

## FOR THE LOVE OF ANNUALS

Doug Badgero  
Greenhouse Manager II  
Michigan State University

- I. **Soil**
  - A. pH
  - B. Salts
  - C. Organic Matter
  - D. Mulches
  
- II. **What type of area do we have to plant in?**
  - A. Sunny
  - B. Partly sunny
  - C. Shady
  
- III. **Three major concerns**
  - A. Water and Fertilizer
  - B. Weeds
  - C. Bugs and Diseases
  
- IV. **Dead Heading**
  
- V. **Major Garden Pest**
  - A. Insects
    1. Whitefly
    2. Aphids
    3. Spider mites
  - B. Diseases
    1. Scelerotina
    2. Powdery Mildew
    3. Pythium
    4. Rhizoctonia

Top Variety Ratings  
From 1995 MSU Flower  
Seed Trial Varieties with  
4.0 to 5 Rating -  
Random Order

**AGERATUM**

Blue Blanket  
Blue Danube \*  
Blue Horizon (1,4)  
Neptune Blue  
White Hawaii

**ALYSSUM**

Snow Crystal

**AMMI MAJUS**

Snow Flake (1)

**BEGONIA - Fibrous Rooted**

All Round Mix (4)  
Ambassador Coral  
Ambassador Pink  
Ambassador Rose  
Ambassador Soft Pink  
Baron Rose (4)  
Brandy  
Derby  
Espresso Rose  
Espresso Pink  
Espresso Scarlet  
Inferno Appleblossom (4)  
Olympia Mix  
Olympia Red  
Olympia Rose  
Olympia Salmon Scarlet  
Olympia White  
Organdy Mix  
Party Boy (4)  
Party Flirt (4)  
Party Friend (4)  
Party Fun Mix (4)  
Party Girl (4) \*  
Prelude Scarlet  
Prelude White  
Swing Rose  
Varsity Dk Leaf Scarlet  
Varsity Dk Leaf White  
Varsity Pink  
Varsity Rose  
Varsity Scarlet  
Victory Pink  
Victory Rose  
Victory Bright Rose  
Vodka

**BEGONIA HIEMALIS**

Charisma Coral  
Charisma Orange

**BEGONIA - Tuberous****Rooted**

Illumination Orange (3)  
Illumination Salmon Pink (3) \*  
Musical Mix (3)  
Musical Rose (3)  
Musical Scarlet (3)  
Nonstop Fiery Red  
Nonstop Golden Orange  
Nonstop Salmon  
Panarama Apricot  
Panarama Orange \*  
Pinup

**CALEOLARIA**

Goldari

**CELOSIA**

Apricot Brandy  
Flamingo Feather (1, 2, 4)  
Forest Fire Imp. (1, 2, 4)  
Pink Candle (1, 2, 4)  
Pink Tassels (1, 2, 4)  
Sparkler Mix (1, 2, 4)  
Sparkler Wine (1, 2, 4)

**COLEUS**

Wizard Mix

**DELPHINIUM**

Magic Fountain Lilac Pk/Wh  
Bee  
Magic Fountain Mix

**DUSTY MILLER**

Silver Dust \*

**DIANTHUS**

Floral Lace Crimson  
Primadonna

**GOMPHERENA**

Bicolor Rose  
Woodcreek Red (1, 2, 4)

**HELIOTROPE**

Marine

**IMPATIENS**

Accent Blush Pink  
Accent Rose Imp.  
Accent Sunrise Mix \*  
Dazzler Bright Eye  
Dazzler Punch  
Dazzler Red  
Dazzler Violet  
Dazzler White  
Deco Rose  
Impulse Bright Red  
Impulse Carmine  
Impulse Red \*  
Impulse White  
Showstopper Burgundy (3)  
Showstopper Lavender Blush (3)  
Showstopper Picotee (3)  
Showstopper Pink Picotee (3)  
Showstopper Sweetness (3)  
Showstopper Tropical Punch (3)  
Super Elfin Blush  
Super Elfin Lipstick Imp.  
Super Elfin Red  
Super Elfin Red Velvet  
Super Elfin Scarlet \*  
Super Elfin Violet  
Tempo Blue Satin  
Tempo Blush  
Tempo Burgundy  
Tempo Frosty Mix  
Tempo Lilac  
Tempo Mix \*  
Tempo Orange  
Tempo Pastel Mix \*  
Tempo Pink  
Tempo Red Tempo Salsa Mix  
Tempo Wedgewood Mix  
Tempo White

**IMPATIENS NEW GUINEA**

Agadoo  
Bingo

**LOBELIA**

Compliment Mix (1)

