



1995
SUMMER
TRIAL
RGARDEN
RESULTS



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ON THE COVER: Vinca Blush Cooler was the overall best performer in the summer 1995 AAS Display Garden at the Alabama Agricultural Experiment Station's E.V. Smith Research Center in Shorter. Another excellent performer was Petunia Purple Wave (inset).

ACKNOWLEDGMENTS

The authors gratefully acknowledge the substantial donation of seed from the companies listed in this publication, as well as the time and effort of David and Martha Wright of Wright's Greenhouse and Nursery, Inc., in growing all the transplants used in this study. K-Power generously donated fertilizer for this study.

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Information contained herein is available to all persons without regard to race, color, sex, or national origin.

1995 Summer Trial Garden Results

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INTRODUCTION

IN THE SUMMER OF 1995, 245 bedding plant cultivars were evaluated in the All-America Selections (AAS) Display Garden at the E.V. Smith Research Center (EVSRC). The objective of this study was to determine the heat tolerance and overall performance of summer-flowering annual plant cultivars. Results generated from this study will assist Alabama horticultural professionals and consumers in plant selection. Cultivar selection is based on seed company donations and vary from year to year. Landscape performance may vary from year to year as climatic conditions affect performance.

AAS is a non-profit organization founded in 1932 to encourage the development of superior flower and vegetable cultivars through controlled trials. Selection of AAS “winners” is based on cultivar performance throughout the nationwide trial system. Winners are prominently displayed for professionals and consumers to see in landscape through a network of display gardens and printed media. The EVSRC Trial Garden was established as an AAS Display Garden in 1993.

EVSRC, a unit of the Alabama Agricultural Experiment Station, is located in Shorter, 26 miles east of Montgomery, Ala. (latitude 32° 30'N, longitude 85°

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40°W). Similar tests were conducted at more than 200 display gardens throughout the U.S. to assess the general performance of new bedding plant cultivars under local environmental conditions. Other display gardens in Alabama are Bellingrath Gardens in Theodore and the Birmingham Botanical Garden. This publication presents results from the E. V. Smith trials. Comparison of results from several display sites will increase the reliability of the findings because weather, soil type, exposure, cultural practices, and other variables can greatly affect plant performance. Horticulturists are urged to visit other trial gardens to gain a better understanding of cultivar performance throughout a region or market area.

METHODS

Seeds of the trial entries were donated by several companies and grown by a local commercial transplant producer. Beds were located in Norfolk-Orangeburg loamy sand association soil (fine, loamy, siliceous, thermic Typic Kandiodults). Raised beds were tilled and fumigated with methyl bromide two weeks before planting. No other fungicides or insecticides were applied during the trial period. K-Power Professional Fertilizer, a slow-release fertilizer (18-6-12), was preplant incorporated into the beds on May 9, 1995, at a rate of five pounds per 100 square feet. No additional fertilizer was applied during the season. Transplants were planted on May 17 at the rate of 12 plants per entry. All plants were grown in full sun, except for impatiens, which were grown under aluminum hoop frames covered with 60% black shade fabric. Rainfall was supplemented by overhead sprinkler irrigation to provide an equivalent of one inch of water per week. No maintenance, with the exception of one prune to the petunias mid-season, was performed on any of the cultivars. Petunia cultivars were pruned to approximately a third of their original length on Aug. 8. No deadheading of spent flowers or other maintenance was conducted.

Eight of 12 plants per entry were evaluated every two weeks from May 31 through Sept. 20; the outer four plants on each side of the test plants were used as guard rows. Plants were rated by the same individual using a scale of 1-5. Flowering plants were rated primarily on their floral displays, while size, shape, and freedom from insect or disease blemishes were also considered. A rating of 1 indicated a small display of foliage with no flowers present; 2 — adequate amount of foliage with no flowers or few buds showing; 3 — large amount of foliage and a relatively small floral display; 4 — sufficient foliage and floral display to be attractive in the landscape; and 5 — superior floral display and sufficient foliage display. A rating of 0 indicated the plant had died. Ratings were made in whole number units. Display was considered to be the size and color of the leaves.

CLIMATIC CONDITIONS

Average daily sunlight levels for the four months of the study (June, July, August, and September) were higher than the average for the last 11 years (Table 1). The

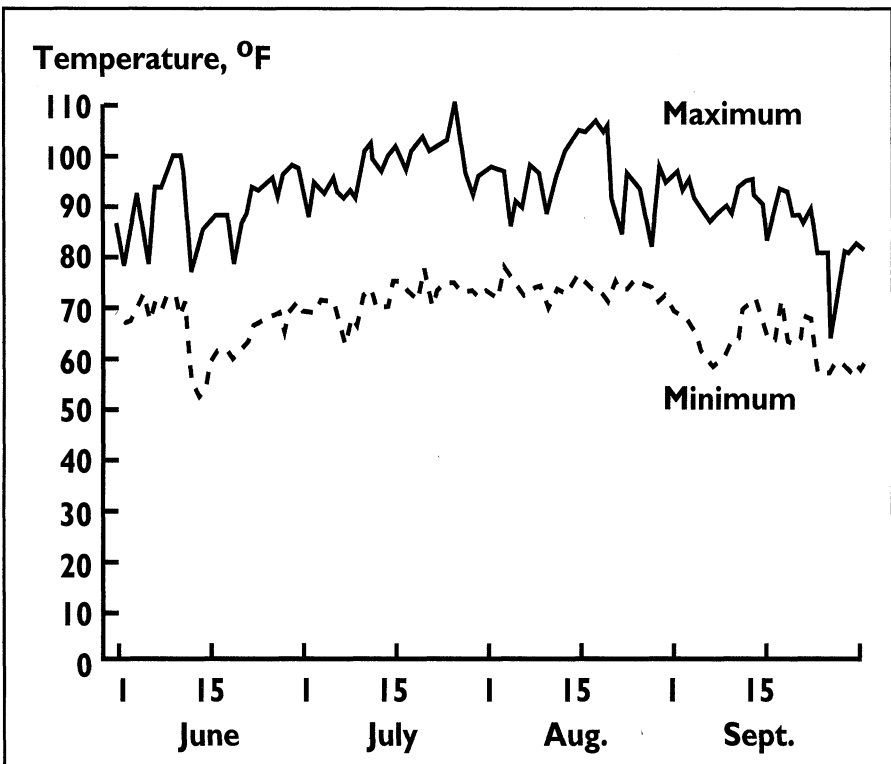
average daily air temperatures for all four months were higher than the average temperatures for the last 30 years. The average monthly rainfall was significantly less than the average for June, July, and August, approximately one half the average rainfall for the last 30 years. Approximately one inch more rainfall than normal fell in September. In general, it was brighter, hotter, and dryer than normal during the evaluation period. Figure 1 shows the minimum and maximum daily air temperatures for 1995.

TABLE 1. AVERAGE DAILY SUNLIGHT, DAILY AIR TEMPERATURE, AND MONTHLY RAINFALL ¹

Month	Avg. sunlight ²		Avg temperature		Total rainfall	
	1995	11-yr. avg.	1995	30-yr. avg	1995	30-yr. avg.
	w/m ²	w/m ²	°F	°F	in.	in.
June	5,978.7	5,919.8	77.8	75.8	1.61	4.1
July	6,194.7	5,737.8	84.8	78.7	2.74	4.71
August	5,354.4	5,280.5	84.7	78.4	2.59	4.18
September	4,992.0	4,631.4	75.3	74.1	4.71	3.63

¹ Data were provided by the National Weather Service at Auburn University.

² Sunlight, or solar radiation, is measured in watts per square meter.



TRIAL HIGHLIGHTS

Due to drought at a critical point in the evaluation, most of the annuals evaluated did not rate a 3 or higher. However, but those that did, proved to be extremely heat and drought tolerant. Vincas performed the best; Blush Cooler was the overall best performer with an average rating of 4.1. Pacifica Punch (4.1) and Pretty in Rose (4) were also among the highest rated selections. *Salvia farinacea* Victoria Blue and *Petunia Fantasy Pink* also performed well (both 3.5).

Another good performer this year was the *petunia Purple Wave*. However, its rating of 3.1 was somewhat misleading. Because *petunias* become leggy and unsightly in midsummer heat, it is a common practice of landscape professionals and gardeners to prune plants at that time in order to get them to produce a new flush of growth and promote flowering. Since all plants are treated in the same manner for purposes of the evaluation, we pruned all the *petunias*, including *Purple Wave*. *Purple Wave* did not appear to need pruning nor did it respond well. Several plants declined and one died. At the time of pruning, *Purple Wave* had an average rating of 5. It may have kept that high rating without pruning. These results indicate that *Purple Wave* should not be pruned at mid-season.

