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VIRGINIA STATE UNIVERSITY

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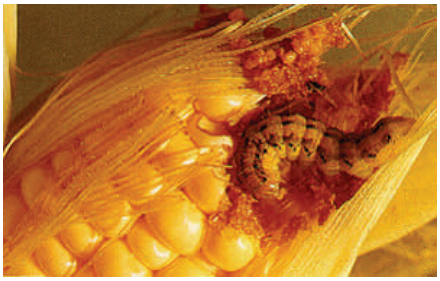
CHESAPEAKE FARMLINE

August 11, 2008

2008 CORN EARWORM SURVEY



The corn earworm survey has been completed for eastern Virginia counties and numbers of corn earworms (CEW) are fairly high. The survey in Chesapeake revealed CEW in **(42%)** of ears sampled, higher than last year. Over 30-years of data show there is nearly a 1:1 relationship between CEW infestation in corn and the amount of soybean acreage that gets treated for this pest. Most of the corn sampled was Bt corn, reflecting a trend in seed selection. Bt corn does express some deterrent to CEW, but is not a control. This only emphasizes the fact CEW % in corn is fairly high.

CEW populations in corn plus a less than prolific canopy in many fields point to pretty intense worm pressure this year in soybeans. The soybeans at greatest risk to earworm infestation are those that:

- are in drought stressed areas
- are flowering or setting pods
- have open canopies (late plantings or poor stands)
- have already been sprayed with a pyrethroid insecticide

Corn Earworm Moth Flight Has Begun!

The blacklight I have been monitoring has revealed CEW's are now leaving corn fields and laying eggs in soybeans as of this week. You can expect those eggs to be hatching within a week. This should be your wake-up call to begin scouting soybeans for CEW next week. Remember soybeans can withstand 30% defoliation from CEW **before pod fill.** The exception here is if soybeans did not have good canopy because of dry weather or weak stands. After pod fill begins, we would be counting CEW's to determine if numbers were high enough to warrant a spray.

With soybean prices at $12 or higher, thresholds for spraying for worms is much lower than years past. The best way to calculate your threshold is to go to this web site:
http://www.ipm.vt.edu/cew/
Select your sampling method, row spacing, price per bu., and estimated control costs (product + application cost). You will see your threshold of worms needed for a spray. An example: figuring a $10 treatment cost, harvesting $12 beans in 14-inch rows would lower threshold to just 1.2 worm per 15-sweep sample.

After a first spray, farmers should scout those soybean fields two weeks later for new worms that may have hatched. The first spray will give about 7-10 days residual protection from worms. After that, new hatchings may need re-spraying.

Any fields where a pyrethroid was tanked mixed with a fungicide and applied in July is at a great risk to worm outbreaks as those earlier sprays would have eliminated most of the beneficial insects helping hold down worm numbers. Additionally monitor pyrethroid sprays for resistance escapes. We saw some pyrethroid sprays leave worms last year under hot, intense worm pressure. If that occurs this year, you may need to switch to more expensive non-pyrethroids like Larvin, Steward, or Tracer.

2008 CROP YEAR BUY-IN FOR DISASTER ASSISTANCE PROGRAMS

All farmers who wish to become eligible in 2008 for USDA's Supplemental Agricultural Disaster Assistance Programs must visit the Chesapeake Farm Service Agency office and fill out form CCC-752 and/or CCC-753 by September 16th. On June 18, 2008, when the 2008 Food, Conservation and Energy Act was enacted into law, the deadline to apply for crop insurance (CAT) and Noninsured Crop Disaster Assistance (NAP) had passed. Normally purchase of CAT or NAP is a requirement to participate in the Supplemental Agricultural Disaster Assistance Program offered by USDA. Therefore, for **2008 crop year only**, producers who were eligible to obtain CAT or NAP but did not, can "**buy-in"** to the Supplemental Agricultural Disaster Assistance Program. The fees for CAT and NAP covered crops are:

- $100 per crop, but not more than $300 per producer per county, or $900 total per producer, for all counties, less any previously paid fees for CAT or NAP.