**MARIGOLD - Large Flowered**

Antigua Yellow  
Discovery Yellow  
Marvel Yellow (4)

**MARIGOLD - French**

Bonanza Gold Imp.  
Disco Flame  
Hero Gold  
Janie Dp Orange  
Little Hero Flame  
Little Hero Gold  
Safari Queen

**MELAMPODIUM**

Derby  
Medallion (1, 4)

**NICOTIANA**

Merlin Lime  
Merlin Purple  
Merlin Salmon Pink  
Promenade Lime

**NIEREMBERGIA**

Mont Blanc

**ORNAMENTAL GRASS**

Rhynchelitrum (1, 2, 4)

**PANSY - Viola**

(Overwinter Trial 94/95)

Clear Sky Primrose  
Clear Sky Purple  
Clear Sky True Blue  
Clear Sky White  
Clear Sky Yellow  
Crystal Bowl Sky Blue  
Crystal Bowl True Blue  
Crystal Bowl Yellow  
Jewel Blue  
Jewel Blue/Face \*  
Jewel Purple/Face  
Maxim Yellow  
Rally Lilac Cap  
Rally Yellow Imp.  
Rally Lt. Blue/Blotch  
Skyline Blue  
Skyline White/Purple Wing  
Sky Line Yellow  
Universal Plus Blue/Blotch  
Universal Plus True Blue  
Universal Plus Violet/Blotch  
Universal Plus Yellow  
Universal Plus Yellow/Blotch  
Universal Plus White

**PELARGONIUM - Seed**

Avanti Light Salmon  
Avanti Scarlet  
Elite White  
Freckles  
Glamour Light Salmon  
Glamour Scarlet  
Horizon Dp Rose  
Horizon Frosty Rose  
Multibloom Pink  
Multibloom Salmon  
Multibloom Scarlet Eye  
Pinto Rose  
Pinto Salmon  
Pinto Scarlet  
Ringo 200 Lavender  
Sensation Blush (floribunda)  
Sensation Cherry  
Signal Red Bicolor  
Venus

**PETUNIA**

Aladdin Pink  
Aladdin Red  
Aladdin Salmon  
Aladdin White  
Carpet Salmon  
Carpet Sky Blue  
Carpet True Blue  
Celebrity Blue  
Celebrity Blue Ice  
Celebrity Burgundy  
Celebrity Cherry Morn Mix  
Celebrity Chiffon Morn  
Celebrity Hot Pink  
Celebrity Ice Mix  
Celebrity Lilac Morn  
Celebrity Neon  
Celebrity Peach Ice  
Celebrity Pink Morn  
Celebrity Red  
Celebrity Sky Blue \*  
Dreams Pink  
Dreams Salmon  
Falcon Mix  
Falcon Lilac  
Fantasy Pink Morn  
Fantasy Red  
Flash Red  
Horizon Dp Rose \*  
Horizon Pink  
Horizon Ruby (4)  
Lavender Storm  
Madness Double Salmon  
Madness Double Rose

**PETUNIA cont.**

Madness Double Rose/White  
Madness Lilac  
Madness Plum Crazy  
Madness Rose  
Madness Sheer  
Madness Spring  
Madness White  
Merlin Pink  
Merlin Red  
Merlin Salmon  
Merlin White  
Polo Burgundy Star  
Primetime Carmine  
Primetime Crystals  
Primetime Fiesta Mix  
Primetime Lavender  
Primetime Mid Blue  
Primetime Salmon  
Primetime Scarlet  
Primetime Twilight  
Purple Wave (3, 4) \*  
Spring Fever Pastel Mix  
Spring Fever Pink  
Spring Fever Red  
Spring Fever Rose  
Spring Fever Salmon  
Spring Fever White  
Ultra Blue Vein  
Ultra Scarlet

**PORTULACA**

Sundial Fuchsia  
Sundial Pink  
Sundial Scarlet  
Sundial White

**RUDBECKIA**

Indian Summer

**SALVIA**

Argent (4)  
Lady In Red (4)  
Strata (4)  
Victoria Blue (4) \*

**STATICE**

Forever Gold

**VERBENA**

Imagination

**VINCA**

Landscape Lt. Pink (4)  
 Pacifica Blush  
 Pacifica Mix  
 Pacifica White  
 Parasol (4)

