PLANT DISEASE AND INSECT ADVISORY

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Karnal Bunt (Kb) Update

Bob Hunger, Extension Wheat Pathologist

USDA-APHIS Report from Olney, Texas (dated 17 July, 2002): USDA-APHIS has reported the following results from KB testing conducted in Olney, TX for the four county area (Archer, Baylor, Throckmorton, and Young):

- 125,027 head of cattle were tested and certified.
- 798 wheat grain samples were collected and tested, with four samples testing positive (Baylor-2, Throckmorton-1, and Young-1).
- 140 wheat seed samples were collected and tested, with six samples testing positive (Archer-2, Baylor-3, Throckmorton-1, and Young-0).

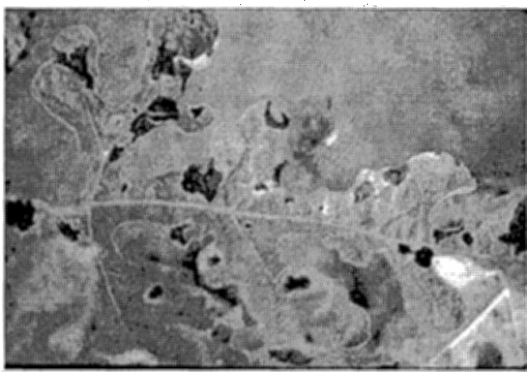
The general tone of the update was that testing in the four county area was completed, and plans are being made for testing next year. I have heard of no update from the testing conducted in the San Saba area of TX. The last information I heard regarding that area (about 15 June) was that no KB had been found.

Oklahoma KB testing update:

- As of 19 July 2002, our lab has received 52 wheat grain samples as part of the national KB testing program. Oklahoma is projected to have a total of 62 samples tested for 2002. Of the 52 samples received, 32 have been processed and all have been negative. Results from the first 20 samples tested have been reported to NAPIS.
- I will be out of Stillwater from July 24 – July 31st. If questions arise regarding Karnal bunt or the testing program, please contact Dr. Larry Singleton (405) 744-9956.

Watermelon Anthracnose Outlook

Jim Duthie, Extension Vegetable Plant Pathologist
Jim Shrefler, Horticultural Extension Specialist



Up to this point in 2002, gummy stem blight and anthracnose have been the most common foliar diseases in watermelon fields in Oklahoma. As usual, anthracnose appears to have been the most damaging. In some years in Oklahoma, downy mildew also causes extensive damage to watermelon crops but in those years, the disease typically does not appear before this part of the growing season.

During the months of June and July, rain has been frequent and humidity has been high in many

locations in the southeast district and around the state. As a result, watermelon foliage has often remained wet for unusually long periods. Consequently, outbreaks of anthracnose have reached damaging levels in many crops. Crops that were planted in April and May and that have reached maturity or that will reach maturity before the end of this month have been particularly vulnerable.

Because of the persistent wet weather during the past two months, the OSU watermelon anthracnose model (http://agweather.mesonet.ou.edu/models/watermelon/default.html) has recommended frequent application of fungicide for many locations in Oklahoma. The model is based on continuous assessment of both humidity and temperature in each county in the state.

Fungicide application is the single most effective method of controlling foliar diseases such as anthracnose in an established watermelon crop. Except under wet conditions, fungicides will reduce the spread of anthracnose and minimize effects on the quality and quantity of watermelon fruits. County extension educators can recommend fungicides for the control of specific foliar diseases of watermelon and other crops.

During the next month, many Oklahoma watermelon growers may be able to reduce costs of fungicide application while minimizing the risk of outbreaks of anthracnose. This can be done by carefully monitoring weather conditions and by using the watermelon anthracnose model. Less frequent application is likely to be recommended by the model for many locations. Hot and dry conditions are likely to predominate throughout the state although localized showers remain possible. The National Weather Service describes a familiar region of high pressure that has built up over the south-central plains. In most years, this high pressure region will persist for the next month or more. Moist air moving north from the Gulf of Mexico and from the southwest will be forced to flow to the east and west. Outbreaks of foliar diseases of watermelon then will be unlikely except where localized thundershowers occur.

Digger Wasps are Active

Tom A. Royer, Extension Entomologist

I have received reports of legions of digger wasps "harassing" some people while they are attempting to garden or mow their lawn. The callers' description of the wasp (about 1½ inches, black with yellow bands on the abdomen, brownish wings) suggests that they are "**Cicada Killers**". These wasps are solitary. The female wasp digs a ½ inch diameter burrow in the ground, which she provisions with a cicada or katydid that she has stung and paralyzed, and lays an egg on it. She will then cover the burrow and start a new one. The eggs soon hatch, producing a legless larva that consumes the paralyzed, but living cicada that its mother so thoughtfully provided. The grub overwinters inside a silken cocoon, then pupates in the spring and emerges as an adult wasp the following summer. Female cicada killers rarely sting, unless stepped on with bare feet or crushed.

The male wasp **CANNOT STING**, but is often the one that does all the "harassing." It establishes a territory that it defends from other male wasps, and waits for a female to fly by that it will attempt to mate with. When a person enters the wasp's territory, the male will fly back and forth, sort of "checking out" the new intruder. They usually leave once they determine that the person is neither a competing male nor a desirable female wasp. The problem is that as the as the person keeps moving, another male's territory is invaded, and the harassment starts all over again.

These wasps prefer to lay eggs in bare, sandy soils. Mulching or planting of ground covers can reduce the problem. It is important to remember that the males cannot sting, and the female wasps rarely sting. A homeowner may be able to "live with them" if those facts are understood. As a last resort, the nest area can be treated with a labeled insecticide such as Sevin 50WP or another labeled product such as Bayer Advanced Home™ or Ortho's Home Defense. It is probably best to treat after sunset, when the wasps become less active. Usually, once the nests and females are killed, the males will leave the area.

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