Field Crops: Trials and Tests
by Tim Hambrick, Field Crops Agent

Agriculture is big business in North Carolina and it is no different in Stokes County! The area that I work—field crops—is primarily comprised of corn, soybeans, and tobacco. In Stokes County, field crops consume about 23,000 acres each year and account for around 11 million dollars each year. Take field crops out of Stokes County and the local economy would notice very quickly.

An Extension Agent does a variety of things in the daily routine, but the primary responsibility of a field crops agent is to design and present educational opportunities to the field crops community. These opportunities might include a field day, a topical newsletter, a winter meeting, a radio interview, or a farm visit. In the spring and summer, much of my job consists of installing and managing a variety of “field research plots.” These research plots are designed to help alleviate a problem, to see new ways of doing something, or to see a new product in action. While each research plot may differ, the desire for the end product is to make local agriculture more efficient, more profitable, decrease harm to the environment, and encourage young people to stay on the farm.

2014 is no different, and I have a variety of research plots scattered across Stokes County this year.

1. Regional Corn Hybrid Trial – Due to a variety of factors, grain production has increased in importance in recent years. Nubbin Greene has volunteered to be part of a seven-county corn hybrid trial. In this test, the same 19 corn hybrids have been planted in a variety of soils across the 7-county area. The management will vary across each plot, as will the weather. The purpose is to see which hybrids do well across the whole testing area, showing growers which hybrids should be reasonably expected to perform well for them.

2. New Nematicides - Mike Martin is volunteering to be part of this NC State research looking at new spray on materials for the control nematodes in flue-cured tobacco. Nematodes are microscopic worms that feed on plant roots, causing yield and quality reduction. Currently, the only controls are fumigants, which have a multitude of legal restrictions. The spray on materials, including one organic material, would be safer for the applicator. It may be less expensive and would not have all the legal hurdles to jump through.

3. IPM and Fertility Tests - Steve Robertson is the cooperators of these two university tests in flue-cured tobacco. The IPM test is designed to use certain pest levels as the “trigger” for an insect spray application. In this test, the university scouts the field each week, counting pests present. Once the pest numbers reach a certain level, an insecticide application is made. The goal of this test is to determine if less pesticide can be used which would be good for farm economics as well as the environment. If less pesticide can also result in no loss of quality or quantity, it is a win-win situation for everybody. The fertility test is designed to look at different types and rates of fertilizer materials. Fertilizers have become much more expensive in recent years and sometimes harder to find. This test will let area growers see the effect of less common materials on growth, quality, and yield.

4. Effect of Timing of Topping on Yield - Jerry Manuel is the cooperators in this test that will look at three different topping dates in flue-cured tobacco. Time of topping has a direct affect on yield and often times a direct affect on quality. While this is not new research, it is a visual reminder that a mundane task such as topping can have a direct affect on economics. It also serves to quantify the advantages or disadvantages of different times of topping.

5. Tobacco Variety Demonstration - Rodney Rogers is the cooperators for this demonstration. This is not a true test, as no data will be collected, but it does allow growers to see several common or new flue-cured tobacco varieties in a side-by-side comparison. They will be able to see plant structure, holding ability, wind resistance, etc., and may help in choosing a variety that can enhance production across the farm.

I greatly appreciate farmer willingness to participate in local research. Not only will they themselves get to see the results, but those results will be shared this winter with the total farming community, oftentimes over several counties across the state. Why do all this research? Because agriculture is big business in North Carolina and in Stokes County, and I want to keep it that way!
Tips and Tasks: Controlling Deer  
by Randy Fulk, Horticulture Agent

The arrival of summer signals the beginning of the gardening season for many Piedmont-area homeowners. The lush green foliage of many garden plants is particularly tempting to the Eastern White Tailed Deer, one of our primary animal pests. Deer will eat most any tender, green foliage in the spring, and our garden plants (due to our meticulous watering and fertilizing) are often preferred over their natural woodland diet.

While exclusion in the form of deer fencing is the preferred control option, several commercially-available repellents are available. Many deer repellents contain putrefied eggs, the smell of which may also serve to repel the gardener! These materials must be applied often and work best when applied before deer problems become severe. Setting out deer-resistant plants is also a good strategy.

