Red' but not as uniform or floriferous.	Just starting to bloom by July evaluation; plants smaller than 'Fresh Look Red' all season; flowers dirty looking here.	bloom, lacked uniformity in size, but was nicer than in Dickinson.
<i>C. plumosa</i> 'Glow Carmine' (PAS)	Very uniform early but not later; good bloom but plants very small.	No vigor all season and by August some plants dying.	Not much vigor early; by August had good bloom, not uniform in size but nicer here than in Dickinson.
<i>C. plumosa</i> 'New Look' (Ben)	Red foliage and plumes; Healthy, vigorous and good bloom all season; lacked uniformity in size early.		
<i>C. spicata</i> 'Flamingo Feather' (Bur)	Good bloom and vigor all season; lacked uniformity in size in September and flowers a little past prime.		
<i>C. spicata</i> 'Kosmo Purple Red' (Pk)	Burgundy and green foliage-burgundy plumes; Small plants all season; not uniform in size later; lots of flower by September.		
<i>C. spicata</i> 'Purple Flamingo' (Pk)	Good vigor but not much bloom for July evaluation; very nice by September with good bloom, vigor and uniformity.		
<i>Chrysanthemum carinatum</i> 'Merry Mix' (Pk)	Pretty flowers but not uniform in size; bloom or vigor early; good bloom later but dead heads detract.		
<i>Cleome hassleriana</i> 'Mix' (Pk)	Pink, white; One sticky plant; not as floriferous as other cleomes.		
<i>C. spinosa</i> 'Sparkler Blush' (AAS '02)	Nice all season with good bloom, vigor and size uniformity.		
<i>C. spinosa</i> 'Sparkler Lavender' (Pk)	Nice all season with good bloom, vigor and uniformity.		
<i>C. spinosa</i> 'Sparkler Rose' (Pk)	Not as uniform in size or vigor as other 'Sparkler' cultivars.		
<i>C. spinosa</i> 'Sparkler White' (Pk)	Very nice by September with good bloom, vigor and uniformity.		
<i>Cobaea scandens</i> 'Key Lime' (Pk)	More vigor than 'Royal Plum'; not too many flowers all season but good growth.		
<i>C. scandens</i> 'Royal Plum' (Pk)	Not blooming for July evaluation and just starting to grow and vine; good vigor later but still not many flowers.		
<i>Coleus x blumei</i> 'Giant Exhibition - Copper Queen' (Pk)	Deep rust; Good vigor but not uniform in size all season.		
<i>C. x blumei</i> 'Giant Exhibition - LimeLight' (Pk)	Bright green; Most uniform in size of the 'Giant Exhibition' group; good vigor.		
<i>C. x blumei</i> 'Giant Exhibition - Palisandra' (Pk)	Deep purple; Fairly uniform in size in July but not by September.		
<i>C. x blumei</i> 'Giant Exhibition - Scarlet II' (Pk)	Green with burgundy edge; Good vigor but not uniform in size, one really small plant.		
<i>C. x blumei</i> 'Giant Exhibition - Tartan' (Pk)	Burgundy, pink, green, yellow-nice color combination; Lacked uniformity in size all season.		
<i>Coreopsis tinctoria</i> 'Mahogany Midget' (Pk)	Rusty, red flowers; Very nice in July with good bloom and uniformity; dead by September.		
<i>Cosmos sulphureus</i> 'Bright Lights' (Pk)	Nicest in July with good bloom; decline by September.		
<i>C. sulphureus</i> 'Cosmic Orange' (AAS '00)	Nice mass of orange early but lacking size uniformity; decline in bloom by September.	Only 2 plants of six alive for the July evaluation, not uniform in size; by August only one non-vigorous plant still there.	Not uniform in size or bloom time all season and sickly looking (Aster Yellows?) by August.
<i>Dahlia hortensis</i> 'Bishop's Children' (Pk)	Purple foliage; Not blooming for July evaluation; lacked uniformity in size all season and bloom not that good.		
<i>D. hortensis</i> 'Figaro Mix' (Pk)	Not uniform in size or bloom all season.		

<i>D. variabilis</i> 'Garden Pride' (Ben)	Better bloom than other dahlias but not uniform in size.	Small and no vigor in July with only one plant blooming; gone for August evaluation.	Not blooming in July and no vigor; alright by August but not uniform in size or bloom.
<i>Delphinium grandiflorum</i> 'Summer Blues' (Ben)	Small, no vigor; possible rabbit damage; not much bloom.	Slightly more vigor and blooms than 'Summer Blues' in July; gone by August evaluation.	Not blooming in July, slightly more vigorous than 'Summer Blues'; not uniform in size or bloom by August.
<i>D. grandiflorum</i> 'Summer Nights' (Ben)	Similar to 'Summer Blues'.	Good vigor early but not uniform in size or bloom time; by August had good bloom but still not uniform in size.	Not uniform in bloom in July but vigorous and uniform in size; nice in August but not as floriferous as 'Amazon Neon Purple'.
<i>Dianthus barbatus</i> 'Amazon Neon Cherry' (PAS)	Bright, cherry red; Nice all season with good bloom and show of color.	Not uniform in size or bloom time early but good vigor; one really small plant in August, otherwise nice show of color.	Nice all season here; most floriferous the three 'Amazon' cultivars; good uniformity in size and bloom time, also.
<i>D. barbatus</i> 'Amazon Neon Purple' (PAS)	Bright purple; Nice all season with good bloom, vigor and uniformity.	Best of the three 'Amazons' in Dickinson all season with good bloom, vigor and uniformity of size and bloom time.	Good uniformity in size and bloom time in July; by August still nice but not as floriferous as 'Amazon Neon Purple'.
<i>D. barbatus</i> 'Amazon Rose Magic' (PAS)	Dark pink to white; Similar to other 'Amazons' but a little more floriferous in September.	Lacked uniformity in size all season; bloom and vigor were better in July.	Good uniformity in size early but just starting to bloom; by August was nicest of the 'Dynasty' cultivars.
<i>D. barbatus</i> 'Dynasty Purple' (Ball)	Nice all season with good bloom, vigor and uniformity.	Better bloom in July than August; good vigor but not as floriferous as 'Dynasty Purple'.	Good vigor and bloom early but lacked size uniformity; nice in August but not as floriferous as 'Dynasty Purple'.
<i>D. barbatus</i> 'Dynasty Red' (Ball)	Nice all season with good bloom, vigor and uniformity.	Similar to other two 'Dynasty' cultivars but a little less bloom at the end of the season.	Did alright but not as showy or vigorous as other two 'Dynasty' cultivars.
<i>D. barbatus</i> 'Dynasty White Blush' (Ball)	Nice red flowers later but dead heads detracted from appearance.	nice red flowers later but dead heads detracted from appearance.	Only one bloom in July but plants vigorous and healthy; good bloom and vigor in August but dead heads detracted a bit.
<i>D. caraphyllus</i> 'Can Can Scarlet' (AAS '03)	Not uniform in size or bloom early; decline in bloom by September and still not uniform in size.	Not uniform in size or bloom time early but good vigor; good bloom later.	
<i>D. chinensis</i> 'Charm Mix' (GS)	Covered with blooms early and fairly uniform in height but not spread; decline in bloom by September.	Lots of huge blooms on smaller plants in July; by August lacked uniformity in size and bloom time.	Best show in July with good bloom, vigor and uniformity; past peak bloom later but still good size uniformity.
<i>D. chinensis</i> 'Corona Cherry Magic' (AAS '03)	good vigor later but decline in bloom-has done better in the past.	Just starting to bloom by July evaluation; doing alright by August evaluation but I've seen it do better.	Not uniform in size or bloom time in July but good vigor; alright in August but it's been better in the past.
<i>D. chinensis</i> 'Melody Pink' (AAS '00)	Good bloom and color combination in July but not uniform in size; still good bloom by September.	Not uniform in size or bloom time all season but nice mix of colors.	Good bloom all season; size uniformity poor in July but better in August; one bigger plant in the group.
<i>D. chinensis</i> 'Panda Mix' (Ball)	Deep burgundy center-pink outside; Good bloom in July, decline by September; not uniform in size all season.		
<i>D. chinensis</i> 'Super Parfait Raspberry' (GS)	Dark red center-pale pink outside; Lacked uniformity in size all season; bloom better in July.		
<i>D. chinensis</i> 'Super Parfait Strawberry' (GS)	White-dark red center; Good bloom for July evaluation but not uniform in size; decline in bloom by September.		
<i>D. chinensis</i> 'Valentine' (PAS)	Silvery gray ground cover; Did alright here but was more vigorous out west in Dickinson and Williston.	Good vigor all season; best in August but weeds coming through the plants.	Alright in July; better in August with very good vigor-a nice ground cover.
<i>Dichondra argentea</i> 'Silver Falls' (PAS)	Green-ground cover; Not as vigorous as 'Silver Falls' and not uniform in size.	Not much vigor for July evaluation; not as vigorous as 'Silver Falls' all season.	Fairly uniform and vigorous all season but not as vigorous as 'Silver Falls'.
<i>D. repens</i> 'Emerald Falls' (PAS)	Bright red-orange flowers; Weedy looking and plants dying by September evaluation.		
<i>Emilia flammula</i> 'Scarlet Magic' (Pk)			

