Hi Folks!

It’s going to be a busy spring! The following classes are scheduled for Randolph Co.:

- **Growing Small Fruits in the Piedmont**
- **Don’t Drink the Kool-Aid: Growing Plants that Will Distinguish Your Nursery from the Competition**
- **Selling at Farmers’ Markets: What to Know Before You Go**
- **Lawn Care in the Piedmont**
- **Tree Worker Training and ISA Tree Worker/Climber Specialist Certification Exam**

Randolph County growers are also invited to **Food Safety on the Farm** in Lexington, which I’ll be helping teach.

See the Upcoming Events section or contact me for more information about these and other events.

Regards,

Mary Helen Ferguson
Extension Agent

"Selling at the Farmers’ Market: What to Know Before You Go" is one of a number of classes scheduled. This one will address such topics as creating signage and attractive displays, food safety practices for the market, when sales taxes are and are not required, regulations related to selling homemade products, as well as basic information like how to apply for a booth.

**Fire Ant Management on Fruit and Vegetable Farms**

Fire ants are present in Randolph Co. and have been for some time. Several classes taught during 2009 focused on fire ant management in turfgrass. Those who work with lawns who have missed these events can give me a call or take a look at these publications: [http://www.ces.ncsu.edu/depts/ent/notes/Urban/ifa.htm](http://www.ces.ncsu.edu/depts/ent/notes/Urban/ifa.htm), [http://www.ces.ncsu.edu/depts/ent/notes/O&T/lawn/note145.html](http://www.ces.ncsu.edu/depts/ent/notes/O&T/lawn/note145.html), and [http://ipm.ncsu.edu/agchem/5-toc.pdf](http://ipm.ncsu.edu/agchem/5-toc.pdf) (Tables 5-19 and 5-23). Treatment options for fruit and vegetable areas (and agricultural land in general) are more limited than those for lawns, but there are options. I’ll address fruits and vegetables, specifically. If you have questions about other situations, give us a call or e-mail. (cont. on next page)
One thing to remember is that fire ants are here to stay. While they’re somewhat new in Randolph County, they’ve been in the US for almost a hundred years and in NC for over fifty. Attempts at eradication in other parts of the country have failed, so we need to learn to live with them as well as we can. Knowing that, you can decide what parts of your property are priority areas—where do fire ants interfere with your work or your crop to a degree that warrants treatment?

Fire ants can be treated with bait (for long-term control), a contact insecticide (for fast but possibly short-term control), or both, in a two-step method. I’ll address each option.

Baits are the products to use for relatively long-term control. The point of these baits is to kill the egg-laying queen or cause her to produce offspring that don’t mature correctly, so that she won’t just move and start a new mound elsewhere, which can happen when contact insecticides are used. Among bait products labeled for use in fruit and vegetable crop areas are some containing methoprene (Extinguish®, but NOT Extinguish® Plus), pyriproxyfen (Esteem® Ant Bait), and spinosad (e.g., Ferti-lome® Come and Get It! Fire Ant Killer). Hydromethylnon, in the form of Amdro® Pro Fire Ant Bait, specifically (note the “Pro”), can be used in bait stations in some fruit crops. Fortunately for organic growers, some products containing spinosad are considered acceptable by organic certifiers, too. Unfortunately for growers, some products containing spinosad are labeled for fruits and vegetables, but only in home gardens, so watch out for this.

It may take about two to four weeks when using hydromethylnon or spinosad and approximately two months when using methoprene or pyriproxyfen to see obvious results, since they do not kill adult ants, for the most part. While baits may cause treated colonies to die off, fire ants can still move back into the area. Be sure to follow label instructions regarding how to apply baits—don’t disturb the mound when you treat, and don’t let the bait get wet. Also, make sure the bait is fresh, since the ants need to perceive it as desirable food.

When you need to get rid of fire ants quickly (e.g., when harvesters are in danger of being stung) and long-term control is of secondary concern (the queen may or may not move and start a new mound elsewhere), you might choose to use a contact insecticide. Contact insecticides for fire ants, labeled for use on at least some fruit and/or vegetable areas, include some products containing carbaryl (Sevin), spinosad (Entrust®), and bifenthrin (various). There may be products in the pyrethroid class (typically, those with active ingredients that end in “–thrin”) labeled for use on fire ants in vegetables and/or fruits, as well, but I’m not aware of particular ones. In the past, a product containing d-limonene (Safer® Fire Ant Killer) was available, but it doesn’t appear that it is still being produced. Bifenthrin is somewhat unique among the mentioned chemicals in that it breaks down very slowly (approximately half of it is said to remain in its original chemical form after four months) and may provide fire ant control where it is applied for a long period of time. So, if you’re going to broadcast a contact insecticide (see more about broadcast treatments below), you might consider using something with bifenthrin. At the same time, when an area is treated with bifenthrin, the queen could still move and start a colony elsewhere in an untreated area. Also, the number of crops listed on some bifenthrin labels is limited, so make sure that the product you’re thinking of buying is labeled for use on the crop you want to treat and the manner of application you want to use (soil application).

