

1966

GARDEN FLOWER VARIETY

TRIALS IN KENTUCKY

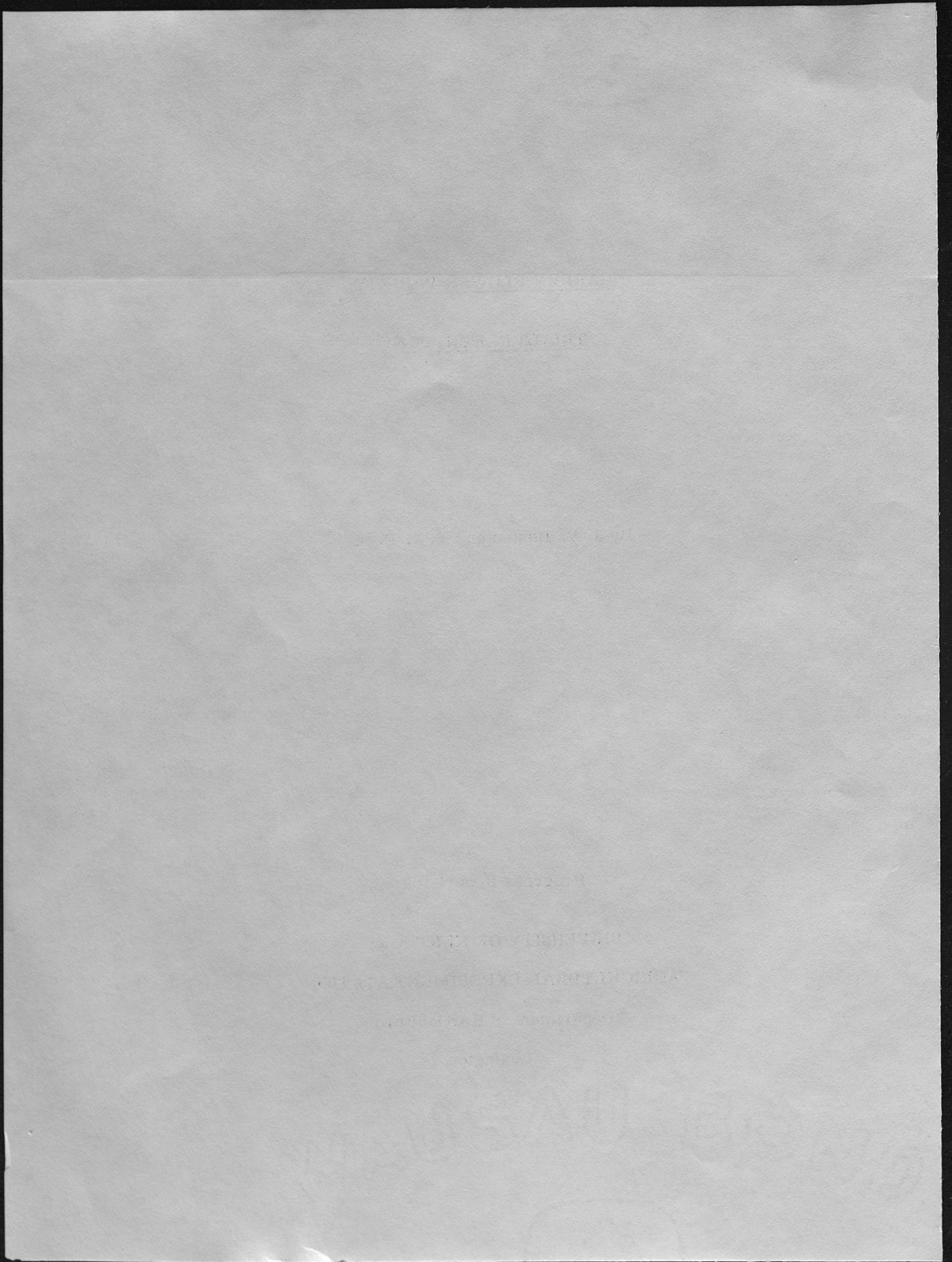
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1966 GARDEN FLOWER VARIETY TRIALS IN KENTUCKY

By J. W. Buxton and T. E. Pope¹

Garden annuals are used in ever-increasing amounts in home and industrial plantings. Therefore, it is important to provide information about the many varieties available to commercial producers and consumers. Numerous varieties of garden annuals are compared annually under Kentucky's climatic and soil conditions in the University of Kentucky trial gardens.

