

2011 Spring/Summer Ornamental Trial -- Crystal Springs, MS

Guihong Bi and Robert C. Cheroni
Mississippi State University - Truck Crops Branch Experiment Station
Crystal Springs, MS 39059

Abstract

An ornamental trial was conducted to evaluate 204 cultivars in central Mississippi. All entries were grown from seed or vegetatively propagated material. Raised landscape beds were prepared using accepted regional methods. Planting into beds began on April 11, 2011 and was completed on April 29, 2011. Plants were given an overall rating based on insect and disease resistance, vigor, flowering, and foliage color. Each cultivar was rated once every two weeks from mid-May to late July when pruning or termination was necessary, depending on each cultivar. The rating range was 0 to 5, where 5 is optimum and 0 is death. Weeds were controlled by hand. Insecticides/fungicides were generally not applied to plants. Water was supplied through drip irrigation as needed. This year the temperatures in Mississippi were hotter than normal. It was very dry and hot in late spring and most of the summer. Weather conditions proved to be conducive to exceptional performance for many of the entries in this trial. The top performing cultivars for 2011 were Hibiscus ‘Mahogany Splendor’ from PanAmerican Seed; Ipomoea Sweet Caroline series and Illusion series from Proven Winners, and Sidekick Lime from Syngenta Flowers; Cleome Seniorita Rosalita from Proven Winners; Cyperus Papyrus King Tut from Proven Winners; Lantana Luscious Lemonade and Citrus Blend from Proven Winners, and Bandana Trailing Gold from Syngenta Flowers; Pennisetum Vertigo from Proven Winners; New Guinea impatiens SunPatiens Spreading Corona, Vigorous Orange, Vigorous White, Compact Coral, Compact White, and Compact Blush Pink from Sakata.

Introduction

This ornamental trial was conducted to evaluate the performance of a wide variety of bedding and garden plants in our southeastern climate. This trial strives to provide timely information to assist commercial producers in decision-making and serve as a resource for horticultural professionals, educators, and home gardeners in Mississippi and surrounding areas in the southeastern USA.

Materials and Methods

This ornamental trial was conducted to evaluate 204 cultivars at the Truck Crops Branch Experiment Station in Crystal Springs, Mississippi (USDA Zone 8b). All entries were grown from seed or vegetatively propagated material. Seeds were sown in 72 cell plug trays filled with Fafard Germinating Mix (Fafard, Inc.), and vegetative plants were received as rooted plugs. All plants were transplanted into 3½ inch containers filled with Fafard #3 growing medium (Fafard, Inc.) and grown according to recommendations. Raised landscape beds were prepared by tilling to a depth of 10-12 inches. Slow release fertilizer (17-6-12 Harrell’s) was incorporated into all

beds at a rate of 0.2-lbs/100 ft² (977g/m²). Planting into beds began on April 11, 2011 and was completed on April 29, 2011. Unreplicated plots were planted with 6 to 8 plants per cultivar, depending on growth habit. Upon planting, beds were mulched with 2-3 inches of fresh pinebark. Irrigation was supplied through drip tape as needed. Supplemental water-soluble fertilizer at a rate of 200 ppm N using Peter's Professional 20-10-20 (Scotts Co.) was applied approximately once every two weeks starting from transplanting through June.

Plants were rated based on insect and disease resistance, vigor, flowering, and foliage color. Each cultivar was rated once every two weeks from mid-May to late July. At the end of July, all cultivars were evaluated for the need of pruning and/or termination. Pruning was performed on plants expected to recover and perform well for fall. The rating range is 0 to 5, where 5 = Free of insect and disease damage, vigorous growth, and excellent foliage color and flowering; 4 = Minor to no pest damage, moderate vigor, good foliage and flowering; 3 = Minor pest damage, modest vigor, acceptable foliage and flowering; 2 = Evidence of insect and/or disease, low vigor, foliage is below normal standards, flowering is absent or declining; 1 = Severe damage by insect and/or disease, lacks vigor, foliage color is below normal standards, flowering is absent or declining; and 0 = Dead. Rating averages were determined as the mean of the ratings for a given entry. Plant height (cm) was measured for each cultivar in late July. Plant height was recorded to show the "average" height of each cultivar, not a minimum or maximum.

No herbicides were applied; hand-weeding controlled weeds. Insecticides/fungicides were generally not applied.