The FSA Office will determine the appropriate buy-in fee required. Payment of these fees **will not** provide CAT or NAP coverage. The buy-in will only make you eligible for the USDA Supplemental Agricultural Disaster Assistance Program.

SOYBEAN RUST UPDATE

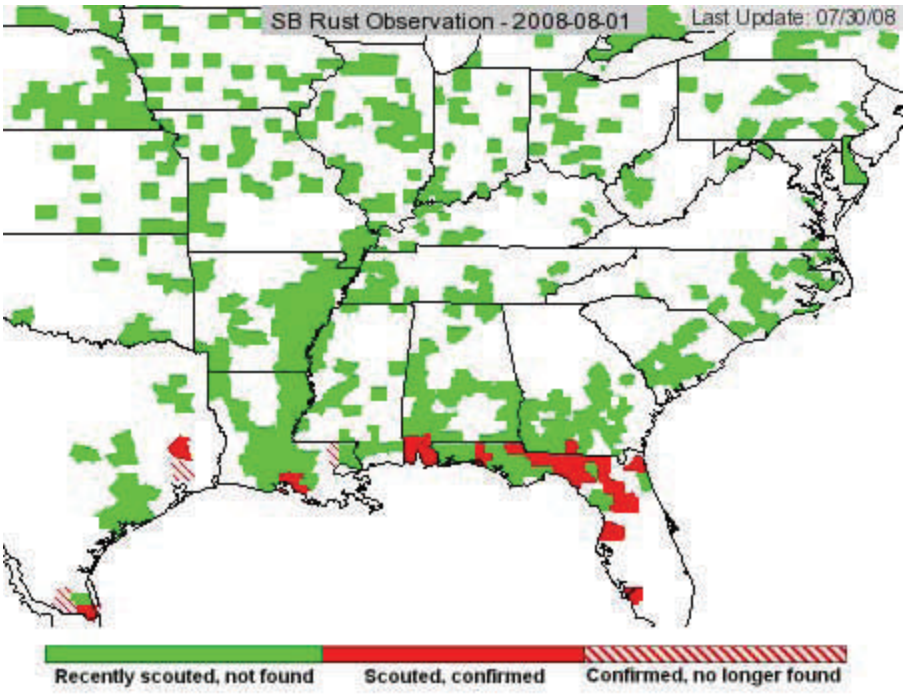
Leaf samples from Virginia sentinel soybean plots have all been negative for soybean rust as of today. Leaf samples have been taken weekly since June 14 from across southeast Virginia, including Chesapeake. If and when rust is found, an advisory will be sent to all farmers advising them to spray a preventive fungicide.

PREVENTIVE: A preventive spray would be recommended if disease has moved or positioned itself in close proximity our area, say North Carolina and weather conditions suggest risk is high. Soybeans should be flowering or setting pods. Fungicide sprays before flowering have not been shown to be effective as a preventive measure. A second spray 10-21 days later would be recommended if weather conditions are still favorable for disease development. If rust appears after pod fill has occurred (R7), then a fungicide spray would not be recommended. *This Extension office will be advising farmers if or when to pull the trigger on preventive sprays.*

Preventive fungicides: These fungicides are effective if applied prior to spore germination. The class of fungicides called *Strobilurins* includes products such as Quadris and Headline. Bravo, which is another class of fungicides can be used but was less effective than Strobilurins in one Extension efficacy trial.

EARLY CURATIVE: This is after the disease has been found. It is important to catch the disease early before 10% of lower leaf area has been infected. Quick, penetrating fungicide applications at this point are critical to halting spread of disease.

Curative fungicides: These fungicides can be effective in slowing or halting disease development once it is present. This class of fungicides called *Triazoles* includes products such as Tilt; PropiMax; Bumper; Folicur; Laredo; and Domark. *Premixes* which contain both Triazoles and Strobilurins include Quilt (Quadris & Tilt) and Stratego. The Triazoles or combination Triazoles and Strobilurins can be effective if applied early.