While it’s important not to let baits get wet and not to disturb the mound when treating with baits, adequate water and application directly to the mound, as well as around it, are of great importance for most contact insecticides. Read the label for additional application instructions.
Another potential contact insecticide, boiling water, has been found to be reasonably effective—information from Texas A&M University states that “[a]pproximately 3 gallons of very hot water poured onto mounds will eliminate ants about 60% of the time.” However, safely getting three gallons of boiling water to a fire ant mound might be a challenge, and the boiling water may hurt plants.

As you can see, there are trade-offs to both bait and contact insecticide use. There is, however, a compromise method of treatment that combines advantages of both. This “two-step” method involves applying bait, waiting several days, and then using a contact insecticide to kill off ants remaining at the top of the mound. The order of the two treatments and the wait between them are important—remember: bait, wait, and then apply the contact insecticide.

Both baits and contact insecticides can be applied to individual mounds or broadcast over an area. I suggest treating mounds individually unless the number of them is so large that this is just not feasible. Broadcast treatments can kill other types of ants that, if present, may compete with fire ants and help prevent the fire ants from spreading into an area.

One special situation that some growers run into is that of fire ants in a greenhouse used for growing vegetables or vegetable transplants. One could use a contact insecticide and/or bait labeled for the crop, if the labels allow greenhouse use, in the greenhouse. Another option is try to manage the fire ant problem in the non-crop area around the greenhouse. A wider range of baits than those mentioned could be used for this purpose, since the application would be to non-cropland. This approach could also be taken in conjunction with contact insecticide treatment in the greenhouse.

I’ll close with a reminder to read and follow the label on whatever product you consider using. Make sure, before you buy something, that it is still labeled for the specific area/crop for which you plan to use it and method of application that you plan to use. (You’ll need something labeled for ground application around the crop of interest, in most cases.) Labels can change, and “the label is the law.” Many labels can be accessed at either www.agrian.com, www.cdms.net, or www.greenbook.net. Also, products differ with respect to whether or not water should be used and how they should be applied, and proper use, according to the label, can make the difference between whether or not a product works.

Recommendations for the use of agricultural chemicals are included in this publication as a convenience to the reader. The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by North Carolina Cooperative Extension nor discrimination against similar products or services not mentioned. Individuals who use agricultural chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Be sure to obtain current information about usage regulations and examine a current product label before applying any chemical. For assistance, contact your county Cooperative Extension agent.

Local Foods Promotional Postcards Available

NCDENR's Office of Environmental Education offers postcards (no fee and no limit given) that promote local produce and can be customized on one side:
http://www.eenorthcarolina.org/consumer/producecard.htm

Cover Crop Survey

Southeastern US “sustainable” farmers are asked to complete a short survey (expected to take approx. five minutes) regarding cover crops, even if the grower does not currently use them. “This survey is part of an effort to better understand the perceived benefits and challenges of cover crops use as well as the current levels of use on Southeast US farms.” You can go here to take the survey:
http://www.cefs.ncsu.edu/survey.html
Upcoming Events

Randolph Co.

Growing Small Fruits in the Piedmont
Mar. 9 (6:00 – 9:00 p.m.), Asheboro (NC Cooperative Ext. Randolph Co. Center). This class will provide an overview of strawberry, blueberry, blackberry, raspberry, and grape (muscadine and bunch) production. Call 336-318-6000 by Mar. 7 to register.

Don’t Drink the Kool-Aid: Growing Plants that Will Distinguish Your Nursery from the Competition
Mar. 11 (7:00 p.m.), NC Zoo Stedman Education Center (next to N. America entrance). Dr. Todd Lasseigne, Director of the Paul J. Ciener Botanical Gardens, will speak about herbaceous and woody plants that are new or unique in the nursery industry. A self-described "plant geek," Dr. Lasseigne holds an M.S. from the University of Georgia and a Ph.D. from NC State University. Before becoming Executive Director of the Paul J. Ciener Botanical Garden, he was Assistant Director of the JC Raulston Arboretum in Raleigh. He has participated in plant-scouting trips in the US, Asia, and Europe. Call 336-318-6000 by Mar 10 to register.