Also performing well, *Celosia plumosa Pink Candle* provided an interesting floral display in the landscape, with a pale rose-colored spiked flower on 2.5-foot stems. This flower performs well as a fresh or dried cut flower in the experience of several gardeners. It received an average rating of 3 in 1995, even under the unusual stress of this summer. An impressive display was given by *Verbena speciosa Imagination* (3.4), with its purple and rose flowers and lacy foliage.

Of the 34 marigold cultivars evaluated, *Antigua Mixed* was rated the highest (3). *Inca Yellow* and *Perfection Gold* were rated second highest (both 2.8). The best-performing *gomprena* cultivar was *Bicolor Rose* (2.6). *Zinnia linearis White Star* (2.6) was the best *zinnia*. Both *melampodium* entries performed relatively well — *Derby* (3) and *Showstar* (2.8).

For consistency, all sunflower cultivars were planted from plugs like the other plants being evaluated. However, since poor performance was expected from transplanted sunflowers, three cultivars were also direct seeded. Although some produced single flowers, the plugged sunflowers grew spindly and performed less well than the direct-seeded flowers. Direct-seeded sunflowers grew strong and tall, producing one to three flowers per plant.

Of the 56 cultivars of *impatiens*, none ranked 3 or above. This was due in part to an early season infestation of *pythium* and *phytophthora* root rot that devastated most cultivars, severely skewing the results. Only three cultivars finished the study with all eight test plants alive. All plants of 16 cultivars died; nine cultivars finished with one or two surviving plants. Top three *impatiens* included *Impatiens Novette Pink Star* (2.7), *Impulse Pink Blush* (2.6), and *Accent Deep Pink* (2.5).

Photographs on pages 11 - 14 illustrate many of the top-performing plants. Table 2 presents the height and overall rating of each flower in the trials (pages 5 - 10). Figures on pages 15 -25 plot the ratings of selected cultivars throughout the growing season.

TABLE 2. HEIGHT AND AVERAGE RATING FOR FLOWERS GROWN
IN THE 1995 SUMMER TRIAL GARDEN

Genus species	Variety	Source ¹	Height ²	Avg. rating ³
Ageratum	Neptune Blue	Gold	24.8	2.5
Ageratum	Neptune White	Gold	14.7	1.5
Ageratum	Think Pink	Grimes	37.0	2.4
Canna	Tropical Rose	AAS	61.3	1.3
Celosia cristata	Chief Mixed	Sakata	0.0	1.6
Celosia globosa	Sparkler Wine	Sakata	0.0	1.3
Celosia globosa	Sparkler Mixed	Sakata	0.0	1.3
Celosia plumosa	Kimono Mixed	Sakata	0.0	1.8
Celosia plumosa	Castle Mix	Takii	0.0	1.3
Celosia plumosa	Dance Ballet Mix	Grimes	0.0	1.5
Celosia plumosa	Apricot Brandy	Sakata	0.0	1.5
Celosia plumosa	Germans Dwarf Mixture	Grimes	0.0	1.5
Celosia plumosa	Forest Fire Improved	Sakata	0.0	1.3
Celosia plumosa	Pink Candle	Takii	85.0	3.0
Gaillardia	Red Plume	AAS	27.0	1.1
Gomphrena	Gnome Pink	Sakata	32.0	2.0
Gomphrena	Bicolor Rose	Takii	66.2	2.6
Gomphrena	Gnome Purple	Sakata	40.5	1.8
Gomphrena	Gnome White	Sakata	0.0	1.9
Impatiens	Blitz 2000 Rose Star	Sluis	0.0	0.8
Impatiens	Deco Rose	PanAm	27.8	1.3
Impatiens	Novette Rose Star	Sluis	32.7	1.0
Impatiens	Blitz 2000 Rose	Sluis	34.0	1.2
Impatiens	Accent Rose	Gold	31.0	1.2
Impatiens	Impulse Bright Eye	Sluis	34.7	1.3
Impatiens	Accent Lilac	Gold	33.9	2.1
Impatiens	Accent Lavender Blue	Gold	25.5	0.7
Impatiens	Accent Violet	Gold	33.8	2.0
Impatiens	Impulse Lilac	Sluis	20.5	0.7
Impatiens	Super Elfin Lavender	PanAm	22.0	0.7
Impatiens	Deco Violet	PanAm	30.0	0.7
Impatiens	Super Elfin Lilac	PanAm	21.5	0.8
Impatiens	Impulse Lilac Blue	Sluis	29.5	0.7
Impatiens	Accent Pastel Mix	Gold	31.6	1.5
Impatiens	Accent Mystic Mix	Gold	31.8	1.3
Impatiens	Impulse Mix	Sluis	37.7	1.0
Impatiens	Accent Sunrise Mix	Gold	27.7	0.8
Impatiens	Blitz 2000 Formula Mix	Sluis	38.7	1.1
Impatiens	Novette Star Mix	Sluis	38.0	0.6
Impatiens	Accent Star Mix	Gold	39.0	1.0
Impatiens	Blitz 2000 Light Pink	Sluis	41.5	1.3
Impatiens	Accent Deep Pink	Gold	43.3	2.5

¹ Seed sources: All-America Selections (AAS); American Takii; Benary; Ball Seed; Goldsmith (Gold); Pan American (PanAm); Sakata; American Sluis; Waller; and Grimes.

² Height was measured in centimeters at the termination of the study (10 centimeter is about four inches). Zero height indicates insufficient plants to calculate terminal height.

³ Rating Scale: 0 = plant died; 1 = small foliage display, no flowers; 2 = adequate foliage, no flowers or few buds; 3 = adequate to large foliage, relatively small floral display; 4 = sufficient foliage and flowers to be attractive in the landscape; and 5 = superior floral display, sufficient foliage.

TABLE 2, CONTINUED. HEIGHT AND AVERAGE RATING FOR FLOWERS
GROWN IN THE 1995 SUMMER TRIAL GARDEN

Genus species	Variety	Source ¹	Height ²	Avg. rating ³
Impatiens	Impulse Pink	Sluis	38.0	1.3
Impatiens	Deco Pink	PanAm	29.8	1.2
Impatiens	Impulse Pink Blush	Sluis	36.9	2.6
Impatiens	Novette Pink Star	Sluis	38.3	2.7
Impatiens	Pink Swirl	PanAm	31.0	1.8
Impatiens	Blitz 2000 Pink	Sluis	40.0	2.2
Impatiens	Impulse Red	Sluis	41.5	2.1
Impatiens	Sun & Shade Cranberry	Grimes	0.0	0.2
Impatiens	Accent Burgundy	Gold	27.8	1.1
Impatiens	Deco Burgundy	PanAm	0.0	0.4
Impatiens	Blitz 2000 Red	Sluis	34.8	1.6
Impatiens	Deco Red	PanAm	23.8	1.3
Impatiens	Accent Cranberry	Gold	37.0	1.3
Impatiens	Super Elfin Red Velvet Im	PanAm	29.5	0.9
Impatiens	Super Elfin Scarlet Imp.	PanAm	26.0	0.6
Impatiens	Accent Red	Gold	29.0	1.3
Impatiens	Sun & Shade Royal Red	Grimes	25.0	0.8
Impatiens	Blitz Salmon	Sluis	50.6	2.0
Impatiens	Super Elfin Apricot	PanAm	29.0	0.5
Impatiens	Peach Swirl	PanAm	34.5	1.2
Impatiens	Impulse Salmon	Sluis	0.0	1.0
Impatiens	Deco Salmon	PanAm	0.0	0.4
Impatiens	Coral Swirl	PanAm	0.0	0.7
Impatiens	Impulse Salmon Orange	Sluis	0.0	0.7
Impatiens	Accent Salmon	Gold	0.0	0.1
Impatiens	Accent White	Gold	0.0	0.5
Impatiens	Impulse White	Sluis	0.0	0.2
Impatiens	Blitz 2000 White	Sluis	0.0	0.3
Impatiens	Exp. Crystal Deco	PanAm	0.0	0.2
Impatiens	Accent Orange	Gold	0.0	0.2
Impatiens	Blitz Orange	Sluis	0.0	0.6
Impatiens	Impulse Orange Bicolour	Sluis	0.0	0.8
Impatiens	Deco Orange	PanAm	0.0	0.4
Marigold	Antigua Primrose	Gold	0.0	2.3
Marigold	Bonanza Flame Imp.	PanAm	0.0	1.7
Marigold	Girl Flame Scarlet	Grimes	0.0	1.5
Marigold	Aurora Red	Waller	29.0	1.9
Marigold	Excel Primrose	Gold	0.0	2.4
Marigold	Perfection Yellow	Gold	0.0	2.4
Marigold	Antigua Yellow	Gold	0.0	2.1
Marigold	Inca Yellow	Gold	61.5	2.8

¹ Seed sources: All-America Selections (AAS); American Takii; Benary; Ball Seed; Goldsmith (Gold); Pan American (PanAm); Sakata; American Sluis; Waller; and Grimes.