**VIOLA**

Jewel Blue  
 Jewel Mix \*

**ZINNIA**

Starbright Mix

**ZONAL GERANIUM****(Clone Produced)**

Designer Bright Scarlet  
 Designer Hot Pink  
 Designer Pink Parfait  
 Designer Salmon Rose  
 Evening Glow  
 Gypsy  
 Kim  
 Lollipop  
 Melody  
 Peaches  
 Sarah  
 Showcase Pink Heart

**\* OUTSTANDING 1995****Other Possible Uses:**

- 1 Cut Flower
- 2 Dry Flower
- 3 Hanging Basket
- 4 Landscape

**Seed Produced Flowering Plants  
That Have Performed Well In  
The Horticultural Gardens At  
Michigan State University 1996  
Lowell C. Ewart**

**AGERATUM**

Blue Blanket  
Blue Danube  
Blue Horizon (LSI)  
Hawaii Series  
Neptune Blue

**ALYSSUM**

Easter Bonnet  
New Carpet of Snow  
Snow Crystals  
Snowdrift

**AMARANTHUS**

Paniculatas

**ANTIRRHINUM (Snaps)**

Floral Carpet Series (Dwf)  
Floral Shower Series (Dwf)  
Liberty Series (Inter.)  
Princess White/Purple Eye (Inter.)  
Rocket Series (Tall)  
Royal Carpet Series (Dwf)  
Sonnet Series (Inter.)  
Tahiti Series (Dwf)

**BASIL**

Purple Ruffles

**BEGONIA - Fibrous**

**(Bronze Foliage)**

All Round Dark-Leaf Series (LSI)  
Baron Rose (LSI)  
Bingo Series  
Cocktail Series  
Espresso Series  
Party Series (GN & LSI)  
Vision Series (GN & LSI)

**BEGONIA - Fibrous**

**(Green Foliage)**

All Round Green-Leaf Series (LSI)  
Ambassador Series  
Derby  
Finale  
Inferno Appleblossom (LSI)  
Olympia Series  
Organdy Series  
Party Series (GN & LSI)  
Prelude Series  
Swing Rose  
Varsity Series  
Victory Rose

**BEGONIA - HIEMALIS**

Charisma Series

**BEGONIA - Tuberous**

Chanson Series (HBI)  
Illumination Series (HBI)  
Memory Series (Lg. Flowered)  
Nonstop Series  
Musical Series (GN & HBI)  
Panarama Apricot Orange (GN&HBI)  
Pin-up

**CALCEOLARIA**

Goldari

**CATHARANTHUS (VINCA)**

Apricot Delight  
Cooler Series  
Landscape Lt. Pink (GN & LSI)  
Pacifica Series  
Parasol (GN & LSI)  
Tropicana Series (GN & LSI)

**CELOSIA**

Apricot Brandy (GN & LSI)  
Castle Series  
Century Series  
Flamingo Feather (GN & LSI)  
Forest Fire Imp (LSI)  
Jewel Box Mix (Crested)  
Kimono Series (Dwf)  
New Look (GN & LSI)  
Olympia Mixed (Crested)  
Pink Candle (GN & LSI)  
Pink Tassels (GN & LSI)  
Red Glow (Dwf)

**CLEOME**

Queen Series (LSI)

**COLEUS**

Black Dragon  
 Carefree Series  
 Fiji Red  
 Red Rainbow  
 Wizard Series

**COREOPSIS**

Sunrise (GN &amp; LSI)

**COSMOS**

Lady Bird Mix  
 Sunny Red

**DAHLBERG DAISY (Dyssodia)**

Gold Carpet  
 Golden Fleece

**DAHLIA**

Diablo Mix (Bronze Foliage)  
 Figaro Series  
 Sunny Series

**DAPHNIUM**

Banner Mix  
 Blue Springs  
 Magic Fountain Series

**DIANTHUS**

Color Magician  
 Ideal Series  
 Primadonna (GN & LSI)  
 Princess Series  
 Telstar Series

**DUSTY MILLER (Cineraria)**

Cirrus (GN & LSI)  
 Silver Dust (GN & LSI)

**GAILLARDIA**

Red Plume (GN &amp; LSI)

**GAZANIA**

Daybreak Series  
 Dynastar Mix  
 Ministar Series  
 Talent Mix

**GOMPHRENA**

Woodcreek Red (LSI)  
 Bicolor Red

**GYPSOPHILA**

Garden Bride

**HELIOTROPE**

Marine

**HIBISCUS**

Disco Series

**HYPOESTES**

Confetti Series (GN & LSI)  
 Splash Select Series (Dwf)  
 Splash Series (GN & LSI)

