EASTERN SHORE AGRICULTURAL RESEARCH & EXTENSION CENTER

The Stalk

VOLUME I ISSUE II



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2021 Eastern Shore AG Conference

he Eastern Shore Ag Conference and Trade Show has been cancelled for 2021. In lieu of meeting in person, a web series is being developed to address key issues affecting our growers. Please see the "Agents Corner" section for more details.



Eastern Shore Agricultural Conference & Trade Show





Dr. Mark S. Reiter Director and Associate Professor of Soils and Nutrient Management

From The Director

We hope that everyone is well and able to continue with field work during this cool and wet October! Things at the Eastern Shore AREC are progressing as we have continued with corn harvest, started hand harvesting our edamame (edible soybean), planted cover crops plots, and planted our cool season vegetables. We also recently received positive news from administration in Blacksburg; which is allowing us to continue our search for a new Horticultural Cropping Systems Specialist faculty position. This position with have a 50% applied research and 50% Extension appointment. Since this position was placed "on-hold" during the COVID-19 pandemic, we are continuing with our current pool of applicants and hope to have interviews soon. Please stay tuned for further information and to participate in the interview process! Mark

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Agents Corner

s we move into the fall and season's change agriculture doesn't stop here on the Eastern Shore. Corn is being picked, soybeans are starting to be harvested, and cover crop is being planted. Overall, reported corn yields have been disastrously low, especially in Northampton County. It is our hope that the soybean crop has better yields. As

we make this transition into the new season, we Agents (Theresa and Ursula) are always looking for what's next.

Unonla & Theresa

ES AG CONFERENCE

The 2021 ES AG Conference in its traditional format has officially been postponed. For this upcoming year, the advisory committee has decided to pursue a web series that growers and agribusiness personnel would be able to view at their leisure. We intend to record subject matter and speakers that are typically seen at the Conference but in a condensed and digital format. If you would like to contribute to the Conference, please submit your recommendations to your County Agent.

CORONAVIRUS FOOD ASSISTANCE PROGRAM - 2 (CFAP-2)

The new 2020 USDA-FSA Coronavirus Food Assistance Pro-gram-2 (CFAP-2) is underway. Sign-up began Sept. 21 and will continue through Dec. 11, 2020 at the FSA Office in Accomac. Call 757-787-0918 for assistance. The purpose of the program is to render financial assistance to farmers who continue to face market disruptions and associated costs because of COVID-19.

Who is Eligible? Anything commercially for sale is likely eligible. Commercial is defined as at least 75% of adjusted gross income from farming.

What is Eligible? CFAP-2 program is split into three categories of commodities:

Price trigger commodities such as grains, cotton, livestock, eggs, and others

Flat-rate crops such as alfalfa, millet, oats, peanuts, triticale, and others

Sales commodities such as fruits & vegetables, nursery crops, aquaculture, tobacco, etc.

Ineligible Commodities? Hay, except alfalfa, forage crops, cover crops, and certain contract growers such as integrated broiler production.

PRIVATE PESTICIDE CLASSES 90 & 91

Recertification classes for private pesticide applicators will be held via an online platform for 2020. We will have more information to share as details become available. If you need to recertify and have any questions, please contact you County Agent.

ACCOMACK EXTENSION OFFICE CLOSURE/MOVE

he Accomack County Extension office is preparing to move! We will be moving a stones throw away into the old Dentist office (Seaker) at 23185 Front St, Accomac. Due to construction in two buildings, the Accomack County Extension office is closed. If you need assistance, please contact Theresa via phone (757-787-1361 x 14) or email (tpittman@vt.edu)

Virginia Cooperative Extension

October Research Highlight Anaerobic Soil Disinfestation (ASD)

