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Inside this issue:

Ahead Lies the Unknown	1
Plum Curculio and Blueberries	1
Educational Programs on IPM	2
2022 MS Blueberry Education WS	3-5
Renovating Blueberry Bushes	6
2022 Pest Management Guide	7

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Ahead Lies the Unknown

There is a lot of uncertainty in the world today. How will the pandemic progress? Are we watching another war begin right before our eyes? Will the climate continue to warm and bring more instability in the future? So many question marks. Most days I just want to focus on my research and extension programs and shut out the outside world. We must focus on making our little part of the world a better place and we can do that through producing a nutritious, delicious, and in-demand crop. Blueberries are more popular now than they have ever been and if we keep that in mind we can perhaps keep the rest of the craziness at bay. So far this year it was warm in early January and I was worried about lack of chill. Then, it got cold and the plants stopped. Now we may even be a little behind where things have been the last few years. It won't take long for that to change once days get warmer. Even though we don't know what lies ahead we can always count on blueberries!

Plum Curculio and Blueberries

Plum curculio (*Conotrachelus nenuphar*) is, as the name suggests, a pest of tree fruit species like plums and peaches but also apples. But, is plum curculio a problem in blueberries? It is in North Carolina. This insect is spread widely across the South and could be a problem in Mississippi fields too. To see a presentation on this pest go to the link below, from The North Carolina Blueberry Journal:

<http://ncblueberryjournal.blogspot.com/2022/01/plum-curculio-biology-and-status-in.html>

Educational Programs on Integrated Pest Management

The University of Georgia Integrated Pest Management program has put together training videos on different topics related to blueberries. These are very informative and given by some of the top experts in the field. Below are the topics and presenters:

- Cultural Practices & Fertility - Bill Cline
- Insect Management - Ash Sial
- Harvesting & Packing - Bill Cline
- Disease Management - Jonathan Oliver
- Organic Disease Management - Elizabeth Little
- Organic Insect Management - Ash Sial
- Disease Management - Jonathan Oliver
- Weed Control - Mark Czarnota
- Organic Weed Control - Mark Czarnota

All of the videos can be accessed from the link below:

<https://extension.uga.edu/programs-services/integrated-pest-management/publications/presentations/blueberry-ipm-presentations.html>

2022 Mississippi Blueberry Education Workshop

Eric T. Stafne, MSU-ES

Topics and Speakers:

On February 14, 2022 the 2022 Mississippi Blueberry Education Workshop took place via Zoom. It was recorded and will be *available soon*. We had a great line-up of topics and speakers. Let me know if you want more of these meetings. Access the recording here:

<https://vimeo.com/679187619/f9c450557a>

Optimizing pollination in blueberry - hive density, placement, and landscape features

Dr. Lisa Wasko DeVetter

Associate Professor, Small Fruit Horticulture

Department of Horticulture

College of Agricultural, Human, and Natural Resource Sciences

Washington State University NWREC and Everett

Description: Many blueberry growers utilize honeybees for pollination services. However, data-driven recommendations on how to optimally deploy honeybees are sparse. This presentation will highlight collaborative research on how hive density, placement, and landscape features impact pollination in blueberry.



-Continued-

Workshop, cont.*Novel Technology for Weed Control in Fruit Crops: What's in the Works***Dr. Lynn Sosnoskie**

Assistant Professor,
School of Integrative Plant Science Horticulture Section
Cornell AgriTech

Description: Weeds are a significant threat to crops, directly, because of resource competition. Indirectly, weeds may serve as alternate hosts for pests and pathogens, interfere with the deposition of crop protection chemicals, and impede harvest. Weed management across US cropping systems is largely reliant on herbicides. The evolution of herbicide resistance, regulatory hurdles, and changing public perceptions about pesticide use has facilitated interest in novel tools for the control of unwanted vegetation. This talk will discuss the results of a nationwide survey to identify grower interests with respect to up-and-coming technology, present preliminary results from ongoing trials evaluating electric weeders and precision sprayers, and describe 2022 research plans.



Workshop, Cont.