<i>Eucalyptus cinerea</i> (Pk)	Good vigor but plants falling over and need support.		
<i>E. ficifolia</i> (Pk)	Did well, had good vigor but also fell over.		
<i>E. gunnii</i> (Pk)	Lacked uniformity in size, one really bushy plant.		
<i>Euphorbia</i> 'Kilimanjaro' (Pk)	Green and white foliage-flowers not showy; Rabbit damage early; good vigor later but falling over.		
<i>Eustoma grandiflorum</i> (Lisianthus) 'Echo Blue' (Pk)	Fairly uniform in size and bloom early; falling over by September and decline in bloom.		
<i>E. grandiflorum</i> 'Echo Mix' (Pk)	Not uniform in bloom early but healthy and fairly uniform; decline in bloom later and falling over.		
<i>E. grandiflorum</i> 'Echo Pink' (Pk)	Not uniform in bloom early and decline in bloom by September; plants falling over.		
<i>E. grandiflorum</i> 'Echo Yellow' (Pk)	Creamy white; Fairly uniform in size and bloom early; decline in bloom later and plants falling over.		
<i>E. grandiflorum</i> 'Forever Blue' (AAS '01)	Not uniform in size or bloom all season; decline in bloom by September.	Good vigor and size uniformity early but not many open flowers; good bloom by August but not uniform in size.	Not uniform in size or bloom time early but plants vigorous; by August decline in bloom but still good vigor.
<i>E. grandiflorum</i> 'Forever White' (AAS '03)	Similar to 'Forever Blue'.		
<i>E. grandiflorum</i> 'Heidi Hybrid' (Pk)	Not uniform in size or bloom early; decline in bloom by September similar to other lisianthus.		
<i>E. grandiflorum</i> 'Red Glass' (Pk)	Not blooming for July evaluation and plants small; decline in bloom by September.		
<i>Gaillardia pulchella</i> 'Red Plume' (AAS '91)	Good bloom all season with good vigor and uniformity.		
<i>G. pulchella</i> 'Sundance Bicolor' (AAS '03)	Good bloom and uniformity all season.	Good vigor early but just starting to bloom; good bloom by August but two plants died; not uniform in size all season.	Just starting to bloom for July evaluation; good bloom by August but realized the cultivar was really 'Red Plume'.
<i>Gazania rigens</i> 'Daybreak Orange Cream' (PAS)	Fairly vigorous early but not uniform in size or bloom; decline in bloom by September.		
<i>G. rigens</i> 'Kiss Mixture' (GS)	Doing alright by July evaluation; decline in bloom by September and two dead plants.		
<i>G. rigens</i> 'Talent Orange' (Ben)	Not uniform in size or bloom all season; decline in bloom by September.		
<i>G. rigens</i> 'Talent Rose Shades' (Ben)	Similar to other gazania cultivars all season.		
<i>G. rigens</i> 'Talent White' (Ben)	Similar to other gazania cultivars all season.		
<i>G. rigens</i> 'Talent Yellow' (Ben)	Not uniform in size or bloom all season; decline in bloom by September.		
<i>G. rigens</i> 'Tiger Mix' (Ball)	Similar to other gazania cultivars all season.		
<i>Gomphrena globosa</i> 'Mix' (Pk)	Rabbit damage early so not too vigorous by July evaluation; good bloom and show by September.		
<i>G. haageana</i> 'Strawberry Fields' (Pk)	Rabbit damage early and all but one plant died; one nice plant by September.		
<i>Gypsophila muralis</i> 'Garden Bride' (Da)	Good bloom early but not uniform in size; three small plants in September with no vigor.		

<i>Gypsophila muralis</i> 'Gypsy' (AAS '97)	Very nice for July evaluation with good bloom and vigor; all six plants died by September evaluation.	Good bloom early but not uniform in size; had died by the August evaluation.	Nice little plants all season although one plant died by the August evaluation.
<i>G. muralis</i> 'Gypsy Deep Rose' (AAS '04)	No vigor all season; only one small plant alive by September evaluation.	Uniform in size early, just starting to bloom; very buggy and ragged looking by August evaluation.	Not blooming for July evaluation, not as uniform in size as 'Soraya'; very buggy by August evaluation.
<i>Helianthus annuus</i> 'Ring of Fire' (AAS '01)	Healthy in July, just starting to bloom; lots of bugs and diseases by September.	Not blooming for July evaluation and not uniform in size; buggy for August evaluation.	Not blooming in July but healthy and uniform in size; buggy by August evaluation.
<i>H. annuus</i> 'Soraya' (AAS '00)	Not blooming for July evaluation but healthy and uniform; lots of bugs and diseases by September.		
<i>Helichrysum bracteatum</i> 'Bright Bikini Mix' (Pk)	Mostly white; Good bloom all season but not uniform in size.		
<i>H. bracteatum</i> 'Fiery Mix' (Pk)	Good bloom early; past peak bloom by September evaluation.		
<i>H. monstrosum</i> 'Mix' (Pk)	Not much bloom early, better by September; lacked uniformity in size all season.		
<i>H. petiolare minus</i> 'Silver Mist' (Pk)	Gray-green foliage; Fairly uniform in size all season; nice ground cover by September.		
<i>Hibiscus moscheutos</i> 'Luna Blush' (Ball)	Very small in September; much better in Dickinson and Williston.	uniform in size, very vigorous by August but flowers hiding in the foliage.	Not blooming or uniform in size in July; good vigor by August but not many flowers and they were hiding in the foliage.
<i>H. moscheutos</i> 'Luna Red' (Ball)	Same as 'Luna Blush'.	Not blooming in July but healthy and vigorous; flowers hiding in the foliage in August.	Not blooming in July but more vigor than 'Luna Blush'; good vigor and bloom in August but flowers hiding in the foliage.
<i>Hypoestes phyllostachya</i> 'Confetti Mix' (Da)	Good mix of color; vigor good all season but not uniform in size.		
<i>Impatiens hawkeri</i> (New Guinea Impatiens) cultivars:			
Sonic Amethyst (FG)	Fairly good bloom and size uniformity early; still good vigor by September but slight decline in bloom.	Good bloom in July but not uniform in size; by August, bloom and vigor had declined.	Good bloom in July but not uniform in size; decline in bloom by August but size uniformity was better.
Sonic Burgundy (FG)	Bloom ok in July but not as vigorous as some others; decline in bloom by September.	Good bloom in July and fairly uniform in size and bloom time; still uniform by August but not many flowers.	Smaller than some other cultivars in July but bloom was alright; decline in bloom by August.
Sonic Dark Salmon (FG)	Not as floriferous or vigorous as other New Guineas all season.	Looked good in July with fairly good size and bloom uniformity; almost dead by August evaluation.	August and not much bloom; plants smaller than other cultivars.
Sonic Hot Rose (FG)	Yellow/red striped foliage-hot pink flowers; not many blooms all season.	Nice variegated foliage; not much bloom all season.	Not uniform in size or bloom all season; better bloom in July than August.
Sonic Light Lavender (FG)	Pale lavender-white; Fairly good size uniformity all season; bloom better by September.	Size uniformity was good all season; bloom and vigor were better in July.	Not uniform in size or bloom all season; better bloom in July than August.
Sonic Light Pink (FG)	Pale pink; Not as vigorous or floriferous as other New Guineas.	Not uniform in size in July but bloom alright; by August had no vigor or blooms.	Less vigor than most other New Guineas in Williston trials; bloom better in July than August.
Sonic Orange (FG)	Fairly good size and bloom uniformity early; similar to others in September with decline in bloom.	Nice, bright color but not uniform in size or bloom in July; uniform in size in August but not too vigorous or floriferous.	Bloom was good all season but by August one plant was dead and another was dying.
Sonic Pastel 2003 (FG)	Pale pink to almost white; Not uniform in bloom early; one of the nicer groups in September with fairly good bloom.	Good vigor all season; bloom better in July but one of the more vigorous groups in Dickinson in August.	One of the nicer New Guinea cultivars here; color not as showy but bloom was good for both evaluations.
Sonic Pink (FG)	Bright pink; Lots of flowers in July but not uniform in size; decline in bloom by September.	Showy early with fairly good bloom and uniformity; not much vigor in August and only two blooms.	Not uniform in size all season; bloom better in July.
Sonic Red 2003 (FG)	Not as floriferous as other cultivars in July; better by September with fairly good bloom and vigor.	Size uniformity good in July but not as floriferous as some other cultivars; three of six dead by August.	Not uniform in size or bloom in July but one of the better groups in August with fairly good size uniformity and bloom.
Sonic Salmon (FG)	Cherry red; Not as vigorous or floriferous as other cultivars all season.	Not as much vigor as some others in July but bloom was alright; not much bloom or vigor by August.	Not uniform in size or as vigorous as other cultivars in July; three dead by August, the others were doing alright.
Sonic Salmon Ice (FG)	Pale salmon to white; Smaller plants than others in July but one of the better bloomers; slight decline in bloom later.	Lacked vigor all season and didn't bloom as well as some others.	Smaller plants than other cultivars and lacked uniformity in size and bloom.