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TABLE 2, CONTINUED. HEIGHT AND AVERAGE RATING FOR FLOWERS
GROWN IN THE 1995 SUMMER TRIAL GARDEN

Genus species	Variety	Source ¹	Height ²	Avg. rating ³
Marigold	Inca Gold	Gold	0.0	2.6
Marigold	American Indian Yellow	Grimes	0.0	2.1
Marigold	Antigua Gold	Gold	0.0	2.5
Marigold	Perfection Gold	Gold	0.0	2.8
Marigold	Bonanza Gold Imp	PanAm	37.1	2.4
Marigold	Bonanza Yellow	PanAm	43.8	2.2
Marigold	Bonanza Spry	PanAm	33.0	2.3
Marigold	Aurora Light Yellow	Waller	34.1	2.6
Marigold	Bonanza Bee	PanAm	29.7	2.2
Marigold	Bounty Yellow	Sakata	29.7	2.2
Marigold	Janie Bright Yellow	Waller	25.5	2.5
Marigold	Bounty Gold	Sakata	38.2	2.6
Marigold	Excel Yellow	Gold	0.0	2.4
Marigold	Excel Gold	Gold	0.0	2.3
Marigold	Perfection Orange	Gold	55.7	2.6
Marigold	Inca Orange	Gold	61.4	2.5
Marigold	Antigua Orange	Gold	0.0	0.0
Marigold	Aurora Orange	Waller	43.3	2.1
Marigold	Janie Tangerine	Waller	27.5	2.3
Marigold	Bonanza Harmony	PanAm	45.3	2.7
Marigold	Bonanza Deep Orange	PanAm	37.0	1.9
Marigold	Bounty Flame	Sakata	29.5	2.0
Marigold	Excel Orange	Gold	0.0	2.7
Marigold	Antigua Mix	Gold	0.0	2.3
Marigold	Bounty Mixed	Sakata	33.5	2.4
Marigold	Janie Mixed	Waller	35.5	2.5
Marigold	Aurora Mixed	Waller	35.4	3.0
Melampodium	Derby	Benary	49.5	3.0
Melampodium	Showstar	Ball	43.2	2.8
Nicotiana	Domino Salmon Pink	Ball	35.6	2.4
Nirembergia	Mont Blanc	AAS	12.7	2.5
Petunia	Primetime Blues Mixture	Gold	25.8	2.4
Petunia	Primetime Mid Blue	Gold	25.6	2.4
Petunia	Primetime Blue	Gold	32.5	2.8
Petunia	Primetime Light Blue	Gold	22.0	1.8
Petunia	Merlin Blue	Sakata	21.1	2.6
Petunia	Merlin Blue Picotee	Sakata	16.4	2.1
Petunia	Fantasy Blue	Gold	19.7	3.1
Petunia	Ultra Blue	Gold	24.5	1.6
Petunia	Ultra Sky Blue	Gold	20.8	1.9

¹ Seed sources: All-America Selections (AAS); American Takii; Benary; Ball Seed; Goldsmith (Gold); Pan American (PanAm); Sakata; American Sluis; Waller; and Grimes.

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TABLE 2, CONTINUED. HEIGHT AND AVERAGE RATING FOR FLOWERS
GROWN IN THE 1995 SUMMER TRIAL GARDEN

Genus species	Variety	Source ¹	Height ²	Avg. rating ³
Petunia	Blue Flash	Sluis	19.6	2.4
Petunia	Hulahoop Blue	Sakata	13.0	2.1
Petunia	Polo Orchid Veined	Sluis	25.8	1.9
Petunia	Heavenly Lavender	Gold	23.4	2.1
Petunia	Lavender Storm	Gold	21.4	2.3
Petunia	Primetime Lavender	Gold	27.8	2.7
Petunia	Primetime Fiesta Mixture	Gold	29.4	2.2
Petunia	Ultra Mixture	Gold	21.4	2.0
Petunia	Flash Mix	Sluis	19.4	2.1
Petunia	Primetime Mixture	Gold	25.1	2.6
Petunia	Merlin Rose Morn	Sakata	21.3	2.6
Petunia	Ultra Rose	Gold	20.9	2.1
Petunia	Merlin Rose	Sakata	25.4	2.5
Petunia	Rose Flash	Sluis	22.0	2.2
Petunia	Primetime Rose Frost	Gold	24.2	2.2
Petunia	Merlin Rose Picotee	Sakata	17.4	2.1
Petunia	Merlin Cherry Rose	Sakata	19.5	2.1
Petunia	Rose/White Flash	Sluis	19.7	1.8
Petunia	Fantasy Pink	Gold	19.9	3.5
Petunia	Celebrity Chiffon Morn	AAS	22.0	2.6
Petunia	Ultra Pink	Gold	18.6	2.3
Petunia	Pink Flash	Sluis	27.0	2.3
Petunia	Primetime Twilight	Gold	27.7	2.4
Petunia	Primetime Crystals	Gold	23.3	2.6
Petunia	Primetime Pink Morn	Gold	22.6	2.5
Petunia	Fantasy Pink Morn	Gold	15.0	2.4
Petunia	Pink Centre Flash	Sluis	17.0	2.3
Petunia	Merlin Pink Morn	Sakata	22.6	2.1
Petunia	Ultra Light Pink Veined	Gold	22.2	2.2
Petunia	Merlin Burgundy Picotee	Sakata	22.7	2.0
Petunia	Primetime Scarlet	Gold	26.3	2.3
Petunia	Merlin Red Picotee	Sakata	24.4	1.8
Petunia	Polo Red	Sluis	22.1	2.0
Petunia	Primetime Red Frost	Gold	23.0	1.7
Petunia	Primetime Carmine	Gold	25.1	2.5
Petunia	Primetime Red Veined	Gold	21.1	1.9
Petunia	Fantasy Red	Gold	16.4	2.3
Petunia	Polo Velvet	Sluis	23.5	3.0
Petunia	Merlin Red	Sakata	16.1	2.2
Petunia	Velvet Flash	Sluis	21.7	1.6
Petunia	Polo Red Target	Sluis	19.6	2.3
Petunia	Red Flash	Sluis	18.8	1.8

¹ Seed sources: All-America Selections (AAS); American Takii; Benary; Ball Seed; Goldsmith (Gold); Pan American (PanAm); Sakata; American Sluis; Waller; and Grimes.

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GROWN IN THE 1995 SUMMER TRIAL GARDEN

Genus species	Variety	Source ¹	Height ²	Avg. rating ³
Petunia	Fantasy Crystal Red	Gold	17.3	2.7
Petunia	Ultra Red	Gold	19.3	1.9
Petunia	Hulahoop Red	Sakata	21.5	2.0
Petunia	Hulahoop Burgundy	Sakata	16.5	2.0
Petunia	Ultra Scarlet	Gold	21.5	1.8
Petunia	Cherry Frost	Gold	23.4	2.0
Petunia	Ultra Burgundy	Gold	22.0	2.1
Petunia	Ultra Crimson Star	Gold	17.6	2.1
Petunia	Coral Flash	Sluis	19.5	1.8
Petunia	Primetime Salmon	Gold	20.3	2.3
Petunia	Polo Salmon	Sluis	19.8	2.2
Petunia	Primetime Salmon Morn	Gold	27.1	2.7
Petunia	Merlin Salmon	Sakata	21.0	2.6
Petunia	Fantasy Salmon	Gold	17.5	2.7
Petunia	Salmon Flash	Sluis	22.6	2.5
Petunia	Ultra Salmon	Gold	21.5	2.2
Petunia	Ultra Plum	Gold	22.4	2.1
Petunia	Hulahoop Velvet	Sakata	18.9	2.1
Petunia	Purple Wave	AAS	14.2	3.1
Petunia	Purple White Flash	Sluis	20.2	1.5
Petunia	Merlin White Improved	Sakata	18.8	2.3
Petunia	Primetime White	Gold	22.0	2.1
Petunia	Ultra White	Gold	19.0	1.3
Petunia	Polo White	Sluis	29.0	2.6
Petunia	White Flash	Sluis	20.5	1.5
Phlox drummondii	Palona White with Eye	Sluis	0.0	1.2
Phlox drummondii	Palona Carmine	Sluis	0.0	1.0
Phlox drummondii	Palona Deep Salmon	Sluis	14.0	1.4
Phlox drummondii	Palona Lightblue	Sluis	0.0	1.0
Portulaca	Sundial Orange	Ball	12.7	2.9
Portulaca	Sundial Gold	Ball	12.9	3.2
Rudbeckia	Becky Mix	Takii	17.5	1.0
Rudbeckia hirta	Indian Summer	AAS	0.0	0.9
Salvia coccinea	Lady in Red	AAS	71.4	2.5
Salvia farinacea	Reference	Benary	34.0	3.2
Salvia farinacea	Victoria White	Ball	38.2	2.8
Salvia farinacea	Victoria Blue	Ball	37.5	3.5
Salvia farinacea	Reniassance	Sluis	37.0	0.9
Salvia splendens	Firecracker Red	Grimes	30.3	2.5
Salvia splendens	Landscaper Bright Scarlet	Grimes	29.9	2.6
Salvia splendens	Cover Girl	Benary	32.5	2.3
Statice	Friendly Yellow	Takii	42.6	2.2

¹ Seed sources: All-America Selections (AAS); American Takii; Benary; Ball Seed; Goldsmith (Gold); Pan American (PanAm); Sakata; American Sluis; Waller; and Grimes.

