2023 Herbaceous Cultivar Trial Results
Ohio State University, Springfield, OH
Snyder Park Gardens & Arboretum

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Introduction

Cultivar trials have been conducted by Ohio State University faculty along with Clark County Extension staff and Master Gardener Volunteers (MGV) in Springfield, Ohio since 1995. MGVs Theresa Gregory, Linda McCann, Karen Parsons, and Rosalind Soles were the 2023 project leaders and were responsible for growing the plants in the greenhouse. Ohio State University Extension Office (OSUE) Associate Jo Brown managed the data. The trials are in the Snyder Park Gardens & Arboretum (1900 Snyder Park Street) in Springfield, Ohio. MGVs planted in the beds and containers, weeded, and assisted with the evaluation of the plots. Visitors to the trials were residents, those from out of town who were familiar with the trials or were touring the gardens, and those who visited the gardens for other reasons.

The plots have loamy, well-drained soil with a pH of 7.4. The current plots were established in the spring of 2015. The beds were tilled to a depth of 8" in both the sun and shade plots. There is approximately 5000 square feet of bed space in full sun and approximately 1000 square feet in the shade, under a shade tree (moderate to heavy shade, Norway maple). The plots are tilled in the spring before planting and in the fall after the removal of the annuals. Compost was added in fall of 2022.

The selection of plants to be trialed in the garden varies from year to year. The selection is based on entries from companies, performance in prior years, current trends, and industry recommendations. The results of performance for the plants are based on the data collected at the plots. The data reflects the growing conditions of 2023 in Springfield or west central Ohio. The purpose of the evaluation is to provide growers, landscapers, and homeowners with a tool for plant selection for Ohio as well as to provide performance data to the breeders and companies.

Method

The plants were started in the greenhouse at the Ohio State University campus from seeds or plugs, depending on the species, according to the recommended starting dates. They were planted in the ground plots and in the containers on May 16, 2023. There were six plants of each variety in a block; most plants were spaced on two-foot centers with the trailing/vining plants planted on four-foot centers in the block. *Calibrachoa* cultivars were planted in 18" diameter containers with six plants per container, and in a soilless mix. There were a few other plants in containers as noted below.

A 14-14-14 slow-release fertilizer was incorporated into the soil as well as the containers before planting at the labeled rate (one tablespoon per four-inch plant). No additional application of fertilizer was made to plants in the ground. Trials were irrigated as needed and containers were watered regularly. See the weather information below for details. No mulch was used. Hand weeding was completed as needed. Treflan (e.g., trifluralin) was incorporated in between the plants six weeks after planting.

All plants were grown in full sun unless otherwise indicated with a shaded row in the chart below. ***The plants were not deadheaded or pruned during the growing season.***

Faculty, staff, and volunteers conducted visual evaluations on June 19th, July 19th, August 16th, and September 20th. The entire block of plants received a visual rating from one to five. A rating of five was excellent and a rating of one was poor. The five individual evaluation ratings were averaged for the monthly rating figure. The monthly evaluations (June-September) were averaged for the final rating for each variety.

Weather Information
The information below was obtained from the College of Food, Agricultural, and Environmental Sciences weather station close to Springfield, Ohio. More details can be found at:
https://weather.cfaes.osu.edu/stationinfo.asp?id=13

Plants were installed under perfect planting conditions on May 17th. May and June precipitation overall was below normal, with May being exceptionally dry. However, July was about an inch over normal, and August was close to normal. September, however, was almost three inches below normal precipitation.

Temperatures were close to the average temperature; June was slightly warmer, and August was slightly cooler. There were a total of six days 90F or over compared to a total of 18 days of 90F or higher in 2022, with half of these in August. This compares to 21 days with temperatures of 90F or higher in 2020, 23 days in 2019, 22 days in 2018, and four days in 2017.

Figure 1 indicates temperature conditions and *Figure 2* indicates rainfall amounts for this growing season.