New Guinea Impatiens (cont.)	Similar to 'Sonic Red' all season but a few less blooms in September.	Nice color; fairly uniform in size early but not later; not very vigorous by August and bloom had declined.	Good bloom and size uniformity in July; by August still fairly uniform but bloom had declined.
Sonic Scarlet Blush (FG)	Not as floriferous or vigorous as others early; similar to other New Guineas later with decline in bloom.	Not uniform in size or bloom in July; lost vigor by August and not many blooms.	Not uniform in size or bloom in July-pretty color; similar to other New Guineas by August with a decline in bloom.
Sonic Sweet Cherry (FG)	Not uniform in size or bloom early; not much bloom by September and not uniform in vigor.	Fairly good bloom in July but browning on petals noticeable; decline in bloom and vigor by August.	Good size uniformity all season; browning on petals noticeable and decline in bloom by August.
Sonic White (FG)	One of the most vigorous groups all season with fairly good bloom.	Not uniform in size, vigor or bloom in July; no bloom in August and 3 plants had died.	Not much bloom all season.
Super Sonic Cherry Cream (FG)	One of the most vigorous and floriferous groups in July; still vigorous in September but a decline in bloom.	Good vigor all season but not much bloom; not uniform in size in August.	Vigorous plants all season but not much bloom for either the July or August evaluations.
Super Sonic Coral Ice (FG)	Not uniform in size or bloom all season.	Fairly uniform in size early; by August not much bloom or vigor.	Good bloom all season; lacked uniformity in size early but was better in August.
Super Sonic Dark Salmon (FG)	Pale to dark lavender; Fairly uniform in size and bloom early; still good vigor by September but decline in bloom.	Not much bloom all season; vigor good in July but had declined by August.	Not as floriferous as others in July; lacked uniformity in size all season.
Super Sonic Lavender (FG)	Not uniform in size or bloom early; good vigor by September but decline in bloom.	declined by August with two dead plants and only one blooming.	Nice in July with good bloom and vigor; not uniform in bloom in August but vigor still good.
Super Sonic Lilac (FG)	Bright cherry red; Nice in July with good bloom and size uniformity; still good vigor later but decline in bloom.	Doing well in July with fairly good bloom and vigor; had declined by August, similar to the others.	Not as floriferous as others in July but more bloom than others in August; size uniformity good in August, also.
Super Sonic Magenta (FG)	Lavender; Vigorous early with fairly good bloom; alright in September but decline in bloom.	Not uniform in bloom in July but vigor and size were alright; not much bloom in August and decline in vigor.	Not uniform in size or bloom all season; didn't bloom as well as other cultivars.
Super Sonic Orchid (FG)	Floriferous in July with fairly good size uniformity; one of the nicer groups in September.	Not uniform in size or bloom in July; best New Guinea for vigor and uniformity in August but not much bloom.	Uniform with good bloom in July; doing alright in August but a slight decline in bloom.
Super Sonic Peach (FG)	Not as floriferous as 'Sonic White' in July but fairly uniform in size and vigor; still alright in September but decline in bloom.	Not as uniform in bloom as 'Sonic White' in July, same as others in August with decline in vigor and bloom.	Not uniform in size bloom or vigor in July; three dead by August and not much bloom on others.
Super Sonic White 2003 (FG)	size or bloom; similar in September with a few really nice plants.		
<i>Impatiens wallerana</i> cultivars:			
Accent Limited Edition Mix (GS)	Mostly pinks; Small, not much bloom all season.		
Accent Pastel Mix (GS)	Only 3 of 12 plants at July evaluation, small and no vigor; similar in September- only two plants with flowers.		
Accent Peppermint Mix (GS)	Small plants early and fairly uniform in size; lacked uniformity in size and bloom in September.		
Circus Orange White (PAS)	One of the more vigorous groups in July; small plants by September but bloom was alright.		
Dazzler Blue Pearl (Ball)	Small, no vigor all season.		
Dazzler Orange Improved (Ball)	Not uniform in size early; one of the better groups in September with fairly good bloom.		
Dazzler Rose Swirl (Ball)	Not much bloom in July; alright by September but not uniform in size.		
Fanciful Coral (Ball)	Not much vigor all season.		
Fanciful Red (Ball)	Smaller plants and not much bloom all summer.		
Mosaic Lilac (GS)	Fairly uniform in size but not bloom early; bloom was alright in September.		
Mosaic Rose (GS)			

Inpatiens (cont.)			
Mosaic Violet (GS)	Not much bloom all summer; not too uniform in size.		
Stardust Salmon (PAS)	A few nice plants with good bloom in July; one of the better groups in September with fairly good vigor and bloom.		
Super Elfin Pink Deep (PAS)	Small with no vigor all season.		
Super Elfin Ruby (PAS)	Not uniform in size and not much vigor all season; bloom alright in September.		
Swirl Coral Improved (PAS)	One of the better groups in July; by September not uniform in size or bloom.		
<i>Ipomoea alba</i> (Moon Vine) (Pk)	vine; still not blooming much in September but vigor really good.		
<i>I. (Mina) lobata</i> (Firecracker Vine) (Pk)	Good bloom and vigor in July; still very vigorous by September but bloom had declined.		
<i>I. x multifida</i> (Cardinal Climber) (Pk)	Red; Good vigor all season but not many flowers; being overrun by the firecracker vine.		
<i>I. nil</i> 'Heavenly Blue' (Pk)	Blue; Good vigor early but not many blooms; overgrown by 'Star of Yella' in September-neither with many blooms.		
<i>I. nil</i> 'Mimbar Rose' (Pk)	Rabbits ate it early so kept it small through July; not blooming or twining much all summer.		
<i>I. purpurea</i> 'Star of Yella' (Pk)	Rabbit damage early and just starting to vine by July evaluation; good vigor in September but not many blooms.		
<i>I. quamoclit</i> (Cypress Vine) 'Mix' (Pk)	No vigor early and only one red flower; by September it had good vigor and twining but still not many flowers.		
<i>Iresine herbata</i> 'Purple Lady' (PAS)	Not much vigor here, only two small plants of twelve survived all summer; did much better in Dickinson and Williston.	Not much vigor in July but very nice ground cover in August with good vigor and purple color.	Alright in July but not too vigorous; much nicer in August making a good ground cover.
<i>Kniphofia unaria</i> 'Flamenco' (AAS '99)	Not much vigor early and no blooms; by September was doing alright but was being crowded by the <i>Leonotis</i> .	No bloom in July but plants doing alright; not uniform in bloom time in August; vigor good.	Alright in July but not too vigorous; much nicer in August making a good ground cover.
<i>Lablab purpureus</i> (<i>Dolichos lablab</i>) (Hyacinth Bean) (Pk)	Very good vigor all season and good bloom; too vigorous in September as it was overtaking neighboring vines.		
<i>Lavandula angustifolia</i> 'Lady' (Pk, AAS '94)	Not blooming for July evaluation and not too vigorous; not uniform in size, bloom or vigor in September.		
<i>Leonotis leonurus</i> 'Lion's Ear' (Pk)	Orange; Vigorous plants all season but didn't start blooming until August.		
<i>Limonium sinuatum</i> 'Soiree Mix' (Pk)	evaluation; good bloom by September and fairly uniform in size.		
<i>Linaria maroccana</i> 'Fantasy Mix' (Pk)	Not uniform in size or bloom all season; past peak bloom by September and some plants dying.		
<i>Lobelia erinus</i> 'Blue Moon' (S&G)	Fairly good size uniformity early but not blooming uniformly; by September full of flowers but not uniform in size.		
<i>L. erinus</i> 'Half Moon' (S&G)	Bright blue; Small but most vigorous of the lobelia in July; lots of flowers in September but not uniform in size.		
<i>L. erinus</i> 'Midnight Moon' (S&G)	Similar to other lobelia.		
<i>L. erinus</i> 'Rose Moon' (S&G)	Rose; Not uniform in size or bloom early; similar to other lobelia in September.		

