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Annual Bedding Plant Variety Trials for 1986-87

University of Tennessee Agricultural Experiment Station

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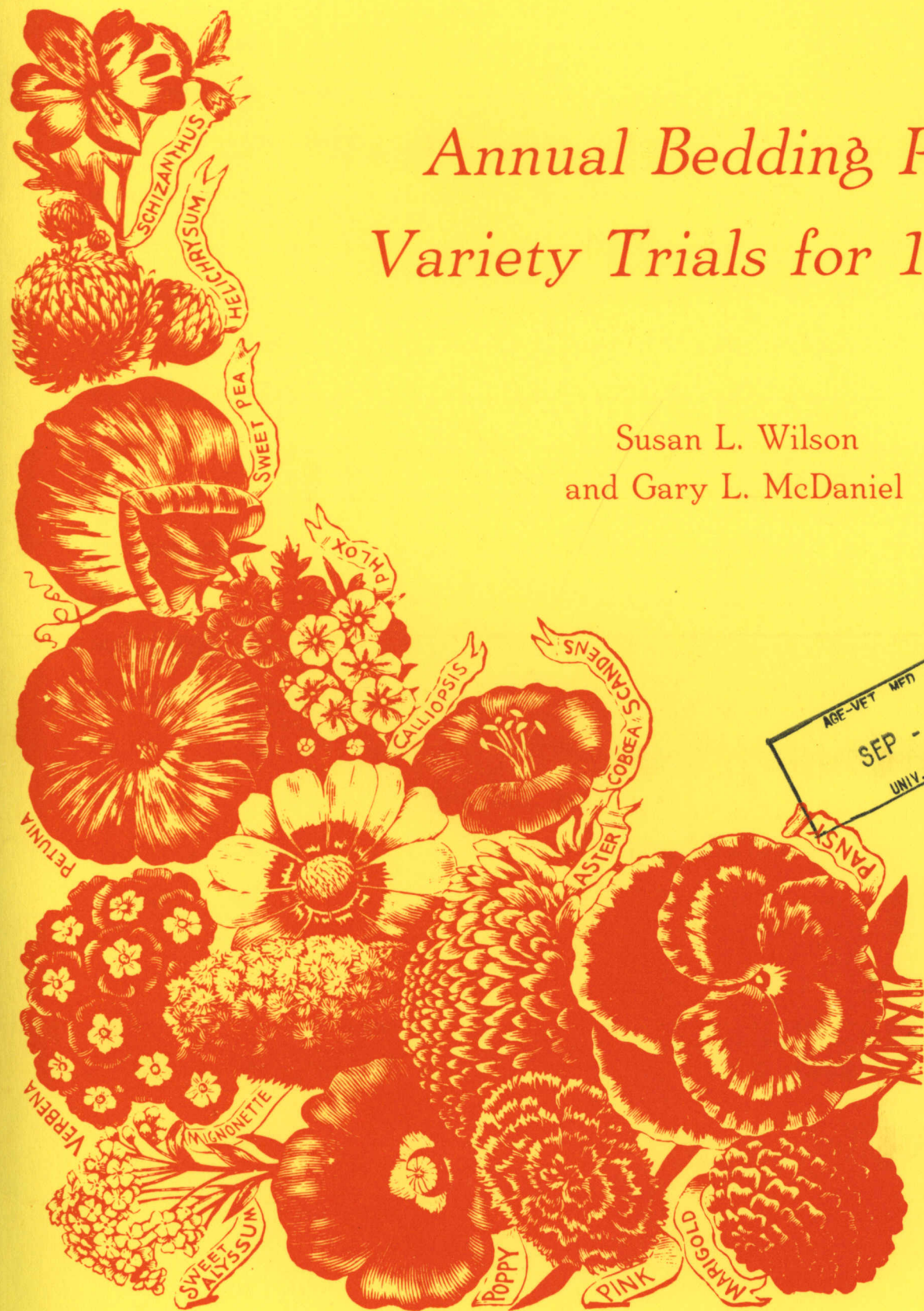
The University of Tennessee
Agricultural Experiment Station

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STACKS

Annual Bedding Plant Variety Trials for 1986-87

Susan L. Wilson
and Gary L. McDaniel



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Table of Contents

	<u>Page</u>
Introduction	i
Color Codes	ii
Seed Source Codes	iii
<u>Annual Flower Performance Tables</u>	
Ageratum	1
Aster	1
Calendula	2
Celosia (plumed)	2
Celosia (crested)	3
Dahlia	3
Gazania	4
Geranium	5
Gerbera	7
Marigold	8
Petunia	12
Salvia	16
Verbena	16
Vinca	17
Zinnia	17