Figure 1

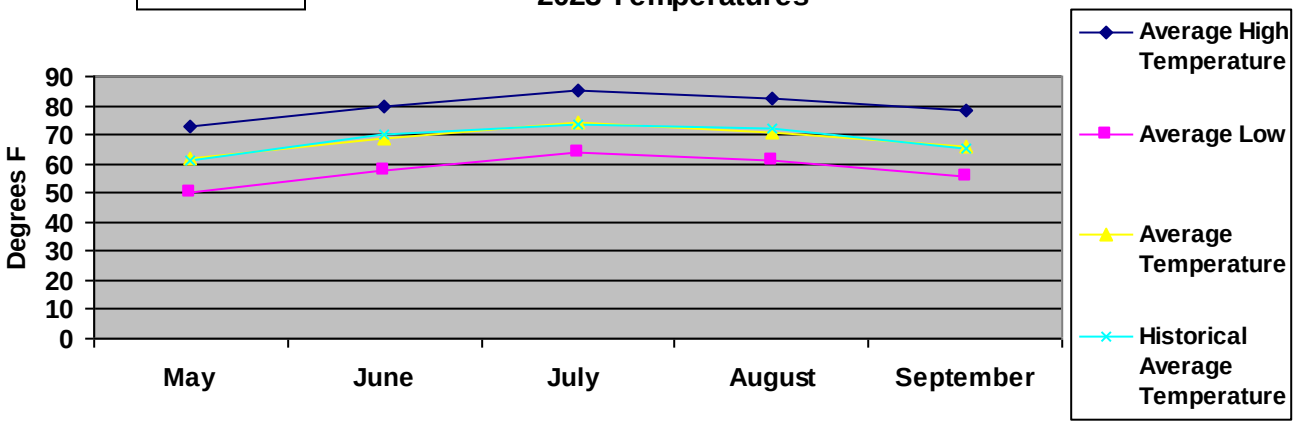
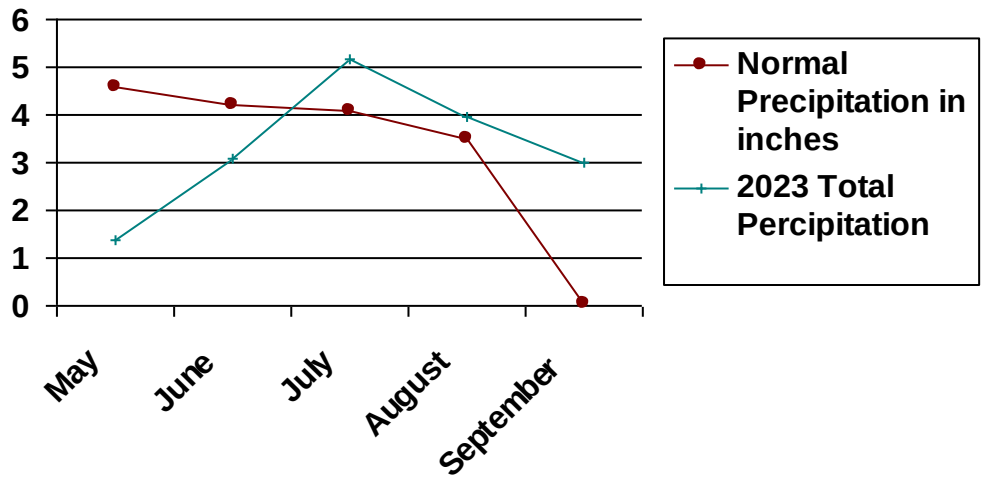


Figure 2



Results

The following are the 2023 cultivar trial varieties and their monthly and final ratings. The plants listed that are shaded gray are those varieties that were grown in shade. The plants with an asterisk (*) after the Genus/Common Name were grown in containers, six plants per container. The supplier for each variety is

listed in the table; the supplier key is at the end under companies. The plants are listed in order of Final Rating from highest to lowest. A rating of five is the highest; a rating of one is the lowest.

