# Joseph A. Fiola, Ph.D. Specialist in Viticulture and Small Fruit

University of Maryland Extension
Western Maryland Research & Education Center



# Value Added Processed Apple Products



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## **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





## 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.







### **Beach Plums**

### Beach Plums (Prunus maritima)

The Beach Plum is a fruiting shrubnative 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.

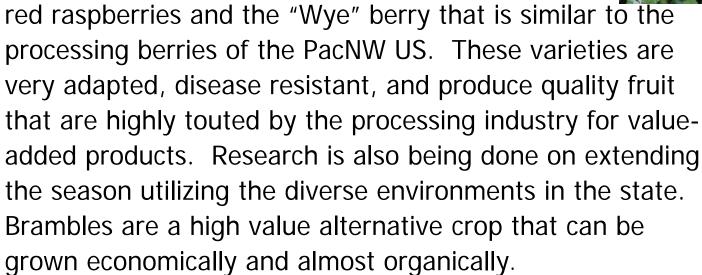






### **Brambles**

The UMD/NJ/VA/WI Cooperative Bramble Breeding Program has developed a series of new varieties, including spring and fall red raspberries and the "Wye" berry that is significant to the series and the "Wye" berry that is significant to the series and the "Wye" berry that is significant to the series and the "Wye" berry that is significant.





Caroline



### 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.





## 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 Crops**















# Research & Development Locations

#### WMREC (Washington Co)

- Beach plums
- Brambles
- Grapes

#### **WyeREC** (Eastern Shore)

Blueberries?

#### **LESREC** (Far Eastern Shore)

- Beach plums
- Grapes
- Blueberries?

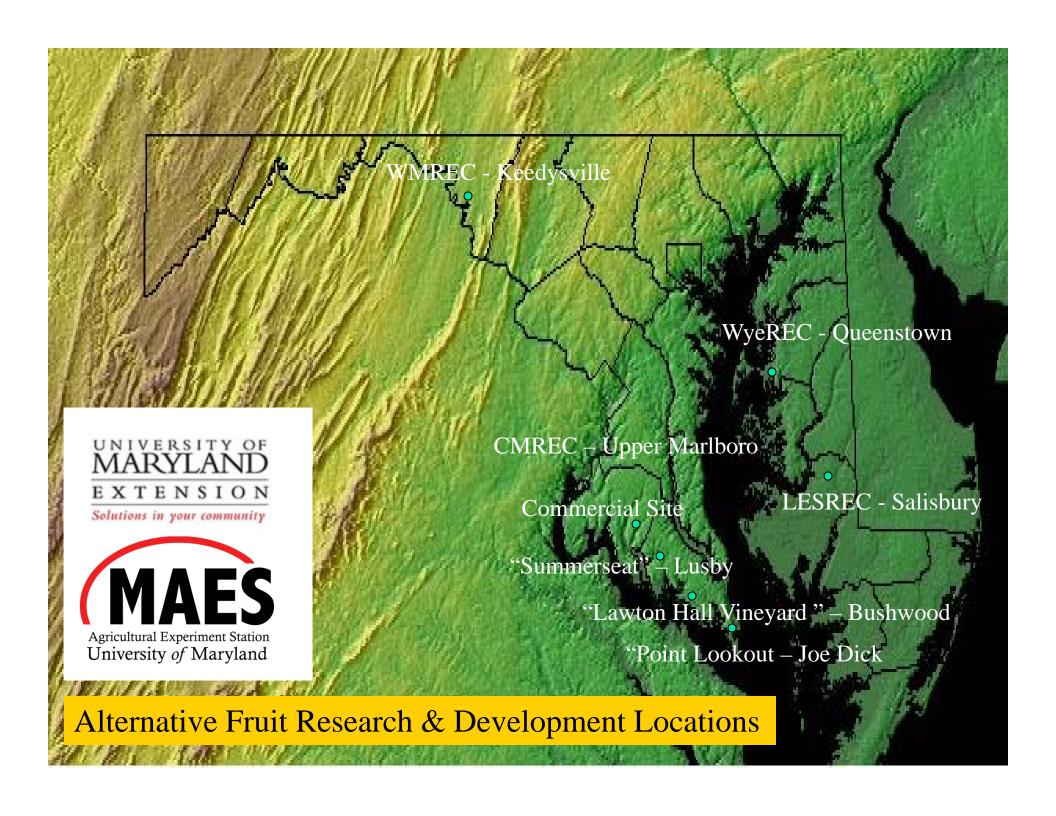
#### **CMREC (PG/Western Shore)**

- Beach plums
- Grapes
- Blueberries?

#### **Grower Sites (Western Shore)**

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







# University of Maryland Extension

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





## **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 UME

