

Project Title

LANDSCAPE EVALUATION OF HARDY HIBISCUS CULTIVARS (*HIBISCUS* x *MOSCHEUTOS*) FOR SOUTH LOUISIANA

PROPOSAL DESCRIPTION

Plans have been made to begin a long term (3-4 year) landscape evaluation of hardy hibiscus cultivars, primarily *Hibiscus moscheutos*, under south Louisiana growing conditions at the LSU AgCenter's Hammond Research Station, Hammond, LA. The interest in these plants is increasing in the nursery and landscape industries. Several wholesale nurseries (TreeSearch Farms, Fleming Flower Fields, Walter Gardens) are introducing new hardy hibiscus cultivars and adding new cultivars to their wholesale inventory. Funds received from the Louisiana Society for Horticulture Research will allow development of the initial year-1 phase (April 2013-March 2014) of this study (evaluation of 30-40 cultivars). Long term goals would be to evaluate 60-70 cultivars over a 4-year period. The project will include some of the new Fleming hardy hibiscus cultivars, the Red River, Moy Grande, and Flares (all popular in Texas) and 11 exclusively proprietary to Walter Gardens. Industry standard cultivars (Peppermint Schnapps, Luna, Cherry Brandy, etc.) will be included for comparison. Travel will be required to Texas and Mississippi to collect plant material. This study will be expanded regionally to include Mississippi State University as a cooperator in the future. Additional funding will be used from previously received grants from the Louisiana Nursery and Landscape Foundation for Scholarship and Research and the Louisiana Department of Agriculture and Forestry's Specialty Crops Competitiveness Block Grant.

Data to be collected will include plant hardiness, emergence dates, flowering quality and quantity, height, flower size and hibiscus saw fly feeding damage.

LSHR Supported Hardy Hibiscus Trial – Final Report

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The LSU AgCenter implemented a landscape evaluation trial of over 40 cultivars of hardy hibiscus, primarily *Hibiscus moscheutos* at the Hammond Research Station in the spring of 2013 with some financial support provided by the Louisiana Society for Horticultural Research.

The project includes a field planting of cultivars from the hibiscus breeding program at Walters Gardens. Some of their hibiscuses are in the Summerific Hibiscus program at Proven Winners.

In addition, all four colors in the Luna seeded line (Louisiana Super Plant) of perennial type hibiscus from PanAmerican Seed were included. The Luna series has been on the market for a number of years now and provides growers with a seed source option, as

opposed to the majority of plant material in this group being available only via vegetative propagation.

Industry standard cultivars – such as the popular Flare series, Moy Grande (a previous LSHR release plant), TX star red hibiscus, Lord Baltimore and Lady Baltimore were included in the study. Also planted was the Red River cultivar that is gaining in popularity in Texas for large blooms.

Another group includes cultivars from Fleming Flower Fields. These hibiscuses are known for their reddish and purple foliage colors, maple, palm and hydrangea leaf shaped foliage and improved compactness.

Data was taken periodically and included date of first bloom, length of bloom, length of peak bloom, plant height, flower diameter, susceptibility to hibiscus sawfly larvae damage and more. Some of the plants in our LSU AgCenter trial are also being evaluated by horticulturist Geoff Denny at the Mississippi State University trial gardens in Starkville.

There is some slightly renewed interest in hardy hibiscus cultivars and landscape use in the south. Hardy hibiscuses have previously been primarily seed propagated. Old seed propagated cultivars include Disco Bell and Southern Belle.

New cultivar development is focusing on plants with earlier spring emergence, leaf spot resistance, dark foliage colors, earlier bloom, larger blooms, improved length of bloom, size reduction, branching habit, new flower colors and unique foliage shape.

Factors limiting sales of hardy hibiscus at garden centers are (1) difficulty in wholesale production due to “tall, lanky, lack of branching” growth habit (making shipping difficult), (2) higher price of vegetatively produced liners, (3) plants being “retail ready” early summer (when the spring garden center season has concluded), (4) poor shelf life at retail due to root bound plants and high irrigation demand.

Research observations, summary:

- Luna Pink Swirl is the best performing of the Luna series cultivars. Plants of this cultivar bloom early, bloom longer and typically have slightly better bloom quality. Consumer appeal is also higher for the pink swirl flower color as compared to the red, white and rose.
- In the Walters Gardens cultivars, Berrylicious, Jazzberry Jam, Party Favor, Midnight Marvel, Summer Storm and Sultry Kiss received the highest visual quality ratings in 2013 and 2014. Cranberry Crush and My Valentine are two of the most sold, grown of these cultivars in Louisiana and they each performed poorer than the other cultivars.

- Pink Elephant, a Walters Gardens cultivar, produced the largest plant in this collection and also had the largest flowers (11 inches in diameter). These characteristics made it popular with master gardeners and home gardener audiences viewing the trial but the plant would have limitations in the retail marketplace.
- Flare (aka Red Flare) hibiscus has been previously named a Mississippi Medallion plant and a Texas Superstar. Peppermint Flare and Pink Flare had quality ratings slightly better than Flare. Peppermint Flare was one of the top plants in the 2013-2014 evaluations.
- Lord Baltimore, Lady Baltimore and Moy Grande have been previously named Texas Superstar plants. In LSU AgCenter trials, Moy Grande was very slow to flower and had split petals. Lord Baltimore and Lady Baltimore produced nice plants but were only average in terms of visual quality ratings and flowering time. All three colors in the Flare hibiscus produced better blooms and better plant habits.
- There were no major landscape performance differences in the Fleming cultivars. The best observations were for Robert Fleming, Dave Fleming, Crown Jewels, Aquarian, Plum Crazy, Royal Gems, Pink Comet, Fireball and Cherub.
- In the Fleming cultivars, cold damage (two nights of 14 degrees winter 2013/2014) was most significant on Torchy, Satellite, Angelique, Little Prince and Kui Nuku.

New hardy hibiscus cultivars that have been released in the past couple years that deserve attention and evaluation include Jackie Grant (new 12 inch flowering pink from Greg Grant at Stephen F. Austin State University) and the Lufkin series (Red and White from Cecil Pounders, USDA – ARS in Poplarville, MS).

Walters Gardens Cultivars

- Berrylicious
- My Valentine
- Pink Elephant
- Jazzberry Jam
- Party Favor
- Midnight Marvel
- Cranberry Crush
- Tie Dye

- Summer Storm
- Sultry Kiss

PanAmerican Seed Luna Series Cultivars

- Luna Red
- Luna Rose
- Luna Pink Swirl
- Luna White

Industry Standard Cultivars

- Disco Bell
- Flare
- Pink Flare
- Peppermint Flare
- Moy Grande
- Lady Baltimore
- Lord Baltimore
- Red River
- Texas Red Star

Fleming Flower Fields Cultivars

- Kopper King
- Snowflake
- New Old Yella
- Royal Gems
- Aquarian
- Torchy
- Satellite
- Fireball
- Pink Comet
- Dave Fleming
- Fantasia
- Copper Queen
- Plum Crazy
- Eruption
- Strawberry Swirl
- Robert Fleming
- Cherub
- Kui Nuku
- Crown Jewels
- Angelique
- Little Prince
- Old Yella

Pink Flare (below)



Peppermint Flare (below)



Flare aka Red Flare (below)

