Pesticide Calibration and Safety Workshop for Horticulture Professionals
George M. Dickert, Regional Lead Agent

Understanding pesticide calibration and safety techniques are critical skills for horticulture professionals. Improperly calibrated application equipment results in misapplied pesticides and fertilizers that may result in ineffective treatments, profit losses, unintended landscape and environmental damage, and/or physical harm.

A team of Horticulture Extension Agents and Specialists addressed this need by developing a workshop curriculum to provide calibration and safety training for professional horticulturists and other pesticide applicators. A workshop was designed to educate pesticide applicators through demonstration and hands-on participation. Topics included spreader and sprayer calibration, pesticide drift demonstration, personal protective equipment use, field diagnosis of common pest problems, weed identification and management, and red imported fire ant management. This workshop was held at Spartanburg Community College on October 22, 2015. Resource materials were provided and six (6) SC and NC pesticide recertification credits were awarded to attendees.

Eighty-eight (88) professional horticulturists and licensed pesticide applicators attended the Spartanburg session on October 22. Sixty-eight (68) attendees completed and returned program evaluations. Of those respondents, 96% agreed or strongly agreed that they intend to use the information learned while applying pesticides. The subsequent practice changes associated with these responses should result in more efficient use of pesticides and fertilizers, saving applicators time and money; less chemical drift and runoff, reducing non-target and environmental damage; and safer mixing and loading practices, lessening the risk of accidental exposure to workers. Additionally, 96% of respondents agreed or strongly agreed that the program was worth their time and money, and 97% agreed or strongly agreed that they would recommend this workshop to others. By all accounts the 2015 Pesticide Calibration and Safety workshop in Spartanburg was successful and welcomed by the local horticulture industry.
Commercial Fruit Updates
Andy Rollins, Upstate Commercial Fruit & Vegetable Agent

This was the last year of the peach variety trial located at James Cooley’s Farm near Chesnee. Although cold damage was clearly evident this year, damage was not as severe as last year. In the picture it shows one beautiful peach, but if you look closely, other fruits were damaged and did not ripen properly. After picking and evaluating peach quality for many years, all the information has now been compiled and put into the new peach website (www.clemsonpeach.org), which will help growers select varieties that are available and will produce efficiently for them.

Continued work on a stinkbug-monitoring project in conjunction with USDA ARS scientist, Dr. Ted Cottrell, has been utilizing an intern, Mrs. Desirae Kissell, in helping collect insect counts each week. Earlier this year it was discovered that the rise in populations could be determined using insect pheromones and trapping (see pic), and consequently, major damage could be avoided through the application of properly timed insecticide treatment. This continued work will help make timely decisions.

Also, an evaluation of new peach rootstocks on one farm a new trial on another farm, each having different selections, are believed to help growers with a devastating disease of Peach Oak Root Rot.

A multi-state variety trial of two unreleased strawberry cultivars is showing promise. Dr. Gina Fernandez, NCSU strawberry and blackberry breeder, is the primary inspector on the grant that Extension and Upstate strawberry growers are interested in. This is an on-farm trial at Mr. James Cooley’s farm, Strawberry Hill USA. Yields, taste and quality of the fruit and plants will be measured.

Continued work on Spotted Wing Drosophila this year in blueberries has yielded two years of data and a better understanding of lower risk options that are now available. One option in particular uses red spheres with an attractant (sugar) and a pesticide in their caps to draw them in and kill them without using pesticides directly on the fruit. The idea is great in that it reduces pesticide use and does better than the control; however, it still doesn’t do as good a job as commercial pesticides registered for this use.
Bringing Growers and Specialist Together

Chris Talley, Area Agronomy/Row Crop Agent

The Upstate area of South Carolina is not known as a large Corn and Soybean Production area of the State. However, there are still a large number of row crop producers who either farm full time or part time. These producers are still in need of valuable research based information provided through Clemson University to help them maximize their production systems. With the emergence of the new invasive insects like the Sugarcane Aphid, Glyphosate resistant weeds, and diseases like Asiatic Soybean Rust, the need for this type of program is even more critical.

Area Agronomic Crops Agent Chris Talley conducted his annual “Upstate Row Crops Production” meeting in Anderson County on February 3, 2016. Over 20 local producers from surrounding counties participated in this program. Producers were giving information on weed management options for corn and soybeans, as well as insect management in soybeans, soybean disease management as well as learning about Clemson’s Certified Seed Program and official variety trials (OVTs) conducted across the state.

Producers had another opportunity to interact with our state specialists and other local farmers on August 19th and 20th of 2016 by participating in the Simpson Research and Education Center (REC) annual field day and in a Pre-Field Day Row Crop Producer meeting. The pre-field day meeting allowed producers to spend more time with our specialists on a one on one type environment. Both the field day and pre field day were well represented by our local row crop producers.