Genus/ Common Name	Series	Variety/Color	Company	June	July	August	September	Overall Average
Lantana	Shamrock	Red	Ball	4.56	4.60	4.95	5.00	4.78
Plectranthus	ColorBlaze	Cherry Drop	PW	4.33	4.80	5.00	4.89	4.76
Salvia	Rockin	Blue Suede Shoes	PW	4.33	4.80	5.00	4.89	4.76
Supertunia	Vista	Jazzberry	PW	4.33	4.70	4.80	4.89	4.68
Supertunia	Hoopla	Vivid Orchid	PW	4.11	4.90	4.70	4.89	4.65
Bidens	Campfire	Marshmallow	PW	3.67	4.90	5.00	5.00	4.64
Supertunia	Minivista	Yellow	PW	4.11	4.60	5.00	4.78	4.62
Supertunia	Minivista	Sweet Sangria	PW	4.33	4.65	4.50	5.00	4.62
Supertunia	Minivista	Indigo	PW	4.56	4.60	4.30	4.89	4.59
Supertunia	Minivista	Midnight	PW	3.89	4.40	5.00	5.00	4.57
Impatiens	Solarscape	XL Salmon Glow	Ball	4.11	4.30	4.90	4.89	4.55
Supertunia	Minivista	White	PW	4.33	4.50	4.80	4.56	4.55
Verbena	Superbena	Sparkling Amethyst	PW	4.33	4.50	5.00	4.33	4.54
Lantana	Shamrock	Rose Gold	Ball	3.78	4.80	4.55	4.89	4.50
Coleus	Volcana	Solar Flare	Ball	4.11	4.70	5.00	4.11	4.48
Begonia	Viking	Coral Flame on Bronze	Sak	4.22	4.75	4.60	4.33	4.48
Salvia	Rockin	Unplugged Pink	PW	3.44	4.65	5.00	4.78	4.47
Salvia	Rockin	Deep Purple	PW	3.33	4.60	5.00	4.89	4.46
Supertunia		Bermuda Beach	PW	4.33	4.60	4.20	4.67	4.45
Ipomoea	Sweet Caroline Upside	Key Lime	PW	3.44	4.70	4.70	4.89	4.43
Impatiens	Solarscape	Orange Burst	Ball	3.56	4.60	4.90	4.67	4.43
Torenia	Catalina	Pink	PW	4.40	4.75	4.00	4.44	4.40
Petunia	ColorRush	Blueberries and Cream	Ball	3.89	4.30	4.70	4.67	4.39
Ipomoea	Sweet Caroline Upside	Black Coffee	PW	4.11	3.60	4.85	4.89	4.36
Begonia	Viking	XL Red on Chocolate	Sak	3.67	4.60	4.85	4.22	4.33
Impatiens	SunPatiens Vigorous	Pretty Pink	Sak	2.89	4.80	4.80	4.78	4.32
Supertunia		Saffron Finch	PW	3.89	4.50	4.30	4.56	4.31
Supertunia	Minivista	Violet Star	PW	4.56	3.90	4.10	4.67	4.31
Calibrachoa*	SuperBells	Pink	PW	5.00	4.70	4.40	3.11	4.30

Genus/ Common Name	Series	Variety/Color	Company	June	July	August	September	Overall Average
Impatiens	Glimmer	Appleblossom	Ball	4.56	4.80	3.94	3.89	4.30
Petchoa mix*		Mix colors	Sak	4.68	4.95	5.00	4.88	4.88
Impatiens	SunPatiens Vigorous	Red	Sak	2.56	4.70	4.90	5.00	4.29
Supertunia	Minivista	Hot Pink	PW	4.78	4.50	3.80	4.00	4.27
Verbena	EndurScape	Purple Fizz	PW	4.44	4.10	3.65	4.78	4.24
Impatiens	Solarscape	White Shimmer	Ball	3.33	3.90	4.80	4.89	4.23
Lantana and begonia*		Mix White/red	Sak	4.00	5.00	4.67	3.22	4.22
Geranium		Dark Red	Ball	4.11	4.00	4.30	4.44	4.21
Begonia	Viking Explorer	Red on Green	Sak	4.11	4.80	3.90	4.00	4.20
Begonia	Viking	Pink on Chocolate	Sak	4.22	4.30	4.40	3.89	4.20
Calibrachoa*	Cha Cha	Diva Lavendar	Ball	5.00	4.44	4.00	3.37	4.20
Calibrachoa*	Bumble Bee	Hot Pink	PW	4.43	4.67	4.45	3.22	4.19
Impatiens	Glimmer	Salmon	Ball	4.75	4.44	4.11	3.44	4.19
Plectranthus	ColorBlaze	Chocolate Drop	PW	4.00	4.70	4.30	3.75	4.19
Impatiens	SunPatiens Compact	Purple Candy	Sak	3.00	4.10	4.70	4.89	4.17
Impatiens	SunPatiens Vigorous	Sweetheart White	Sak	2.67	4.30	4.90	4.78	4.16
Ipomoea	Sweet Caroline	Sweet Mahogany	PW	3.89	4.30	4.20	4.22	4.15
Begonia x hybrida	Viking	Explorer Rose on Green	Sak	4.60	4.90	4.44	2.67	4.15
Impatiens	SunPatiens Compact	Red Candy	Sak	2.89	4.20	4.50	5.00	4.15
Verbena	Superbena	Pink Cashmere	PW	4.00	4.50	3.75	4.33	4.15
Calibrachoa*	SuperBells	Double White	PW	4.17	4.40	4.33	3.67	4.14
Impatiens	Beacon	Lindau Mix	Ball	4.00	4.30	4.44	3.67	4.10
Calibrachoa*	Superbells®	Vintage Coral	PW	4.29	4.67	4.11	3.22	4.07
Petunia		Bees Knees	Ball	4.44	3.90	4.15	3.78	4.07
Calibrachoa*	Superbells®	Blue	PW	4.14	4.50	4.22	3.33	4.05
Rudbeckia	MiniBeckia	Flame	GC	4.56	4.90	4.50	2.22	4.04
Cuphea		Sweet Talk	Ball	4.33	3.55	3.95	4.22	4.01
Supertunia		Tiara Pink	PW	4.44	4.20	3.60	3.56	3.95
Ipomoea	Sweet Caroline	Red Hawk	PW	4.00	3.70	3.70	4.33	3.93
Calibrachoa*	Superbells®	Double Amber	PW	4.38	4.60	4.06	2.67	3.92