Trees that are seldom damaged by deer include River Birch, Crepe Myrtle, Southern Magnolia, and American Holly. For evergreen shrubs, try Abelia, Japanese Boxwood, and Eleagnus. Deer-resistant deciduous shrubs include Japanese Barberry and Butterfly Bush. Perennials seldom damaged by deer include Coreopsis, Dianthus, and Lenten Rose. Be aware that no plant is 100% deer proof. When food is scarce, deer will eat ANYTHING!

4-H: Yesterday, Today, and Tomorrow  
by Matt Barber, 4-H & Youth Development Agent

"If your actions inspire others to dream more, learn more, do more and become more, you are a leader."  
- John Quincy Adams

Have you heard the saying, “If you only do what you have always done, you will always get what you always got”? I try to apply this saying when planning for how 4-H can continue to meet the needs of youth and families over time. When 4-H was established over 100 years ago, our view of the world was very different. We were an agricultural society, and 4-H clubs were established to help us learn to take care of the home and preserve food in ways that would benefit the family. Those same skills are necessary today. However, we have progressed and identified even larger endeavors for 4-H learning. In today’s fast paced world, we expect youth to learn new information and then be able to apply that learning in future situations. In order to accomplish this task, youth must be introduced to critical thinking, decision-making, and communication skills. 4-H clubs are a great place for youth to learn these skills!

As we design activities that challenge youth, we see an emergence of cooperation, exploration, open-ended and focused observations. 4-H tries to build upon a youth’s natural curiosity and love of exploration. Club leaders that step back and allow youth to lead can see the progression in confidence expressed by club members. That model of learning has served us well, and we continue to apply that model as we learn new subject matter.

As an organization, 4-H strives to:
- lead educational programs
- focus results-driven programming based upon current and emerging needs
- strengthen life skills
- encourage volunteerism and community service
- grow youth/adult partnerships

When we do these things, we will continue to grow. We may not offer the same programs year after year. Instead, we may strategically plan to offer programs that meet the emerging needs of the community. In order to be competitive in the 21st century, our program must be creative and innovative. We must provide youth the opportunities to use critical thinking skills so they get practice in analyzing information in order to solve problems and answer questions. In addition, our 4-H club programs have to help youth articulate their thoughts and ideas clearly and effectively. Utilizing our educational presentation contest is one way to begin this process.

Why do we care so much about how young people fare today? Because we know youth will compete for tomorrow’s jobs not only with other American youth, but with the most brilliant minds around the globe. North Carolina must educate and graduate people with the right knowledge, skills, ideas, and self-motivation to compete globally for job security. I care because I know our future depends on the youth who are graduating today, and I want to make sure I have done everything I can to assist them in becoming competent and contributing members of our communities. If you would like to assist 4-H with programming, call me at 336-593-8179. 4-H is open to youth ages 5-19 without regard to race, color, religion, sex, national origin, or disability.
Summer Gardens and Canning
by Deborah Cox, Family & Consumer Sciences Agent

Driving out to Francisco and North Stokes High School, it was a
treat to see the many lush home gardens that will soon have excess
produce suitable for canning.

The last of June and early July keep me busy answering questions
when something goes wrong in the canning process. Our role has
always been to help homemakers stretch their food dollars to feed
themselves. While many people do not enjoy the labor-intensive
work home canning entails, equal number of people find satisfaction
in accomplishing a reserve of food with fresh flavor for the cold
winter months. If you want to start canning before then, check out
some seasonless recipes such as the one on eggs later in this article.

We often get calls about recipes that have been given by a friend
or by someone replicating a product seen on grocery store shelves.
I only recommend recipes that have been tested for food safety
from the USDA website or the National Center for Home
Food Preservation.

The following pickled egg recipe is such one request. Dr. Elizabeth
Andress of the University of Georgia decided to apply her research-
tested methods after several requests from Extension agents. The
following information is found at:
http://nchfp.uga.edu/how/can_06/pickled_eggs.html.

There are no home canning directions for pickled eggs. All of
the following pickled egg recipes are for storage in the
refrigerator. Pickled eggs should never be at room temperature
except for serving time, when they should be limited to no more
than 2 hours in the temperature danger zone of 40 to
140 degrees F.