Annual Bedding Plant Variety Trials for 1986-7

Each year new varieties of flowering plants are developed by breeders and are introduced into the trade by commercial seed companies. The list of available annual flower varieties becomes increasingly longer as improvements in flower color, plant form, and plant durability in the landscape are bred into each flower type. The purpose of the annual variety testing program at the University of Tennessee is to compare these newly-introduced flower varieties with some of the older, better known varieties that are commonly grown in Tennessee.

The test garden used for these trials is an official All-American Selections (AAS) Flower Trial and Display Garden. All varieties tested were grown in cell packs containing a peat-lite mix. All plants were set out in the first part of May. The research test garden consists of six 6'x 140' beds. Each variety was displayed in a 6' x 2'square area within the beds.

Prior to planting, the test garden was tilled with a garden rototiller. Two inches of mushroom compost was incorporated which provided adequate nutrition for the growing season. The beds were then gas sterilized with methyl bromide to eradicate potential weeds, insects and soil-borne disease organisms.

Supplemental irrigation was provided as required throughout the growing season by use of an overhead impulse sprinkler or by hand with a garden hose. All plants were grown in full sun. Weed control within the beds was provided by hand-weeding and with a new product called Reflex,TMa post-emergence grass herbicide. ReflexTM was very successful in killing bermudagrass in our beds with no damage to any of the annuals we trialed except geraniums and snapdragons. Round-UpTM was periodically used to edge the trial beds. The individual use of ZybanTM, CaptanTM, BenlateTM, BanrotTM, SubdueTM and Chipco-26019TM was used to treat such diseases as Alternaria Leaf-spot, Botrytis, Powdery Mildew and root rot. SevinTM, DiazinonTM and Insecticidal Soap were used to control any insect infestations.

Data was recorded for each plant variety at maximum flowering. Data presented in the tables includes: plant name, variety, flower color (see code), seed source (see code), average height (inches) and average spread (inches). All plants were set on 12 inch centers ('M' = Massed if plant crown had grown together), performance rating ('E' = excellent, VG = very good, G = good, F = fair and P = poor), and general comments (FS = Fleuroselect winner - Europe, AAS = former All-American Selections winner, and New = new variety for 1987).

Trade names are used only for the purpose of information and the Tennessee Experiment Station does not guarantee nor warrant the standard of the product nor does it imply approval of the product to the exclusion of others which may also be suitable.

COLOR CODE

AP - Apricot	OK - Orchid-pink
BG - Burgandy	OP - Orchid-purple
BL - Blue	OR - Orange-red
BR - Bronze	PK - Pink
CL - Coral	PP - Plum-pink
CM - Cream	PM - Plum
CO - Copper	PU - Purple
CR - Coral-red	RD - Red
CS - Crimson	RO - Rose
CH - Chartreuse	RP - Rose-pink
DB - Dark Blue	SA - Salmon
DR - Deep Rose	SB - Sky-blue
GO - Gold	SC - Scarlet
GR - Green	SP - Salmon-pink
LV - Lavendar	SR - Salmon-red
LB - Lavendar-blue	VB - Violet-blue
LP - Light-pink	VL - Violet
LY - Light-yellow	WH - White
MR - Mahogany-red	WR - Wine-red
MX - Mixed Colors	YO - Yellow-orange
OG - Orange	YW - Yellow

SEED SOURCE CODE

Special thanks are extended to the seed companies, breeders and distributors who cooperated in this effort. Trade names and varieties are used only for the purpose of information and the Tennessee Experiment Station does not guarantee nor warrant the standard of the product nor does it imply approval of the product to the exclusion of others which may also be suitable. Results of the All-America Selections trials are not reported in this publication.