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TABLE 2, CONTINUED. HEIGHT AND AVERAGE RATING FOR FLOWERS
GROWN IN THE 1995 SUMMER TRIAL GARDEN

Genus species	Variety	Source ¹	Height ²	Avg. rating ³
Statice	Z Scape Queen Sage Rose	Grimes	10.5	2.0
Statice	Premium Carmine	Grimes	30.8	2.0
Statice	Premium Apricot	Grimes	35.4	1.8
Statice	Premium Blue	Grimes	23.6	1.8
Statice	Light Pink Shades	Sakata	23.5	2.0
Statice	Petite Bouquet Mixed	Waller	15.4	1.9
Statice	Tall Excellent Mixed	Sakata	32.5	1.1
Sunflower	Sunbeam	Sakata	0.0	1.1
Sunflower	Sunbright	Sakata	0.0	0.8
Sunflower	Moonbright	Sakata	0.0	0.7
Sunflower	Premium Yellow Branching	Grimes	0.0	0.9
Sunflower (seeded)	Sunbeam	Sakata	84.0	-
Sunflower (seeded)	Sunbright	Sakata	120.0	-
Sunflower (seeded)	Moonbright	Sakata	122.0	-
Verbena	Peaches and Cream	AAS	23.5	2.4
Verbena speciosa	Imagination	Benary	26.4	3.4
Vinca	Grape Cooler	PanAm	47.9	3.9
Vinca	Orchid Cooler	PanAm	47.5	3.8
Vinca	Pacifica Lilac	Waller	40.3	3.3
Vinca	Blush Cooler	PanAm	45.6	4.1
Vinca	Rose Cooler	PanAm	42.1	3.9
Vinca	Pacifica Punch	Waller	48.6	4.1
Vinca	Pacifica Polka Dot	Waller	41.6	3.9
Vinca	Pretty in Rose	AAS	46.6	4.0
Vinca	Peppermint Cooler	PanAm	47.0	4.0
Vinca	Pink Cooler	PanAm	50.8	3.7
Vinca	Icy Pink Cooler	PanAm	44.6	3.7
Vinca	Parasol	AAS	57.6	3.7
Vinca	Pacifica Red	Waller	44.6	3.9
Vinca	Pacifica Blush	Waller	40.4	3.5
Vinca	Apricot Delight	Waller	36.0	3.7
Vinca	Pacifica White	Waller	36.8	3.7
Zinnia	Short Stuff Scarlet	Gold	18.3	1.4
Zinnia	Short Stuff Orange	Gold	21.8	1.7
Zinnia	Short Stuff Gold	Gold	20.5	1.3
Zinnia	Short Stuff Mixture	Gold	21.0	1.6
Zinnia	Short Stuff White	Gold	20.0	1.0
Zinnia	Short Stuff Deep Red	Gold	15.5	0.9
Zinnia	Short Stuff Coral	Gold	27.0	1.6
Zinnia linearis	Starbright Mix	Ball	0.0	2.2
Zinnia linearis	Orange Star	Ball	0.0	2.1
Zinnia linearis	White Star	Ball	57.0	2.6

¹ Seed sources: All-America Selections (AAS); American Takii; Benary; Ball Seed; Goldsmith (Gold); Pan American (PanAm); Sakata; American Sluis; Waller; and Grimes.

² Height was measured in centimeters at the termination of the study (10 centimeter is about four inches). Zero height indicates insufficient plants to calculate terminal height.

³ Rating Scale: 0 = plant died; 1 = small foliage display, no flowers; 2 = adequate foliage, no flowers or few buds; 3 = adequate to large foliage, relatively small floral display; 4 = sufficient foliage and flowers to be attractive in the landscape; and 5 = superior floral display, sufficient foliage.