Root growth patterns of southern highbush blueberry grown in pine bark beds

Dr. Gerando Nunez

Assistant Professor of Horticulture
Horticultural Sciences Department
University of Florida

Description: Root abundance and nutrient uptake efficiency vary throughout the season in perennial crops. We studied the root systems of southern highbush blueberry cultivars ‘Emerald’ and ‘Farthing’ using a combination of farm and laboratory measurements. We identified periods with high root growth and periods with high root turnover, which have important implications for blueberry irrigation and fertilization.



Renovating Blueberry Bushes

Eric T. Stafne and Barbara J. Smith

Rabbiteye blueberry bushes are relatively easy to grow and commonplace across Mississippi; however, if not properly maintained the bushes will decline over time. Renovation pruning is a way to re-invigorate bushes by severely cutting back old growth to promote flushes of new canes that lead to more fruit bearing potential. Producers who purchase old rabbiteye blueberry plantings often have questions on how best to rejuvenate bushes, including how much to cut off and when fruit will be harvested again. In much of the southeastern United States, mature bushes are sheared or topped immediately after harvest each year which allows sufficient time for cane regrowth and fruiting bud development during the remaining summer period. While this is a common practice on rabbiteye blueberry bushes, a more radical pruning (renovation) is sometimes required to re-invigorate moribund and poorly maintained plantings of highbush blueberry and rabbiteye blueberry. When renovation pruning is performed, blueberry bushes are pruned to the ground or close to the ground, resulting in no fruit production the following year or perhaps even longer. However, if plants recover quicker, then an earlier harvestable crop could be gained to offset the costs of the renovation process. We did this procedure with eighteen, aged, low productivity 'Woodard' rabbiteye blueberry bushes which were pruned at two different heights (ground level and 50 cm above ground level) after harvest in July 2017. For two seasons, fruit yields were collected and weighed, bushes were measured for growth parameters, and canes weighed. Bushes pruned at 50 cm above ground level had much higher yields in both 2019 (3.47 vs. 0.63 kg) and 2020 (3.91 vs. 1.23 kg), thus providing a substantial yield benefit. The 50-cm above ground level pruning treatment bushes produced more canes by the end of the study, thus accounting for more fruiting area. In short, pruning old, non-productive bushes at 50 cm above ground level can provide growers with greater potential for early economic returns than pruning at ground level for 'Woodard' rabbiteye blueberry. The entire study can be read here:

<https://journals.ashs.org/horttech/view/journals/horttech/31/2/article-p188.xml>

Beginning this year (2022) we will be doing a similar study on southern highbush blueberry bushes, primarily 'Star'. An added component will be fertilizer rate to see if that effects regrowth and productivity. The bushes have been pruned already and we are just waiting for the weather to warm up and see some faster growth. We will keep you updated on any interesting results that come out of this study.



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Southeast Regional Blueberry Integrated Management Guide

Rebecca Melanson — MSU extension plant pathologist

The 2022 Southeast Regional Blueberry Integrated Management Guide, produced by the Southern Region Small Fruit Consortium. This guide is for commercial blueberry production and is an excellent resource for commercial blueberry producers and agents with commercial blueberry plantings in their counties.

The guide is available on the Southern Region Small Fruit Consortium website (www.smallfruits.org). The link will also be posted on the [Fruit and Nut Disease Publications webpage](#) on the MSU Extension website.

Thanks to funding support from a USDA NIFA Crop Protection and Pest Management Extension Implementation Program grant, a limited number of guides will be printed for distribution to commercial blueberry producers and county agents in Mississippi.

2022 Southeast Regional Blueberry Integrated Management Guide

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Ash Sial (University of Georgia)

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Recommendations are based on information from the manufacturer's label and performance data from research and extension field tests. Because environmental conditions and grower application methods vary widely, suggested use does not imply that performance of the pesticide will always conform to the safety and pest control standards indicated by experimental data.

This publication is intended for use only as a guide. Specific rates and application methods are on the pesticide label, and these are subject to change at any time. Always refer to and read the pesticide label before making any application! The pesticide label supersedes any information contained in this guide, and it is the legal document referenced for application standards.