



Agriculture News

Chowan County Crops Newsletter
August 2009

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Chowan County Voluntary Agricultural District Ordinance

Over the last few months a committee has worked to develop a draft Chowan County Voluntary Agricultural District (VAD) ordinance. The purpose of the VAD program is “to encourage the preservation and protection of farmland from non-farm development”. This program has benefits for both farmers and the public. Farmer benefits include increased protection from nuisance suits, waiver of water and sewer assessments and eligibility for funding. The ordinance, in addition to a brochure from NCDA, is available on our website at www.chowan.ces.ncsu.edu or by calling the Extension office.

A public hearing for this ordinance will be held **September 14** at the County Commissioners meeting. Everyone is encouraged to read the ordinance and either submit comments in writing to the Board or to attend the public hearing. For more information, call the Extension Office.

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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. For accommodations for persons with disabilities, contact Denise Bunch at 252-482-6585 no later than five business days before the event. 369 copies of this public document were printed at a cost of \$29.52, or \$0.08 per copy.

Soybean Insect Update

Early predictions from NCSU entomologists are for a higher moth flight than in previous years. If you haven't started scouting for soybean pests, start doing so now. For sampling narrow row soybeans, use either the sweep net or rigid beat cloth method. The updated chart for sweep net thresholds with soybean prices adjusted to as low as \$5.00 per bushel is below. Please note this chart is updated from the chart I included in the last newsletter.

Virginia Tech has a website that will let you calculate your worm threshold based on specific inputs for your farm such as row width, cost of control, price of soybeans, etc. The website can be found at www.ipm.vt.edu/cew/.

A corn earworm sweep net sample consists of 15 separate sweeps covering five rows of 7-inch, three rows of 14-inch, or two rows of 21-inch soybeans. While sweeping, pace down the row taking one sweep per pace for 15 paces. Record the total number of corn earworms and stinkbugs, count each and record the total number. Figure the average number of worms over the sample. If the average is on the border, take an extra sample.

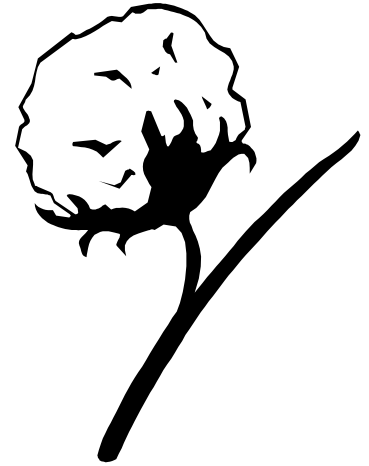
Sweep Net Thresholds (7 inch to 21 inch rows) Average Worms Per 15 Sweep Sample			
Selling Price*	7" Rows	14" Rows	21' Rows
\$5.00	3.6	3.5	4.6
\$6.00	3.0	2.9	3.8
\$7.00	2.6	2.5	3.3
\$8.00	2.2	2.2	2.9
\$9.00	1.8	1.9	2.5
\$10.00	1.4	1.6	2.2

*Thresholds do not decline as prices climb above \$10.00 per bushel due to plant compensation for low levels of pod damage.

Stinkbugs are typically more of a problem in late August into early October. Left untreated above threshold levels, they can cause significant damage, especially to soybeans grown for seed. If scouting specifically for stinkbugs, a sweep net sample consists of 12 sweeps, otherwise count how many you catch when sweeping for corn earworms. Large immatures over 1/2 inch should be counted as adults. Count groups of small immatures as one adult.

Sweep Net Thresholds (7 inch to 21 inch Rows) Average Stinkbugs per Sample		
Row Width	Grain	Seed and Edible
7"	2.3	1.2
14"	2.3	1.2
21"	3.5	1.8

Cotton Insect Update



Bollworms (the caterpillar stage of the corn earworm moth) are not the major pest they once were since growers started using Bollgard II and WideStrike cotton, but farmers in Gates County have reported threshold levels. Most of the bollworms found in Gates were associated with bloom tag (the dried brown cotton bloom that sticks to the tip or off to one side of the young boll). **The post-bloom threshold is 3 live larvae per 100 terminals, squares, blooms, or bolls.**

When scouting, inspect squares from all areas of the plant. Don't sample obviously damaged or flared squares. The boll sample should consist of bloom tags, small bolls and large bolls in the proportion that they occur in the field.

