GROWING BUNCH GRAPES IN MISSISSIPPI

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THE GRAPE

- Family: Vitaceae
- Has 11 genera, including *Vitis*
- Has 600 species
- *Vitis* is only food-bearing genus in family
- *Vitis* has two subgenera: Euvitis and Muscadinia
PREFERRED GROWING CONDITIONS

- Warm summer temperatures √
- Cool night temperatures X
- Dry summers X
- Mild winter temperatures √
CAN BUNCH GRAPES GROW IN MISSISSIPPI?

- Good cultivar selection is important.
- Many commonly available cultivars do not survive in the Gulf South area, so care should be taken in making a decision on what to grow.
- They require a lot of management and significant attention to detail.
- Bunch grape growing is more difficult than growing muscadines for these reasons.
WHAT ARE THE LIMITATIONS TO GROWING BUNCH GRAPES?

- Big limitation is Pierce’s Disease. It is a bacterial disease spread by sharpshooter leafhoppers. This disease kills many grape cultivars, including the most widely known European cultivars.

- Fungal diseases are also prevalent and must be controlled. Birds and other animals can also reduce yields.
SHARPSHOOTERS
CULTIVAR DECISIONS

- Not all grow well in Mississippi

- Your decision should stem from knowledge of climate, disease, genetics, market, etc.

- “I like to drink or eat …” not a good enough reason for commercial production
CULTIVARS OF V. VINIFERA

- ‘Chardonnay’
- ‘Cabernet Sauvignon’
- ‘Merlot’
- Thousands more
INTERSPECIFIC HYBRIDS

- Originally started as breeding for rootstocks

- Amateur grape breeders pushed it forward looking for vines with roots resistant to phylloxera, foliage resistant to fungal diseases, and fruit that could produce wines more similar to vinifera types
TRIAL LOCATIONS

- **Where**: Poplarville, MS and Beaumont, MS
- **Purpose**: to observe and evaluate known and untested cultivars with eye to improving recommendations; to learn if MS is yearning for grapes
- **Future possibilities**: small-scale breeding, cooperative testing with existing breeding programs, studies evaluating genotype x environment interactions
PROVEN GULF SOUTH CULTIVARS

- **Lake Emerald** — good fruit set, susceptible to disease on ripening fruit, vine vigor good

- **Champanel** — few clusters, slipskin, mild fruit flavor, cluster size medium to large, “slimy” pulp, some nutritional deficiency symptoms, possible PD symptoms, vine vigor moderate, clusters loose

- **Conquistador** — good fruit set but fruit ripens unevenly, vine vigorous

- **FAMU 99** — vigorous vine, good fruit set, poor tasting fruit
PROVEN GULF SOUTH CULTIVARS

- **MidSouth** — low to moderate vine vigor and yield, small clusters, intriguing “raspberry” flavor, slipskin, high acid

- **Villard blanc** — long, loose clusters, nonslipskin, obvious “wine”-like grape flavor, vines moderate vigor

- **Blanc du bois** — vines very vigorous, high yields, large to medium cluster size, anthracnose a problem, slipskin

- **Miss blanc** — less vigorous than VB and BdB, less fruit too, but disease resistant, high acid
BLANC DU BOIS
MISS BLANC
CONQUISTADOR
UNDER TRIAL

- **Cynthiana/Norton** — low to moderate vigor, north MS better

- **Victoria Red** — some Pierce’s Disease symptoms (PD), not extremely productive, clusters variable in size and shape, some vines little crop while others better; bird depredation and bees a problem, fruit is crisp and sweet with good flavor (close to neutral), some seeds, vines have good vigor, non-slipskin
VICTORIA RED
POOR PERFORMERS

- **Cimarron** — very few clusters, small cluster size, slipskin with “Concord-like” flavor, some PD symptoms, moderate vine vigor
- **Sunset** — little crop, possible PD symptoms, low vigor
- **Rubaiyat** — PD symptoms, vine vigor varies among vines, some vines no fruit and some lots, slipskin, red flesh, flavor mild to neutral, good sized clusters when present, some vines appear stressed, some uneven ripening, some nutritional deficiency symptoms, bird and bee depredation, dieback after harvest
- **Himrod** — poor growth, no fruit
NEEDS

- New Cultivars

- Markets exist for table grapes but seeds/skins/shelf-life limit potential

- Wine market growing, becoming more sophisticated

- Sustained research priorities and funding
INTERESTED?

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