Results

In 2011, the temperatures in Mississippi were hotter than normal. It was very dry and hot in late spring and most of the summer. Weather conditions proved to be conducive to exceptional performance for many of the entries in this trial. The top performing cultivars for 2011 were: Hibiscus 'Mahogany Splendor' from PanAmerican Seed; Ipomoea Sweet Caroline series and Illusion series from Proven Winners, and Sidekick Lime from Syngenta Flowers; Cleome Senorita Rosalita from Proven Winners; Cyperus Papyrus King Tut from Proven Winners; Lantana Luscious Lemonade and Citrus Blend from Proven Winners, and Bandana Trailing Gold from Syngenta Flowers; Pennisetum Vertigo from Proven Winners; New Guinea impatiens SunPatiens Spreading Corona, Vigorous Orange, Vigorous White, Compact Coral, Compact White, and Compact Blush Pink from Sakata (Table 1).

Table 2 shows the average ratings of all entries in this trial (See attached Excel file for detailed ratings, plant heights, and weather data).

Table 1. Top performing cultivars based on ratings of 2011 Spring/Summer Ornamental Trial, Crystal Springs, MS^z.

Common Name	Cultivar	Average Rating^y
Hibiscus	Mahogany Splendor	5.0
Ipomoea	Illusion Midnight Lace	4.9
Ipomoea	Sweet Caroline Bewitched Imp	4.9
Ipomoea	Sweet Caroline Raven	4.9
Ipomoea	Sweet Caroline Sweetheart Purple	4.9
Ipomoea	Sweet Caroline Sweetheart Red	4.9
Cleome	Senorita Rosalita	4.8
Cyperus	GG King Tut	4.8
Ipomoea	Illusion Emerald Lace	4.8
Ipomoea	Illusion Garnet Lace	4.8
Ipomoea	Sidekick Lime	4.8
Ipomoea	Sweet Caroline Bronze	4.8
Lantana	Bandana Trailing Gold	4.8
Lantana	Citrus Blend	4.8
Lantana	Luscious Lemonade	4.8
Pennisetum	Vertigo	4.8
SunPatiens	Compact Blush Pink	4.8
SunPatiens	Compact Coral	4.8
SunPatiens	Compact White	4.8
SunPatiens	Spreading Corona	4.8
SunPatiens	Vigorous Orange	4.8
SunPatiens	Vigorous White	4.8

^zPerformance factors included insect and disease resistance, vigor, flowering, and foliage color.

^y Average of performance ratings. Rating scale 0-5:

5 = Free of insect and disease damage, vigorous growth, and excellent foliage color and flowering

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2 = Evidence of insect and/or disease, low vigor, foliage is below normal standards, flowering is absent or declining

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Table 2. Ratings of 2011 Spring/Summer Ornamental Trial, Crystal Springs, MS^z.

Common Name	Cultivar	Average Rating^y
Hibiscus	Mahogany Splendor	5.0
Ipomoea	Illusion Midnight Lace	4.9
Ipomoea	Sweet Caroline Bewitched Imp	4.9
Ipomoea	Sweet Caroline Raven	4.9
Ipomoea	Sweet Caroline Sweetheart Purple	4.9
Ipomoea	Sweet Caroline Sweetheart Red	4.9
Cleome	Senorita Rosalita	4.8
Cyperus	GG King Tut	4.8
Ipomoea	Illusion Emerald Lace	4.8
Ipomoea	Illusion Garnet Lace	4.8
Ipomoea	Sidekick Lime	4.8
Ipomoea	Sweet Caroline Bronze	4.8
Lantana	Bandana Trailing Gold	4.8
Lantana	Citrus Blend	4.8
Lantana	Luscious Lemonade	4.8
Pennisetum	Vertigo	4.8
SunPatiens	Compact Blush Pink	4.8
SunPatiens	Compact Coral	4.8
SunPatiens	Compact White	4.8
SunPatiens	Spreading Corona	4.8
SunPatiens	Vigorous Orange	4.8
SunPatiens	Vigorous White	4.8
Begonia	Whopper Red Brnz Leaf	4.7
Begonia	Whopper Red Grn Leaf	4.7
Begonia	Whopper Rose Brnz Leaf	4.7
Begonia	Whopper Rose Grn Leaf	4.7
Coleus	Colorblaze Alligator Tears	4.7
Coleus	Lancelot Velvet Mocha	4.7
Coleus	Sultana	4.7
Coleus	Wasabi	4.7
Euphorbia	Diamond Frost	4.7
Impatiens	Dazzler Coral Splash	4.7
Impatiens	Impreza Cherry Splash	4.7
Impatiens	Impreza Red	4.7
Impatiens	Impreza Violet	4.7
Impatiens	Impreza White	4.7
Lobularia	Snow Princess	4.7
Petunia	Supertunia Sangria Charm	4.7
Petunia	Supertunia Vista Bubblegum	4.7

