Thrips in Soybeans?

Several of you have contacted me about thrips in your soybeans. For those of you not familiar with Thrips. They are very small, slender insects that are not easily seen. Immatures are usually yellow and adults are black, banded black and white, or straw colored depending on the species. They are commonly found on many weeds and flowers. They feed by rasping off the outer layer of leaves and sucking out the juices. Thrips populations can sometimes reach high levels during drought periods. During these times thrips damage is more visible because the plant is not vigorously growing.

On seedling plants thrips may be found on the upper and lower leaf surfaces as well as in unfolded leaves. Thrips problems are always accompanied by crinkled, deformed leaves which often have a silvery appearance. If populations are high and damage is severe, leaf drop is common.

Scouting procedure -- Sample only if damage is readily noticeable. At each sample site randomly pick 10 leaves (a leaf consists of 3 leaflets) and examine them for thrips damage (substantial silvery scaring and/or deformed leaves.) Record the number of leaves damaged. Sample a minimum of three sites (small fields) or maximum of 10 sites (large fields).

After sampling the field calculate the percentage of leaves damaged. If the plants are stressed for any reason take special notice of thrips activity since thrips damage and other plant stress factors are additive. Thrips numbers can be checked by careful leaf examination or by picking leaves and slapping them over a horizontally held white card.

**Action Threshold -- Thrips rarely require treatment;** however, early season injury to drought-stressed plants may occasionally reduce yields. Treatment can be considered if 75% of the leaflets are damaged, the plants are under stress, and numerous thrips are present (more than 8 per leaflet). **All three conditions should be met before treatment is applied.**

Thus far this year we have had adequate moisture and temperature so we should not expect problems even though some thrips are present in fields.
Many of you are picking wheat as hard as you can go and I expect some are unhappy with the amount of Italian Ryegrass in the crop this year. Some fields were sprayed and for one reason or another control was less than satisfactory. The largest contributing factor to poor ryegrass control this year is the widespread occurrence of ALS resistant populations. These are plants that have developed a resistance mechanism to this herbicide mode of action that many of our postemergence ryegrass herbicides come in. Below are some pictures from an extension trial located outside of Monroe this year to evaluate a few of the postemergence herbicide options available for ryegrass control in wheat. This population is ALS resistant as well as Hoelon resistant. In this trial we found no difference in control among any of the options except Axial XL and though it provided *slightly* greater control it still provided less than a 20% reduction at harvest time when compared to the untreated. Hang on! It isn’t time to panic and throw in the towel yet! We do have a few other options but they are in the form of preemergent herbicides and will be demonstrated in the upcoming season. This is not included to pick on any particular herbicide or company. It is simply included as an illustration of the options available when ALS resistant ryegrass populations are present at traditional treatment times. The take home message is that if you suspect you have ALS resistant populations you must take additional steps such as soil applied herbicides and rotation of crops and modes of action to reduce the population levels. If you do not have these populations use the same methods to reduce the risk of obtaining it.

Research has shown that Italian ryegrass seeds are viable for approximately 3 years in the soil so don’t expect the problem to simply go away. While in this particular trial the control was poor, this DOES NOT mean that these are poor products! They are very effective generally, however in an ALS and Hoelon resistant situation control may be less than desirable as illustrated.

Photos courtesy of Andrew Gardner, Extension Agent, Agriculture, NCCES, Union County
This year corn planting has started out to be much different than we have historically been accustomed to. The seasonal rains have caused corn to show various, unique symptoms to plant leaves that are not normally seen. The following Guide is to be used as a tool in evaluating the nutrient needs of your crop.

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Soybean Rust Update
Jim Dunphy, Extension Crop Science Specialist, and Steve Koenning, Extension Plant Pathologist

Current Status of Soybean Rust in North America – June 2009

Asiatic Soybean Rust has been confirmed on soybeans in a sentinel plot in Washington County, Alabama, in the southwestern corner of the state (the first county north of Mobile). The soybeans were approximately 3 feet tall, and in full bloom. This is the second confirmation of Asiatic Soybean Rust on soybeans in the continental U.S. in 2009; the first was last week in Louisiana on a sentinel plot that was at stage R4 (full sized pods).

Washington County, Alabama, is approximately 365 miles from Murphy, North Carolina, and 520 miles from Charlotte. The rust was detected on a sentinel plot that was at stage R4 (full sized pods). Iberia Parish, Louisiana, is approximately 585 miles from Murphy, North Carolina. We do not consider this find to pose any imminent threat to our North Carolina soybeans.

Soybean Rust Summary for North Carolina
Reflections on 2005-2008

Soybean rust has been detected in North Carolina every year since 2005. Rust was found in 17, 44, and 6 counties in 2005, 2006, and 2007 respectively. In spite of a favorable fall environment, rust was only found in five counties in 2008. Fungicides were not necessary to control rust and most foliar diseases were minor in 2008. Only in 2006 was it recommended that fungicides be sprayed in the southeastern counties on late planted late maturity soybean. Yield increases in these areas were on the order of 4 to 5 bushels per acre.