

IPM NEWSLETTER

Update for Field Crops and Their Pests

No. 1

March 2, 2007

Past Newsletters and other information can be found at UTCrops.com

Bookmarks: [Weeds in Wheat and Burndown](#) [Insect Issues](#)

Weed Control / Burndown (Larry Steckel, Assistant Professor)

Wheat. The calls have been coming in with folks interested in spraying wild garlic (onions) in wheat. The main concern is whether or not there is enough new growth on the wild garlic to obtain good control with Harmony Extra. Harmony Extra is primarily taken up through the foliage. Therefore new growth in the spring is essential to obtain good control. The Harmony Extra label states that 2 to 4 inches of new growth from stressed weeds is essential for good control. The mistake many make is to look for the new growth at the end of the garlic leaf. The new growth actually comes from the bulb area and not from the end of the leaf. The wild garlic in the fields I have walked as of last



week were showing a good 2 inches of growth and should be at a good stage to spray. Some have also asked about adding Clarity in at this time with their Harmony Extra. The wheat in most fields now is showing the first joint which makes it **too mature** to safely use Clarity. Though I haven't seen every field, it is apparent there is little garlic pressure in the wheat sowed in fields that have been in cotton for several years. In a few fields there has been so little it was not worth spraying. It may save you some money to step out and scout the garlic level in some of these fields.

Burndown. One overall observation on the winter annual weed pressure this spring is that bluegrass and henbit pressure is extremely heavy across many Tennessee row crop fields. On the flip side, in general, horseweed pressure does not appear to be as severe as in 2006. As many of you are aware I am strongly recommending that we apply burndowns in March this year. The reasons for this is in research as well as in growers' fields we have seen more consistent horseweed control with burndowns applied in March than in April or May. Another reason is that with very early burndowns which would be applied more than 30 days before planting (DBP) higher rates of Clarity (dicamba) may be used prior to planting soybeans. In soybean fields with very heavy horseweed pressure 12 ozs/A of Clarity applied 30 DBP should provide better control than 8 oz/A. In fields with moderate horseweed pressure (<10/sq ft) 8 ozs will likely provide adequate control. Unfortunately, Clarity is not labeled to be applied at any more than 8 ozs/A before cotton planting. **Remember the 8 oz/A Clarity rate can be applied up to 21 DBP cotton or soybeans while one must wait 30 DBP soybeans if rates higher than 8 oz/A of Clarity are used.**

It sounds like many will be using Valor as part of the burndown program in cotton and right behind the planter in soybeans this year to provide residual weed control. We have looked at it many years in both crops and it will provide very good residual control of horseweed, pigweeds, etc. Depending upon soil type, rainfall, and the rate of Valor applied it should be able to provide residual control for about 4 to 6 weeks. The typical rate most will use is 2 oz/A, which can be applied up to 21 days before cotton planting and pre emergence in soybeans. Valor will not provide any burndown activity on existing horseweed.

Gangster is a premix of Valor + FirstRate and is being marketed as a horseweed burndown and residual product to be applied right before soybean planting. Be cautious using Gangster as a burndown for horseweed when it is cold (<60°F). The Valor will provide no control of horseweed that has emerged. The FirstRate can provide horseweed control under warm conditions. However, when it is cold outside, FirstRate will not provide good horseweed control. Under cold conditions Gramoxone Inteon at 40 oz/A + Sencor at 4 oz/A will provide more consistent horseweed control.

Insect Issues (Scott Stewart, IPM Specialist)

Wheat Insects (Scott Stewart and Russ Patrick): Treatment of wheat for aphids at this time of year generally has little value. Aphids, unto themselves, seldom cause yield loss. The primary value of treating aphids is to prevent the transmission of barley yellow dwarf virus. Any treatments for aphids should usually be made in the fall (October and November), or preventatively using a Gaucho or Cruiser seed treatment. It is fall transmission of this disease that has the biggest potential impact on yield. When I hear “I’ve got pretty good numbers of aphids in my wheat,” the truth is your already too late to significantly reduce disease transmission.

