Wheat has had its share of hard knocks this growing season. We have seen infestations of greenbugs, army cutworms, winter grain mites or the Brown wheat mites, and the Russian wheat aphid (RWA). Area wide, Russian wheat aphid infestations and feeding damage were as bad as we have experienced in a number of years. Some individuals sprayed two to three times trying to prevent excessive damage. The insecticide applications provided good control of the RWA populations in a field. But, due to infestations in other wheat fields and alternate hosts, RWA continued to re-infest treated fields.

From now until harvest Brown wheat mites may build up if the weather stays warm and dry. But, chemical treatments for these mites are generally not justified after wheat has flowered. Many producers have brought wheat samples to the High Plains Plant Diagnostic Laboratory at the Texas AgriLife Research and Extension Center in Amarillo within the past few weeks. The diseases being identified are Barley Yellow Dwarf, Wheat Streak Mosaic, and Triticum Mosaic which are predominately from fields south of Amarillo.

Monti Vandiver, IPM extension agent for Bailey and Parmer counties, made an excellent summation about this year’s wheat crop in his May 22, 2009 newsletter. He stated, “There is likely no single explanation for the poor condition of the crop but is likely a combination of harsh environmental conditions including freezing temperatures during the jointing stage (last week of March) and viral disease all of which have been compounded by an extremely dry winter and spring as well as heavy Russian wheat aphid pressure.”

Pesticide Update

Carbofuran Cancellation Status, http://tinyurl.com/4Zn53a

On May 11, 2009, EPA issued a ruling revoking all carbofuran tolerances and a Notice of Intent to Cancel. Carbofuran is an N-methyl carbamate insecticide and nematicide that has been registered to control pests in soil and on leaves in a variety of field, fruit, and vegetable crops. No residential uses are registered. EPA has approved some of FMC’s voluntary label reductions. The new label is expected to continue to have corn, sunflowers, potatoes, and some minor crops.

FMC indicates, for now, any Furadan in stock having the current label can be applied to all of the registered crops on that label. Check with your dealer before using in case EPA has made changes to their ruling.
Panhandle Pest Update

Cotton Pests

As wheat begins to dry down thrips will be migrating to seedling cotton that has been planted and beginning to germinate. Our current threshold is one thrips per plant from plant emergence through the first true leaf stage. Then the treatment threshold is one thrips per true leaf until the cotton has 4 to 5 true leaves. Under cool conditions growth by the young cotton seedlings is slowed and may not outgrow damage caused by thrips. Data collected in 2007-2008 by Dr. David Kerns, Extension Entomologist at Texas AgriLife Extension Service, Lubbock, indicates under cool conditions an aggressive approach to managing thrips is needed. When temperatures are around a high of 80 degrees and lows in the mid-50s a treatment for thrips may be required when there is a average of 0.5 thrips per plant at the cotyledon to 1 true leaf stage. But, when temperatures are hot (highs in the low 90s and lows in the low 70s) cotton growth is faster and the plant can tolerate more thrips (up to 2 thrips per true leaf).

Samples taken from a thrips test near Sunray yesterday, May 27, showed the thrips numbers on cotyledon plants were very low, averaging 1 adult and 1 immature for every 10 plants sampled.

Sampling for thrips can be difficult because adult and immature thrips prefer feeding on the underside of new leaves where the leaf is curled and in the terminal bud. The use of a knife or pencil to open up the curled leaf area and bud area will help to find thrips.

The use of seed treatments, such as Aeris, Cruiser, or Avicta CC, should provide up to 3 to 4 weeks of protection from thrips. At planting applications of Temik, at 3.5 lbs/ac or more, should provide 28 to 30 days of protection. However, regardless of any prior treatments, all cotton should be monitored at least weekly for possible thrips survival. If immature thrips are found, the protection from insecticide is no longer effective. When this occurs a foliar insecticide application may be needed which should be based on the action threshold level.

If a foliar treatment is required then Orthene® 90S @1.5-3.0 ozs./acre, Bidrin® 8E @ 2.5 ozs./acre, or Dimethoate 4E @ 4-8 ozs./acre are insecticides for thrips control. The timing of treatments are very important, because research has shown spraying foliar treatments after significant thrips damage has occurred does not result in increased yields.

Corn Update


Written by Dr. Pat Porter, Extension Entomologist, Texas AgriLife Extension Service, Lubbock

Transgenic corn has been regulated, in part, by EPA since before it was introduced in 1996. EPA and the companies that produce the transgenic technologies (the Registrants) work to establish, among other things, Insect Resistance Management (IRM) plans for each transgenic technology. Until now there has been significant uniformity in requests from the Registrants for IRM plans for both corn toxic to rootworms and corn toxic to caterpillar pests (or toxic to both pests in the case of stacked toxins). With some slight variation in planting schemes, all of these IRM strategies call for a 20 percent non-transgenic refuge planted in strips within a field, separate sections of a field, or in fields in close proximity to where the transgenic corn was planted. Many years of scientific effort by university scientists and industry have gone in to developing IRM plans. However, Pioneer has asked EPA to be allowed a refuge that consists of mixing no greater than 5 percent seed that does not have corn rootworm protection (but does have caterpillar protection) in a bag with transgenic seed that has both corn rootworm and caterpillar protection. They are marketing this seed mixture as Optimum AcreMax 1 and calling it a "refuge-in-a-bag" and it would result in a 5 percent (or less) corn rootworm refuge. (It is true that the refuge for corn rootworm would be in the bag, but one would still need to plant a separate 20 percent structured refuge for caterpillar pests.) Pioneer does not have EPA approval for Optimum AcreMax 1.

A FIFRA Scientific Advisory Panel was recently convened to render opinions on whether this "refuge-in-a-bag" concept...
There are really two issues before EPA now; a seed blend for corn rootworm IRM instead of a spatial refuge, and a drastic reduction in the amount of refuge. This should be an interesting decision. We will keep our readers posted. I recently developed a table that lists all of the transgenic corn types. It is intended to be a quick reference for all single toxin and stacked toxin corn hybrids on the market or nearing registration. The table of transgenic traits is available here. RPP