Seed used in the trials was supplied by commercial seed companies and were sown the first of April, except for marigolds, zinnias, and balsam, which were sown the middle of April. Seed of each variety was sown in a 4-inch clay pot containing a sterilized mixture of 1 part soil: 1 part peat: 1 part perlite. A thin layer of vermiculite was placed on top of this mixture and watered thoroughly. The seed was sown on the vermiculite and then covered with another thin layer of vermiculite. Small seeds such as that of petunias and snapdragons were left uncovered. A freezer bag was then placed over the pot and wrapped around the bottom. Some of the pots were placed in a plastic greenhouse where temperatures were maintained at 70° with heating cable. Other pots were placed in a 70° growth room furnished with fluorescent and incandescent light fixtures about 18-inches above the top of the pots. The plastic bags were removed as soon as the seed began to germinate. When the seedlings had developed two true leaves, they were transplanted into 2 1/4-inch peat pots. Marigold, zinnia, and balsam seed was sown directly in 2 1/4-inch peat pots in flats, using the same methods described above. The direct-sown flats were covered with a sheet of clear polyethylene plastic which was removed as soon as germination started. Beginning in mid-May, the plants were transplanted to the garden.

Plants were placed in 6-x-5-foot plots laid out in rows, with a 5-foot walkway between rows. The rows were covered with 4-mil black polyethylene plastic to control weeds and conserve moisture. Generally, the plants were given 1 square foot in which to grow; however, some plots contained more or fewer plants, depending on growth characteristics of the variety. Water was applied by a sprinkler system, as necessary, and ammonium nitrate in combination with a soluble 20-20-20 fertilizer was applied every 2 or 3 weeks throughout the summer.

The varieties were evaluated on July 20 and again on August 5, so that most of them would be observed at a time when they were in full bloom. Each variety was given a rating of "excellent," "very good," "fair," or "poor," based on uniformity, general appeal, and disease resistance.

On July 11 a field day was held at the trial garden. Forms were distributed to persons visiting the trials for preference ranking of petunia, marigold, celosia, and zinnia varieties. On page 15 the top varieties are listed in the order of preference.

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VARIETIES TESTED*

	Height	July 20	Aug. 5	Comments**
AGERATUM				
Blue Blazer	8-11"	very good	good	rich mid-blue
Fairy Pink	9-15"	fair; not uniform in height and flowering	poor	shades of lavender pink
Golden Ageratum	12-14"	good	good	golden yellow
Snow Carpet	8-9"	good	good	white
ALYSSUM				
Carpet of Snow	-	very good	very good	white
Royal Carpet	-	very good	very good	violet white
AMARANTHUS				
Early Splendor	54-56"	1/2 died of disease, remainder very good	most of plants dead	mixed red and deep red foliage; poor disease resistance

*Seed Companies supplying seed for these trials:

George J. Ball Co., W. Atlee Burpee Co., Fred C. Gloeckner Co. Inc., Germania Seed Co., Henry F. Mitchell Co., Vaughan's Seed Co.,

All-American Selection Trials - Goldsmith Seeds, Inc., Geo. W. Park Seed Co., and Joseph Harris Co. Inc.

