

UGA Extension Meriwether County ANR E-Newsletter

July 28, 2017

INVASIVE SPECIES

Ways We Keep Track of New (Or Old) Invasive Species

On Thursday I received a request from the Bugwood Network: Center For Invasive Species and Ecosystem Health to publish images that I took of the African fig fly, *Zaprionus indianus* on their website. It is a first report for their country wide mapping. The fly has actually been here for a few years. I trapped for it and reared it out of fruit during 2012-2015 back in SC for Clemson University. It is not believed to be as severe a pest in fruits as the spotted wing drosophila (SWD), *Drosophila suzukii*, another new invasive, but it does show up in fruits, especially soft fruits. What was very different about this find is that all of the flies I captured on peaches were *Z. indianus*. Typically, in the past, when I found *Zaprionus* I also found SWD. I've been trapping in Meriwether County for these species since the beginning of 2016. SWD is present year round in the area but *Z. indianus* is unable to overwinter here. It's too cold or there are not enough resources (food) available. Back in SC it usually showed up sometime in July and that has been the case here also.

To see Meriwether County highlighted on a US map by itself (that probably won't last, I expect other people to start submitting images) please visit:

<https://www.eddmaps.org/distribution/uscounty.cfm?sub=21976>

To see the *Z. indianus* images on their website please visit:

<https://www.ipmimages.org/browse/subthumb.cfm?sub=21976>

Click on the images to zoom in.

Joe LaForest, Co-Director of the Southern IPM Center and Associate Director of the Bugwood Network, first saw my images of the egg and larval stage of *Z. indianus* as a sighting submission on EDDMaps-an early detection network for invasive species. County agents are strongly encouraged to make regular submissions but anyone can register and make submissions of plant, insect, wildlife or diseases thought or known to be invasive in the southeast. You can also visit the website to just see what is being submitted. Lanie Riner and I had a conversation about a month ago about a submission for Johnson grass, *Sorghum halepense*, in Meriwether County. So not all submissions are about a new invasive; some are about very old invasives. How many of you knew that Johnson grass is actually not native? It's originally from the Mediterranean area and was brought into the US in the 1800's as a potential forage crop. Remind you of any other invasive intentional introductions?

To learn more, to join or to just check it out please visit: <https://www.eddmaps.org/southeast/>

BERMUDAGRASS STEM MAGGOT

Bermudagrass pasture problems confirmed in Meriwether County on July 26, 2017 and Pike County on July 28, 2017

I got a call from David Ward Wednesday about problems in a bermudagrass pasture and a call from Glen Beckham of Pike County this morning. The word had been going around for a couple of weeks about possible armyworms or bermudagrass stem maggots in fields. I can now confirm that I have seen Bermuda rust (*Puccinia cynodontis*) as well as damage from bermudagrass stem maggots (*Atherigona reversura*). Once you see the tip dieback typically the maggot has already dropped to the ground to pupate.

The bermudagrass stem maggot is a fairly new introduction from Japan and Asia to the US, first found in Georgia in 2010. David told me that it was found in the Manchester area a few years back. Emmett Collins told me it was also found in the Greenville area before. It is believed that the fly does not overwinter in our area but migrates in from Gulf States. Bear in mind, it might not need to go far to survive in a mild winter. The damage is caused by the larvae of a fairly small fly (approximately 1/4 inch in length). The female fly lays an egg near the first node of a grass shoot, the larva hatches out and moves into the shoot and precedes to tunnel and feed up the shoot from the node which causes the tip to die. The larva is approximately 1/8-1/4 inch long. If a field is heavily infested, it can look like the field has frost on it (see image below). If the bermudagrass is flowering/seeding though that can cause a frosted look too. So be sure to look closely at the tips. If it is bermudagrass stem maggot you can easily pull the dead tips out of the sheath (see images below).