Early Burndowns and Cutworms: UT’s recommendation for early herbicide burndowns, particularly for cotton (see above), influences whether a pyrethroid should be included for cutworms. To make a long story short, the best time to apply an insecticide for cutworm control is as close to planting as possible. Applications made for cutworms more than 14-21 days ahead of planting don’t make much sense, primarily because any cutworms that are present will “mature” and would not be present when you plant anyhow. Also, with a good burndown, you can essentially starve any cutworms to death before planting begins. A field that is kept weed free for three or more weeks prior to planting is unlikely to have a significant cutworm population. Thus, if doing an early burndown and weeds come back into the field during the 2-3 weeks period before planting, you may have a cutworm infestation. If this is the case, consider using a pyrethroid (preferably behind the planter). Recommended products and rates are listed in the new insect control recommendations (http://www.utextension.utk.edu/fieldCrops/cotton/cotton_insects/InsectBook.htm). You can apply treatments in a band, but I would not go any narrower than 10 inches.

Bidrin Label Change (Cotton): The re-registration process is complete for Bidrin. Any existing Bidrin, with the old label, can still be used as before. My understanding is that there is enough “old” Bidrin in stock for most of the early-season use. Once the new Bidrin label comes out, there will be several changes.

- Prior to bloom, only a single application can be made at a maximum rate of 0.2 lb ai/a (3.2 oz/a) -- essentially allowing an application for thrips.
- The seasonal maximum use limit has been reduced from 1.5 lb ai (24 oz) to 1.2 lb ai (19.2 oz)
- After first bloom, no more 1 lb ai (16 oz) of Bidrin can be used (8 oz max per application). There is a 14-day minimum interval between Bidrin treatments.

Soothsaying: I noticed my colleague at Mississippi State University (Angus Catchot) did some psycho-babbling in his first newsletter, and I intend to do the same. Anyone trying to predict future insect problems is making educated guesses at best because weather between now in then is a major factor, but some good guesses are better than none at all. It is obvious that corn acres are going up this year at the expense of cotton. Corn, including Bt corn, is a good host for corn earworms (a.k.a. bollworm). We typically have our biggest bollworm flight in late July and early August, and it is usually larger in the northern counties of West Tennessee when corn acreage is highest. It is a reasonable bet that we will have an above average year for bollworm in areas increasing corn acres, and this can be a potential problem in cotton and soybean. Having said that, spring-time weather and the availability of wild hosts can have a big impact on whether this prediction comes true.

It is also common, particularly in the Mississippi River Bottom, to have high tarnished plant bug populations next to corn. In part, I think corn funnels plant bugs into cotton. You often clearly see the highest plant bug populations in cotton near the borders of corn fields. So, we may have an above average plant bug year. The good news - the early burndowns being pushed on many acres may knock out some wild, spring-time hosts of the tarnished plant bug.

Double-cropped soybeans following wheat will be late maturing, and these beans generally encounter higher stink bug populations. Wheat and then corn may also generally increase stink bug populations that subsequently infest soybean and cotton. Brown stink bugs moving from nearby wheat can also damage small, whorl-stage corn (killing the growing point). We can easily cure this problem, but it requires scouting.

Every year, I get questions about if the cold weather killed many critters. The truth is - probably not. Tennessee had some long cold streaks this winter, but we didn't have any "Arctic" conditions. Regardless, our cold weather does not substantially impact most of our major pests (green and brown stink bugs, plant bugs, bollworm, and tobacco budworm). Spring weather, including rainfall, is a bigger factor for these pests (also affecting the availability and quality of alternate hosts). Historically, several days of single digit low temperatures and teens for highs would do a number on overwintering boll weevils. But with weevils being eradicated in most areas, there is not as much benefit to cold weather as in times past. Southwestern corn borers are sensitive to cold weather, and we may have seen some benefit this year.

The Agricultural Extension Service offers its programs to all eligible persons regardless of race, color, national origin, sex religion, disability or veteran status and is an Equal Opportunity Employer. COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS. The University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating in furtherance of Acts of May 8 and June 30, 1914. Agricultural Extension Service, Charles L. Norman, Dean.

DISCLAIMER STATEMENT

This publication contains pesticide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. The label takes precedence over the recommendations found in this publication. Use of trade or brand names in this publication is for clarity and information; it does not imply approval of the product to the exclusion of others which may be of similar, suitable composition, nor does it guarantee or warrant the standard of the product. The author(s), The University of Tennessee, The Institute of Agriculture and the University of Tennessee Extension assume no liability resulting from the use of these recommendations.

Scott D. Stewart (editor)
Extension Cotton IPM Specialist