AAS - All-America Selections, 628 Executive Drive, Willowbrook
Ill. 60521

BP - W. Atlee Burpee Co., 335 South Briggs Rd., Santa Paula
Cal. 93060

BD - Bodger Seeds, P.O. Box 5090, El Monte Cal 91734-1090

DH - Denholm Seeds, 222 North A Street, P.O. Box 1381, Lompoc
Cal. 93436

GS - Goldsmith Seeds, P.O. Box 1349, Gilroy Cal. 95021

HM - Harris Moran Seed Co., 3670 Buffalo Rd., Rochester
NY. 14624

PA - Pan American Seed, P.O. Box 438, West Chicago, Ill 60185

SEED SOURCE CODE

- PK - Geo. W. Park Seed Co., Cokesbury Rd., Greenwood S.C. 29647
- RS - Royal Sluis, P.O. Box 22, 1600 AA Enkhuizen, Holland
- SK - Sakata Seed Co., Yokohama, Japan 232
- SG - Sluis and Groot, 5680 South Syracuse Cir., Suite 300
Englewood, Col. 80111
- VG - Vaughans Seed Co., 5300 Katrine Ave., Downers Grove Ill.
60515

Variety	Color	Source	HT	WD	Rating	Comments
<u>Ageratum</u>						
Ocean Improved	VL	RS	8	M	EX	Compact growth, profuse all season.
Deep Medium Blue	VB	RS	10	M	EX	Compact growth, profuse flowering all season. deep violet blue.
Blue Danube	VB	BD	8	M	EX	Vigorous, profuse flowering, compact growth.
Royal Delft	PU	SG	9	M	EX	Compact growth, vigorous all season.
Royal Jay	PU	HM	9	M	EX	A lavender blue color, compact, profuse growth all season.
Blue Ribbon	VB	TM	10	M	EX	Uneven growth but good massing, profuse growth all season.

Ageratum has several flushes of flowering throughout the season. As each flush begins to fade and turn brown, cut plants back to encourage the next flush and keep plants vigorous.

Aster

Pink Ribbon	PK	BP	--	--	--	Died, could not survive heat.
Blue Ribbon	LB	BP	--	--	--	Died, could not survive heat.
Pot-N-Patio	MX	BP	--	--	--	Died, could not survive heat.

Variety	Color	Source	HT	WD	Rating	Comments
<u>Calendula</u>						
Early Nakayasu Gold	YW	SK	27	10	VG	Profuse flowering, good background plant
Bon Bon Mix	LY	BD	14	10	VG	Profuse flowering, unique light yellow color
Dwarf Gem Mix	YW	BP	11	12	VG	Profuse flowering, good bright yellow color
Golden Yellow	YW	RS	--	--	--	Died, could not survive heat.

All varieties of Calendula became infected with Alternaria Leaf Spot in mid September

Celosia (Plumosa)

Plume type

Nana Glitters	RD	RS	6	8	EX	Good color retention all season, very compact growth habit.
Century Mix	MX	BP	16	14	EX	Orange and purple colors mixed.
Fancy Plume Mix	MX	BP	24	M	EX	Mixture of bright yellows, reds and pinks, good color retention throughout season.
Century Cream	LY	SK	12	10	EX	Excellent light yellow colored plum. Good color retention all season. Profuse flowering.
Century Yellow	YW	SK	12	10	EX	Bright yellow plum, good color retention, profuse flowering all season.
Century Rose	PK	SK	12	10	EX	Hot pink plum, good color retention, profuse flowering all season.
Century Fire	OR	SK	12	10	EX	Bright orange red plum, good color retention, profuse flowering all season.

<u>Variety</u>	<u>Color</u>	<u>Source</u>	<u>HT</u>	<u>WD</u>	<u>Rating</u>	<u>Comments</u>
<u>Celosia (Plumosa)</u>						
Plume type						
Century Red	BG	SK	12	10	EX	Burgandy color plum, good color retention, profuse flowering all season.
Century Mix	MX	SK	12	10	EX	Mix of the above Century colors, profuse all season.
Apricot Brandy	AP	SK	--	--	--	Died. Damping-off disease.
Nana Yellow Kewpie	YW	SK	--	--	--	Died. Damping-off disease.
Nana Kewpie Mix	MX	SK	--	--	--	Died. Damping-off disease.
Nana Orange Kewpie	OG	SK	--	--	--	Died. Damping-off disease.
Nana Red Kewpie	RD	SK	--	--	--	Died. Damping-off disease.
<u>Celosia (Cristata)</u>						
Cockscomb						
Floradale Rose Pink	LP	BP	6	10	EX	Beautiful mauve color, good color retention, after peak flowering growth was stunted.
Jewel Box Mix	MX	SG	5	6	P	Stunted poor growth, not very vigorous, died.
Jewel Box Dark Red	BG	SG	6	6	P	Stunted poor growth, not very vigours, died.