**IMPATIENS**

Accent Series  
 Blitz 2000 Series (GN & LSI)  
 Cascade Beauties Series (HBI)  
 Dazzler Series  
 Deco Series (Dk Foliage)  
 Impact Series  
 Impulse Series  
 Mega Orange Star  
 Showstopper Series (HBI)  
 Spotlight Mix  
 Super Elfin Series  
 Tango Imp (GN & LSI)  
 Tempo Series (GN & LSI)

**LISIANTHUS**

Lisa Series

**LOBELIA**

Blue Moon  
 Cascade Series (HBI)  
 Cobalt Blue  
 Fountain Series (HBI)  
 Rapid Series  
 Regatta Marine

**MARIGOLD- American**

Antigua Series  
 Discovery Series  
 Galore Series (GN & LSI)  
 Inca Series (GN & LSI)  
 Jubilee Series (GN & LSI)  
 Lady Series (GN & LSI)  
 Marvel Series (GN & LSI)  
 Perfection Series (GN & LSI)  
 Voyager Series

**MARIGOLD - French**

Aurora Series  
 Bonanza Series  
 Boy Series  
 Gate Series  
 Hero Series  
 Janie Series

**MARIGOLD - French cont.**

Jacket Orange  
 Little Hero Series  
 Safari series  
 Spice Series

**MARIGOLD - Polyploid Hybrids**

Zenith Series

**MARIGOLD - Single**

Disco Series  
 Espana Series

**MELAMPODIUM**

Derby  
 Medallion (LSI)  
 Showstar

**MIMULUS**

Malibu Orange  
 Mystic Mix (GN & LSI)

**NICOTIANA**

Havana Series  
 Merlin Series  
 Promenade Lime  
 Starship Red Imp

**NIEREMBERGIA**

Mont Blanc (AWW & FS'93)

**ORNAMENTAL PEPPER**

Holiday Cheer  
 Red Missile

**PANSY**

Bingo Series  
 Crown Series  
 Crystal Bowl Series<sup>1</sup>  
 Fama Series  
 Happy Face Series  
 Imperial Series  
 Maxim Series<sup>1</sup>  
 Presto Series<sup>1</sup>  
 Rally Series<sup>1</sup>  
 Roc Series  
 Sky Series<sup>1</sup>  
 Skyline Series<sup>1</sup>  
 Super Majestic Series  
 Ultima Mix  
 Universal Series

<sup>1</sup> Have also shown good results as a fall planted, overwinter crop.

**PELARGONIUM - Seed Geranium**

Avanti Series  
 Elite Series  
 Freckles  
 Glamour  
     Lt. Salmon, Scarlet  
 Horizon  
     Dp. Rose, Frosty Rose  
 Maverick Star  
 Multibloom  
     Pink, Scarlet/Eye  
 Orange Appeal  
 Orbit  
     Hot Pink, Red, Violet  
 Pinto Series (GN & LSI)  
 Sensation (floribunda)  
     Blush, Cherry, Rose, Scarlet  
 Summer Showers (HBI)  
 Venus

**PETUNIA-Multiflora**

Carpet  
     Bluelace, Flame, Lilac, Mix, Pink,  
     Red, Rose, Salmon, Sky Blue,  
     True Blue, White  
 Celebrity Series  
 Fantasy Series (CT)  
 Horizon  
     Blue, Deep Rose, Flame,  
     Lt Salmon, Mix, Pink, Red, Ruby,  
     Salmon Halo, White  
 Madness  
     Midnight, Plum Crazy, Lilac,  
     Rose, Sheer, Simply, Sugar,  
     Summer, White  
 Madness DBL  
     Red/White, Rose, Salmon, Sheer  
 Merlin  
     Blue, Mix, Picotee Mix, Pink,  
     Red, Salmon, White  
 Polo  
     Mix, Orchid Veined, Pink, Red,  
     Red Target, Rose Flare, Salmon  
 Primetime Series  
 Purple Wave (AAW '95)(GN & LSI)  
 Spring Fever  
     Pastel Mix, Salmon, White

**PETUNIA -Grandiflora**

Aladdin  
 Peach Morn, Pink, Red, Salmon,  
 White  
 Challenger Mix  
 Daddy  
 Blue, Orchid, Peppermint, Sugar  
 Dreams  
 Mix, Pink, Salmon, White  
 Falcon  
 Coral, Lilac, Mid Blue, Mix,  
 Pastel Salmon, Red, Rose  
 Flash  
 Blue, Pink, Red, White  
 Happiness  
 Highlight Mix  
 Lavender Storm (FS'96)  
 Picotee  
 Blue, Mix, Red  
 Prism  
 Bright Rose, Salmon, White  
 Supermagic  
 Telstar  
 Ultra  
 Blue, Crimson Star, Lt Pink,  
 Pink, Red Star, Salmon