Research is ongoing on management for bermudagrass stem maggot but not a lot is known since it has been here such a short time and is not a problem every year. It tends to avoid thick-stemmed varieties such as Tifton 85 or 68. Finer-stemmed varieties such as Alicia, Russell, Coastal and common are more susceptible. If your grass is growing strongly and quickly and there is only isolated areas of damage you may get by with just cutting for hay. If there seems to be a heavy or widespread infestation or the grass is struggling to grow then pesticides may be necessary. The recommendation for an insecticide application is to treat 5-7 days after a cutting and then make a second application in another 7-14 days. Two applications are recommended because of possible multiple generations. Bear in mind though that flying insects are usually not easily controlled by foliar insecticide applications and the same goes for larvae inside plant tissue unless a systemic is used. Only pyrethroids are recommended at this time for bermudagrass stem maggot and all of them (zeta-cypermethrin, cyfluthrin, lambda-cyhalothrin, etc.) work equally well.

I managed to finally find a larva on Thursday evening (images below). I spent a couple of hours slicing open stem tips to find it so it's not something you will typically see in the field with the naked eye. I also found an empty pupal case (image below) which means

that possibly the flies don't always drop to the ground to pupate in the soil. They are, perhaps, able to remain in the stem and pupate.

I am encouraging folks to scout their pastures. If you need assistance just let me know.



SMALL RUMINANTS

Sheep Reproduction

This past spring I had a number of sheep producers in the area mention that they had an exceptional number of ewes giving birth to triplets or an even higher number of lambs. There are many factors that can influence the number of multiple births for an ewe including breed, nutrition, size and maturity of the ewe, breeding season time of year, and of course the health of the ram used for breeding. Producers with a high number of multiple births, knowingly or unknowingly, successfully manipulated these factors.

Certain breeds are known to have the potential for multiple births. Finnsheep and Romanov are used in crossing to increase prolificacy and obtain earlier onset of puberty. The hair sheep breeds Katahdin, St. Croix, and Barbados Blackbelly are also well known for their multiple births and ability to breed out of season.

Even ewes of known prolific breeds need adequate nutrition to reproduce though. That said, they shouldn't be overfed. Fat ewes may have difficulty conceiving and may experience more embryonic losses. They don't respond to "flushing" either. Flushing is giving extra feed (rested pastures or by supplementation) to ewes that are in an acceptable condition for breeding to encourage weight gain. Flushing will work best if done early in the breeding season so some weight gain has occurred by the time the ovulation rate is at a maximum.

The reproductive cycle for sheep is partly controlled by photoperiod. Ewes come into estrus (heat) around every 17 days and estrus will last 24-48 hours or until pregnancy occurs. As days become shorter and nights longer the period between estrus shortens so there is more opportunity for breeding. The cooler temperatures of fall (when days are shorter) will also increase conception rate and reduce fetal stress. As I mentioned above, though, some breeds, such as Katahdin, are not as influenced by photoperiod and can be bred successfully "out of season."

Breeds vary as to when ewe lambs will reach sexual maturity ranging from 5-12 months. Research has indicated that ewes bred as yearlings have a higher lifetime productivity than ewes that lamb at two years old. Before making the decision to breed ewe lambs, the nutrition needed to reach at least two-thirds of their mature weight should be provided. Bred ewe lambs typically have single births which is a good thing since the potential for lambing problems is higher. Typically multiple births increase as ewe age increases; 3-6 year old ewes are the most likely to have multiple lambs.

Parasite management is critical for the overall health of the herd but is especially critical for successful lambing. FAMACHA scoring can be used to manage dewormer use throughout the year but a general recommendation is to deworm ewes one month before lambing.

So aim at combining the best genetics with the best environmental conditions for increasing production with multiple births. Feed your ewes adequately (not overfeeding) and then flush 2-3 weeks prior to breeding and 2-3 weeks into the breeding season. Breed in the shorter days and cooler temperatures of September, October or November. Use FAMACHA scoring regularly to manage dewormer use and move herds off pastures that are heavily infested. Treat prior to lambing.