Dahlia

Large Flowered Double Mix	MX	BP	41	22	VG	Extra large profuse flowers, flowers tend to be so heavy they bend the plant, good for cut flowers.
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Variety	Color	Source	HT	WD	Rating	Comments
<u>Dahlia</u>						
Amore Mix	MX	RS	11	12	VG	Medium height, good background plant, vibrant colors, profuse flowering
Verdi Mix	MX	SG	16	15	VG	Medium height, vibrant colors, profuse flowering, good background plant
Fresco Mix	MX	SG	21	13	VG	Medium height, good color, profuse flowering, good background plant

Gazania

Morning Star Mix	MX	VJ	5	8	EX	Profuse flowering all season.
Cardinal Mix	MX	BP	5	8	EX	Profuse flowering all season.
Mini-Star Yellow	YW	PK	8	8	P	Died. Damping-off disease.
Mini-Star Tangerine	AP	PK	8	8	P	Died. Damping-off disease.
Daybreak Yellow	YW	PK	9	8	P	Died. Damping-off disease.

All Gazanias were prone to damping-off disease. Use of various drench fungicides controlled the disease.

Variety	Color	Source	HT	WD	Rating	Comments
<u>GERANIUM</u>						
Pinwheel Bright Rose	RP	HS	12	M	EX	Profuse flowering, brilliant hot pink color, disease resistant.
Pinwheel Scarlet	SC	HS	12	M	EX	Profuse flowering, ringed leaf, disease resistant.
Pinwheel Salmon	SP	HS	12	M	G	Profuse flowering, ringed leaf, some disease.
Pinwheel Red	OR	HS	10	11	G	Ringed leaf, some disease.
Snow Storm	WH	HS	13	16	EX	Profuse flowering, some disease.
Pink Orbit	PK	GS	10	16	EX	Profuse flowering, brt. pink color, disease resistant.
Scarlet Orbit	CS	GS	14	14	VG	Profuse flowering, disease resistant.
Violet Orbit	VL	GS	10	11	F	Brt. violet color, ringed leaf, some disease.
Apple Blossom Orbit	LP	GS	14	12	G	Profuse flowering, ringed leaf, some disease.
Cardinal Orbit	SC	GS	13	16	G	Profuse flowering, ringed leaf, brilliant color.
White Orbit	WH	GS	10	14	P	Very diseased.
Orchid Orbit	VL	GS	9	12	P	Lt. violet color, very diseased.
Sprinter Scarlet	SC	GS	17	M	EX	Profuse flowering, tall and bushy growth, very vigorous, disease resistant.
Red Elite	CS	GS	9	14	EX	Short vigorous growth, bt. red color, disease tolerant.
Hollywood Rose Pink	RP	DH	10	12	EX	Profuse flowering, disease resistant.

Variety	Color	Source	HT	WD	Rating	Comments
<u>Geranium</u>						
Hollywood Star	PK/WH	DH	8	8	G	White center w/ pink edge, short and bushy growth.
Hollywood Red	RD	DH	8	8	G	Short, compact growth, some disease.
Hollywood Mix	MX	DH	8	8	G	Short, compact growth, some disease.
Ringo Salmon	SA	SG	9	13	P	Very diseased.
Ringo Light Salmon	SP	SG	12	16	G	Profuse flowering, thick and bushy growth.
Ringo White	WH	SG	12	15	EX	Profuse flowering, vigorous and stocky growth, disease resistant.
Ringo Deep Scarlet	SC	SG	12	15	EX	Excellent profuse flowering, ringed leaf, one of best geraniums trialed.
Ringo Scarlet	RD	SG	15	M	EX	Profuse flowering, ringed leaf, disease resistant, more red than scarlet color.
Ringo Dolly	PK/WH	SG	15	15	EX	White center w/ dark pink edge, disease resistant.
Ringo Rose	OK	SG	13	14	EX	Profuse flowering, disease resistant, brilliant color.
Pinto Rose	PK	SG	14	14	EX	Profuse flowering, disease resistant, vigorous growth, ringed leaf.
Pinto Red	CS	SG	15	14	VG	Profuse flowering, vigorous growth, disease resistant.
Pinto Salmon	SP	SG	16	16	F	Profuse flowering, non-vigorous growth.
Ice Queen	WH	SG	16	M	F	Profuse flowering, some disease.
Snowdon Improved	WH	SG	17	16	G	Profuse flowering, some disease.

