

IPM NEWSLETTER

Update for Field Crops and Their Pests

No. 1

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

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Announcements:

Tennessee Grain and Soybean Producers Conference (Thursday, February 7th, 9:00 AM - 2:30 PM), Dyersburg County Fair Grounds. Registration begins at 8:00 AM.

Cotton Focus (Thursday, February 14th, 8:00 AM - Lunch), West Tennessee Research and Education Center, Jackson. The annual boll weevil eradication committee meeting will be held after lunch. For program details see <http://www.utextension.utk.edu/fieldCrops/upcomingevents.html>.

Cotton Scout School (Friday, May 30th, 8:30 AM - Lunch), West Tennessee Research and Education Center, Jackson. There will be a “go-to-the-field” session after lunch.

Weed Management (Larry Steckel, Weed Specialist)

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. Some have also asked about adding Clarity in at this time with their Harmony Extra. Clarity can be safely used in wheat up to the first wheat joint. 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. In general, horseweed

pressure appears to be more robust than it was this time last year. As many of you are aware I am strongly recommending that we apply burndowns in February or early 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 early 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.

There are quite a few herbicide premixes that will be offered this year that contain FirstRate. These include Gangster, Valor XLT, Sonic and Authority First. They are being marketed as a horseweed burndown and residual product to be applied right before soybean planting. Be cautious using these products as a burndown for horseweed when it is cold (<60°F). The FirstRate can provide horseweed control under warm conditions. However, when it is cold outside, FirstRate will not provide good horseweed control.

Should You Spray Aphids in Wheat? (Scott Stewart, IPM Specialist)

This is generally not the time of year to make an insecticide application for aphids in wheat. In fact, most aphid treatments should be made in the fall, either as a foliar spray or as a seed treatment. These early applications are made to prevent the transmission of barley yellow dwarf virus. Applications in the winter or spring are typically too late to prevent disease transmission, and late transmission is less harmful to plants anyway. Everyone wants to piggyback insecticide applications with upcoming applications of other products, but unless aphid populations are high, it is unlikely that there will be a yield response to insecticide treatments made during the winter or spring. For most species, treatment is not recommended unless aphids are causing the leaves of some plants to dry up or die. The exception is greenbug. The greenbug causes more direct damage than other aphids because it injects a toxin while feeding. I've not had any reports of greenbug infestations in Tennessee, but recommended treatment thresholds are shown below. The greenbug is relatively easy to distinguish from other species of aphids. They are light green with a dark green "racing strip" down their back (greenbugs are pictured above on left; bird cherry-oat aphids are visible on the right).



Treatment Recommendations for Greenbug:

- For wheat less than 6 inches tall, treat if greenbugs number 50 or more per linear foot.
- For wheat 6 - 10 inches tall, treat if greenbugs number 200 or more per linear foot.
- Or, consider treatment anytime symptoms of injury are occurring and greenbugs are present. Symptoms may include leaves that are yellowing and dying with no other obvious cause.

Insecticide Seed Treatment in Soybean? (Scott Stewart, IPM Specialist) With good market prices, there is a lot of interest in insecticidal seed treatments (IST) for soybean. Specifically, we are talking about whether a Cruiser or Gaucho seed treatments is justified. Labeled rates for these products are: Cruiser 5F = 1.28 oz/100 lb seed and Gaucho 600 = 1.6 - 3.2 oz/100 lb of seed. There has been a lot of testing of these products in the last few years. If you look across the Midsouth as a whole, the average

treatment response to an IST has been about 3 bushels per acre, more than enough to pay for the cost of treatment. In Tennessee, we have seen a lower yield response compared with other states. UT's data indicates an average response of about 1.0 bushel/acre, but for early plantings, the average yield increase has been higher (1.5 - 2.0 bushels per acre).

Let's keep this down to Earth. Soybean seedlings are pretty tough, and soybeans are not especially sensitive to stand loss. When compared with other crops such as cotton and corn, early-season insects are less likely to reduce yields in soybean. However, significant yield responses of 5-6 bushels/acre have been observed in a couple replicated experiments in West Tennessee.

Both Gaucho and Cruiser have a similar spectrum of insect control and provide about three weeks of protection to seedling plants. This includes suppression of above ground pests (bean leaf beetles, thrips and threecornered alfalfa hopper) and below ground pests (grape colaspis larvae, white grubs, wireworms, among others). Most testing has been done using 1.28 oz of Cruiser and 1.6 oz of Gaucho. At these rates, Cruiser has been a little more consistent in controlling insects and increasing yields. A Gaucho rate of 2.0 - 2.25 oz/100 wt is probably more comparable with Cruiser in terms of efficacy and price.

Because the most consistent yield responses have been seen on fields planted before May 15, I typically recommend an IST on early planted beans (e.g., Group III varieties). You may want to consider taking a look at IST on later beans, but do not expect a consistent yield response. The value of IST is higher this year because of market prices. Concerns about seed quality (i.e., low vigor) and a short seed supply also may increase the need for an IST on soybean. You can make the same arguments to justify a fungicidal seed treatment.

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