**PHLOX**

Premium Pink

**PORTULACA**

Sundial Series

**RUDBECKIA**

Becky Mix  
 Indian Summer (AWW'95)(LSI)

**SALVIA coccinea**

Lady In Red (GN & LSI)

**SALVIA farinacea**

Argent Blanche (GN & LSI)  
 Rhea Dark Blue  
 Strata (AAW '96)  
 Victoria (GN & LSI)

**SALVIA splendens**

Bonfire Elite (LSI)  
 Cleopatera Mix  
 Burgundy, Lavender, Rose, Violet  
 Covergirl Scarlet  
 Empire Series  
 Grenadier  
 Hot Stuff Series  
 Rambo (LSI)  
 Red Hot Sally  
 Sizzler  
 Burgundy, Lavender, Salmon

**SANVITALIA**

Mandarin Orange  
 Irish Eyes

**SHASTA DAISY**

Snow Lady  
 White Knight

**STATICE**

Blue River  
 Forever Gold  
 Fortress Series  
 Friendly Yellow

**STOCK**

Midget Series

**TORENIA**

Clown Series

**VERBENA**

Elegance Mix  
 Imagination Purple (GN & LSI)  
 Novalis Series  
 Peaches & Cream  
 Romance Series

**VIOLA**

Alpine Summer  
 Jewel Series  
 Princess Series  
 Velour Series

**ZINNIA angustiflora**

Star Series

**ZINNIA**

Border Beauty Series (GN & LSI)  
 Bouquet Series  
 Dreamland Series  
 Peter Pan Series  
 Ruffles Series (GN & LSI)  
 Small World Series  
 Splendor Series (GN & LSI)  
 Pink, Scarlet

**UNUSUAL GARDEN SUBJECTS****ABELMOSCHUS**

Pacific Series

**AMARANTHUS**

Pigmy Torch

**AMMOBIUM**

Bikini

**CUT FLOWER****ACHILLEA**

Summer Pastels (AAW'90)

**AGERATUM**

Blue Horizon

Snowpuffs

**ANTIRRHINUM (Snaps)**

Liberty Series

Rocket Series

Sonnet Series

**ASTER**

Bouquet PK Fantasies

Gala Cinnabar

Perfection Series

Sophisticated Pink

**CACALIA**

Scarlet

**CELOSIA**

Spicata Flamingo Feather

Spicata Pink Candle

Spicata Tassels

Forest Fire Imp

Tall Chief Mix

Tall Sparkler Mix

Toreador Red

**CRASPEDIA**

Goldstick

**DELPHINIUM**

Magic Fountain Series

**DIANTHUS**

Primadonna

**GOMPHRENA**

Strawberry Fields

Woodcreek Red

**HELIANTHUS**

Sonia

**HELICHRYSUM**

Swiss Giant Mix

**LISIANTHUS**

Echo Series (Double)

Heidi Series (Single)

**LOBELIA**

Compliment Series

**MARIGOLD**

Lady Series

Perfection Series

**MELANPODIUM**

Medallion

**SILENE**

Royal Elekta

**XERANTHEMUM**

Florist Choice

**ZINNIA**

Border Beauty Series

Ruffles Series

**DRY FLOWERS****CELOSIA SPICATA**

Flamingo Feather

Pink Tassels

**CRASPEDIA**

Goldstick

**ORNAMENTAL GRASS**

Rhynehelitrum

**SCABIOSA**

Starflower

**LIMONIUM SINUATA (statice)**

Friendly Yellow

Forever Gold

Fortress Series

**CLONE PRODUCE****NEW GUINEA IMPATIENS**

Agadoo

Bingo, Blues, Bolaro

Celebration

Bright Scarlet, Electric, Raspberry,

Rose, Salmon

Paradise

Bonaire, Samoa Imp, Tanna, Timor

**CLONE PRODUCE**  
**ZONAL PELARGONIUMS**

Designer Bright Star  
Designer Hot Pink  
Designer Pink Parfait  
Designer Salmon Rose  
Evening Glow  
Gypsy (floribunda)  
Julia (floribunda)  
Kim  
Lollipop  
Medallion Dk Red  
Melody  
Morning Mist  
North Star  
Peaches  
Sarah  
Showcase Pink Heart

AAW - All-American Winner  
FS - Fleuroselect Winner

CT - Container Item  
GN - Garden  
HBI - Hanging Basket Item  
LSI - Landscape Item