Variety	Color	Source	HT	WD	Rating	Comments
<u>Geranium</u>						
Jackpot	RD	SG	11	15	G	Some disease, ringed leaf.
Cherie '80	SP	SG	14	12	F	Profuse flowering, some disease.
Mustang	RD	SG	15	15	EX	Profuse flowering, excellent color, vigorous growth, disease resistant.
Picasso	VL	SG	10	12	VG	Profuse flowering, excellent color, short growth habit , ringed leaf, disease resistant.
Cherry Border	RO	SG	12	15	EX	Profuse flowering, excellent color, disease resistant.
Scarlet Border	CS	SG	7	15	VG	Excellent short, bushy growth habit, disease resistant.

All geraniums were grown from seed and all flowered profusely the entire season. Geraniums and petunias were the most showy and profuse flowering species in our entire trial garden. The geraniums had 4 to 5 flushes of flowers throughout the season. As each flush began to fade the flowers were removed to keep the plants tender and vigorous. A fungicide spray and drench was applied monthly to prevent and control any fungal diseases. Botrytis and Alternaria Leaf Spot were the two predominate diseases on geraniums.

Gerbera

Tempo Scarlet	BU	SK	10	8	EX	Deep burgandy flower with yellow daisy center, long flower stalk excellent for cutting.
Tempo Rose and Pink	AP	SK	8	8	EX	Unique peach/apricot color, excellent cut flower.

Variety	Color	Source	HT	WD	Rating	Comments
<u>Gerbera</u>						
Tempo Orange Shade	AP	SK	10	10	EX	More orange than Tempo Rose and Pink, excellent cut flower.
Gigi Mix	MX	PA	8	10	EX	A mix of bright reds, oranges, and yellows, excellent cut flower.

All Gerbera varieties were prone to damping-off disease. Fungicides were successful in controlling the disease. Gerbera is considered a tender perennial. If the plants are mulched heavy in the fall before a killing frost the plants may over-winter.

Marigold

First Lady	YW	BP	20	12	EX	Semi-dwarf African type, bright yellow color, bloomed all season, very profuse.
Primrose Lady	YW	BP	18	11	EX	Semi-dwarf African type, bloomed all season.
Gold Lady	GD	BP	20	12	EX	Semi-dwarf African type, good sturdy growth habit, good for background planting.
Orange Lady	OG	BP	19	13	EX	Semi-dwarf African type, profuse blooming all season.
Gay Ladies Mix	MX	BP	18	11	EX	Semi-dwarf African type, a mix of the above 'lady' varieties.
Royal Mix	MX	BP	18	12	EX	Semi-dwarf African type, a mix of yellow and orange.
Red Seven Star	RD	BP	14	10	EX	Triploid, flower is red crested with gold, profuse all season.

Variety	Color	Source	HT	WD	Rating	Comments
<u>Marigold</u>						
Pretty Joy Mix	MX	BP	7	10	EX	Dwarf French type, a mix of yellow, gold and red.
Happy Days	OG	BP	10	10	EX	Dwarf French type, double flowers, compact growth excellent for borders.
Cheerful Mix	MX	BP	12	11	EX	Dwarf French type, a mix of yellow and orange, profuse all season.
Superstar Orange	OG	BP	14	M	EX	Tetraploid, compact but uneven growth, vigorous growth all season.
Orange Fire Works	OG	BP	18	M	EX	Medium French type, profuse compact growth and flowering all season.
Yellow Sophia	YW	BD	12	M	EX	Semi-dwarf French type, anemone flower, new.
Queen Sophia	OG	BD	11	M	EX	Dwarf French type, bronze orange color with yellow cresting on flower, profuse all season, All American Selection Winner.
Hero Red	RD	BD	10	11	EX	Dwarf French type, mahogany red flower with gold crest, compact and profuse growth all season, new.
Gold Coins Mix	MX	BD	34	M	EX	Tall American type, double flowers, excellent for cut flowers, sturdy growth.
Mighty Marietta	OG	HM	8	10	EX	Triploid single type, profuse flowering all season.
Aurora Fire	RD	GS	13	12	EX	Semi-dwarf French type, anemone flower, flower is orange and red bi-color, compact profuse growth, flowers all season.