Genus/ Common Name	Series	Variety/Color	Company	June	July	August	September	Overall Average
Calibrachoa*	Superbells®	Double Red Stone	PW	4.25	4.39	3.72	3.22	3.90
Begonia	Viking Explorer	Rose on Green	Sak	3.56	4.30	3.80	3.89	3.89
Lantana	SunDance	White	Sak	3.33	3.70	4.20	4.22	3.86
Petunia	SuperCal Premium	Yellow Sun	Sak	4.56	4.20	3.15	3.44	3.84
Impatiens	SunPatiens Compact	Lilac Improved	Sak	2.33	3.90	4.56	4.56	3.84
Petunia	SureShot	Raspberry Cheesecake	Ball	4.44	4.60	3.70	2.56	3.83
Petunia	SuperCal Premium	Red Maple	Sak	4.33	4.30	3.80	2.78	3.80
Jamesbrittenia	Safari	Dusk	PW	4.44	4.10	2.90	3.67	3.78
Calibrachoa*	Superbells®	Double Twilight	PW	3.89	4.10	4.11	3.00	3.78
Guara		Monarch White	Dum	3.22	3.50	4.05	4.11	3.72
Begonia	Viking	Rose on Bronze	Sak	2.78	3.95	4.35	3.78	3.71
Impatiens	Beacon	Salmon	Ball	4.00	4.33	4.00	2.44	3.69
Scaveola	Whirlwind	Blue	PW	2.56	3.20	4.35	4.67	3.69
Petchoa		Mix	Sak	5.00	4.38	3.00	2.33	3.68
Impatiens	SunPatiens Compact	Classic White	Sak	2.00	3.90	4.25	4.56	3.68
Calibrachoa*	Superbells®	Prism™ Pink Lemonade	PW	3.89	3.85	4.00	2.78	3.63
Geranium		White Eye	Ball	3.00	4.10	3.20	4.00	3.58
Calibrachoa*	SuperBells	Double Smitten Pink	PW	3.40	4.44	4.00	2.44	3.57
Supertunia	Minivista	Ultramarine	PW	4.44	3.50	3.10	3.00	3.51
Petunia	SuperCal Premium	Sunset Orange	Sak	3.67	3.80	3.35	3.22	3.51
Verbena	Superbena	Cherryburst	PW	3.33	3.20	2.80	4.56	3.48
Scaveola	Whirlwind	White	PW	2.78	3.20	3.80	4.00	3.44
Angelonia	Archangel	Ruby Sangria	Ball	2.67	3.50	3.50	3.44	3.28
Scaveola	Whirlwind	Pink	PW	2.56	3.00	3.95	3.56	3.27
Petunia	SuperCal Premium	Pearl White	Sak	4.00	4.10	2.50	1.44	3.01
Petunia	Jewel	Frosted Sapphire	Ball	4.33	2.80	1.39	3.11	2.91
Jamesbrittenia	Safari	Sky	PW	3.11	3.00	2.20	2.89	2.80
Guara		Monarch Pink	Dum	3.11	1.80	3.15	3.11	2.79
Supertunia	Minivista	Scarlet	PW	4.11	3.50	1.72	1.78	2.78
Nemesia	Sunsatia	Coconut	PW	4.44	3.50	1.22	1.44	2.65

Genus/ Common Name	Series	Variety/Color	Company	June	July	August	September	Overall Average
Bidens	Goldilocks	Rocks	PW	3.22	2.00	1.33	2.89	2.36
Bidens	Campfire	Flame	PW	3.67	3.30	1.00	1.00	2.24
Begonia	Double Delight	Blush Rose	PW	3.89	2.33	1.00	1.00	2.06
Begonia	Double Delight	Appleblossom	PW	2.67	2.80	1.00	1.00	1.87

Companies
Ball = Ball Horticulture (Includes Ball FloraPlant, Ball Ingenuity, PanAmerican Seed)
Dum = Dummen Orange
GC = GardenChoice
PW = Proven Winners
SAK = Sakata

Thank You
Thank you to all the companies who participated in the trials in 2023. A special thanks to our volunteers who assisted with a variety of tasks in these trials. Their dedication and hard work during the growing season kept the trials in excellent condition. The volunteers include: Theresa Gregory, Linda McCann, Karen Parsons, Rosalind Soles and many others who were involved in planting and maintenance.

More Information
Contact Pam Bennett, Professor with questions or comments: bennett.27@osu.edu or 937-398-7575.