<i>Lobelia erinus</i> 'Sky Moon' (S&G)	Only 3 of 6 plants alive by July evaluation-those weren't too vigorous; lots of flowers by September.		
<i>Lobularia maritima</i> 'Golf' (CI)	Good bloom in July but not uniform in size; vigorous in September but flea beetles destroyed all the flowers.		
<i>L. maritima</i> 'Pastel Carpet' (Pk)	Alright in July but not uniform in size; vigorous in September but flea beetles present.		
<i>L. maritima</i> 'Snow Crystals' (Pk)	Good bloom in July but not uniform in size; most uniform in size of the lobularia in September but flea beetles present.		
<i>Melampodium paludosum</i> 'Lemon Delight' (Pk)	Pale yellow; Nice all season with good bloom, vigor and uniformity.		
<i>M. paludosum</i> 'Million Gold' (Pk)	Not uniform in size in July but fairly good bloom; nice and full in September but monarda falling over on top of it.		
<i>M. paludosum</i> 'Showstar' (Ben)	Not uniform in size all season but bloom good, especially into September.		
<i>Monarda x hybrida</i> 'Lambada' (Pk)	Good size uniformity in July but just starting to bloom; nice and full of flowers in September but plants falling over.		
<i>Nicotiana glauca</i> (Pk)	White; Not uniform in size early but bloom alright; good bloom and vigor by September.		
<i>N. glauca</i> 'Domino Mix' (Pk)	Most vigorous nicotiana in July but not uniform in size; good bloom in September but still not uniform in size.		
<i>N. glauca</i> 'Saratoga Mix' (GS)	Not uniform in size or bloom early and not much vigor; bloom alright in September but still not uniform in size.		
<i>N. x sanderae</i> 'Perfume Mix' (Pk)	Similar to 'Saratoga Mix' in July; lots of blooms in September but not uniform in height or spread.		
<i>Ocimum basilicum</i> 'Magical Michael' (AAS '02)	Not uniform in size all season; decline in bloom by September and lots of dead heads.		
<i>Osteospermum ecklonis</i> 'Passion Mix' (AAS '99)	Not uniform in size or bloom early; better size uniformity by September and bloom was alright.	Good vigor all season but not uniform in size or bloom time.	Not uniform in size or bloom all season; slight decline in bloom by August evaluation.
<i>Pelargonium x hortorum</i> - Zonal geranium cultivars:			
Appleblossom Orbit (GS)	Not uniform in size; bloom or vigor early; lull in bloom by September evaluation and still not uniform in size.		
Black Velvet Rose (AAS '02)	Good bloom early but not uniform in size; alright in September but not as nice as it has been in past years.	Fairly uniform in bloom early; didn't do as well as it has in the past; decline in bloom by August.	Nice all season with good bloom, vigor and uniformity.
Casanova 2003 (FG)	Not as uniform or vigorous as 'Flamingo' in July; small in September but bloom was alright.	Nicer in July with fairly good bloom and size uniformity; decline in bloom and uniformity by August.	Nicest in July with good uniformity in size and good bloom; by August not as floriferous or uniform as some others.
Cherry Elite (GS)	Bright cherry red; Good bloom in July on smaller plants; good vigor in September and bloom was alright.		
Deep Salmon Orbit (GS)	More vigor than 'Multibloom Salmon' but not uniform in size; still not uniform in size in September but bloom fairly good.		
Dolce Vita 2004 (FG)	'Rocky Mt. Salmon'; nice later with good bloom and uniformity.	Small plants all season; bloom better in July, not very vigorous by end of August.	Fairly uniform in size in July, big flower heads; good vigor and bloom by end of August.
Flamingo (FG)	Pink; Good bloom and uniformity in July; vigorous plants in September but decline in bloom.	Not much bloom in July but size and vigor good; still not much bloom by end of August but size uniformity good.	Good flower production early but not as vigorous as some others; vigor better later but color not too showy.
Glow Orbit (GS)	Not uniform in size all season but bloom fairly good.		
Maverick Coral (GS)	Deep, reddish salmon; Good bloom early on vigorous plants; still good vigor in September but slight decline in bloom.		

Zonal Geraniums (cont.)			
Maverick Light Salmon (GS)	Pink; Good bloom all season; not uniform in vigor in September.		
Maverick Pink (GS)	Dark pink; Looked alright in July; decline in bloom by September.		
Maverick Red (GS)	Cherry red; Not uniform in size or bloom for July evaluation; bloom and vigor alright in September.		
Maverick Salmon (GS)	Deep coral; Good bloom but not uniform in size all season.		
Maverick Scarlet (GS)	Orange-red; Size uniformity good all season; bloom and vigor best in September.		
Maverick Star (GS)	Pink with dark spots; Nice big flowers in July but not uniform in size; good vigor later but bloom has been better.		
Maverick Violet (GS)	Bright cherry red; Nice color but not uniform in size or vigor; vigorous in September but decline in bloom.		
Maverick White (GS)	Not uniform in size all season but more vigor than other whites in July; most vigorous white in September.		
Multibloom Capri (GS)	Deep coral; Good bloom early but not uniform in size; not much bloom by September.		
Multibloom Red (GS)	Cherry red; Not as vigorous or floriferous as other geraniums in July; similar in September.		
Multibloom Salmon (GS)	Dark salmon; Not as vigorous or floriferous as others in July; small but uniform plants in September with okay bloom.		
Red Orbit (GS)	Good bloom early but not uniform in size; nice in September with good bloom, vigor and uniformity.		
Rocky Mountain Dark Red (FG)	Deep red; Nicest in July with good bloom and vigor; still good vigor in September but decline in bloom.	Not uniform in size or bloom all season	Huge blooms with good vigor in July; really good show by end of August-one of the top performers here.
Rocky Mountain Deep Rose (FG)	Deep, lavender pink; Bigger blooms than 'Tango Hot Pink'; bloom best in July.	Not uniform in size or bloom in July; by end of August plants were vigorous but didn't have much bloom.	Not uniform in bloom in July and not as vigorous as others; by August, still not as vigorous or floriferous as others.
Rocky Mountain Lavender (FG)	Bright lavender; Showy in July with good bloom but not uniform in size; decline in bloom by September.	Fairly uniform in size in July but not bloom; good vigor in August but not much bloom.	Good vigor and uniformity in July but not many blooms; nice in August with good vigor, bloom and uniformity.
Rocky Mountain Lavender Pink 2004 (FG)	Bright, hot pink; Not uniform in size all season; bloom best in July; decline of vigor by September.	Not uniform in size in July and bloom was low; not uniform in vigor or bloom by end of August.	Not uniform in size in July but good bloom and huge flowers; not as showy or floriferous as others in August.
Rocky Mountain Light Pink (FG)	Pink with dark center; Flowers similar to 'Casanova'; good bloom in July but not uniform in size; decline in bloom later.	Not much bloom or vigor all season.	Good vigor and size uniformity early but not as many blooms as others, even into August.
Rocky Mountain Light Salmon (FG)	Pale pink; Not uniform in size or bloom early; best in September with good vigor and bloom.	Not as much vigor as others all season and not many blooms.	Good vigor early and fairly uniform in size; very nice by August with a good show of color.
Rocky Mountain Magenta (FG)	Deep cherry red; Good bloom, vigor and size uniformity all season; slight decline in vigor by September.	Small plants all season but fairly uniform in size; bloom not that good.	Nice all season with good vigor, bloom and uniformity.
Rocky Mountain Orange (FG)	Reddish orange; Good bloom but plants not uniform in size; slight decline in September.	One of the better groups here all season with fairly good vigor and bloom.	as some others; very nice in August with better bloom than earlier.
Rocky Mountain Red 2003 (FG)	Deep orange-red; Not quite as vigorous in July as some others; better vigor in September but a decline in bloom.	Not uniform in size or vigor all season.	Huge blooms early but not uniform in size; very nice in August with good vigor and show of color.
Rocky Mountain Royal Red (FG)	Bright cherry red; Did alright in July but nicer in September with better vigor and uniformity.	Not uniform in size or bloom early; one of the better groups in Dickinson in August but still not uniform in size.	Good size uniformity early and huge blooms but not as floriferous as some others; very nice in August.
Rocky Mountain Salmon 2004 (FG)	Deep coral-pretty color; Not uniform in size all season; decline in bloom by September.	Not much bloom in July and one really small plant; not uniform in vigor or bloom in August.	Nice bright color; Good vigor in July but not uniform in bloom; very nice in August with good bloom and vigor.

