

Status Report 12/1/2018

**Title: Development of a regional Muscadine production guide**

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## **Objectives:**

- (1) Develop a regional muscadine guide
- (2) Develop a seed muscadine team

## **Justification and Description:**

The NCSU Muscadine Production Guide (Poling et al. 2003) is a standard guide for muscadine growers in the Southeast. However, the muscadine industry has experienced substantial growth since 2003. In North Carolina alone, an estimated 1000 acres of commercial muscadines are grown, compared to an estimated 400 acres in 2002 (Poling et al. 2003). Today, muscadine growers represent a thriving wine and a growing fresh-market industry in the Southeast. The needs of those two variable industry outlets as well as regional differences in climate and soil patterns, the increasing maturity of older muscadine vineyards, the recent development in pest management and the release of new muscadine varieties since 2003, need to be addressed.

Therefore, we propose to build a team of scientists and growers to develop a new, regional adapted muscadine production guide. We propose (1) to identify and update key areas of interest, specifically addressing regional differences in muscadine production. (2) to include knowledge of experienced growers into the regional guide.

Over this process, we further propose to build a seed muscadine team. Within this team, we will assess strategies for the development and funding of an area wide muscadine working-group (e.g. through the Southern IPM Center IPM Enhancement Grant Program)

## **Objectives, Results and Impact:**

### *Objective (1) Develop a regional muscadine guide*

In a face-to-face meeting early 2018, key areas of the muscadine guide and main editors were identified (see preliminary document). A first document of a complete muscadine production guide is currently under development, including following text-bodies: Trellis, Training and Pruning; Fertilization, liming and nutrient deficiencies; Weed Management and Herbicide Injury; Pest Management; Disease Management; Harvesting; Fruit Quality Characteristics.

Following text-bodies are completed: The biology of wild muscadine vines; Modern Muscadine Varieties; Costs and estimated returns; Main production regions in Georgia and North Carolina; Climate Change and Muscadine Production; Propagation; Site Selection and Vineyard Establishment;

It can be assumed that a completed text body will be send out to the research and extension editorial board by **mid of December 2018**. However, due to missing original files of illustrations from Poling et al. 2003, most drawings need to be re-developed.

*Therefore we will ask for an extension of the funding period to hire a part-time illustrator in the year of 2019.*

Objective (2): Develop a seed muscadine team

Through an extension team building effort in August 2018 at LuMil Vineyards, a seed muscadine extension team (NC Eastern Grape Extension Team) was built. The members are: Brad Hardison (NC Coop. Ext., Sampson Co.); Bruce McLean (NC Coop. Ext., Bladen Co.); Jessica Strickland (NC Coop. Ext., Wayne Co.); Tom Hroza (NC Coop. Ext., Duplin Co.); Mack Johnson (NC Coop. Ext., Robeson Co.); Jason Weathington (NC Coop. Ext., Cumberland Co.); Nancy Olsen (NC Coop. Ext., Bladen Co.); Sanjun Gu (NC A&T Greensboro). Mark Hoffmann (NC Coop. Ext., NCSU Raleigh) is chairing this group.

Industry and research representatives from Georgia, North Carolina, Alabama and the USDA were present at that meeting and a industry priority list was developed. A next team meeting is scheduled for early 2019 to develop strategies for project funding, based on the industry input. The extension team and industry priority list can be found online:

<https://smallfruits.cals.ncsu.edu/services/eastern-grape-extension-team/>

**Literature:**

Poling, E.B., Mainland, C.M., Bland, W.T., Cline, B. and Sorensen, K. 2003. Muscadine Grape Production Guide for North Carolina. North Carolina Cooperative Extension Service NCSU, Raleigh, NC. AG-92, 20pp.

October 20, 2017

Dear Dr. Hoffmann

**Cauble Creek Vineyard, LLC** support your efforts to develop a regional, updated Muscadine production guide. During the last decade, the Muscadine industry grew immensely, facing new challenges with diverse marketing channels, different maturity levels of vineyards and regional differences in weather patterns. Those challenges differ from region to region. An up to date production guide which addresses these issues is highly needed for growers throughout the Southeast. Therefore, you have our full support in your efforts of the **“Development and Update of a Regional Muscadine Production Guide”**. We are looking forward to work closely with you on a regional and updated version of the NCSU Muscadine production guide.

Sincerely,



William M. Yost – Member, Mgr.



100th North Carolina Winery

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