**Comments as given by seed companies.

***Not Evaluated

VARIETIES TESTED*

	Height	July 20	Aug. 5	Comments**
ASTER				
Rivera Mixed	-	poor	poor	mixture
BALSAM				
Color Parade	26-28"	very good	very good	large double blooms; mixture
Dr. Tom Thumb	9-11"	fair to good	fair	double bloom mixture
Double Camellia	9-11"	fair	fair	double blooms; mixture
BASIL				
Dark Opal	18-20"	very good	very good	dark purplish-bronze foliage
CELOSIA				
Fireglow	18-20"	very good	very good	cardinal red
Forest Fire	22-28"	very good	excellent	fiery orange scarlet with bronzy red foliage
Golden Feather	15-17"	very good	fair, flowers fading	golden yellow
Rose Empress	11-13"	very good	very good	bright rose
Kardinal Imp	9-11"	very good	good; some fading	red
Toreador	20-22"	good	good; flowers too tall	bright red
Giant Empress	9-10"	very good	very good	crimson with reddish leaves
BACHELORS BUTTON				
Blue Boy	27-29"	very good	good	blue
Jubilee Jem	16-18"	very good	very good	blue; short doesn't fall over

(For explanation of footnotes, *, **, and ***, see page 7.)

VARIETIES TESTED*

	Height	July 20	Aug. 5	Comments**
Pinkie	18-20"	good	fair	pink; falls over
Red Boy	20-22"	good	fair	dark pink
COLEUS				
Rainbow Mix	-	very good in shade	-	mixture
Rose Rainbow	-	very good	good	bright salmon rose foliage
COSMOS				
Goldcrest	18-20"	very good	good	golden yellow
Sunset	18-20"	very good	poor	bright orange
CALENDULA				
Orange Delight	15-17"	poor	poor	orange
DAHLIA				
Coltness Single	14-16"	poor	poor	mix; dwarf single flower
Unwin Dwarf	14-16"	good	good	mix; double and semi-double
DAISY				
Gloriosa Db.	35-37"	very good	excellent	golden yellow with dark brown center
DIANTHUS				
Baby Doll	5-6"	fair	good	mixture of reds, pinks, whites
Bravo	7-9"	good	poor	brilliant red

(For explanation of footnotes, *, **, and ***, see page 7.)

VARIETIES TESTED*

	Height	July 20	Aug. 5	Comments**
Red Monarch	6-8"	good	fair	scarlet red
DUSTY MILLER				
Gymnocrapa	16-18"	good	good	silvery gray foliage
Maritima	12-15"	very good	very good	silvery gray foliage
FOXGLOVE				
Foxy	15-18"	***	very good	mixture
MULTANA				
Double Bright Orange		***	good	orange
Bright rose		***	fair	rose
Pinkie		***		coral rose
Pink Jewel		***	few flowers	rose pink
Red Jewel		***	few flowers	deep cherry red
Scarlet Baby		***	few flowers	scarlet; light bronze foliage
OBELIA				
Blue Gown		***	good	deep blue
Crystal Palace		***	good	deep blue; bronze foliage
Heavenly		***	fair	deep sky blue
Rosamond		***	fair	violet rose with white eye
White Lady		***	good	clear white

* explanation of footnotes, *, **, and ***, see page 7.)

VARIETIES TESTED*

	Height	July 20	Aug. 5	Comments**
MARIGOLD				
Brittany	9-11"	very good	***	deep mahogany with golden yellow tip
Brownie Scout	8-11"	good	***	golden yellow with flecks of reddish brown
Color Magic	10-13"	good	good	yellow and orange marked with dark red
Diamond Jubilee	24-26"	good	good	sunny yellow
Double Eagle	28-32"	very good	good	deep orange; double flowers
Doubloon	30-32"	good	very good	light yellow
Golden Climax	28-30"	good	very good	golden yellow
Golden Jubilee	26-28"	very good	very good	bright yellow
Naughty Marietta	15-17"	very good	very good	golden yellow with mahogany
Pygmy Primrose	9-11"	good	good	primrose with red base
Rusty Red	18-20"	good	good	rust red
Sparky	12-14"	very good	very good	light golden yellow to mahogany
Spry	10-12"	good	***	golden yellow centers with mahogany guard petals
Spungold	12-14"	good	***	bright golden yellow
Spun Yellow	10-12"	***	***	bright yellow
Yellow Pygmy	9-12"	good	good	lemon yellow
Lemon Yellow	9-11"	very good	good	lemon yellow
Sunbeam	24-26"	good	good	lemon yellow to deep orange

(For explanation of footnotes, *, **, and ***, see page 7.)