Zonal Geraniums (cont.)						
Rocky Mountain Salmon Rose (FG)	Deep cherry red; Good bloom in July but a few plants smaller than the others; good vigor and size later but decline in bloom.	Not uniform in size in July and not many blooms; one of the most floriferous groups in Dickinson in August.	Nice bright color and good vigor in July; not as uniform in size as others in August but still good vigor.			
Rocky Mountain Scarlet (FG)	Orange red; Fairly uniform in size in July and good bloom; bloom and vigor still alright in September.	Uniform in bloom early but not size; not much bloom and not uniform in vigor in August.	One of the most vigorous groups in July but not as floriferous as some others; very nice in August.			
Rocky Mountain Violet (FG)	Bright, cherry red; Nice, showy color; uniform in bloom but not size in July; lack of vigor by September evaluation.	Not uniform in size or bloom all season.	Lacked uniformity in size all season but bloom was alright.			
Rocky Mountain White (FG)	Not as floriferous as 'Tango White' but plants more vigorous; not uniform in size in September and decline in bloom.	Not much bloom all season; two really small plants-not uniform in vigor or size.	More vigor than 'Tango White' but not as many blooms; good vigor and bloom in August.			
Rose Orbit (GS)	Not as uniform or floriferous as other geraniums in July; not uniform in size in September and not much bloom.					
Scarlet Elite (GS)	Orange-red; Not uniform in size early but bloom was alright; size uniformity was better later but two plants really small.					
Scarlet Orbit (GS)	Orange-red; Similar to other red geraniums in July; not uniform in size in September and bloom had declined.					
Tango (FG)	Orange-red; Not uniform in size or bloom in July and not as floriferous as others; not much bloom later.	Not uniform in size all season and not much bloom.	Smaller plants than others but good vigor in July; nice into August.			
Tango Dark Red (FG)	Deep red; Not as vigorous or floriferous as 'Rocky Mtn. Dark Red' in July; not much bloom by September.	Good vigor and uniformity early but two plants gone; not much bloom in August.	Nice show of red in July; alright in August but not as showy or vigorous as 'Rocky Mtn. Dark Red'.			
Tango Hot Pink (FG)	Deep lavender pink; Not uniform in size in July but bloom was alright; not much bloom in September and not uniform in size.	Not uniform in size or bloom all season.	Nice all season with good vigor. bloom and uniformity.			
Tango Lavender (FG)	Lavender; Fairly good bloom in July but not uniform in size or bloom; not too vigorous by September and decline in bloom.	Fairly uniform in size all season but not much bloom.	Not as floriferous or showy as some others in July but uniform in size; nice in August with good bloom and vigor.			
Tango Lavender Pink (FG)	Dark pink; Not as vigorous or uniform as 'Tango Light Orchid' in July; not much bloom or vigor by September.	Not uniform in size all season and not much bloom.	Not as vigorous as others in July and not uniform in size; size uniformity better in August but not as floriferous as others.			
Tango Light Orchid (FG)	Pale pink; Not uniform in size; bloom or vigor in July; decline in vigor and bloom by September.	Not uniform in size or bloom in July; small but uniform plants in August and all had 1-2 blooms.	Not as vigorous or floriferous as others all season but still looked nice.			
Tango Magenta (FG)	Deep cherry red; Good bloom but not as vigorous or uniform as some others in July; loss of vigor and bloom by September.	Small plants all season but fairly uniform in size; not much bloom all season.	Not as uniform in bloom or size in July as some others; very nice in August with good bloom, vigor and uniformity.			
Tango Neon Purple (FG)	Bright cherry red; Good bloom and bright color in July; lacked uniformity in size all season; loss of vigor by September.	Small but uniform plants in July; not uniform in size or bloom in August.	Good vigor early but not as uniform in size as some others; very nice in August.			
Tango Pink (FG)	Dark pink with darker centers; Good bloom and size uniformity in July; loss of vigor and bloom by September.	Small plants all season; not much uniformity in size or bloom.	Nice in July with good vigor and bloom; still looking good in August.			
Tango Violet (FG)	Similar to 'Rocky Mtn. Violet' but less vigorous in July; loss of vigor and bloom by September.	Small plants all season; not much bloom-especially into August.	Fairly uniform in size and bloom in July; nicest in August with good vigor, bloom and uniformity.			
Tango White (FG)	Good bloom but plants not uniform in size in July and old blossoms more obvious; no vigor and decline in bloom later.	Small but uniform in size all season; not much bloom in either July or August.	Not as uniform in size as some others all season; bloom was alright.			
White Elite (GS)	Not much vigor early and not uniform in size; not much bloom in September and not uniform in size or vigor.					
White Orbit (GS)	Not as vigorous as other geraniums in July; still not much vigor by September.					
Pelargonium peltatum - Ivy Geraniums						
Black Magic (FG)	Deep purple; Nice color but not too showy; fairly good bloom and uniformity all season.	Fairly good bloom and uniformity in July; not uniform in size or bloom by August.	Fairly uniform in size and bloom alright in July; not too showy in August-not as floriferous as some others.			
Holiday Rose (FG)	Bright pink; Not as uniform in size as some others but good bloom; some leaves yellowing by September and loss of vigor.	Fairly uniform in size early but not bloom; not uniform in size or bloom later.	Fairly uniform in size and bloom in July; slight decline in bloom in August but vigor alright.			
Purple Dream (FG)	Bright cherry red; Nice in July with good bloom and vigor; slight decline in bloom by September but still nice.	Not uniform in size or bloom all season.	Not uniform in size early but bloom alright; good vigor in August but slight decline in bloom.			