José Garcia Gonzalez, ESAREC Graduate Research Assistant, is researching the efficiency in the generation of anaerobic conditions and its effect on the management of soilborne diseases such as southern blight (Sclerotium rolfsii) and impact on the soil and tomato plants. oilborne diseases and nematodes continue to be a threat to vegetable and field crop productions throughout the mid-Atlantic region. With the phase-out of methyl bromide and reduced fumigation occurring in vegetable production systems, it is necessary to explore alternative methods to control soilborne plant pathogens and other pests. Anaerobic soil disinfestation (ASD) consists of applying carbon amendments to the soil, watering to the field capacity to remove oxygen from the soil, and immediately covering it with a plastic tarp for 2 to 8 weeks. Anaerobic conditions favor both facultative and obligate anaerobic microbes and subsequently create organic acids and volatile compounds that are harmful to most soil pathogens. The rapid growth of microorganisms in the soil depends directly on the available carbon; therefore,



identifying suitable and efficient local carbon sources is critical for ASD to be successful. Currently, José Garcia Gonzalez, a 4-year Ph.D. candidate, working under the advice of the project leader, Steve Rideout and other faculty at the Eastern Shore AREC, is exploring different carbon sources that include brassica, grass, and legumes cover crops, as well as pelletized poultry litter, biochar, and mushroom compost. The objective is to identify its efficiency in the generation of anaerobic conditions and its effect on the management of soilborne diseases such as southern blight (*Sclerotium rolfsii*) and impact on the soil and tomato plants.

As part of multidisciplinary research, the controlled environment experiment will help elucidate effective carbon sources for ASD in plasticulture systems in the mid-Atlantic region and thus be implemented as an alternative ecological strategy to control soilborne pathogens.

Dr. Vijay Singh is interested in obtaining herbicide resistant weed samples from growers! Please contact him for more information.

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Feel free to send us your feedback!

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Southern Green Stink Bugs





"In early fall, 2020, they EXPLODED in numbers! How fitting for the 2020 year!"

An Eastern Shore Invasion

Hélène B. Doughty

he Southern green stink bug

(Nezara viridula) is in the same family of true bugs as the green stink bug, the brown stink bug and the brown marmorated stink Although adult bug. Southern green stink bugs are very similar in appearance to green stink bugs, they are separate species and differ in their appearance as nymphs. The Southern green stink bug is very dark colored in the early instars, turning green in the latter instars but can be distinguished from the green stink bug by the presence of white dots on its abdomen Green stink bug nymphs have more of a striped abdomen look in

comparison (figure 1). Both species of nymphs can otherwise have various colorations of green and black (figure 2). Southern green stink bugs overwinter under debris or tree bark and emerge in March-April with another peak flight in October. This species can be found in the Southeastern United States from Virginia to Florida but I had never seen them in any kind of numbers on the research station or in growers' fields. Southern green stink bug nymphs were first observed in our trials at the ESAREC last year, particularly in edamame, soybean and hemp in moderate numbers. In early fall, 2020, they EXPLOD-ED in numbers! How fitting for the 2020 year! I

first observed eggs and nymphs in zucchini squash in the spring. In the fall, they infested sweet corn trials (see damage in figure edamame, soybean, 3), pumpkin and tomatoes. I began to differentiate green stink bugs found in the light trap in July and determined that a switch in species occurred in August with more Southern green stink bugs being trapped (figure 4). Both species inflict the same damage and feed on a variety of host plants but the Southern green stink bug has the potential for higher population numbers (figure 5).





Population of green stink bug vs. Southern green stink bug in black light trap Aug - Oct 2020 ESAREC, Painter, VA 120 100 80 60 40 20 0 25-Jul 1-Aug 8-Aug 15-Aug 22-Aug 29-Aug 5-Sep 12-Sep 19-Sep 26-Sep 3-Oct Figure 5

Southern Green

Green Stink Bug 🛛 🗕

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The Virginia Tech, Eastern Shore AREC is committed to supporting commercial vegetable, grain, oilseed, and fiber production throughout the Commonwealth of Virginia. Centrally located on Virginia's Eastern Shore, the center conducts basic and applied research on more than 25 agricultural crops.

If you are a person with a disability and desire any assistive devices, services or other accommodations to participate in any activity, please contact Lauren Seltzer at 757-807-6586* (*TDD number is (800) 828-1120) during business hours of 7:30 a.m. and 4:00 p.m. to discuss accommodations.



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