

New UF Plant Breeding Introductions

Zhanao Deng

UF UNIVERSITY of
FLORIDA
IFAS

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'**



**'Sea
Foam
Pink'**



**‘Cherry
Tart’**





'Sizzle'

**‘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**



http://mwgcm.org/MGCM/Bobs_Blog/Entries/2014/3/14_Caladiums_by_Margaret_Hibberd.html

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**

Now Accepting Craft Vendors

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
- Droughts in Aug., Sept., Oct.
- Allow them to grow >5 months

■ Fertilization

- Osmocote: 1 table spoon/plant
- Complete fertilizers (6-6-6, 8-8-8, etc.): monthly



**Dr. David
Clark &
Coleus**



Sterile Bloomify™ Red, Bloomify™ Rose



Zhanao Deng
Garden Centers



Sep 19, 2019 10:37 AM
Riverview, FL



Dr. Rosanna Freyre

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



Landscapes

Foodscapes



Dr. Jay Scott



Dr. Sam Hutton



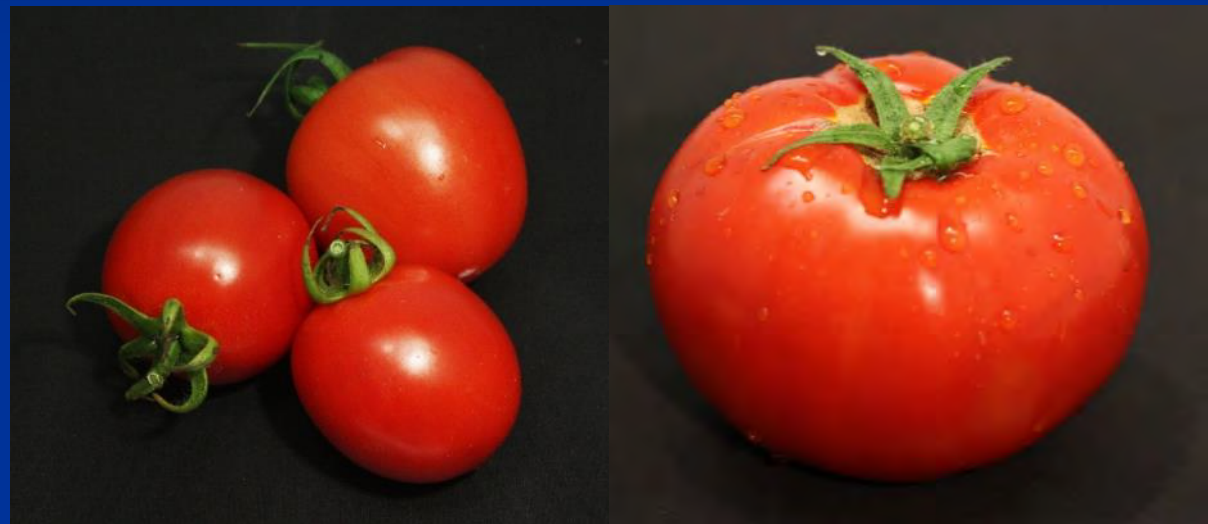
<http://www.tasti-lee.com/>



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



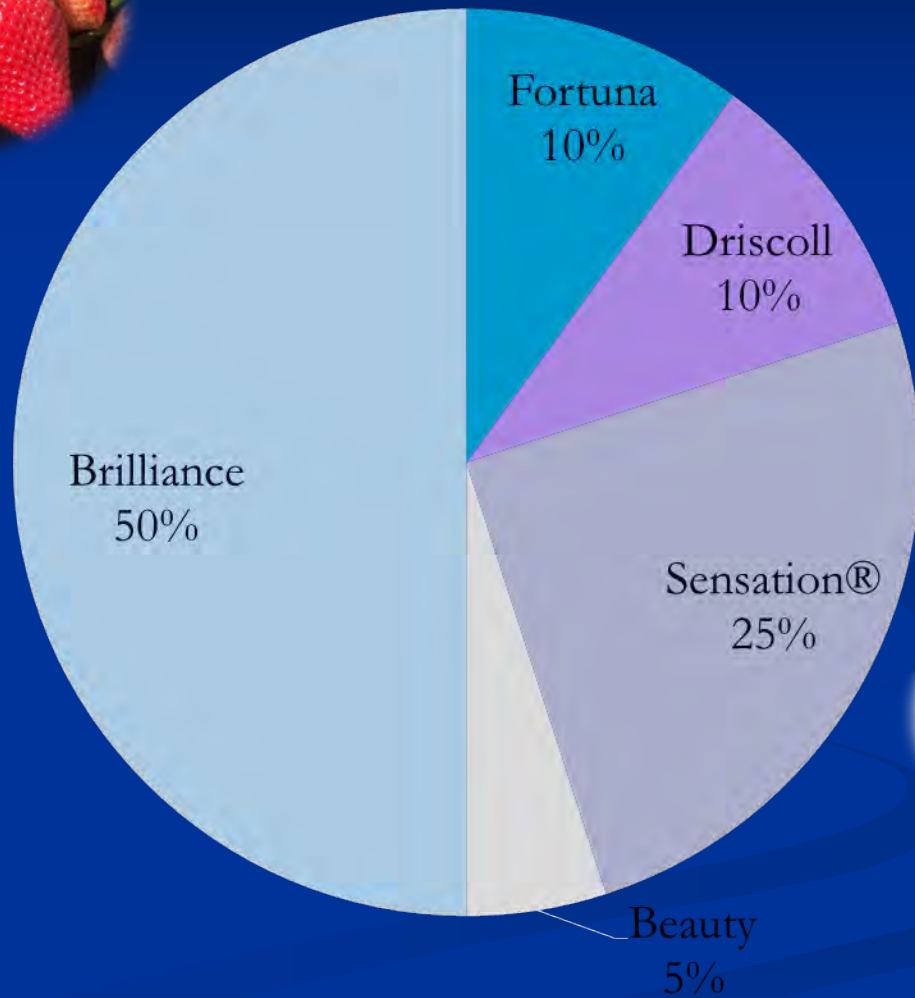
Dr. Harry Klee



- \$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'



Dr. Patricio Munoz

Dr. Paul Lyrene

- **‘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. Fred Gmitter Jr.



Dr. Jude Grosser



LB8-9 (Sugar Belle®)

UF UNIVERSITY of
FLORIDA
IFAS
Citrus Research and Education Center

- 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

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

Acknowledgements

- Drs. Rosanna Freyre, Fred Gmitter Jr., Harry Klee, Patricio Munoz, and Vance Whitaker, and Mr. John Watson for photos, slides, and information

Thank You!