Ivy Geraniums (cont.)	Bright cherry red; Was doing alright in July but slightly better bloom and vigor in September.		Uniform with good vigor early but bloom could be better; nice bloom and bright color by end of August.
Reggae Bright Red (FG)	Dark red; Good size uniformity and fairly good bloom in July; still doing well by September.	Not much bloom early; not uniform in size or bloom later with one really floriferous plants.	Fairly good bloom and uniformity in July; decline in bloom by end of August.
Shiva 2003 (FG)		Not uniform in size or bloom all season.	
Blizzard Cascades:			
Holiday Red Blizzard (FG)	bloom in July; good vigor in September but not uniform in size.	Small but fairly uniform in size early; not uniform in size or vigor in August.	Not uniform in size early and not as floriferous as others; doing alright in August.
Purple Blizzard (FG)	Deep purple with white streaks; More vigor than 'Holiday Red Blizzard' in July; more blooms than 'H. R. Bl.' in September.	Not uniform in size or bloom all season.	Similar to 'Holiday Red' all season but slightly more vigorous.
<i>Pennisetum glaucum</i> 'Purple Majesty' (PAS, AAS '03)	Rabbits ate this early-only one really vigorous plant.	Didn't do well; lacked vigor early and was dead by August.	No vigor and was gone by the August evaluation.
<i>P. setaceum</i> (Fountain Grass) (PK)	Nice for July evaluation, just starting to plume out; very nice show in September with good vigor and plumes.	Starting to look nice in July but was putting on a very good show by August.	Doing well in July but much better by August.
<i>Pentas lanceolata</i> 'Butterfly Deep Rose' (Ball)	Not much vigor in July; nicer in September with fairly good bloom and uniformity in size.	Not blooming by July evaluation but lots of buds; not uniform in size or vigor; dead by August.	Not uniform in size all season; not blooming for July evaluation but bloom alright by August.
<i>P. lanceolata</i> 'New Look Pink' (Ben)	Not much vigor in July; not too vigorous by September but the best of the 'New Look' pentas.		
<i>P. lanceolata</i> 'New Look Red' (Ben)	Not much vigor or blooms in July; not too vigorous or floriferous in September.		
<i>P. lanceolata</i> 'New Look Rose' (Ben)	Not much vigor or blooms in July; not too vigorous or floriferous in September.		
<i>P. lanceolata</i> 'New Look Violet' (Ben)	Similar to the other 'New Look' pentas.		
<i>P. lanceolata</i> 'New Look White' (Ben)	Similar to the other 'New Look' pentas.		
<i>Petunia hybrida</i> -Floribunda petunias:			
Celebrity Chiffon Mom (AAS '95)	Good bloom all season but size uniformity better in September.		
Celebrity Niagara Mix (Bod)	Good bloom all summer; lacked size uniformity in July and was getting leggy by September.		
Celebrity Watercolors Mix (Bod)	Less vigor and bloom than others all season.		
Madness Clear Mix (Ball)	Good color mix; Not as vigorous or uniform in size and bloom as others in July; getting leggy by September.		
Madness Magenta (Ball)	Not as uniform in size or bloom in July as some others; very nice in September with good bloom and vigor.		
Madness Red and White (Ball)	Double red and white flowers; Not as vigorous or floriferous as some others all season.		
Madness Waterfall Mix (Ball)	Lavender, white, purple; Good bloom all season but not uniform in size.		
<i>Petunia hybrida</i> -Grandiflora petunias:			
Bravo Blue (S&G)	Not as vigorous or floriferous as other cultivars.		
Bravo Blue Veined (S&G)	Not as vigorous, floriferous or uniform in size as some others.		
Grandiflora Petunias (cont.)			

Bravo Cool Water Mixed (S&G)	Mostly lavender, one white, two blue; Not uniform in size; best bloom in September.		
Bravo Lavender (S&G)	Good bloom all season but lacked uniformity in size.		
Bravo Red (S&G)	Lacked vigor and blooms all season.		
Bravo Salmon Improved (S&G)	Good show of color all season; size uniformity better in September.		
Bravo White (S&G)	Good show of white all season.		
Double Cascade Mix (PAS)	Not uniform in size or bloom in July and getting leggy by September.		
Double Cascade Orchid Mix (PAS)	Nice bloom, vigor and uniformity all season but getting a little leggy by September.		
Dreams Mix - Patriot (PAS)	Red, white, blue; Good bloom but not uniform in size-blues were small while whites were larger.		
Limbo Violet (AAS '04)	Nice in July with good bloom, vigor and uniformity; stayed low and full of flowers; one of the top flowers in September.	Huge blooms and lots of them; good show of violet all season but size uniformity could've been better in July.	Nice all season with good bloom, vigor and uniformity.
Pirouette Red (PAS)	Double red and white flowers; Good bloom and vigor in July; decline in bloom by September and a little leggy.	Good vigor early but not uniform in bloom; became leggy by August and flower color was fading.	Good bloom all season but not uniform in size early and was getting leggy in August.
Prism Sunshine (Pk, AAS '98)	Good bloom all season; better size uniformity in July.		
Stars and Stripes Mix (Ball)	White, red & white, deep purple; Not uniform in size all season; best bloom in September.		
<i>Petunia hybrida</i> - Hedgeflora petunias:			
Tidal Wave Cherry (Ball)	Good bloom all season but fuller and more vigorous by September evaluation.		
Tidal Wave Purple (Ball)	Good bloom all season but not as full or floriferous as 'Tidal Wave Silver' in September.	Good vigor, bloom and show all season; especially nice in August.	Good bloom, vigor and uniformity all season; very nice in August.
Tidal Wave Silver (AAS '02)	July but very nice in September with good vigor and lots of blooms.	Not quite as vigorous as 'Tidal Wave Purple' in July but still nice; even nicer in August.	Same as 'Tidal Wave Purple'; especially nice into August.
<i>Petunia hybrida</i> - Milliflora petunias:			
Fantasy Blue (GS)	Good bloom all season but not uniform in size in July and getting leggy by September.		
Fantasy Carmine (GS)	Good bloom all season but lacked size uniformity in July; nice, bright show of color by September.		
Fantasy Crystal Light Salmon (GS)	Good bloom but not uniform in size in July; nice show in September.		
Fantasy Crystal Red (GS)	Good bloom but not uniform in size in July; nice show in September.		
Fantasy Ivory (GS)	Not as floriferous or vigorous as others in July; smaller than other 'Fantasy' petunias in September but good bloom.		
Fantasy Pink (GS)	Lacked size uniformity all season but good bloom.		
Fantasy Pink Morn (GS, AAS '96)	Lacked size uniformity all season but good bloom.		
Milliflora petunias (cont.)			

<i>P. grandiflora</i> 'Margarita Scarlet' (PAS)	Deep coral red; Not uniform in size or bloom early; decline in vigor and bloom by September.	Bigger plants than 'Margarita Rosita' in July; not much bloom by August and decline in health.	Not uniform in size or bloom in July and decline in health by August evaluation.
<i>P. grandiflora</i> 'Sundial Peach' (AAS '99)	Similar to other two portulaca in the Fargo trials.	Good vigor and bloom for July evaluation but decline in health and flowers by August, similar to the 'Margarita' cultivars.	Good vigor and size uniformity early; decline in health by August.
<i>Rudbeckia hirta</i> 'Autumn Colors' (Ben)	Gold to brown 6" flowers; Nice all season but better bloom in September; lacked uniformity in size all season.	Lacked uniformity in size and bloom all season; good bloom in August.	good bloom in August but leaves and petals browning on edges.
<i>R. hirta</i> 'Cherokee Sunset' (AAS '02)	Vigorous early but not uniform in size all season; loss of vigor in some plants by September but a few plants really nice.	Lacked uniformity in vigor all season—lost 3 plants of six by August but the 3 still alive were doing well.	Just starting to bloom for July evaluation with good vigor and size uniformity; nice in August with good show of color.
<i>R. hirta</i> 'Cordoba' (Ben)	Not uniform in size, vigor or bloom all season.	Nice little plants in July but poor; with no vigor by August evaluation.	Not uniform in size but good bloom all season; especially nice in August.
<i>R. hirta</i> 'Indian Summer' (AAS '95)	Vigorous early but not uniform in size or bloom; better show in September but one plant died.		
<i>R. hirta</i> 'Prairie Sun' (AAS '03)	Good bloom early but lacking size uniformity; loss of vigor and bloom by September.	Most vigorous <i>Rudbeckia</i> in the trials in July; good show of color in August.	Good vigor and uniformity in July and just starting to bloom; very nice show of color by August evaluation.
<i>R. hirta</i> 'Sonora' (Ben)	Not uniform in size, vigor or bloom all season but a few really nice plants.		
<i>R. hirta</i> 'Toto' (Ben)	Fairly uniform and good bloom on smaller plants in July; lost some vigor by September and some plants dead.		
<i>R. hirta</i> 'Toto Gold' (Ben)	Small plants but good bloom in July; a few really nice plants in September but some dying and not uniform in size or vigor.	Nice, little plants in July with good bloom but not uniform in size; poor in August with a decline in vigor.	Nice all season with good bloom, vigor and uniformity.
<i>R. hirta</i> 'Toto Lemon' (Ben)	Small with no vigor early and some rabbit damage; similar to other 'Toto' cultivars in September.	Small plants in July with good bloom and fairly good size uniformity; decline in vigor by August.	Good bloom but not uniform in size in July; plants dying by the August evaluation.
<i>R. hirta</i> 'Toto Rustic' (Ben)	Not uniform in vigor early; by September some plants dead and others not uniform in bloom or vigor.	Not uniform in size early; decline in vigor by August.	Uniform and floriferous in July; lacking uniformity in vigor and size by August.
<i>Sahvia coccinea</i> 'Forest Fire' (Pk)	good vigor and uniformity in September but flowers not too showy.		
<i>S. coccinea</i> 'Snow Nymph' (Pk)	White; Good vigor in July but just starting to bloom; Good vigor and uniformity in September but not very showy.		
<i>S. farinacea</i> 'Reference' (Ben)	Not healthy early and not too uniform in size or bloom; good bloom and vigor by September but not uniform in size.		
<i>S. farinacea</i> 'Victoria' (Pk)	Blue; Nice all season with good bloom, vigor and uniformity.		
<i>S. horminum</i> (<i>S. viridis</i>) 'Marble Arch Mix' (Pk)	decline in bloom by September—flowers drying up (spider mites?)		
<i>S. patens</i> 'Blue Angel' (Ben)	Bright blue; Only one plant blooming in July and not uniform in size; vigorous in September but flowers not too showy.		
<i>S. splendens</i> 'Blue Ribbon' (PAS)	No vigor all season and not much bloom.		
<i>S. splendens</i> 'Salsa Mix' (GS)	No vigor all season and not much bloom.		
<i>S. splendens</i> 'Salvador Red' (S&G)	No vigor all season and not much bloom.		
<i>Scabiosa atropurpurea</i> 'Giant Imperial Mix' (Pk)	Good vigor in July but not uniform in size or bloom; decline in bloom by September and stems falling over.		
<i>S. atropurpurea</i> 'QJS Scarlet' (Pk)	Red; Good vigor in July but not uniform in size or bloom; decline in bloom by September and stems falling over.		
<i>Scabiosa atropurpurea</i> 'Sweet Scabious Mix' (Pk)	Good vigor in July but not uniform in size or bloom; decline in bloom by September and stems falling over.		
<i>Senecio cineraria</i> 'Cirrus' (Pk)	Silver foliage; Nice all season with good vigor and uniformity.		