Variety	Color	Source	HT	WD	Rating	Comments
<u>Marigold</u>						
Aurora Gold	GD	GS	12	10	EX	Semi-dwarf French type, anemone flower, compact profuse flowering and growth all season.
Aurora Mix	MX	GS	11	12	EX	Semi-dwarf French type, anemone flower, a mix of the Gold and Fire Aurora varieties.
Inca Orange	OG	GS	14	15	EX	Medium American type, double flower, flowers are very large, compact growth and profuse flowering all season.
Inca Gold	GD	GS	16	M	EX	Medium American type, double flower, profuse flowering all season.
Inca Yellow	YW	GS	15	M	EX	Medium American type, double flower, compact growth, profuse flowering all season.
Perfection Yellow	YW	GS	17	13	EX	Tall African type, double flower, sturdy growth habit, profuse all season.
Perfection Gold	GD	GS	18	14	EX	Tall African type, double flower, tolerates heat and sun well, profuse flowering all season.
Perfection Orange	OG	GS	17	14	EX	Tall African type, double flower, sturdy growth, profuse all season.
Janie	OG	GS	8	8	EX	Dwarf French type, golden orange color, profuse all season, excellent as a border planting.
Janie Bright Yellow	YW	GS	8	8	EX	Dwarf French type, bright yellow color, very uniform in growth and flowering, flowers profuse all season.
Janie Flame	GD	GS	10	8	EX	Dwarf French type, red and gold bicolor flower color, profuse flowering all season.

Variety	Color	Source	HT	WD	Rating	Comments
<u>Marigold</u>						
Bonanza Yellow	YW	DH	8	8	EX	Dwarf French type, produces large flowers on a compact plant, very sturdy plant.
Bonanza Orange	OG	DH	10	8	EX	Dwarf French type, new, deep orange color.
Bonanza Mix	MX	DH	10	10	EX	Dwarf French type, a mix of the six separate bonanza color.
Spice Ginger	GD	DH	11	12	EX	Dwarf French type, new, profuse all season.
Spice Saffron	YW	DH	10	12	EX	Dwarf French type, new, profuse all season.
Red Marietta	RD	DH	14	12	EX	Semi-dwarf French type, flower is red crested with gold, profuse all season.
Luxor Orange	OG	RS	14	12	EX	Luxor type, extra large flower on small compact plant, sturdy growth, profuse flowering all season.
Super Crested Primo Yellow	YW	RS	12	12	EX	Semi-dwarf French type, soft yellow color.
Super Crested Primo Gold	GD	RS	13	14	EX	Semi-dwarf French type, profuse flowering all season.
Super Crested Primo Orange	OG	RS	12	13	EX	Semi-dwarf French type, sturdy growth, profuse flowering all season.
Calando Golden Yellow	GO	RS	16	14	EX	African type, profuse flowering all season.

Variety	Color	Source	HT	WD	Rating	Comments
<u>Marigold</u>						
Forever Red	RD	VG	13	12	EX	Semi-dwarf French type, compact growth, profuse flowering all season.

All marigolds became infected with alternaria leaf spot fungus towards the end of the season. Moderate control was accomplished with the use of various fungicides. Better control could have been accomplished by not planting plants so close. All varieties were pruned back several times throughout the season to remove dead and dying flowers and to keep the plants tender and vigorous.

Petunia

Supermagic Ruby	BG	PA	7	M	EX	Profuse flowering, excellent burgandy color, tolerates sun and heat extremely well, flowered May 15 to frost, grandiflora type.
New Supermagic Red	CS	PA	7	M	EX	Profuse flowering, tolerates sun and heat extremely well, flowered from May 15 to frost, grandiflora type.
New Supermagic Cherry	CS	PA	7	M	EX	Profuse flowering, tolerates sun and heat extremely well, flowered from May 15 to frost, grandiflora type.
Peppermint Daddy	LP	PA	8	M	EX	Profuse flowering, tolerates sun and heat extremely well, flowered from May 15 to frost, grandiflora type.
Red Carpet	RD	PA	7	M	EX	Profuse flowering, small solid red flower, tolerates sun and heat extremely well, flowered from May 15 to frost.

