

IPM NEWSLETTER

Update for Field Crops and Their Pests

No. 2

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Weed Control (Larry Steckel, Assistant Professor)

The presence of a winter annual weed somewhat uncommon to west Tennessee, common groundsel (*Senecio vulgaris*), was pointed out to me by a producer in Crockett County. I have noticed it in virtually every field of cotton or soybean stubble I have come across since. A close cousin, cressleaf groundsel (*Senecio glabellus*), is the typical winter annual groundsel in Tennessee. Common groundsel was probably here in low numbers the last several springs and is just simply more prevalent this year. Many winter annual weeds like henbit, chickweed, horseweed, purple deadnettle, etc. seem to be thriving this spring as well. The large number of winter annuals in many fields coupled with very cold conditions slowing the activity of Clarity, Gramoxone and glyphosate has worried some that these early applications may not be effective. Cold conditions during burndown applications were also common in the springs of 2004 and 2005. The take home message from the field as well as research those years is that good control of most winter annuals particularly horseweed was achieved though an extra week or two of time was needed to get there.



Common Groundsel

Another point to consider is that some of these winter annual weeds (not horseweed) like common groundsel and henbit are in late flower and have just about run their course. At this point systemic herbicides like Clarity and Roundup will work very slowly on these weeds. Contact herbicides like Ignite under warm conditions or Gramoxone which is less temperature sensitive will dry these maturing plants up very rapidly.

A lot of calls have come in over the last week concerning generic dicamba (Banvel, Vision, Rifle, etc.). These generic dicambas are of the same formulation as the old Banvel. The main difference chemically between Clarity and the generics is that Clarity is less volatile. Last year I preached caution moving to these generic products due to lack of data on how effective they were controlling glyphosate-resistant (GR) horseweed compared to Clarity. In very few comparisons under research conditions so far I have not seen a difference in control of GR horseweed. This coupled with no reported major failures last year on GR horseweed in the field has given me more confidence in them.

I hope this will continue to be the case as judging by my phone calls there will be a large amount of acres treated with a generic dicamba this year. That said this will be a big test year for the generic dicambas as they will be applied over many varied environments. The difference in volatility between the generic dicambas and Clarity could, in some unique environments, potentially result in horseweed efficacy differences.

Cotton Burndown Considerations

There has been a lot of grower interest in using Valor this spring for control of GR horseweed. Valor will provide excellent residual control of horseweed when applied at a rate of 2 ozs/A. Valor will provide residual control of horseweed as well as pigweed for 30 days or more depending upon weather conditions. Valor can now be applied up to 21 days before cotton planting. Valor will not burn down existing horseweed. Therefore something that will burn down existing horseweed must be applied with it.

In just a couple of weeks we will be inside the 21 day window before cotton planting when one should consider an alternate burndown herbicide to dicamba for horseweed. Gramoxone Inteon applied at a rate of 48 ozs/A + Caparol at 32 oz/A or Cotoran at 32 oz/A or Direx at 16 ozs/A can be applied anytime prior to cotton planting. In our research these tank mixtures have provided adequate GR horseweed control without a required waiting period before cotton planting. We found similar horseweed control with Ignite 280 at a rate of 23 oz/A mixed with either Caparol at 32 oz/A or Cotoran at 32 oz/A or Direx at 16 ozs/A.

Corn Weed Control Considerations

Corn planting has started throughout much of west Tennessee. A common question at this time is how to control ryegrass that has escaped either tillage or a burndown herbicide. Research we have conducted over the last few years would indicate that ryegrass is most easily controlled at early tiller. Once it reaches boot to heading it becomes very hard to control. This is the stage it is in now. One thing we have going for us is that the ryegrass will end its life cycle as its seed matures. Glyphosate on RR corn or Accent will quicken this natural senescence to some degree. Prior to corn emergence a quart of Gramoxone Inteon + 1% oil + at least 1 lb/A of atrazine will have the best success of burning down ryegrass. Some have asked about and a few have tried burning down ryegrass with glyphosate + atrazine. This is not an effective combination for ryegrass burndown.