The 2016 producer meeting had 27 row crop producers in attendance from five upstate counties. Over 50 producers participated in the Simpson REC field day agronomic crops tours and 16 producers participated in the pre-field day meeting. All producers expressed that they gained valuable knowledge, which will help them be more profitable in their row crop production.

Many of our state extension specialists participate in this meeting where they relay information from their research trials to our upstate producers. Producers can then utilize what they learn in making their farming operations more efficient and profitable.
Therapy Dogs Help Educate Youth

Ginger Bowen, 4-H Agent

Spartanburg County 4-H reached 3,782 youth in 2015-2016. There were 37 active 4-H Clubs with thirteen of them being 4-H Pet Pal Clubs.

The Spartanburg Humane Society and Spartanburg County 4-H have been partnering for over eight years to create and enhance a program that educates youth on issues affecting companion animals. The Club lessons included the following topics: importance of grooming, annual veterinarian visits, nutrition, manner training, adoption options and parasite control. The Humane Society Educator, Ingrid Norris; 4-H Coordinator, Ginger Bowen; volunteers, teachers, and certified therapy dogs contribute to making this 4-H Pet Pal program possible.

The target audience for this particular club is for youth between the ages of 9-14. Clubs meet once a month for 9 months which typically begins in September and ends in May of each school year. Programs last from sixty to ninety minutes each and have between 20 to 25 youth enrolled.

Clubs are held in-school and after school depending on the needs of the youth. All 4-H Pet Pal Clubs have elected officers that have been taught basic leadership skills on how to conduct a brief business meeting. Officers open and close every meeting. The gavel is used, roll is called, pledges are said and minutes are recorded and read.

These 4-H Clubs have a winning combination. The youth learn leadership skills and the importance of taking care of a companion pet. The Clubs always strive to use the hands-on approach and practice the 4-H Motto, “Learn by Doing”.

As stated above Spartanburg County had 37 active 4-H Clubs in 2015-2016. Thirteen were Pet Pal Clubs and the remainder 24 Clubs were in the areas of; goats, beef cows, chickens, nutrition, science, healthy lifestyles and gardening.

Four-H would not be possible in Spartanburg County without the support of volunteers, parents, teachers and good partnerships. Spartanburg County’s seven school districts, which 4-H has partnered with, is making sure 4-H is available to youth in each district.
Coyote Management

Jeff Fellers, Forestry/Natural Resources Agent

On February 25, 2016 Cherokee, Spartanburg, and Union Counties held a joint meeting on coyote control. The meeting was held in Jonesville, SC, which was a central location between all three counties. Coyote management has become a hot topic across the state of South Carolina. They have a significant impact on wildlife and domestic animals. The workshop provided the basic information on coyote biology as well as demonstrations for trapping coyotes. We partnered with the SC Department of Natural Resources and the Natural Resource Conservation Service to reach as many people as possible. We had a good turnout from all counties involved. Overall we had 52 people attend the meeting and actually had to close registration due to the limited size of the facility. Below are some of the results from a short evaluation conducted after the meeting.

What County do you live/hunt/manage land?
Cherokee – 19% of Participants
Spartanburg – 31% of Participants
Union – 44% of participants
No Answer – 6% of participants

Did you find tonight’s Workshops beneficial?
Yes – 100%
No – 0%

Breakdown of Participants (They could circle more than one Category)
Landowner/Manager – 81% of Participants
Hunter – 50% of Participants
Outdoor Enthusiast – 31% of participants
No Answer – 6% of participants

Backyard Barnyard

Lindsey Craig, Livestock and Forage Agent

This past May Backyard Barnyard: A hands on guide to small livestock farming, was held at Roper Mountain Science Center in Greenville County. The program was a joint effort between upstate area livestock and forage agents Cassie Wycoff and Lindsey Craig. This one-day workshop offered many unique sessions including in person weed ID, bee keeping, chicken farming, small ruminant farming, hog farming, raising horses, and having beef cattle. The class had over 20 participants from multiple counties that got to practice some hands on techniques as well. Some of these activities were ear tagging and giving vaccinations. Most of the participants had small farms themselves or were interested in raising food for their family on limited acreage. The class was a great success with future plans to move this program to other counties with even more topics to be covered.
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Agricultural Service Laboratory

The Agricultural Service Laboratory provides a variety of analytical agricultural testing. Samples may be submitted through the County Extension Offices or directly to the lab. Each County Extension Office has the supplies for submitting samples.

- Soil Testing
- Plant Problem Clinic
- Plant Tissue
- Feed and Forage
- Irrigation Water
- Compost
- Animal Waste

Spartanburg County Extension submitted 2,214 samples to the Agricultural Service Lab and Plant Problem Clinic in the 2015-2016 reporting year.

www.clemson.edu/extension/county/spartanburg

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