New UF Plant Breeding Introductions

Zhanao Deng

FL Master Gardener Volunteer Conference
Kissimmee, 10/21/19

Environmental Horticulture Dept.,
Gulf Coast Research and Education Center
UF Plant Breeding Programs

~30 breeders
~50 crops
10 to 55 cultivars/year
Caladium
Caladiums in the Landscape
Improving Caladium Performance & Disease Resistance
‘Royal Flush’
'Summer Pink'
‘Tapestry’
‘Fiesta’

Excellent sun tolerance

Perform well in the landscape
‘Hearts Desire’
‘Cherry Tart’
‘Cosmic Delight’
‘Icicle’
‘Red Hot’
‘Passionista’
Caladium Tubers/Bulbs Directly from Florida Caladium Growers in Lake Placid, Highlands County

- Bates Sons & Daughters
- Classic Caladiums
- Good Day Caladiums
- Happiness Farms
- Heartland Caladiums
- Hendry Caladiums
- Lake Country Farms
- Lake Huntley Bulb Company
- Rainbow Acres

Caladium Festivals: Plants, Field Tours & Lots of Fun…

Caladium Festival & Plant Extravaganza 2019
Buy Bulbs and Plants
Meet the Growers
Food Booths
Bus Tours to the Fields
Arts and Crafts Vendors
Free Admission, Entertainment & Parking
Car & Bike Show July 27th (Saturday Only)

Save the Date! JULY 26-28

VisitLakePlacidFlorida.com

https://lpfla.com/caladium-festival-2/
**Planting site selection**
- Filtered sun, partial shading
- Morning sun, 3-4 hours/day
- Not heavily shaded areas

**Ground preparation**
- 8 to 10 inches of soil
- Compost, potting mix, or peat moss

**Plant materials**
- Large, firm bulbs
- Quality pot plants

**Planting**
- 60 F or above; April in FL
- 12-18” apart, 1-2” mulch
- Buds (eyes) up

**Watering**
- Most important; moist, not wet
- Allow them to grow >5 months

**Fertilization**
- Osmocote: 1 table spoon/plant
- Complete fertilizers (6-6-6, 8-8-8, etc.): monthly
Sterile Bloomify™ Red, Bloomify™ Rose

Zhanao Deng
Garden Centers
Mayan Series:

- Purple
- Compact Purple (Machu Morado™)

- ‘Mayan Purple’
- Better landscape performance than ‘Purple Showers’ and ‘Mayan Purple’
- Compact & better branching → fuller appearance
- Fruitless → no seeds → non-invasive
- Very low/null pollen viability, or no pollen
- Not pollinate fertile plants
Aztec Series:
Purple, White/Pink, & Pink

- Semi-dwarf habit, full plants
- Smaller flowers
- Fruitless → no seeds → non-invasive
- Low/no pollen viability, or no pollen
- Not pollinate fertile plants
Dr. Jay Scott

Dr. Sam Hutton

- High lycopene
- Bright, uniform red
- Lots of health benefits
- Flavorful and very tasty

http://www.tasti-lee.com/
• $10 donation to UF Foundation ⇒ packet of seeds of three varieties
• Look for consumers to test latest, unreleased varieties ⇒ give feedback
Dr. Vance Whitaker
Dr. Craig Chandler
‘Florida Brilliance’
• ‘Jewel’
  - 250 chill hours
  - Widely adapted to Florida
  - Large, round berries
  - Soft berries
  - High yield
  - First harvest around April 15

• ‘Sweetcrisp’
  - 200-300 chill hours
  - Firm, crisp, sweet
  - Highest quality fruit
  - Lower yield

• ‘Bluecrip’
  - Large, sweet berries,
  - Crisp
  - 400 chill hours
  - Better adapted to north FL

Dr. Patricio Munoz

Dr. Paul Lyrene
• Like ‘Minneola’ in shape and appearance
• Equal or excel in color & flavor
• Among the best in appearance, flavor, peel and fresh color, size
• Mature 4-5 weeks earlier, in the holiday season
• Excellent juice
• Citrus greening (Huanglongbing, HLB)-tolerant

Sugar Belle® near Vero Beach, HLB+ >8 years!
- Clementine-like
- Easy to peel
- Seedless mandarin
- Good HLB tolerance

‘BINGO’
UF 1420

Marathon

Very early (mid August)
Very easy to peel

Very sweet (Brix/acid ratio 14 to 28)
Fruit avail. For ~5 months (mid Aug. – early Jan.)
13-51 mandarin

HLB tolerance
Excellent tree health
Exceptional flavor
On tree for 5 months
Dooryard potential
## UF Breeders Working on Other Plants

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<th>Breeders</th>
<th>Plants</th>
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<tr>
<td>Dr. Alfred Huo (MREC)</td>
<td>Begonia, snapdragon, foliage, etc.</td>
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<td>Drs. German Sandoya (EREC)</td>
<td>Lettuce</td>
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<td>Dr. Rathinasabapathi Bala (Hort Sci)</td>
<td>Pepper</td>
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<td>Dr. Geoffrey Meru (TREC)</td>
<td>Tropical vegetables</td>
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<td>Dr. Seonghee Lee (GCREC)</td>
<td>Strawberry</td>
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<td>Dr. Tong Gon Lee (GCREC)</td>
<td>Tomato</td>
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<td>Dr. Alan Chambers (TREC)</td>
<td>Avocado, banana, mango, papaya, &amp; passionfruit</td>
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<tr>
<td>Dr. Jose Chaparro (Hort Sci)</td>
<td>Peach, mandarin</td>
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<td>Dr. Zhanao Deng (GCREC)</td>
<td>Blackberry, pomegranate</td>
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<td>Dr. Kevin Kenworthy (Agronomy)</td>
<td>Turf grasses</td>
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<td>Dr. Ann Blount (NFREC)</td>
<td>Perennial peanut</td>
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Acknowledgements

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Thank You!