GR horseweed was a problem in some RR corn fields last year. We all found out that a pound and a half of atrazine plus 22 oz of Roundup Weathermax was not going to provide adequate control of GR horseweed that was 10 plus inches tall. The time to most effectively control GR horseweed in corn will be over the next several weeks when the horseweed and corn are still small. The most economical control of GR horseweed in corn is Clarity. The rate can go as high as 16 ozs until the corn reaches 8" tall. After the corn gets above 8 inches the Clarity rate that can be used is 8 ozs until corn reaches 36". Another lesson learned last year was that though 8 ozs of Clarity is very good for burndown it will often not provide good control of horseweed that is over 12 inches tall. Our research has shown that Callisto at 2 oz/A is the best option on tall horseweed.

Cotton Insect Considerations (Scott Stewart and Russ Patrick, Extension IPM Specialists)

In the last newsletter, we hit on cutworm control in corn. Now I want to touch base on cutworms and thrips control in cotton.

Cutworms may appear in any cotton field, reduced or conventionally tilled. However, problems are most frequent in no-till. It is worth mentioning again that a good, early burndown (3 or more weeks before planting) can go a long way in preventing cutworm infestations. There is little value of putting a pyrethroid in with the burndown herbicide when you are several weeks in advance of planting. The lack of living vegetation in the field will starve to death any caterpillars that are present, and near full-grown caterpillars would have emerged before planting anyhow.



In contrast, the closer your burndown goes out before planting, the more justified you would be to tank mix a relatively low rate of pyrethroid (e.g., Ammo, Karate, Baythroid, Asana, etc.) with the herbicide. It is possible, even with an early burndown, moths will subsequently lay eggs in the field prior to planting. Thus, you could have small larvae in the field when you plant. Because of this, the safest approach is to apply the insecticide at or very near planting, thus killing any that are present. This also provides the opportunity to band the insecticide behind the planter, using no less than a 10 inch band, and save some money. Although there are some special (2ee) labels that allow extremely low use rates of pyrethroids for cutworms, these rates are pushing the envelope. Considering the low cost of these products, I suggest sticking with the already relatively low rates recommended in the [Tennessee Cotton Insect Control Guide](#).

Thrips would likely be are #1 pest if it were not for the high use of at-planting insecticides, including seed treatments. Seedling protection is critical for maintaining a healthy stand of cotton. Seedling cotton is sensitive to insect and disease injury, and in northern climates like Tennessee, we have to be especially careful. Our standard recommendations begin with a quality at-planting insecticide and fungicide treatment. There are a number of good seed and in-furrow treatments for thrips control including acephate (e.g., Orthene), Gaucho Grande, Cruiser and Temik. Of these, only Temik provides protection against nematodes and early-season spider mites (and mites were an issue in much of the Midsouth last year). Expect acephate, either in-furrow or as a seed treatment, to have less residual than the other treatments, and I often recommend a follow-up thrips application when cotton is at the first true-leaf stage.

Avicta Complete Pack is a newly available seed treatment offered by Syngenta that provides protection against seedling diseases, thrips and nematodes. The value for the Avicta Complete Pack depends on whether or not you have nematodes. If nematodes are not an issue, you have multiple options for an at-planting insecticide and fungicide.



All the above treatments work well when the cotton shoots out of the ground. But truth be told, when emergence conditions are poor and seedling plants are growing slowly, any at-planting treatment may benefit from a foliar thrips application. You can't do anything about the weather, so perhaps the best advice is not to push the planting window too far. Planting in cold ground is asking for trouble and, since the cotton grows-off slowly, does not have a major impact on earliness.

Wheat Insect Control (Russ Patrick, Extension IPM Specialist)

The phone has not been ringing off the hook about problems with wheat insects. There have been a few calls about aphids, but as was discussed in the last newsletter, aphid control is normally recommended only in the fall. Now, we are in a waiting mode to see if true armyworm populations develop to a significant level.

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