Selling at Farmers’ Markets: What to Know Before You Go
Mar. 22 (6:00 – 9:00 p.m.), Asheboro (NC Cooperative Ext. Randolph Co. Center). This class will address such topics as creating signage and attractive displays, food safety practices for the market, when sales taxes are and are not required, regulations related to selling homemade products, as well as basic information like how to apply for a booth. Call 336-318-6000 by Mar. 19 to register.

Lawn Care in the Piedmont
May 1 (9:00 – noon), Asheboro (NC Cooperative Ext. Randolph Co. Center). Learn the basics of turfgrass establishment and maintenance. Call 336-318-6000 by Apr. 30 to register.

Tree Worker Training and ISA Tree Worker/Climber Specialist Certification Exam
May 10 – 12, NC Zoo. This training (May 10 – 11) will address climbing, pruning, cabling, tree health, and other topics. ISA CEUs available. Twenty-five people will be allowed to take the International Society of Arboriculture Certified Tree Worker/Climber Specialist exam after the training (May 11 - 12). Call Mary Helen for more information. Those who want to take the exam should pre-register and pay the $40 fee as early as practical, since registering earlier will allow you to get the book to study for the exam earlier. Those who take the exam are also required to register with ISA. The training is limited to 50 people. This event is funded in part by a NC Urban and Community Forestry Grant. Go to http://randolph.ces.ncsu.edu/files/library/76/agenda-online.doc or contact Mary Helen for more information.

For NC Cooperative Extension, Randolph County Center, events: For accommodations for persons with disabilities or limited English proficiency, contact Wanda Howe by phone, fax, e-mail (wanda_howe@ncsu.edu), or in person, no later than ten business days before the event.
Statewide and Regional

East Coast Agritourism Webinar Series
Mar. 2: Introduction to Agritourism
Mar. 9: Is Agritourism Right for You?
Mar. 16: Marketing Basics
Mar. 30: Creating the Customer Experience
Apr. 6: Social Media 101
More info and to access webinars: http://www.ncsu.edu/tourismextension/WebinarSeries.html

Northern Piedmont Specialty Crops School
Mar. 5, Roxboro. Topics to be covered include the use of high tunnels to produce various horticultural crops and the results of table grape and asparagus trials. More info: http://granville.ces.ncsu.edu/index.php?page=events&event_id=16668 or 919-603-1350.

NC Muscadine Grape Assoc. 2010 Annual Winter Meeting

The Incredible Edible Muscadine

17th Annual Organic Growers School Spring Conference

Landscaper Pesticide Training

Growing Oyster Mushrooms

Crisis Preparedness Training
Mar. 17 – 18, Raleigh. “Scenario: A food-borne illness outbreak has been traced to your farm and it hits the news media.” More info: leah_chester-davis@ncsu.edu or 704-250-5406. To register (by Feb. 26): phhi_info@ncsu.edu or 704-250-5400.

Cultivating Connections: Web Marketing and Social Media for the Small Farm

2010 Small Farms Week Educational Events
Mar. 22 – 24, Raeford, Shannon, and Greensboro, NC. Included in this week are a tour of the John Council Farm and educational sessions related to greenhouse and high tunnel production, how to promote the nutritional aspects of crops, and more. More info: http://www.ag.ncat.edu/extension/sfc2010_reg.asp or 336-334-7691 or 336-256-0812.
Food Safety on the Farm
Mar. 25 (8:00 a.m. – noon), Lexington. $5. Reg. by Mar. 19. More info: 

Triad Landscape Workshop
Mar. 25, Greensboro. Three hours of pesticide credits in categories L, N, D, and X, and three hours of irrigation contractor CEUs available. More info:

GROW BIOINTENSIVE® Sustainable Mini-Farming Workshop
Apr. 8 – 10, Asheville. More info: http://www.johnjeavons.info/ or 707-459-5958 (California number, call between 1:00 and 6:00 p.m. EST).

Perry-winkle Farm Show and Tell
Mar. 29, Chapel Hill. Drip irrigation will be discussed. More info: 919-542-8202.

NC Piedmont 2010 Woodland Steward Series
Apr. 9 - 10, Salisbury: Discovering Your Land: Basic Land Mgmt Skills
Apr. 23 – 24, Asheboro: Native Landscaping & Water Management
May 7 – 8, Chapel Hill: Woodscaping Your Woodlands & Firewise Mgmt
May 21 – 22, Troy: Stewardship, Recreation, & Liability.

Juice and Wine Analysis Short Course

Acidified Foods for Entrepreneurs: Better Process Control School

10th Annual NCSU Vermiculture Conference

Wine Microbiology and Winery Sanitation Short Course

Please contact M.H. (maryhelen_ferguson@ncsu.edu) if you would like to be on the Randolph Growers e-mail list, by which you can get the newsletter and more frequent updates.