Vinca Blush Cooler



Petunia Purple Wave



Celosia plumosa Pink Candle



Gomphrena Bicolor Rose



Marigold Bonanza Harmony



Marigold Excel Orange



Marigold Perfection Gold



Melampodium Derby



Melampodium Showstar



Nicotiana Domino Salmon Pink



Niremburgia Mont Blanc



Petunia Fantasy Blue



Petunia Fantasy Pink



Petunia Polo Velvet



Portulaca Sundial Gold



Rudbeckia Indian Summer



Salvia coccinea Lady in Red



Salvia farinacea Reference



Salvia farinacea Victoria Blue



Salvia farinacea Victoria White



Verbena x Speciosa Imagination



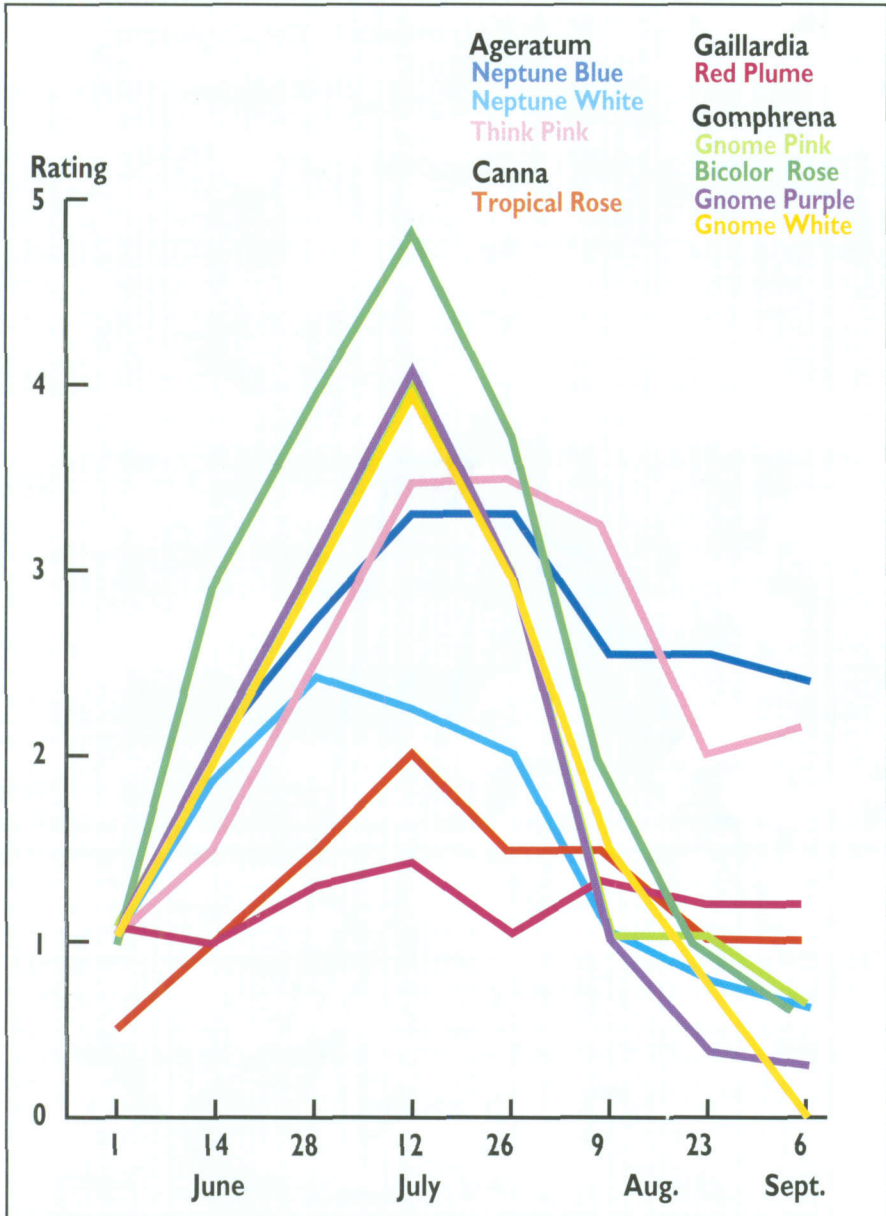
Vinca Pacifica Red



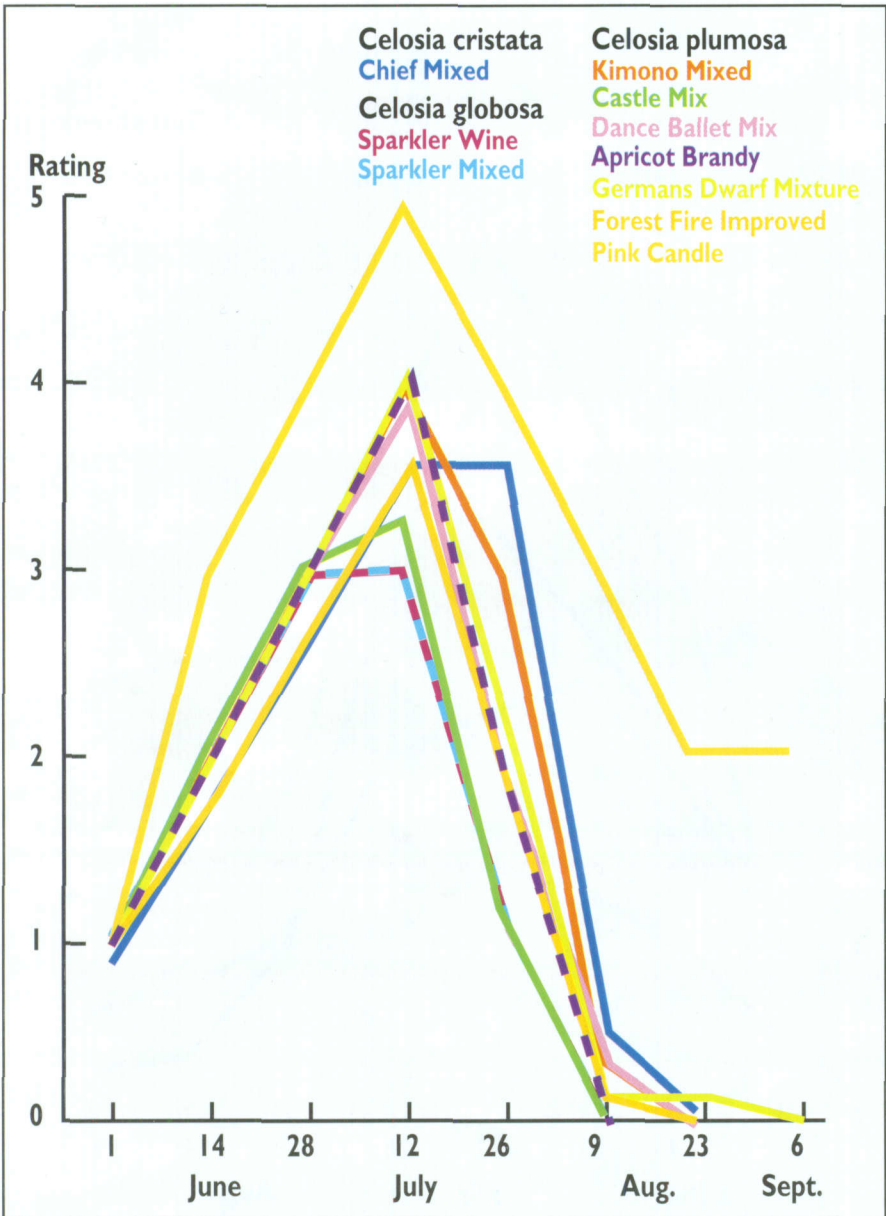
Vinca Pretty in Rose



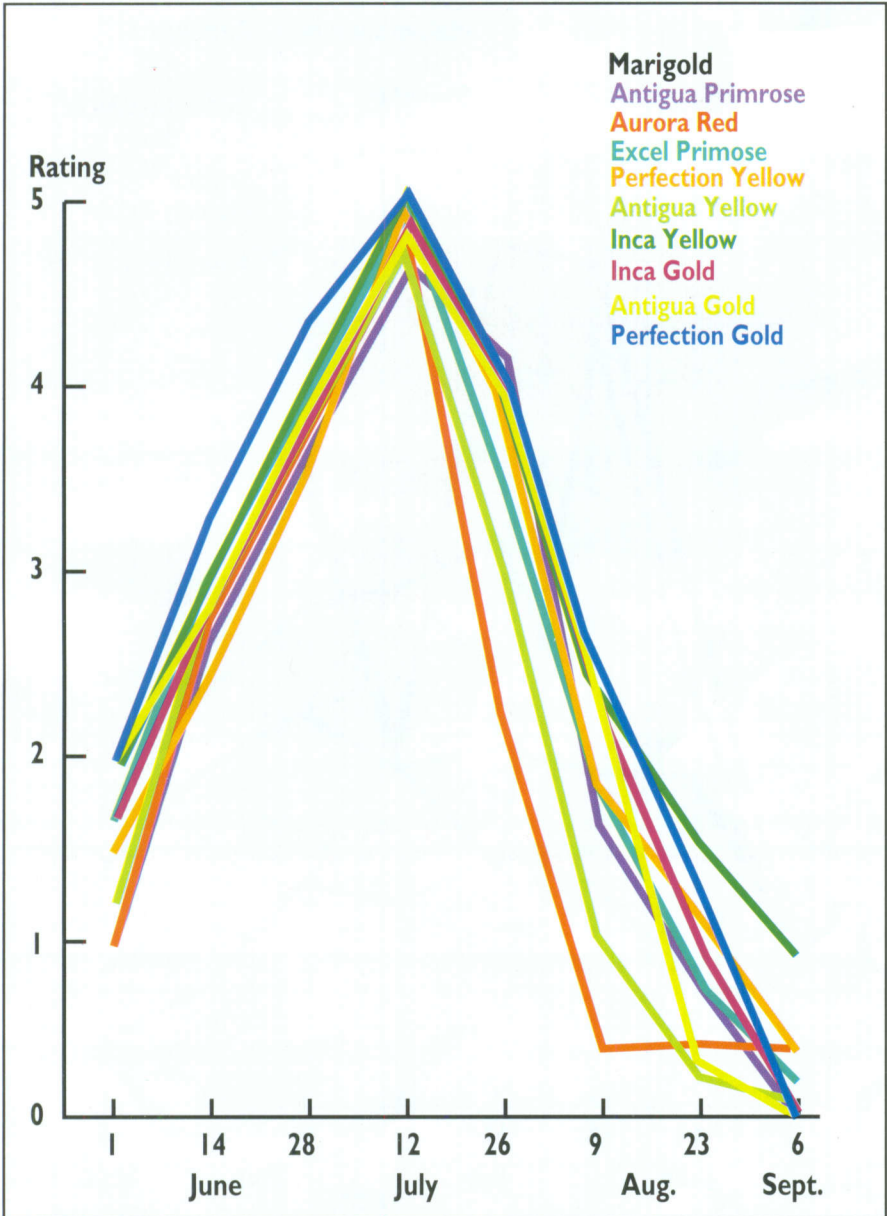
Zinnia linearis White Star



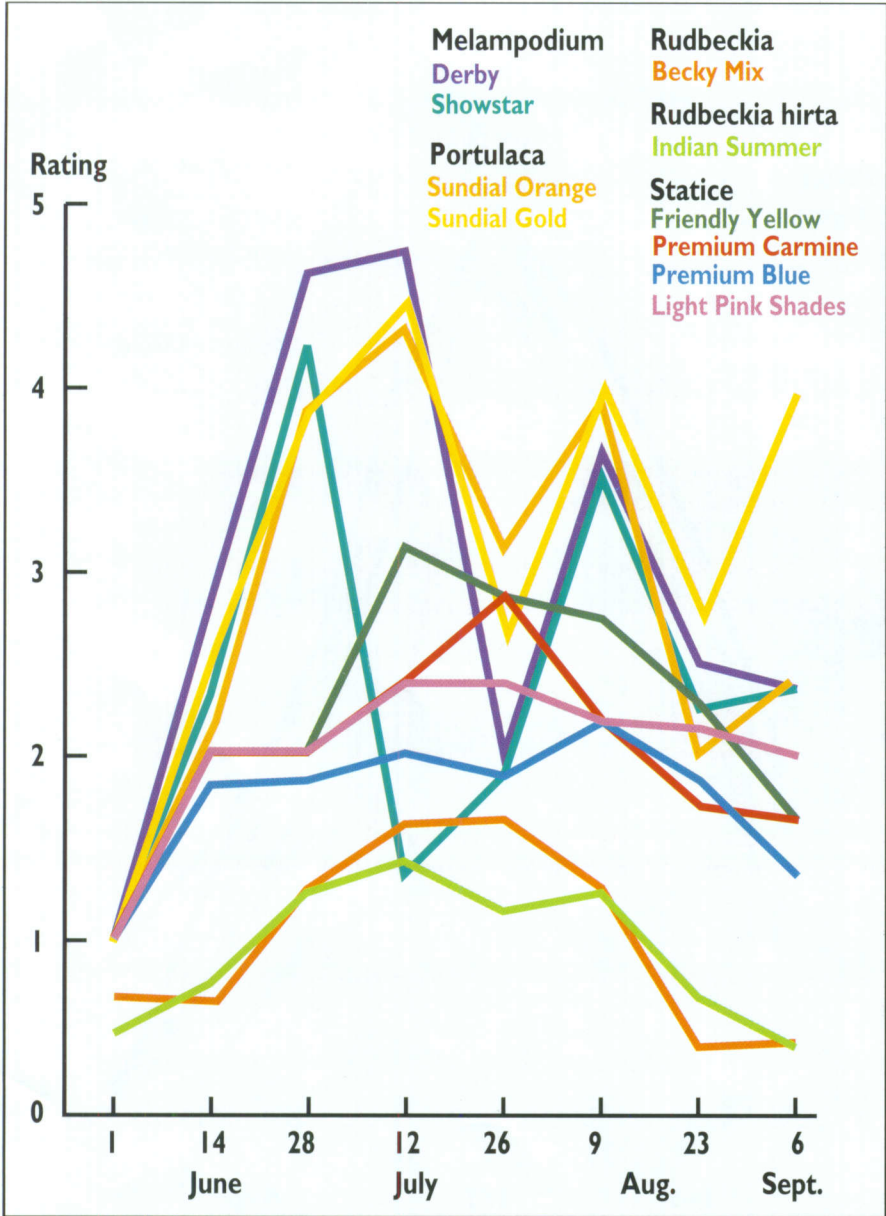
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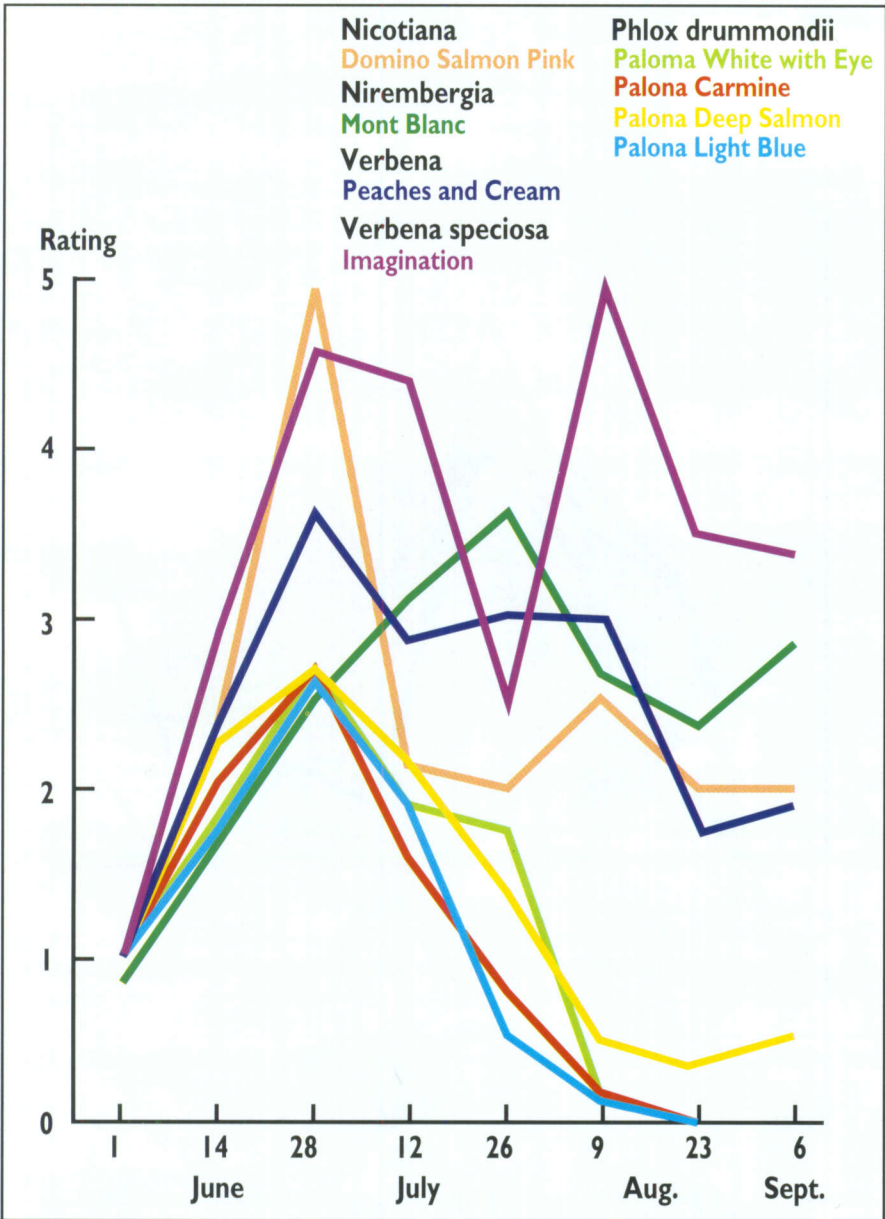
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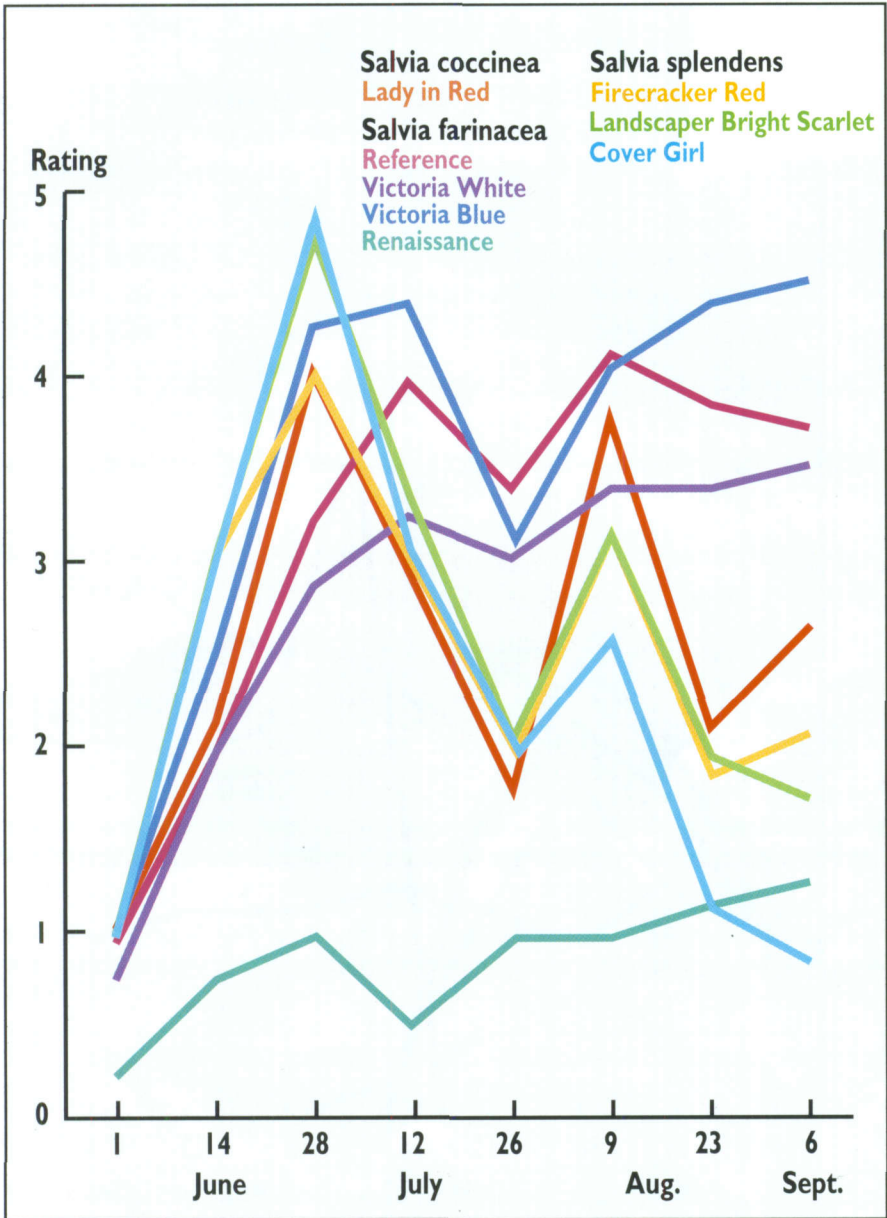