Variety	Color	Source	HT	WD	Rating	Comments
<u>Petunia</u>						
Purple Pirouette	PU	PA	8	M	EX	Bright purple color, double flower, flowered from May 15 to frost, grandiflora type.
Velvet Frost	PU	GS	7	M	F	Some botrytis, flower has purple center with white fringe, grandiflora type.
Ultra Plum	PM	GS	6	M	EX	Large flowers, bright plum color, profuse flowering, grandiflora type.
Ultra Rose	PK	GS	7	M	F	Some botrytis, bright hot pink color, grandiflora type.
Fire Frost	RD/WH	GS	7	M	EX	Small flowers, flowers are red and white striped, profuse flowering, tolerates heat and sun well, grandiflora type.
Glacier	WH	GS	8	M	EX	Large solid white flower, profuse flowering, compact, tolerates sun and heat well,
Apollo	WH	GS	8.5	M	P	Very diseased with botrytis, not very profuse, grandiflora type.
California Girl	LY	GS	8	M	EX	Unusual light yellow color, small flower, profuse flowering all season, tolerates sun and heat well, grandiflora type.
Mariner	PU	GS	8	M	EX	Unusual bright blue purple, profuse flowering, compact.
Ultra Rose Star	WH/PK	GS	7.5	M	EX	Striped hot pink and white flower, profuse flowering, compact, tolerates sun and heat well, grandiflora type.
Ultra Red Star	WH/RD	GS	7	M	EX	Striped white and red flower, profuse flowering, compact, tolerates heat and sun well, grandiflora type.

Variety	Color	Source	HT	WD	Rating	Comments
<u>Petunia</u>						
Ultra Blue	PU	GS	7	M	EX	Outstanding blue color, profuse flowering, flowered from May 15 to frost, grandiflora type.
Ultra Pink	PK	GS	7	M	EX	Hot pink color, profuse flowering, compact, tolerates sun and heat well, flowered from May 15 to frost, grandiflora type.
Ultra Burgandy	BG	GS	7	M	EX	Deep burgandy color, profuse flowering, compact, flowered from May 15 to frost, grandiflora type.
Challenger Red & White	RD/WH	VG	8.5	M	EX	Striped red and white flower, profuse flowering, compact, flowered May 15 to frost, grandiflora type.
Challenger Red	RD	VG	8	M	EX	Profuse flowering, compact, flowered May 15 to frost, tolerates sun and heat well, grandiflora type.
Challenger Rose	PK	VG	8	M	EX	Hot pink color, profuse flowering, tolerates heat and sun well, grandiflora type.
Challenger Blue	PU	VG	8	M	EX	Bright blue purple color, profuse flowering, flowered all season, grandiflora type.
Challenger Salmon	SP	VG	8.5	M	F	Pink salmon color, some botrytis, grandiflora type.
Challenger White	WH	VG	8	M	F	Some botrytis disease, compact, grandiflora type.
Rainy Day Salmon	SP	VG	7.5	M	EX	Small flowers but profuse, compact, flowered all season, multiflora type.

Variety	Color	Source	HT	WD	Rating	Comments
<u>Petunia</u>						
Rainy Day Blue Star	PU/WH	VG	8	M	EX	Striped purple and white flower, profuse flowering, compact, flowered all season, multiflora type.
Rainy Day Rose	PK	VG	8	M	EX	Hot pink color, profuse flowering all season, compact, multiflora type.
Postilion Red Star	RD/WH	RS	7.5	M	P	Very diseased with botrytis.
Postilion Mix	MX	RS	7.5	M	P	Very diseased with botrytis.
Flash Formula Mix	MX	SG	8	M	EX	Large flowers, good mix of bright colors, profuse flowering all season, grandiflora type.
Pink Flash	PK	SG	7.5	M	EX	Large hot pink flowers, profuse all season, tolerates heat and sun well, grandiflora type.
Blue Flash	PU	SG	8	M	EX	Large flower, bright blue color, profuse all season, grandiflora type.
Salmon Flash	SR	SG	8	M	EX	Large flower, red salmon color, profuse all season, grandiflora type.
Rose Flash	PK	SG	7.5	M	EX	Hot pink color, large flowers, profuse all season, grandiflora type.
Velvet Flash	BG	SG	7.5	M	F	Large flowers, some botrytis, burgandy color, grandiflora type.
White Flash	WH	SG	7.5	M	F	Large flowers, some botrytis, grandiflora type.
Red Flash	RD	SG	7.5	M	EX	Large flowers, profuse flowering all season, grandiflora type.

Variety	Color	Source	HT	WD	Rating	Comments
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Petunias perform extremely well under the extreme hot, dry summers we are prone to have in east Tennessee. Most all varieties trialed flowered profusely the entire growing season. To keep plants young, and vigorous, periodic pinching and removal of dead flowers was done.