One suggestion from the "Cotton Insect Scouting Guide" is to sample and retain 10 squares and 10 bolls while walking, then stopping within the field to evaluate the fruit. Repeat this process 10 times for a total of 100 squares and 100 bolls. A cloth nail pouch with two sides (one for squares and the other for bolls) make a good container for carrying fruit between stops.

Stinkbugs damage cotton by puncturing the carpal walls of bolls to feed on the soft, developing seeds. Heavy feeding can completely destroy small bolls, causing them to abort. When stink bugs feed on slightly larger to medium-sized bolls *up to 3-3.5 weeks) they often introduce bollrot pathogens, resulting in partially or entirely destroyed locks (the major, individual, internal section of a cotton bolls in which seed and lint development take place, 4-5 locks per boll is typical), hard-lock, and a lower grade of harvested cotton. Internal damage to bolls seems to be expressed more in mature, opening bolls in wet, humid weather.

Week three through five of bloom are the most critical and carry a damage threshold of 10%. At week six, the threshold goes up to 20%, increases to 30% at week seven and maxes out at 50% at week eight. Externally, boll damage is characterized by small, round, shallow, purplish depressions. Internally, the damaged bolls often have a yellowish to tan to brown stain in the seed areas. Other damage symptoms include small wart-like growth and/or dark "pin prick" spots on the inside of the boll wall. This internal damage can be identical to that caused by plant bugs. Internal damage may be present without obvious external damage.

The same threshold applies to **Fall Armyworms**; 3 larvae per 100 squares, bloom or bolls. Widestrike cotton is extremely resistant to fall armyworms and Bollgard II is a close second. Economic levels of Fall Armyworms are not expected to develop on these two technologies. On conventional and Bollgard cotton lines, however, Fall Armyworms can reduce yields significantly if present above threshold levels. Although medium (1/2 inch) to large Fall Armyworms are difficult to control there are several options. A tank mix of Karate or bifenthrin (Capture, Brigade, etc.) at a medium to high rate plus 0.25 pound of active ingredient per acre of Larvin has worked reasonably well. Larvin may be next to impossible to find. Newer materials such as Diamond, Rynaxypyr and Belt, and to a lesser degree Intrepid, have better Fall Armyworm activity than the pyrethroids but provide little or no stink bug control.



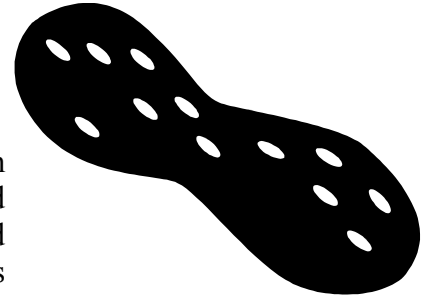
Although this green, brown, or black caterpillar primarily attacks blooms, squares, and bolls, it also feeds on the foliage, occasionally tops plants, and bores into stems. This larva has 5 pairs of prolegs, reaches a maximum length of 1.5 inches, and often has distinct inverted "Y" on its head capsule. It has a black, longitudinal stripe down each side of its body and a yellowish-gray stripe down its back.

Peanut News

Corn Earworms can also be a problem in peanuts during August. The threshold is 4 caterpillars per row foot. This increases to 6 per row foot by early September.

57th Annual Peanut Field Day

The Peanut Field Day will be held at the Peanut Belt Research Station in Lewiston-Woodville on September 10. Tour stops start at 9:00 a.m. and include Variety Development; Pest Management, Precision Ag and Plant Growth Regulation; and Tillage and Cropping Systems. Remarks and the membership meeting will start at 11:00 a.m. followed by lunch.



Sclerotinia versus Stem Rot

Sclerotinia Blight and Stem Rot have both been found in peanut fields in Chowan County. Being able to differentiate between the two could save you money when choosing what pesticide to use.

Sclerotinia is a soil-borne disease that attacks peanut plants and causes limbs to wilt and die. This disease starts by killing individual limbs rather than causing overall wilt. Careful scouting is required and one should pull back the vines to look for the disease on the stems. Sclerotinia Blight will cause the stems to turn a tan color and look bleached out. Small sclerotia that resemble mouse droppings, oval in shape and black will form on and inside the stems. In the early morning, a white cottony growth, often described as “fluffy”, of the fungus will appear. As the days get hotter the white cottony fungus structures are harder to see. The disease likes cool wet conditions and can spread if not treated.