When multiple births do occur the chance is that intervention of some kind on the producer's part will be necessary to be sure all lambs are fed adequately. Most ewes have difficulty or may refuse to nurse multiple lambs. Intervention may mean finding a surrogate ewe who willingly nurse one or more of the lambs or bottle-feeding around the clock. Be sure you are willing to take on the extra work and gain the necessary experience for insuring survival of your lambs.

BEEKEEPING

Introduction to Beekeeping

We meet next Tuesday! Jim Quick, Research Professional in the UGA Entomology Department and Master Beekeeper, will be giving an overview of the art and science of beekeeping on Tuesday, August 1 at 7:00 PM. I am hoping Jim's talk will be the first of many. We will meet at New Hope Church Fellowship Hall at 7719 Callaway Road in Gay. Drinks and snacks will be provided. Please call 706-672-4235 or email scj24262@uga.edu if you plan to attend.

NRCS

Local Work Group-EQIP

The Natural Resources Conservation Service (NRCS) in Georgia is soliciting feedback from the Local Work Groups (LWGs) for 2018 Program Delivery of Farm Bill Programs. This open forum is design for local citizens; stakeholders; and partners to come together and have a voice on how federal funding is spent on a local level for the Environmental Quality Incentives Program (EQIP) and other Farm Bill Programs. This meeting is to provide input on the Fiscal Year 2018 funding for the EQIP.

Specifically, NRCS-Georgia is seeking LWG feedback on three items of information:

1. Propose an Allocation of Funding by Resource Concern,
2. Establish Payment Maximums, and
3. Recommendation on local questions

Rory Richardson sent out the notice this week for our local meeting. The Newnan Funding Unit (Coweta, Meriwether, and Troup Counties) Local Work Group Meeting will be on Tuesday, August 8, 2017 at 10:00 am at the Troup County Library in Lagrange, GA. The Library's address is 115 Alford St, LaGrange, GA 30240 and the telephone number is (706) 882-7784.

I will not be there this year. The Georgia Strawberry Growers Association Annual Meeting is the same day and I am already committed to it. Brian Maddy, ANR Agent for Troup County, plans to attend and will give me an update.

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STRAWBERRIES

Georgia Strawberry Growers Association Annual Meeting

Tuesday, August 8, 2017

Georgia Farm Bureau Building, 1620 Bass Rd, Macon Georgia

AGENDA

10:00 – 10:30 Registration and Welcome

10:30: Strawberry Insect Update – Hannah Burrack, NCSU Extension Entomology Specialist

11:05: Strawberry Weed Control – Katie Jennings, NCSU Assistant Professor Weed Science

11:35: Strawberry Varieties for the Southeast – Gina Fernandez, NCSU Extension Horticulture

12:45: Business Meeting

Please let me know if you plan to attend the meeting so I can inform the organizers. Also a group of us plan to ride together so you may be able to join us. Contact me at 706-977-0882 or scj24262@uga.edu.

FORAGES

GrassMasters

Preparation for the classes has been finalized. They will be held from 6:30 to 8:30 on Thursday evenings (see dates and topics below) at the Troup County Agricultural Center at 21 Vulcan Materials Rd in LaGrange.

August 31: Introduction to Forages

September 7: Fertilization of Perennial Grasses

September 21: Pest Management

September 28: Hay Production

October 5: Understanding Forage Quality

October 19: Grazing Management and Planning

The program focuses on the forages proven best for northern Georgia and strategies for grazing, maintaining soil fertility and health, and managing pests. Staff members of the UGA Forage Team and the U.S. Department of Agriculture Natural Resources Conservation Service have teamed up to teach the classes.

The cost for all seven classes is \$25, which covers the cost of an educational handbook and refreshments. Participants must pre-register before August 25 by contacting the Harris County Extension office at 706-628-4824.