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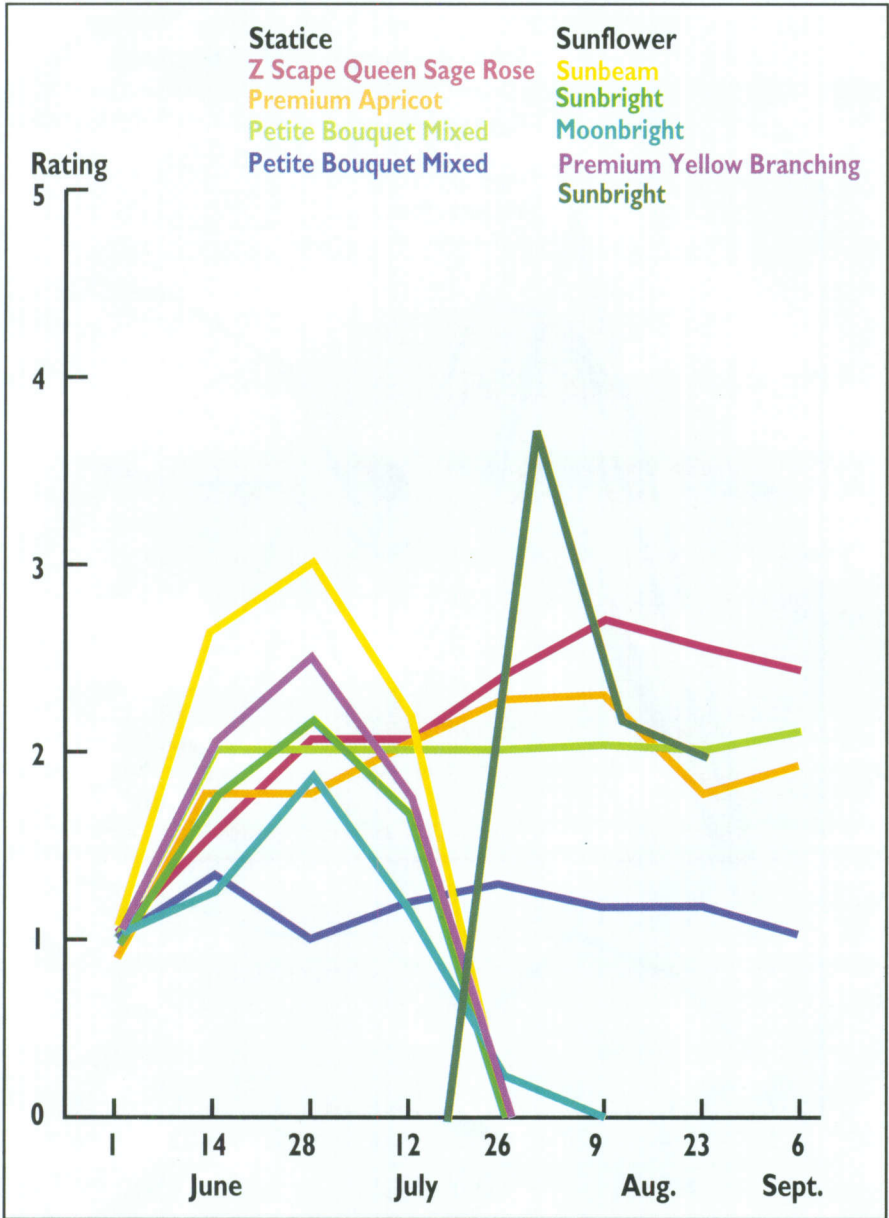
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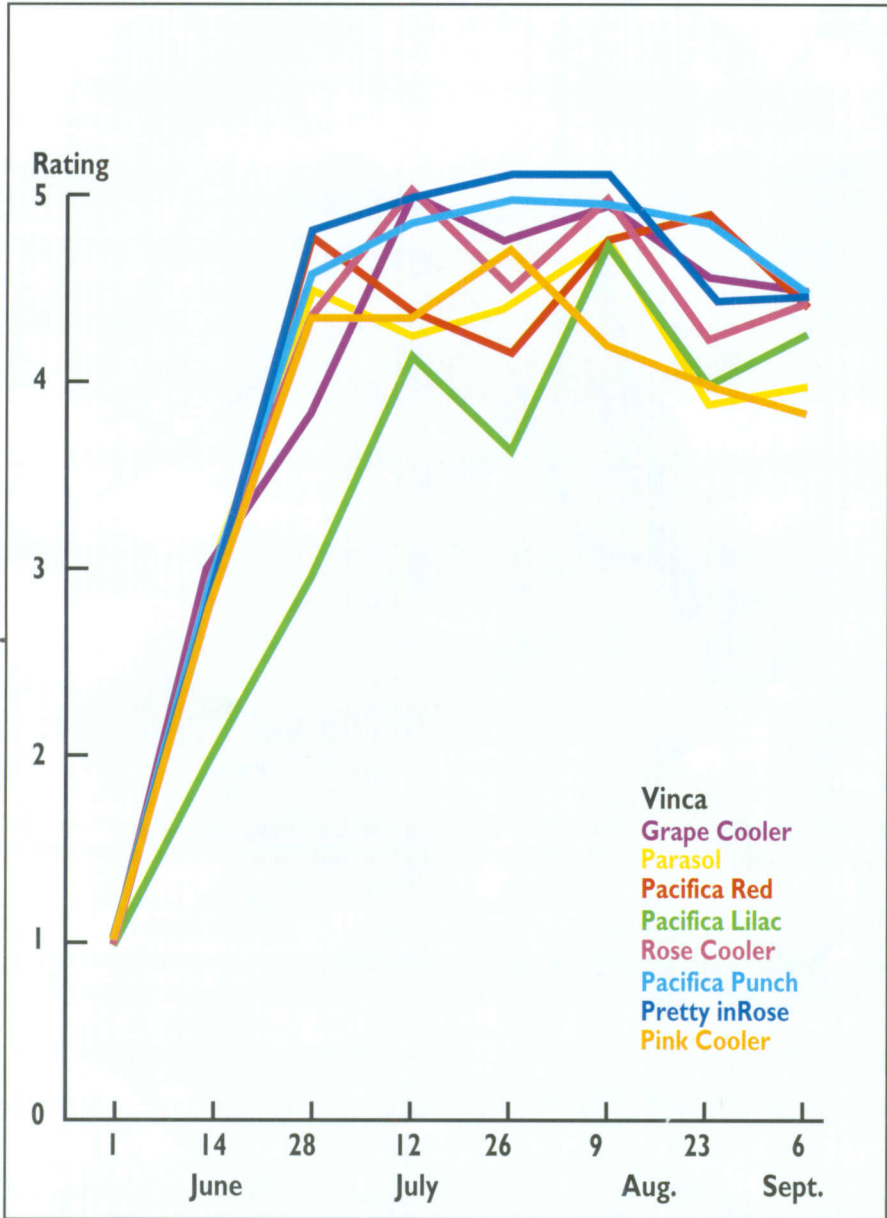
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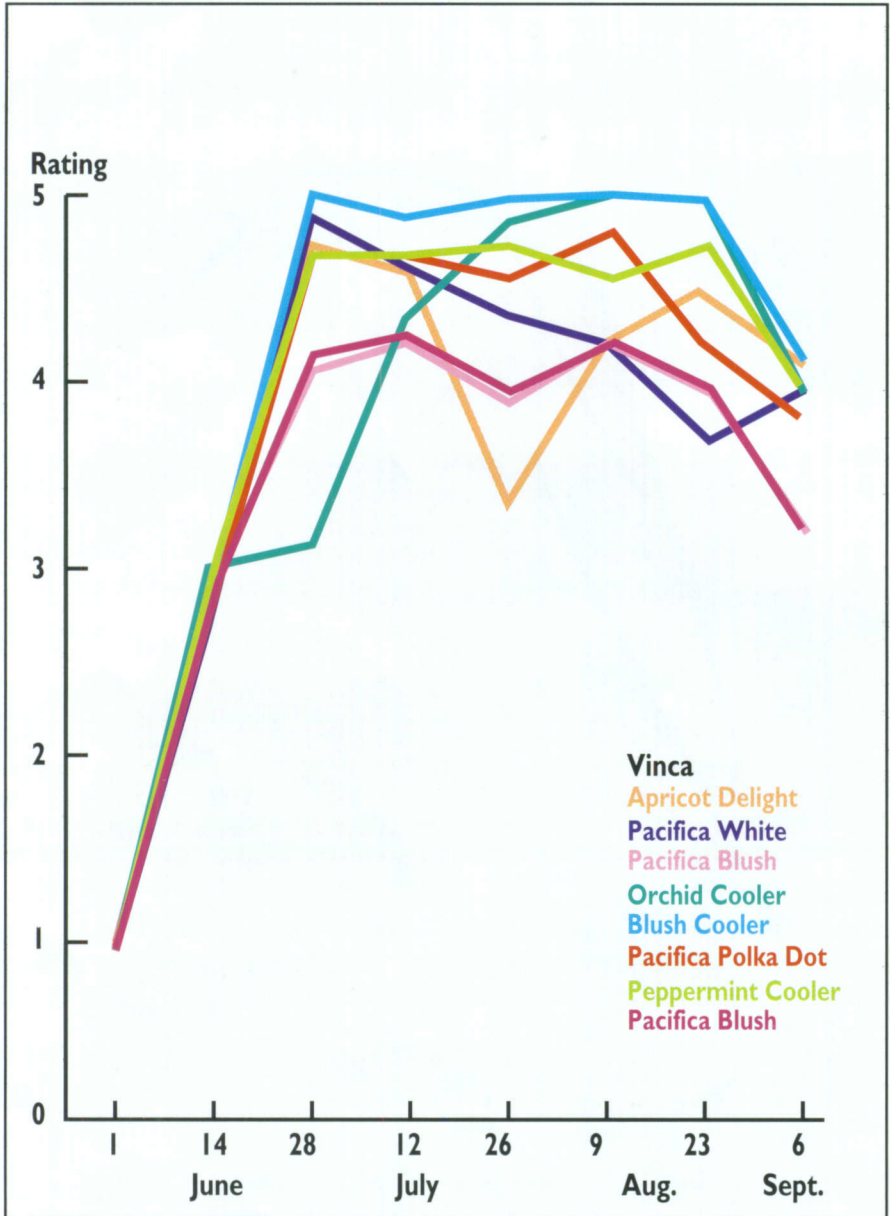
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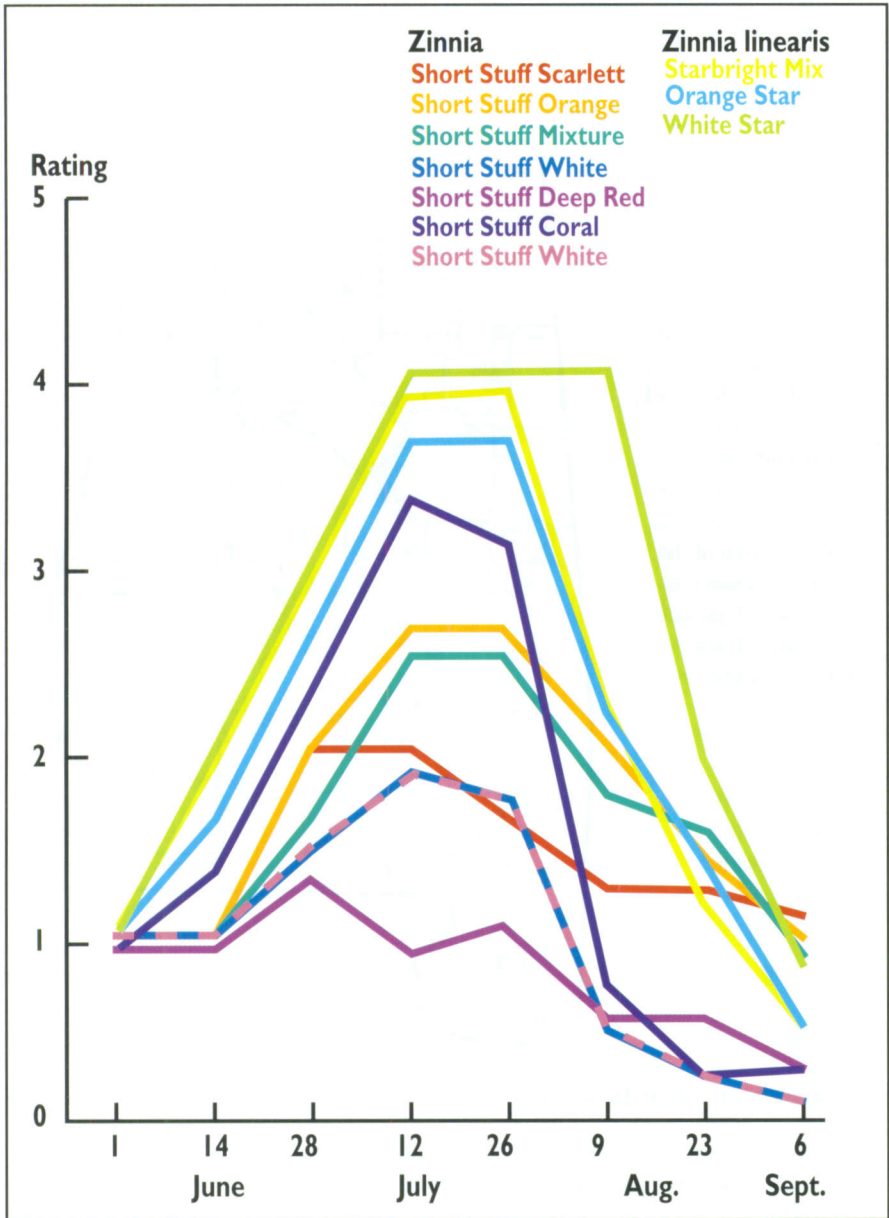
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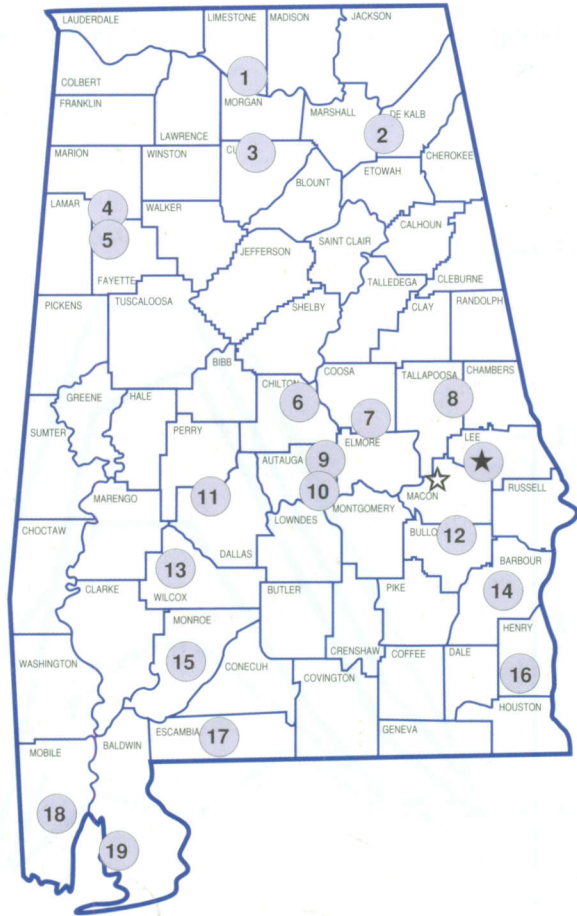