(updated: 07/30/08) On 28 July, soybean rust was confirmed in soybean production fields in Cameron County, Texas. On 25 July, soybean rust was detected on leaves collected from a soybean sentinel plot in Baldwin County in Alabama. This is the first report of rust on soybeans in Alabama this year. The disease was observed on kudzu in Mobile County earlier this year. Many of the counties in Florida adjacent to Georgia and Alabama have reported soybean rust in 2008.
Since January of 2008, soybean rust has been reported in two counties in Alabama; one

APPLICATION EQUIPMENT FOR EFFECTIVE CONTROL OF SOYBEAN RUST

One step farmers can take now to be prepared to spray for rust is to tailor their sprayers for making through coverage in the soybean canopy. Below are some ideas that can help:

- Keep spray volumes above 20 gallons/acre for ground applications
- Choose a nozzle that will allow small to medium droplets (200-300 microns)
- Nozzles that produce a flat-fan pattern are a better choice than cone nozzles for canopy penetration
- Choose "low-drift" nozzles which allow a farmer to increase pressure (60 psi) without increasing the number of small droplets
- Use twin nozzle technology, one angled forward and one angled backward rather than a single nozzle spraying in one direction
-

If rust is found and time dictates that fungicides must be applied quickly, aerial fungicide applications may be an option that can also be effective. Maintaining the proper height above the crop (not too high, not too low); increasing rate up to 5 gallons/acre; using proper low-drift nozzles that produce small to medium droplets are important to good penetration of canopy.

WHEAT PRE-SEASON BREAKFAST MEETING

There will be a Wheat Pre-Season Breakfast Meeting, 7:00 a.m., Wednesday, August 21st at the Hickory Ruritan Building. All Wheat producers are invited. We will discuss variety and production information. The breakfast will be at 7:00 a.m. with the meeting beginning around 7:30 a.m. and should conclude by 8:30 a.m. Please mark your calendars and plan to attend. No pre-registration required.

POULTRY LITTER AS FERTILIZER SOURCE FOR CORN

With the high cost of fertilizer, many farmers are looking at poultry litter, its availability, and how much can be spent trucking it into our area. Average nutrient values: source—NCSU

Broiler Litter	**Total N**	**Ammonium NH4+**	**Phosphorous P2O5**	**Potassium K2O**
(lbs. per ton)	72	11	78	46

Nutrient value of poultry litter: Find the current costs per pound of nutrients in commercial fertilizers and multiply by the nutrients found in one ton of poultry litter. These nutrients may vary considerably in poultry litter. N, P, & K costs/lb. based on current fertilizer costs.

Example: 72 lbs. X $1.08 (N/lb.) = $ 77.76
78 lbs. X $0.94 (P/lb.) = $ 73.32
46 lbs. X $0.93 (K/lb.) = $ 42.78
$193.86 nutrient value/ton poultry litter

This value would not include hauling, handling, or application costs, nor would it include the value of other essential nutrients in the manure. Poultry litter is bulky and would require approximately 2 tons/acre to meet nutrient needs of corn crop. Litter analysis and soil test is best way to determine application rates for crop.

DATES TO REMEMBER: (contact our office for more information 382-6348)

August 14 Virginia Ag Expo-Billy Bain Farm-Dinwiddie County
August 14 Strawberry Pre-Plant Strawberry Meeting-Currituck Extension Office
August 19 Wheat Pre-Season Breakfast Meeting-Hickory Ruritan Building
August 25 Pork and Transport Quality Assurance (PQA, TQA) Certification-TAREC-Holland
August 26 Agri Tourism Field Day-VA State University

If you are a person with a disability and require any auxiliary aids, services or other accommodations for any Chesapeake Extension event, please discuss your accommodation needs with the Extension staff at (757) 382-6348 at least one week prior to the event.
The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by Cooperative Extension is implied. If you need additional information, please give us a call.

Sincerely,

M. Watson Lawrence, Jr.

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Extension Agent, Agriculture