Southern Stem rot, also known as white mold, is characterized by white, stringy fungus growth that resembles a spider web. Small white, yellow-to-brown balls (sclerotia) develop from the white mold on the lower stems and leaf letter. Southern Stem Rot is most active during the hottest part of the season, especially following rain, and can cause wilting and death.

The fungicides most farmers use to control Leafspot and Southern Stem Rot in peanuts do not control Sclerotinia Blight. The two fungicides recommended for Sclerotinia Blight control are Omega and Endura. Omega has no activity on leafspot or Southern Stem Rot and Endura has only moderate activity on Leafspot. They are sprayed along with the normal fungicides that are applied for Leafspot and Southern Stem Rot. The fungicides that control Sclerotinia Blight are expensive, so it is recommended to scout for the disease and only treat the fields where the disease is found. It is important to walk each field and look for signs of Sclerotinia Blight. This disease can cause much damage before you will detect it from the truck windshield.

It is important to learn the symptoms and identifying characteristics of each disease, so the appropriate fungicide can be applied. If you have questions about peanut diseases, call the office at 482-6585.

Corn Contest

Anyone who grows one acre or more of corn in North Carolina may enter the North Carolina Corn Yield Contest. Harvest, weighing, and a moisture determination must be completed on the same day in addition to measuring all four sides of the plot. We will also be taking stalk samples to look at stalk nitrate data for the northeast district. Applications must be postmarked by November 27, 2009. If you are interested in entering the 2009 N.C. Corn Yield Contest please give me a call at 482-6585 to set up a time for me to be present at your harvest.

NC Coastal Farmers Eligible for Grants

Grants totaling \$750,000 over a three-year period will be awarded for new farm enterprises that demonstrate innovative opportunities in production, processing and marketing. The program is managed by Rural Advancement Foundation International (RAFI-USA) as the "Tobacco Communities Reinvestment Fund (TCRF)".

Supported by the N.C. Tobacco Trust Fund Commission, the grant program is designed to keep farmers in farming and to maintain the economic base of North Carolina's rural communities. All farmers are eligible. Priority is given to projects that provide opportunities for a new generation of farmers and to applicants who had tobacco income at the time of the Master Settlement Agreement.

Eligibility: Qualifying producers must be farmers or farmer "groups" actively engaged in full or part-time farming in the Coastal Region which includes the Counties of Beaufort, Bertie, Brunswick, Camden, Cartaret, Chowan, Craven, Currituck, Dare, Duplin, Gates, Greene, Hertford, Hyde, Jones, Lenoir, Martin, New Hanover, North Hampton, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Pitt, Tyrrell, Washington and Wayne Counties.

Awards: The maximum amount available to individual farmers is \$10,000 and \$30,000 for collaborative farmer or community projects. Grant applications for the Coastal Region are due December 16, 2009 at 5:00 p.m. The timeline for submitting grants in other NC regions can be seen at: ncfarmgrants.org

"The TCRF is designed to help farmers put their own ideas to work to develop new income sources," said Jason Roehrig, RAFI Program Director. "Through cost-share grants, we can help reduce the risk of trying new ideas." Examples of past projects have included improved greenhouse vegetable production, supplies for pasture-raised livestock, expansion of nursery operations, farmer's market assistance and more.

Interested farmers and representatives of agricultural cooperatives or associations may obtain applications at ncfarmgrants.org or by calling 919-542-1396 ext. 205.



Oil Recycling

If you have used motor oil you would like picked up for recycling please call the Extension office and leave your name, contact information and an estimate of the number of gallons of oil you have. If we have enough to fill a truck I can line up a pick-up date, otherwise we can add names to the list to be picked up when a truck is in the area.

Upcoming Events

September 1 Private Pesticide Applicator “V” Training
Perquimans County Cooperative Extension office, 9:00 a.m.—11:00 a.m.

September 10 Peanut Field Day
Peanut Belt Research Station, Lewiston-Woodville

September 15 Private Pesticide Applicator “V” Training
Pasquotank County Extension office, 5:30—7:30 p.m.

“X” Training; 2 hours A,G, H, I, L, N, O, D and X credits
Pasquotank County Extension office, 7:30—9:30 p.m.

September 15 Virginia Tech Tidewater AREC Pre-Harvest Crops Tour
Hare Road Research Farm, Suffolk, VA

September TBA Pod Blasting

October TBA Pod Blasting

November 27 Deadline for NC Corn Yield Contest Entries