VARIETIES TESTED*

	Height	July 20	Aug. 5	Comments**
EMESIA				
Mixture	8-14"	poor	poor	mixture attractive early in season
IEREMBERGIA				
Purple Robe		good	good	deep violet purple
ETUNIA				
<u>Multiflora</u>				
Cleopatra	8-10"	very good	good	scarlet
Comanche		very good	poor	brilliant scarlet-red
Kewpie	11-12"	very good	very good	rose-white bicolor
Pink Delight	14-16"	good	good	light rose with deeper viens
Pink Profusion		very good	very good	pink to rose
Plum Dandy	12-14"	excellent	very good	fuchsia-purple
Purple Plum	14-16"	excellent	good	reddish plum color
Red & White Delight	14-16"	good	fair	bright scarlet and white
Red Satin		good	good	scarlet
Resisto Bright Scarlet	12-14"	very good	very good	scarlet
Rose Star	9-11"	good	good	dark rose red with white star
Salmon Delia	8-10"	good	fair	salmon rose
Scarlet Satin		good	good	scarlet red
Starfire	9-11"	good	good	scarlet red and white
Star Trophy	14-16"	very good	good	white stars on blue

For explanation of footnotes, *, **, and ***, see page 7.)

VARIETIES TESTED*

	Height	July 20	Aug. 5	Comments**
Sugar Blue		good	good	deep blue shades to light blue
Sugar Pink	9-11"	excellent	very good	light pink veined with deep pink
Valentine		poor	poor	red; double
White Delight	16-18"	very good	very good	white
White Dandy	16-17"	excellent	very good	white
Red Dandy	14-16"	good	fair	red
<u>Grandiflora</u>				
Apple blossom	15-16"	very good	good	light to intense pink
Blue Danube	14-16"	fair	good	lavender blue; double
Blue Jeans	12-14"	good	good	med-blue
Blue Mantle	14-16"	good	fair	violet blue
Bonfire	12-14"	good	fair	deep salmon scarlet with golden throat
Boomershine	18-20"	fair	good	scarlet with white variations; double
Bridesmaid	12-14"	very good	good	light salmon pink
Candy Apple	9-11"	good	good	bright scarlet red
Dorothy Favorite	6-8"	good	poor	salmon rose; double
Dreamland		fair	fair	deep crimson and white; bicolor
Fandango	15-17"	good	fair	deep blue and white bicolor ruffled

(For explanation of footnotes, *, **, and ***, see page 7.)

VARIETIES TESTED*

	Height	July 20	Aug. 5	Comments**
Fiesta	10-12"	very good	very good	rose and white variation
Gay Paris	15-17"	very good	very good	wine-purple and white
Glacier	8-14"	good	fair	white
Highlight	9-11"	very good	very good	deep salmon
Lyric	11-13"	poor	fair	salmon pink; double
Peach Blossom	9-11"	very good	very good	white shading to salmon
Razzle-Dazzle		fair	fair	mixture of red, deep blue, and crimson
Red Magic	10-12"	very good	good	bright red with yellow throat
Spring Song	8-10"	good	very good	salmon pink
Vesuvius	9-11"	very good	good	deep rose red; ruffled edges
White Cascade	8-9"	good	fair	white; ruffled edges
White Magic	8-12"	good	good	white; ruffled edges
HLOX				
Radiant Mixture	5-7"	fair	poor	mixture
Twinkles	8"	very good	fair	mixture; small pointed petal flowers
Dwarf Mix	8-9"	very good	poor	mixture
Twinkles (Red)	5-6"	very good	fair	red shades
Twinkles (Salmon)	5-6"	very good	poor	pink shades
Dwarf Master Blend	7-9"	excellent	poor	mixture

For explanation of footnotes, *, **, and ***, see page 7.)