Salvia

Carabiniere Scarlet	CS	PA	14	11	VG	Excellent growth and flower color.
Carabiniere Purple	PM	PA	13	10	VG	Excellent growth and flowering habit, beautiful plum color.
Carabinerie Orange	SA	PA	13	12	VG	Excellent growth and flowering habit, beautiful salmon color.
Caramba	RD	SG	13	13	VG	Excellent stocky growth and flowering habit.
Purple Blaze	PM	BP	12	14	VG	Excellent stocky growth and flowering habit, beautiful plum color.
Scarlet Signal	RD	RS	14	13	VG	Excellent foliage and profuse flowering.
Scarlet Pimpernel	RD	RS	15	13	VG	Excellent foliage and flower color.
Hotstuff	RD	VG	12	14	VG	Excellent foliage and flowering habit.
Laser Purple	PM	PK	12	13	VG	Excellent foliage and nice plum color.
Hotline	RD	PK	24	17	VG	Excellent tall growth habit, profuse flowering habit.

Periodic pinching of dying and fading flowers was done to promote young, vigorous growth which would produce more flowers.

Variety	Color	Source	HT	WD	Rating	Comments
<u>Verbena</u>						
Showtime Blaze	SC	DH	4	M	EX	Bright scarlet red color, compact dark green foliage, good creeping border annual.
Springtime Mix	MX	GS	6	M	EX	A mix of bright, profuse colors, good creeping growth habit excellent for a border annual.
<u>Vinca</u>						
Dwarf Little Linda	VL	SK	16	M	EX	Flower is solid violet with no eye, makes an excellent massed planting.
Dwarf Little Mix	MX	SK	16	M	EX	A mix of white and violet flowers, profuse all season.
Dwarf Little Blanche	WH	SK	16	M	EX	Solid white flower with no eye, profuse flowering all season.
Dwarf Little Bright Eye	WH	SK	20	M	EX	White flower with red eye, profuse flowering all season.
Dwarf Little Delicata	LP	SK	20	M	EX	Light pink flower with purple eye, profuse growth and flowering all season.
Dwarf Little Pinkie	PU	SK	20	M	EX	Solid dark purple flower with no eye, profuse flowering and growth all season.

All vinca varieties tolerated heat and sun excellent all season, all varieties needed extra fertilizer throughout the season due to their profuse growth.

Variety	Color	Source	HT	WD	Rating	Comments
<u>Zinnia</u>						
Dreamland Pink	PK	PK	15	10	G	Had some disease, medium height, good erect Growth
Dreamland Coral	SA	PK	15	16	VG	Slight disease, beautiful unique salmon color, medium height
Scarlet Mix	MX	PK	19	24	F	Some disease, medium height, good growth
Red Lollipops	OR	BP	36	24	VG	Some disease, very tall variety, good for Cut flowers, beautiful orange/red color
Border Beauty Scarlet	OG	BP	36	24	VG	Excellent profuse flowering and good sturdy growth, tall variety
Border Beauty Yellow	YW	BP	35	20	VG	Excellent profuse flowering, brilliant yellow color, tall variety good for cutting
Border Beauty Rose	RP	BP	40	20	VG	Excellent profuse flowering, beautiful rosey pink color, excellent variety for cutting, sturdy growth
Border Beauty Mix	MX	BP	40	20	VG	Excellent profuse flowering, beautiful mix of the above colors, good sturdy growth, excellent cut flower
Pink Splendor	PK	BP	36	22	VG	Nice bright pink color, tall variety good for cutting
Fantastic Light Pink	LP	GS	28	17	VG	Light pink color, tall variety good for cutting, good sturdy growth
Peter Pan Mix Improved	MX	GS	21	23	VG	Profuse flowering, mix of bright colors, medium height, good for cut flowers
Peter Pan Scarlet	OR	GS	19	19	VG	Excellent profuse flowering, bright orange red color, medium height, good for cut flowers

Variety	Color	Source	HT	WD	Rating	Comments
<u>Zinnia</u>						
Peter Pan Gold	YW	GS	19	16	VG	Excellent profuse flowering, good bright yellow color, medium height, good for cut flowers
Peter Pan Plum Improved	PM	GS	15	12	VG	Excellent profuse flowering, bright plum color, medium height, good for cut flowers
Peter Pan Orange	OG	GS	27	18	VG	Excellent profuse flowering, bright orange color, sturdy growth habit, medium height, good cut flower
Small World Pink	PK	BD	23	20	VG	Excellent profuse flowering, medium height, good cut flower

All zinnias were infected with Alternaria Leaf Spot disease by the end of the season. Moderate control was maintained by the use of various fungicides.



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