<i>S. cineraria</i> 'Silverdust' (Pk)	Silver foliage; Nice all season with good vigor and uniformity. Pink; Poor with no vigor all season-most were dead by September.	Nice early with good bloom and vigor; dead by August evaluation.	Not uniform in size early but good bloom; lots of dead heads by August and some plants dying.
<i>Silene pendula</i> 'Céline' (Ben)	Only one plant growing and that did alright.		
<i>Solenostemon scutellarioides</i> 'Carefree Mix' (Pk)	Burgundy, green, yellow; Nice color combination; plants not uniform in size.		
<i>S. scutellarioides</i> 'Park's Brilliant Mix' (Pk)	Golden 'balls'; Unique looking; not uniform in size or vigor but bloom good; more vigor in Dickinson and Williston.	Good vigor, bloom and size uniformity all season.	Not uniform in size early; better later but bloom and vigor good all season.
<i>Spilanthes oleracea</i> 'Peek-A-Boo' (PAS)	Nice early with good uniformity but could be more vigorous; did well by September.		
<i>Stipa tenuissima</i> 'Angel Hair' (Pk)	Not uniform in size or bloom all season.		
<i>Tagetes erecta</i> 'Antigua Gold' (GS)	Not uniform in bloom early and not as floriferous as other marigolds in September.		
<i>T. erecta</i> 'Antigua Orange' (GS)	Not uniform in size or bloom early but by September was very nice with good bloom, vigor and uniformity.		
<i>T. erecta</i> 'Antigua Primrose' (GS)	Nicest in July with good bloom, vigor and uniformity; good size uniformity in September but too many dead heads.		
<i>T. erecta</i> 'Antigua Yellow' (GS)	Good bloom and vigor all season; lost some size uniformity by September.		
<i>T. erecta</i> 'Inca II Gold' (GS)	Good bloom all season but not uniform in size; one dead plant by September.		
<i>T. erecta</i> 'Inca II Orange' (GS)	Good bloom all season but lacked good size uniformity.		
<i>T. erecta</i> 'Inca II Primrose' (GS)	Uniform and floriferous in July; still good bloom by September but lacked size uniformity.		
<i>T. erecta</i> 'Inca II Yellow' (GS)	Uniform and floriferous in July; still good bloom by September but lacked size uniformity.		
<i>T. erecta</i> 'Perfection Gold' (GS)	Not uniform in size all season but bloom was good.		
<i>T. erecta</i> 'Perfection Orange' (GS)	Best bloom in September; not uniform in size.		
<i>T. erecta</i> 'Perfection Yellow' (GS)	Floriferous, uniform and vigorous in July; still nice by September although Aster Yellows was in a few plants.	Good bloom, vigor and uniformity in July; by August plants still vigorous but lacked uniformity in size and bloom time.	Yellows showing up by August but healthy plants still really nice.
<i>T. patula</i> 'Bonanza Bolero' (AAS '99)	Best in July with good bloom, vigor and uniformity; Aster Yellows in September and a decline in bloom.		
<i>T. patula</i> 'Bonanza Gold' (PAS)	Lacked uniformity in size all season; bloom was best in July; dead heads detracted in September.		
<i>T. patula</i> 'Bonanza Harmony' (PAS)			
<i>T. patula</i> 'Bonanza Mix' (PAS)	Nicest in July; lots of Aster Yellows by September.		
<i>T. patula</i> 'Bonanza Orange' (PAS)	Floriferous, uniform and vigorous in July; lost some height uniformity in September but bloom was still alright.		
<i>Tagetes patula</i> 'Durango Bolero' (PAS)	Best in July; decline in bloom by September and lots of dead heads detracted from appearance.		
<i>T. patula</i> 'Durango Mix' (PAS)	Not uniform in size or bloom all season and Aster Yellows present in September.		
<i>T. patula</i> 'Durango Red' (PAS)	Uniform, floriferous and vigorous in July; still nice in September.		

<i>T. patula</i> 'Durango Tangerine' (PAS)	Floriferous, uniform and vigorous in July; lost some height uniformity in September but bloom was still alright.		
<i>T. patula</i> 'Durango Yellow Improved' (PAS)	Not uniform in size all season; decline in bloom by September and Aster Yellows present.		
<i>T. tenuifolia</i> 'Luna Lemon Yellow' (Da)	Good bloom early but not uniform in size; declining in vigor by September with some dying plants.		
<i>T. tenuifolia</i> 'Starfire Mix' (Pk)	Nicest in July with good bloom; most plants dead by September (Aster Yellows, spider mites).		
<i>Tanacetum ptarmiciflorum</i> 'Silver Feather' (Pk)	Silver, feathery foliage; Only 3 of 6 plants survived transplanting; those turned into nice, vigorous, uniform plants.		
<i>Thunbergia alata</i> (Black-eyed Susan Vine) (Pk)	Good vigor and lots of blooms this year.		
<i>Tithonia rotundifolia</i> 'Fiesta del Sol' (AAS '00)	Good vigor early but not much bloom and not uniform in size; similar in September but good bloom.	Nice plant in July but no bloom yet; alright in August but not uniform in size or bloom time.	Not uniform in size all season; not blooming for July evaluation; more vigor here than Dickinson.
<i>Torenia fournieri</i> 'Duchess Blue and White' (GS)	Rabbit damage early; Didn't have much bloom or vigor all season.		
<i>T. fournieri</i> 'Duchess Burgundy' (GS)	Purple and white; Small all season; not much bloom.		
<i>T. fournieri</i> 'Duchess Light Blue' (GS)	Small and no vigor all season.		
<i>T. fournieri</i> 'Duchess Pink' (GS)	Small and no vigor all season.		
<i>Trachelium caeruleum</i> 'Jemmy Antique Rose' (Ben)	Pale lavender; Rabbit damage early; good vigor in July with lots of buds; best bloom and uniformity of these in September.	Not blooming for either July or August evaluation; purple stems; bloomed between evaluations.	Only two plants blooming in July; past bloom in August but could tell they had a lot of flowers.
<i>T. caeruleum</i> 'Jemmy Royal Purple' (Ben)	Deep rose lavender; Rabbit damage early; good bloom by September but not uniform in size.	evaluation and past bloom by end of August; not uniform in vigor.	Uniform in size and bloom in July-nice; past peak bloom by August.
<i>T. caeruleum</i> 'Jemmy Violet' (Ben)	Deep purple; Rabbit damage early; just starting to bloom by September; not uniform in size or bloom.	Most vigorous and best of group in July but still not blooming; past bloom by August evaluation.	Only two plants blooming in July; past bloom in August but could tell they had a lot of flowers.
<i>T. caeruleum</i> 'Jemmy White' (Ben)	White; Rabbit damage early; just starting to bloom in September and not uniform in size or bloom.	Least uniform in size of 'Jemmy' cultivars in July and not blooming; most vigorous in August but past bloom.	Uniform in size in July but not blooming; good vigor and uniformity in August but past peak bloom.
<i>Tropaeolum majus</i> 'Alaska' (Pk)	No vigor all season and not much bloom.		
<i>T. majus</i> 'Empress of India' (Pk)	Not much vigor or bloom all season.		
<i>T. majus</i> 'Moonlight' (Pk)	Best of the three nasturtiums but still not very nice this year.		
<i>Verbena bonariensis</i> (Pk)	Purple; Open and airy habit; good bloom and vigor all season.		
<i>V. x hybrida</i> 'Crystal Ball Mix' (PAS)	Good bloom early but not uniform in size; most vigorous and floriferous <i>V. x hybrida</i> in Sept. but some spider mite damage.		
<i>V. x hybrida</i> 'Liberty For All' (Ball)	size; decline in bloom by Sept. with spider mites and powdery mildew.		
<i>Verbena x hybrida</i> 'Merlot Mix Improved' (Ball)	Good bloom and fairly uniform early; decline in bloom by September.		
<i>V. x hybrida</i> 'Quartz Burgundy' (AAS '99)	Good bloom but not uniform in size in July; slight decline in bloom by September with spider mites and powdery mildew.		
<i>V. x hybrida</i> 'Quartz Burgundy w/ Eye' (PAS)	Not uniform in size or bloom early; similar to other verbenas in September.		
<i>V. x hybrida</i> 'Quartz Red Eye' (PAS)	Similar to 'Quartz Scarlet' in July; decline in bloom by September with some foliage problems.		