VARIETIES TESTED*

	Height	July 20	Aug. 5	Comments**
PORTULACA				
Mixture	8-10"	very good	very good	mixture
SALVIA				
America	24-26"	good; few flowers	good	red; dwarf, bushy
Brazier	16-18"	good	very good	scarlet
Cardinal	26-28"	good; few flowers	good	intense red with dark foliage
Copper King	12-14"	good	very good	red with copp on calyx
Evening Glow	22-24"	good; few flowers	good	lavender rose
Red Bird	12-14"	very good	excellent	red
Regal Purple	26-28"	excellent	very good	deep violet blue
Royal Blue	37-40"	very good	good	deep blue
Royal White	37-39"	excellent	good	white
Violet Flame	24-26"	good; few flowers	very good	dark violet purple
St. John's Fire	18-20"	very good	very good	deep red
Whitefire	16-18"	good	good	creamy white
Scarlet Pygmy	15-17"	good	very good	scarlet
Rose Flame	22-24"	good	good; few flowers	scarlet
SCABIOSA				
Gt. Mix	18-20"	good	poor	mixture
SWEET PEAS				
Salmon Cream Pink		poor	poor	salmon

(For explanation of footnotes, *, **, and ***, see page 7.)

VARIETIES TESTED*

	Height	July 20	Aug. 5	Comments**
ERBENA				
Amethyst	5-7"	very good	very good	med blue
Mixture	9-11"	very good	very good	mixture
INCA				
Coquette	13-15"	very good	very good	rosy pink
Bright Eye	13-15"	very good	very good	white flowers; red centers
ASTURTIUM				
Golden Gleam		fair	fair	golden yellow
Orange		fair	fair	orange
INNIA				
Bonanza	26-28"	very good	fair	golden yellow
Envy	24-26"	very good	very good	chartreuse
Firecracker	30-32"	excellent	very good	scarlet-red quilled cactus type petals
Old Mexico	20-24"	very good	very good	deep mahogany red edged with bright gold shades
Persian Carpet	18-22"	very good	very good	Bi-color flo- wers with pointed petals; range of color
Pink Buttons	16-18"	very good	fair	rose pink and salmon small flowers
Princess	28-30"	very good	fair	soft salmon- pink
Red Man	24-26"	very good	good	scarlet

For explanation of footnotes, *, **, and ***, see page 7.)

VARIETIES TESTED*

	Height	July 20	Aug. 5	Comments**
River of Gold	22-24"	very good	very good	gold shades
State fair Mix	36-38"	very good	very good	mixture
Thumbelina	5-7"	very good	very good	dwarf; mixture
Wild Cherry	24-26"	excellent	very good	violet rose
Whirligig	22-24"	very good	fair	various bright colors in circular patterns
Yellow Zenith	26-30"	very good	very good	clear yellow
Miss University	24-36"	poor	poor	mixture
FLOWERING TOBACCO				
Limelight	32-34"	very good	very good	limegreen
Scarlet queen	32-34"	good	good	deep red

(For explanation of footnotes, *, **, and ***, see page 7.)

TOP VARIETIES OF 1966

Celosia

Fireglow
Golden Feather
Rose Empress
Giant Empress
Cardinal Imp.

Petunia

Plum Dandy
Star Trophy
Purple Plum
Bridesmaid
Kewpie
Spring Song

Marigold

Doubloon
Sparky Mix
Lemon Yellow
Double Eagle
Spry
Brittany

Zinnia

Wild Cherry
Firecracker
Princess
Pink Buttons
Old Mexico
Whirligig