Petunia	Supertunia Vista Silverberry	4.7
Salvia Coccinea	Summer Jewels Red	4.7
Sunpatiens	Variegated Spreading Salmon	4.7
SunPatiens	Variegated Vigorous Coral	4.7
SunPatiens	Vigorous Magenta	4.7
Vinca	Nirvana Red	4.7
Vinca	Nirvana Rose	4.7
Euphorbia	Euphoric White	4.6
Gomphrena	Audrey White	4.6
Petunia	Supertunia Raspberry Blast	4.6
Petunia	Whispers Star Rose	4.6
Scaevola	Bombay Dk Blue	4.6
Scaevola	Bombay Pink	4.6
SunPatiens	Compact Lilac	4.6
Cyperus	GG Baby Tut	4.5
Impatiens	Rockapulco Coral Reef	4.5
Lantana	Bandana Lt Yellow	4.5
Lantana	Bandana Peach	4.5
Lantana	Bandana White	4.5
Lantana	Tropical Fruit	4.5
Mecardonia	Gold Dust	4.5
Petunia	Picnic Violet	4.5
Petunia	Suncatcher Pink Lemonade	4.5
SunPatiens	Compact Deep Rose	4.5
SunPatiens	Compact Magenta	4.5
SunPatiens	Compact Orange	4.5
SunPatiens	Varagated Spreading White	4.5
SunPatiens	Vigorous Lavender	4.5
SunPatiens	Vigorous Pink	4.5
Vinca	Nirvana Pink Blush	4.5
Gomphrena	Audrey Bicolor Rose	4.4
Impatiens	Impreza Pink Splash	4.4
Impatiens	Impreza Rose	4.4
Impatiens	Impreza Salmon	4.4
Lantana	Bandana Rose Imp	4.4
Petunia	Picnic White	4.4
Petunia	Supertunia White Russian	4.4
Begonia	Sherbet Bon Bon (container)	4.3
Bidens	Sunbeam	4.3
Calibrachoa	Callie Pure Joy Mix (container)	4.3
Calibrachoa	Superbells Cherry Star (container)	4.3
Coleus	Fuseables Under the Sun	4.3

Echinacea	PowWow White	4.3
Echinacea	PowWow Wild Berry	4.3
Geranium Ivy	Caliente Coral	4.3
Geranium Ivy	Caliente Fire	4.3
Impatiens	Patchwork Lavender	4.3
Marigold	Bonanza Deep Orange	4.3
Petchoa	SuperCal Blue	4.3
Petchoa	SuperCal Neon Rose/Yellow Throat	4.3
Petchoa	SuperCal Pink Ice	4.3
Petchoa	SuperCal Purple	4.3
Petunia	Sun Spun Blue	4.3
Zinnia	Profusion Knee High Red	4.3
Zinnia	Profusion Knee High White	4.3
Calibrachoa	Superbells Apricot Punch (container)	4.2
Calibrachoa	Superbells Coralberry Punch (container)	4.2
Dipladenia	Rio Deep Red	4.2
Impatiens	Super Elfin Salmon Splash XP	4.2
Petunia	Opera Supreme Lavender	4.2
Petunia	Picnic Purple	4.2
Petunia	Sanguna Purple Imp	4.2
SunPatiens	Vigorous Red	4.2
Verbena	Superbena Royale Iced Cherry	4.2
Calibrachoa	Superbells Tequila Sunrise Im (container)	4.1
Gaillardia	Sunrita Scarlet Halo	4.1
Geranium	Frenza Dark Red	4.1
Geranium	Frenza Fire	4.1
Heliotropium	Simply Scentsational	4.1
Lantana	Luscious Grape	4.1
Nierembergia	Blue Skies	4.1
Petchoa	SuperCal Terracotta	4.1
Petunia	Sanguna Yellow	4.1
Torenia	Kauai Burgundy	4.1
Torenia	Kauai Deep Blue	4.1
Torenia	Kauai Rose	4.1
Verbena	Lanai Up Blue w/ Eye	4.1
Verbena	Superbena Burgundy	4.1
Verbena	Superbena Coral Red Imp	4.1
Calibrachoa	Callie Dp Yellow	4.0
Calibrachoa	Callie Purple	4.0
Gaillardia	Mesa Bright Bicolor	4.0
Geranium Ivy	Caliente pink	4.0
Juncus	Blue Mohawk	4.0

