

Insect Control in Winter Wheat

Winter grain mite: Since my e-mail several weeks ago about winter grain mite infestations in Alabama, I have had several calls and site visits of infestations in Georgia. Most have been from the south-central piedmont region. Fields are early planted small grains or ryegrass in reduced tillage situations or overseeded into pastures. Several of the fields also have had cow manure applications. Mite injury causes stunting and bleaches out the foliage. Mites feed at night and on cloudy days and are present on the soil surface during the day. Mite will remain active for several more weeks until temperature routinely exceed 60°F. For wheat fields, an application of lambda cyhalothrin (Karate, Warrior or similar products) have provided good control. Mustang or Lorsban 4E also are labeled for use on small grains for mite control. Karate / Warrior and Lorsban are not labeled for use in pastures and ryegrass, so Mustang MAX at 4.0 fl. oz / acre is recommended. In grazing situations, Mustang MAX also is recommended because it has a 0 day grazing restriction, but do not apply spray direct to livestock. Karate / Warrior and similar products have a 14 day grazing restriction.

Aphids and BYD infection in wheat: Aphids infesting wheat are mostly a problem because they transmit barley yellow dwarf viral disease. Infection causing yield loss can still occur up until boot/flag leaf emergence. The next critical time to consider aphid control in wheat is at the full tiller stage when top-dress nitrogen fertilizer is applied. This will occur in the next two weeks (first 2 weeks of February) in the coastal plain region and at the end of March/early April in north Georgia. If aphids are present an application of lambda cyhalothrin (Karate, Warrior or similar product) should be useful. Fields that were previously treated with Karate or Warrior seem to have good residual aphid control and may not need treatment. Scouting is needed to determine if aphids have returned to these fields. At current high commodity prices a lower threshold of 4 aphids per foot of row should be used. Lambda cyhalothrin should be broadcast applied. Low rates are effective; 1.3 fl. oz. per acre for Karate 2.08 type product or 2.56 fl. oz. per acre for Warrior 1CS type product. Other registered products will kill aphids but may not suppress BYD because of the lack of residual activity. See the 2007 Georgia Pest Management Handbook, commercial edition for additional information and restrictions on insecticides recommended for wheat.

David Buntin

UGA-Griffin campus, Grain Crop Entomologist

Corn Insect Control

Supplemental insecticide use at planting: Nearly all corn seed this year will be sold with an insecticide seed treatment of Poncho 250 or Cruiser 250 already on the seed. These products should provide good control of most soil insects. However, these products will not control nematodes. They also at the 250 rate will not provide control of cutworms or corn billbug. Supplemental treatments should be considered for these pests. These supplemental treatments are not known to interact with Poncho or Cruiser seed treatments.

For **nematodes**, consider also applying Counter 15G in-furrow or a 7 in band at 8 oz/1000 foot of row and incorporated. DO NOT use an ALS-inhibiting herbicide with Counter such as Accent or Option because serious plant injury may occur. For additional information about nematode control see the GA Pest Management Handbook or contact Bob Kemerait, plant pathologist, UGA-Tifton campus.

Southern **corn billbug** mainly occurs in continuous corn fields and in fields with nutsedge infestations. Again Counter 15G applied as a T-band at 8 oz/1000 ft or row or Furadan 4F liquid sprayed in-furrow are recommended supplemental treatments for billbug control.

For **cutworms**, options include a broadcast insecticide application of the products listed in the next sentence within a week before planting. These insecticides can be tank mixed with a burn down herbicide or glyphosate, but check compatibility of products with a small pre-mix. A second option is to apply at planting Lorsban 4E or a pyrethroid insecticide (Asana XL, Baythroid XL, Capture 2E, Decis 1.5EC, Warrior 1CS or similar products) as a band or T-band application over the row. Check product labels for specific band application directions. A third option is Lorsban 15G at 8 oz/1000 foot of row as a band or T-band over the row and lightly incorporated. Lorsban may interact with ALS-inhibiting herbicides causing plant injury; see label for herbicide restrictions. Counter 15G is not usually effective against cutworms, and Karate is not labeled for use on corn.

Also for cutworms, Bt corn containing Herculex – CB (corn borer) generally provides fair to good suppression of cutworm damage in the seedling stage. YieldGard - corn borer type Bt is not effective against large cutworms in the seedling stage. I will discuss refuge requirements for various types for Bt corn in the next newsletter. Please contact me if you need this information before then.

See the 2007 Georgia Pest Management Handbook, commercial edition, for additional information and restrictions on insecticides recommended at planting for corn.

David Buntin

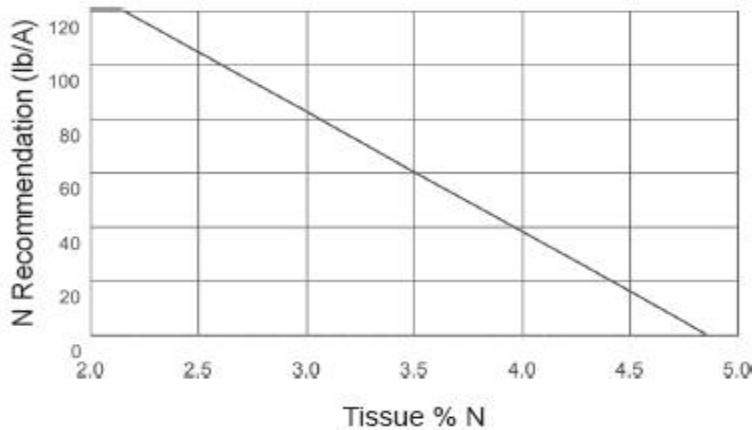
UGA-Griffin campus, Grain Crop Entomologist

Nitrogen applications critical in early spring.
Dr. Dewey Lee

High yield wheat in Georgia most often only requires 100 to 130 lbs of N per acre. Nitrogen applications will vary according to the soil type, the variety's lodging resistance, irrigation capability, previous crop, wheat growth stage and residual nitrogen from manure applications.

Spring N applications should be made at stem elongation and prior to the development of the first hollow node to keep the crop from entering any deficiency during head development. Usually this occurs during early to mid February in south Georgia and late February and early March in north Georgia. Most growers who are properly managing their N would have already applied some nitrogen if tiller counts were low. Application rates can vary considerably. In general, average yields (50 to 60+ bu/ac) only need 80 lbs N per acre. However, higher yields require more N carefully applied to maintain a proper level of nutrition.

The figure below is a guide used by growers in North Carolina and Virginia to determine the need for nitrogen at GS 30 (or Feekes 5). A tissue analysis is needed for final N application determination. It is assumed that the average tiller count will be above 100 per square foot.



In addition, 15 lbs of S should be applied with the nitrogen to soils that are sandy. Avoid tank mixing herbicides such as Express, Harmony Extra, and/or 2,4-D as this will increase burn and tissue loss.

Mid to late December planted wheat will not have the same yield potential as timely planted wheat and therefore will not yield as well (30% to 50% reduction). Maximum yield potential is usually met with a total of 80 lbs N per acre.

Currently November planted wheat in the southern portions of the state has reached the first hollow node stage. This wheat is very susceptible to injury by applications of phenoxy herbicides. If the crop has not been topdressed, do not apply 2,4-D or MCPA with any additional nitrogen.