Caution: Home pickled eggs stored at room temperature have
caused botulism. For the report from the Centers for Disease Control
and Prevention (CDC), see http://www.cdc.gov/mmwr/preview/
mmwrhtml/mm4934a2.htm The Editorial Note in this report cautions
against room temperature pickling and storage, also. The CDC
further cautions that to reduce the risk for botulism when pickling,
food items should be washed and cooked adequately, and utensils,
containers, and other surfaces in contact with food, including cutting
boards and hands, should be cleaned thoroughly with soap and warm
water. Containers (e.g., jars and lids) in which pickling will occur
should be sterilized (e.g., placed in boiling water for a
prescribed period).

PICKLING TIPS
Pickled eggs are peeled, hard-cooked eggs in a solution consisting
basically of vinegar, salt, spices, and perhaps other seasonings.
Pickling solutions are heated to boiling, simmered for 5 minutes, and
poured over the peeled eggs. Egg whites tend to be more tender if a
boiling solution is used instead of room temperature solutions.

Eggs used for pickling should have clean, sound shells. Small or
medium eggs are usually a good choice for pickling so the seasoning
can penetrate into the egg. Fresh eggs are the best to use for pickling
to ensure the highest quality possible since the eggs will be stored
over a relatively long period of time. However, eggs at least a few
days old will peel better after boiling.

Cooking and Peeling Eggs
According to the Georgia Egg Commission, the following method of
hard-cooking facilitates peeling of ultra fresh eggs. Make a pinhole
in the large end of the egg, place the eggs in a single layer in a
saucepan, and cover with cold water to an inch above the layer of
eggs. Place a lid on the pan and bring eggs to a boil. Remove the
pan of eggs from the burner, leaving the cover in place, and allow to
sit for 15-18 minutes, adjusting time up or down 3 minutes for larger
or smaller eggs. Immediately remove eggs from the pan of hot water
with a slotted spoon to a bowl of ice water for one minute. In the
meantime, bring hot water to simmering. After one minute in ice
water remove eggs back to the simmering water for ten seconds.
The ten second interval is important because this allows the shell to
expand without expanding the rest of the egg. Peel immediately by
cracking the shells of the egg all over. Roll each egg gently between
hands to loosen the shell. Peel, starting at the large end of the
egg. The peeling may take place under cold running water to help
wash the shell off the egg and to minimize the shell breaking into
the white.

Another cooking method when you are less concerned about peeling
of ultra fresh eggs is to make a pinhole in the large end of the egg,
place the eggs in a single layer in a saucepan, and cover with cold
water to an inch above the layer of eggs. Place a lid on the pan and
bring eggs to a boil. Turn down the heat and simmer for 15
minutes. Place the eggs in cold water and when cool, remove
shells. Crack the shell of the egg all over. Peel, starting at the large
end of the egg. The peeling may take place under cold running water
help wash the shell off the egg.

Containers for the Eggs
The container used for the eggs should be one that can be closed or
sealed tightly; glass canning jars work well. The eggs are to be
completely covered with the pickling solution during storage. A
quart-size canning jar will hold about one dozen medium sized
eggs...

Storing Eggs
After making the eggs, the eggs require some time to season (i.e.,
pick up the flavors from the pickling brine). Keep them refrigerated
at all times. If small eggs are used, 1 to 2 weeks are usually allowed
for seasoning to occur. Medium or large eggs may require 2 to 3
weeks to become well seasoned. Use the eggs within 3 to 4 months
for best quality.

RECIPE
[This recipe] uses 12 peeled, hard-cooked eggs. The
directions...are to bring all the ingredients except the eggs to a boil,
reduce the heat and simmer for 5 minutes. Pack no more than one
dozene peeled, hard-cooked eggs loosely into a warm, pre-sterilized
quart jar (or other similar size container which can be closed
tightly). There needs to be plenty of pickling solution, and enough to
completely cover the eggs. Pour the hot pickling solution over the
eggs in the jar, cover, and refrigerate immediately.

RED BEET EGGS
1 cup red beet juice (from canned beets)
1 1/2 cups cider vinegar
t 1 teaspoon brown sugar

A few canned whole tiny red beets (or several slices of beets can be
used)

Reviewed April 2014. Elizabeth L. Andress, Ph.D. University of
Georgia and National Center for Home Food Preservation.
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