

# Alternative Fruit Crops R&E Program

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UMD/Maryland Cooperative/WMREC



# Value Added Processed Apple Products

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## Alternative Fruit R&E Program

### Alternative Fruit Crops

- Beach Plums
  - *Prunus maritima*
- Blueberries
  - Southern High Bush
- Figs
- Muscadine Grapes
  - Fresh market
- Wine Grapes
  - Heat tolerant
- Autumn Olive
  - High carotenoid content
- Brambles
  - MD Breeding lines
  - Season extension



## Alternative Fruit R&E Program

### Southern Highbush Blueberry

#### Southern Highbush Blueberries



The Southern Highbush Blueberry (*V. corymbosum* x *V. darwini*) is a cross between the Northern Highbush Blueberry and the native southern Darwin species. The Southern Highbush is considered to have greater tolerance to high summer temperatures, greater drought tolerance, early fruit production, and superior fruit quality in hotter climates.



## Alternative Fruit R&E Program

### Beach Plums

#### Beach Plums (*Prunus maritima*)



The Beach Plum is a fruiting shrub native to coastal dunes of the Northeastern United States. The fruit has been collected from the wild for making preserves and jelly since colonial times. Today, native stands support a high-value cottage industry in the Northeast. Interest in bringing beach plum into commercial production has necessitated small-scale production trials to optimize horticultural practices to increase yield.



## Alternative Fruit R&E Program

### Figs

#### Figs (*Ficus carica*)



Figs are a desirable fruit for fresh market and processing for direct sale. Challenges for fig production in the Southern Maryland area include the selection of moderately cold hardy early varieties that can survive winter in Regions 7 and 8. Existing research shows potential for fig production in areas where temperatures remain above 15 degrees F. or are protected with some form of environment modification



**Alternative Fruit R&E Program**

# Muscadine Grapes

**Muscadine Grapes (*Vitis rotundifolia*)**

The Muscadine or "Southern Grape," is grown widely from North Carolina to Florida. They can be processed into juice and wine, however there has been a surge of demand for fresh fruit, especially in the Washington, D.C. region. Although it will only grow in the most protected sites in the region due to cold sensitivity, it may be able to fit into a very lucrative niche market



**Alternative Fruit R&E Program**

# Alternative Fruit Crops



**Alternative Fruit R&E Program**

# R&D Locations

**WMREC (Washington Co)**

- Beach plums
- Brambles
- Grapes

**CMREC (PG/Western Shore)**

- Beach plums
- Grapes
- Blueberries?

**WyeREC (Eastern Shore)**

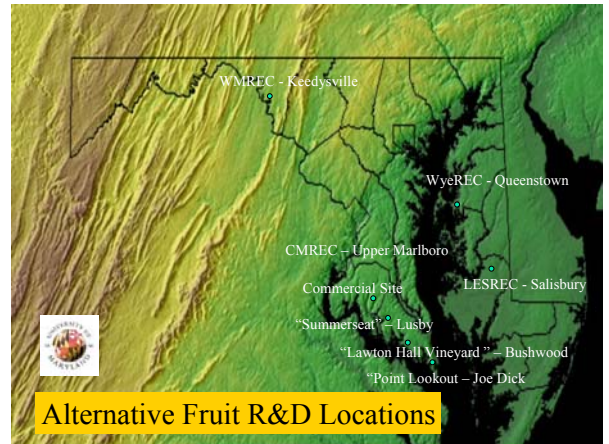
- Blueberries?

**Grower Sites (Western Shore)**

- Beach plums
- Grapes
- Blueberries
- Figs
- Autumn olive

**LESREC (Far Eastern Shore)**

- Beach plums
- Grapes
- Blueberries?



**Alternative Fruit R&D Locations**

**Alternative Fruit R&E Program**

# MCE Cooperators

- County Extension Educators
  - Ben Beale
  - David Myers
  - Herb Reed
  - Laura Romano
  - Lief Erikson (Nutrient Management)
- Research, Extension, and Teaching Faculty
  - Dr. Harry Swartz - Propagation/Physiology
  - Dr. Bill Lamp - Entomology



**Viticulture and Enology R&E Program**

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  - Dave Martin
  - Lief Erikson (Nutrient Management)
- Research, Extension and Teaching Faculty
  - Dr. Harry Swartz - Propagation/Physiology
  - Dr. Bill Lamp - Entomology
- AES Faculty and Services
  - Ethel Dutky - Plant Disease Clinic
  - Sandra Sardinelli - Nematology Lab



*Alternative Fruit R&E Program*

## Program Support

- Tri-County Council
  - 3 year Establishment Grant
  - 3 year Viticulture and Enology Grant
- Maryland Department of Agriculture
  - 2 year Alternative Crops Grant
- MD Center for Agro-Ecology
  - Grant pending
- MAES and MCE



*Viticulture and Enology R&E Program*

## Program Support

- Tri-County Council
  - 3 year Establishment Grant
  - 3 year Viticulture and Enology Grant
- Maryland Department of Agriculture
  - 2 year Alternative Crops Grant
- Maryland Grape Growers Association
- Association of Maryland Wineries
- MAES and MCE



*Viticulture and Enology R&E Update*

## Extension Services

- Site Evaluations
  - Climate, Soils, Markets
- Vineyard Start-up
  - Varieties, planting, resources
- Vineyard maintenance
  - Canopy mgmt, nutrition, pest mgmt, harvest decisions
    - Soil and tissue sampling analysis
  - Pest diagnosis and sampling
  - Enology resource
    - MDQWA
  - Information resource



*Viticulture and Enology R&E Program*

## Program Services



- **Objective Organoleptic Evaluation**
- **Set Quality Standard**
  - No Faults
  - Commercial Quality