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Alabama's Agricultural Experiment Station System

AUBURN UNIVERSITY

With an agricultural research unit in every major soil area, Auburn University serves the needs of field crop, livestock, forestry, and horticultural producers in each region in Alabama. Every citizen of the state has a stake in this research program, since any advantage from new and more economical ways of producing and handling farm products directly benefits the consuming public.



Research Unit Identification

- ★ Main Agricultural Experiment Station, Auburn.
- ☆ E. V. Smith Research Center, Shorter.

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| <ul style="list-style-type: none"> 1. Tennessee Valley Substation, Belle Mina. 2. Sand Mountain Substation, Crossville. 3. North Alabama Horticulture Substation, Cullman. 4. Upper Coastal Plain Substation, Winfield. 5. Forestry Unit, Fayette County. 6. Chilton Area Horticulture Substation, Clanton. 7. Forestry Unit, Coosa County. 8. Piedmont Substation, Camp Hill. 9. Forestry Unit, Autauga County. 10. Prattville Experiment Field, Prattville. | <ul style="list-style-type: none"> 11. Black Belt Substation, Marion Junction. 12. The Turnipseed-Ikenberry Place, Union Springs. 13. Lower Coastal Plain Substation, Camden. 14. Forestry Unit, Barbour County. 15. Monroeville Experiment Field, Monroeville. 16. Wiregrass Substation, Headland. 17. Brewton Experiment Field, Brewton. 18. Ornamental Horticulture Substation, Spring Hill. 19. Gulf Coast Substation, Fairhope. |
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