Petunia	Fuseables Blue Dawn	4.0
Petunia	Fuseables Vogue	4.0
Petunia	Shock Wave Coral Crush	4.0
Portulaca	Happy Hour Coconut	4.0
Torenia	Kauai Magenta	4.0
Torenia	Kauai White	4.0
Verbena	Lanai Dk Red	4.0
Verbena	Lanai Red	4.0
Verbena	Lanai Up Rose w/ Eye	4.0
Begonia	Inferno Mix (container)	3.9
Calibrachoa	Superbells Blackberry Punch (container)	3.9
Dipladenia	Rio Hot Pink	3.9
Gaillardia	Sunrita Yellow	3.9
Geranium Ivy	Caliente orange	3.9
Geranium Zonal	Allure True Red	3.9
Lantana	Lucky Lemon Glow	3.9
Leycesteria	Jealousy	3.9
Portulaca	Happy Hour Banana	3.9
Portulaca	Happy Hour Fuchsia	3.9
Portulaca	Happy Hour Lemon	3.9
Torenia	Kauai Lemon Drop	3.9
Verbena	Lanai Twister Pink	3.9
Verbena	Magalena White	3.9
Verbena	Superbena Royale Chambray	3.9
Gaillardia	Sunrita Burgundy	3.8
Geranium	Calliope Scarlet Fire	3.8
Impatiens	Impreza Blue Pearl	3.8
Incarvillea	Cheron Pink	3.8
Petunia	Shock Wave Red	3.8
Verbena	Aztec Burgundy	3.8
Angelonia	Serena Blue	3.7
Calibrachoa	Callie White	3.7
Geranium	Americana Cherry Rose	3.7
Geranium	Frenza Hot Coral	3.7
Gerbera	Funtastic Mango	3.7
Portulaca	Happy Hour Deep Red	3.7
Portulaca	Happy Hour Orange	3.7
Portulaca	Happy Hour Peppermint	3.7
Verbena	Lanai Blush White	3.7
Verbena	Tukana Scarlet Star	3.7
Angelonia	Archangel Purple	3.6
Angelonia	Archangel White	3.6

Bidens	Mexican Gold	3.6
Calibrachoa	Callie Bright Red	3.6
Calibrachoa	Callie Rose	3.6
Canna	Tropical Bronze Leaf Scarlet	3.6
Geranium	Americana Dark Red	3.6
Geranium	Americana Violet	3.6
Gerbera	Funtastic Enduring Burgundy	3.6
Verbena	Lanai Peach Imp	3.6
Angelonia	Angelface Pink Imp	3.5
Angelonia	Archangel Pink	3.5
Angelonia	Archangel Raspberry	3.5
Calibrachoa	Callie Coral Pink	3.5
Calibrachoa	Callie Star Pink	3.5
Calibrachoa	Superbells Miss Lilac	3.5
Calibrachoa	Superbells Sweet Tart	3.5
Geranium	Americana Deep Rose	3.5
Geranium	Americana Pink	3.5
Geranium	Americana White	3.5
Geranium	Calliope Dark red	3.5
Geranium	Tango Deep Pink	3.5
NG Impatiens	Infinity Electric Cherry	3.5
NG Impatiens	Infinity Electric Coral	3.5
NG Impatiens	Infinity Salmon Bisque	3.5
Geranium	Rocky Mountain Deep Rose	3.4
Geranium	Tango Red	3.4
Geranium	Tango Salmon	3.4
Geranium Ivy	Caliente Hot Coral	3.4
Geranium Zonal	Fantasia Raspberry Twizzle	3.4
Verbena	Superbena Large Lilac Blue	3.4
Verbena	Superbena Royale Peachy Keen	3.4
Bidens	Mexican Gold Semi-Double	3.3
Portulaca	Happy Hour Rosita	3.2
Verbena	Lanai Lavender Star	3.2
Bacopa	Fuseables Utopia	3.1
Melampodium	Casino Light Yellow	3.1
Calibrachoa	Superbells Grape Punch	2.9
Gerbera	Funtastic Blush	2.9
NG Impatiens	Infinity Lavender Imp	1.7
Armeria	Ballerina Lilac	1.6

^z Performance factors included insect and disease resistance, vigor, flowering, and foliage color.

^y Average of performance ratings. Rating scale 0-5:

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