<i>I. x hybrida</i> 'Quartz Scarlet' (PAS)	Not uniform in size or bloom early and some rabbit damage; similar to other verbena in September.		
<i>I. x hybrida</i> 'Quartz Waterfall Mix' (PAS)	Bloom alright in July but rabbits chewing on and not uniform in size; similar to other verbena in September.		
<i>Vigna caracalla</i> (Snaal Vine) (Pk)	Not blooming for July evaluation and not much vigor; still not blooming in September but vigor better.		
<i>Viola cornuta</i> 'Penny Deep Blue' (GS)	Not much bloom early; rabbit damage; spider mites killed in August.		
<i>I. cornuta</i> 'Penny Orange Jump-up' (GS)	Not uniform in size or bloom early; rabbit damage; spider mites killed in August.		
<i>I. cornuta</i> 'Penny White' (GS)	Similar to other <i>Violas</i> .		
<i>I. wittockiana</i> 'Acquarelle Mix' (Pk)	Rabbit damage early; spider mite infestation killed these in August.		
<i>I. wittockiana</i> 'Flamenco Mix' (Pk)	Rabbit damage early and spider mites killed in August.		
<i>I. wittockiana</i> 'Ultimo Morpho' (AAS '02)	Bloom better than others in July but some rabbit damage and dead by spider mites in August.	Not uniform in size or bloom in July and something (rabbit?) has been eating; not as vigorous or floriferous as in the past.	Good bloom early but plants not as vigorous as normal; bloom still alright by August but size uniformly lacking.
<i>I. wittockiana</i> 'Universal Plus Citrus Mix' (GS)	Rabbit damage early and spider mites killed in August.		
<i>I. wittockiana</i> 'Universal Plus Mariner Mix' (GS)	Rabbit damage early and spider mites killed in August.		
<i>I. wittockiana</i> 'Universal Plus Rhapsody Mix' (GS)	Rose, cream and rose; Not uniform in size or bloom early; rabbit damage; spider mites killed in August.		
<i>Zinnia angustifolia</i> 'Crystal Orange' (Pk)	Good bloom all season but not uniform in size.		
<i>Z. angustifolia</i> 'Crystal White' (AAS 97)	Good bloom all season but not uniform in size.		
<i>Z. angustifolia</i> 'Crystal Yellow' (Pk)	Most uniform in size of the 'Crystal' zinnias in July; lost some size uniformity by September but bloom good all season.		
<i>Z. elegans</i> 'Benary's Giant Mix' (Ben)	Good bloom all season but not uniform in height; some browning on petals evident in September.		
<i>Z. elegans</i> 'Candy Stripe' (Pk)	Not uniform in size or bloom early; some browning on petals by September and one dead plant.		
<i>Z. elegans</i> 'Envy' (Pk)	Lime green; Fairly good size and bloom all season but flower color not too showy.		
<i>Z. elegans</i> 'Giant Cactus Mix' (Pk)	Good bloom and fairly uniform all season but best show in September.		
<i>Z. elegans</i> 'Park's Picks Mix' (Pk)	Nice mix of colors and good bloom but not uniform in size all season.		
<i>Zinnia elegans</i> 'Peter Pan Mix' (GS)	Good bloom but not uniform in size all season and browning on petals showing up in September.		
<i>Z. elegans</i> 'Short Stuff Mix' (GS)	Good bloom all season but not uniform in size; browning of petals evident in September.		
<i>Z. elegans</i> 'Zinnita Orange' (Ben)	Not uniform in size or bloom all season; best bloom in September.		
<i>Z. elegans</i> 'Zinnita White' (Ben)	Not uniform in size or bloom all season; best bloom in September.		
<i>Z. elegans</i> 'Zinnita Yellow' (Ben)	Similar to other 'Zinnita's.		

<i>Z. tenuifolia</i> 'Red Spider' (Pk)	Red-orange; Smaller flowers than <i>Z. angustifolia</i> ; not uniform in size and petals browning by September.		
<i>Z.</i> hybrid 'Profusion Cherry' (AAS '99)	Best of the three 'Profusion's in July; decline in plant vigor by September.	Good size uniformity in July but just starting to bloom; good bloom in August but flowers fading and a few plants dying.	Good size uniformity all season; flowers discolored in August, possibly due to thrip damage.
<i>Z.</i> hybrid 'Profusion Orange' (AAS '99)	September with good bloom, although a few plants declining in vigor.	Just starting to bloom in July; good bloom in August but lacked uniformity in size all season.	Slightly more vigorous and uniform than 'Profusion Cherry' in July; very nice in August with a good show of orange.
<i>Z.</i> hybrid 'Profusion White' (AAS '01)	Not uniform in size all season and not as vigorous or floriferous as other two 'Profusion' zinnias.	Just starting to bloom in July; by August was the best of the three 'Profusions' with good vigor, bloom and uniformity.	but very nice in August with good bloom, vigor and uniformity.

2003 Seed Source List

(An 'R' after the seed source abbreviation indicates a retail company while a 'W' indicates a wholesale or breeding company.)

Abbreviation	Company Name and Address	Abbreviation	Company Name and Address	Abbreviation	Company Name and Address
AAS	All-America Selections 311 Butterfield Road Suite 311 Downer's Grove, IL 60515	Bur (R)	W. Atlee Burpee 300 Park Avenue Warminster, PA 18974	PAS (W)	PanAmerican Seed 622 Town Road West Chicago, IL 60185-2698
Ball (W)	Ball Seed Company 622 Town Road West Chicago, IL 60185-2698	Da (W)	Daehnfeltdt, Inc. P.O. Box 38 North Manchester, IN 46962	Plk (R)	Park Seed Co. P.O. Box 31 Greenwood, SC 29646
Ben (W)	Ernst Benary of America, Inc. 1444 Larson Street Sycamore, IL 60178	FG (W)	Fischer USA, Inc. 6899 Winchester Circle, Suite 102 Boulder, CO 80301	S&G (W)	Syngenta Seeds, Inc. 5300 Katrine Ave. Downers Grove, IL 60515-4095
Bod (W)	Bodger Seeds, LTD 1800 North Tyler Avenue South El Monte, CA 91733	GS (W)	Goldsmith Seeds, Inc. P.O. Box 1349 Gilroy, CA 95021	WG (W)	Waller Genetics P.O. Box 70 Guadalupe, CA 93434