PLANT DISEASE AND INSECT ADVISORY

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Vol. 1, No. 22 Website: http://plants.okstate.edu/Pddl/advisory.htm July 30, 2002

Peanut Diseases Increasing

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The rains, high humidity, and moderate temperatures which prevailed during June and the first half of July have triggered peanut disease outbreaks. While we have begun drying out and are now experiencing hot temperatures, disease control programs will prove critical in protecting the good crop prospects that we currently have.

Foliar Diseases - **Early leaf spot** (right) is prevalent state-wide, particularly in fields that were cropped to peanuts last year. Numerous hours of disease favoring weather accumulated during the first week of July and the results of infections that occurred then are now appearing. Remember, it takes about 10-14 days after infection (an invisible event) for spots to appear. I have had calls about fungicide applications not being effective. This is probably the result of: 1) late application timing or 2) the appearance of another foliar disease, pepper spot. Protectant fungicide such as Bravo act like paint to protect leaves from infection. Let's say Bravo was applied the second week in July. Those infections that occurred the first week in July which was so favorable for infection will go ahead and progress to form spots which would appear the third week in July. If the grower starts seeing spots a week after a fungicide application, he/she is like to conclude that the fungicide did not work. This example illustrates why reactive timing of fungicide according to the appearance and/or increase in symptoms observed in the field is not always effective. A systemic fungicide such as Tilt, Tilt/Bravo, or Folicur is a good choice for early-season applications where timing is late because the systemic activity will provide about 2-3 days of post-infection activity (kick-back). **Pepper-spot** (left) is also appearing in many fields of runners peanuts. This disease can

sometimes be confused with early leaf spot. Our field trials have shown that currently registered fungicides do not provide good control of this disease. Fortunately this disease does not appear to be very damaging.

Generally, Oklahoma growers have not experienced severe leaf spot since 1997. When the disease is allowed to completely defoliate plants, most of the expected yield can be lost during digging. Defoliation from leaf spot must be kept below 50% at digging. Growers are recommended to maintain a 14-day spray program or consult the early leaf spot advisory program (http://www.mesonet.ou.edu/premium/) for timing fungicide applications. Where the disease is currently established, a lack of fungicide protection in combination with another infection period will lead to an explosive increase in disease.

Sclerotinia blight - Beck Johnson, a crop consultant in Caddo Co., has informed me that Sclerotinia blight has begun to appear in Caddo Co. We have not yet observed it on the Caddo Research Station. The fungicide Omega has provided excellent control of this disease and is recommended for problem fields. Yields responses of 1,000 lb/a or more to Omega programs can be expected on all current varieties except for Tamspan 90 where vine growth is not rank (the plants remain upright). Ground and chemigation applications at 1 to 1.5 pt/A are permitted. It is critical that applications are made before, or shortly after the first appearance of this disease. Depending on future weather, a second application may be required, 3 to 4 weeks after the first. Unless applied by chemigation, the fungicide should be washed down by rain or irrigation within 4 days of application.

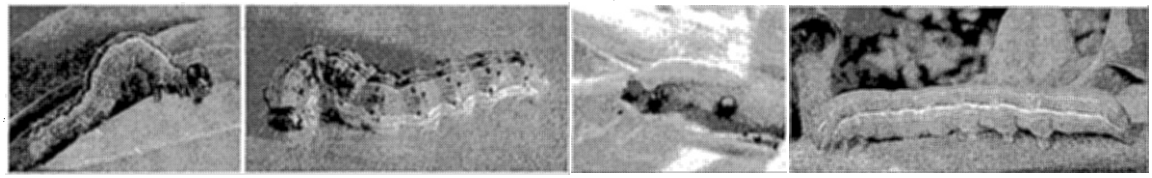
Southern Blight - While southern blight has not yet been reported now is the time to begin fungicide programs for southern blight in problem fields. Folicur, Abound, and Moncut are very effective against this disease. Folicur and Abound also control early leaf spot. Omega is also effective against southern blight where it is applied for Sclerotinia blight. However, the product is too expensive to recommend only for southern blight. Fungicide applications for Southern blight should be washed down by irrigation and or rain within 4 days for maximum effectiveness.

Tracer™ Receives Section 18 Label for use in Peanut

Phil Mulder, Extension Entomologist

Back in March of 2002, we filed for a section 18 exemption for the use of Tracer insecticide on peanut. After not hearing anything for quite some time, we managed to track it down and find out that the section 18 was approved on May 30, but somehow the filing had been misplaced.

This compound is labeled from June 15, 2002 to October 30, 2002 for use against most of the common defoliators (loopers, earworms, rednecked peanutworms, beet armyworm, etc.)



affecting peanut. Use rates for Tracer range from 1.5 to 3 ounces pre acre. A maximum of three applications per season are permitted, but yo u may not exceed 9 fluid ounces of product per acre per season. Tracer may not be applied through any type of irrigation system and can not be applied within thr ee days of nut harvest or 14 days of harvest for forage. This product is relatively safe on many beneficial organisms; however, it is considered highly toxic to bees exposed to direct treatment on blooming crops or weeds.

Steward® Insecticide Receives Federal Label

Phil Mulder, Extension Entomologist

Dupont recently announced the labeling of Steward® insecticide for use in peanut, soybeans, and alfalfa. The product already had a label for use in cotton. This provides another tool for use against defoliating caterpillars in these crops. Since the primary lethal exposure is due to ingestion, with some contact activity, Steward is relatively safe to beneficial organisms and therefore should not cause secondary mite outbreaks. This latter suggestion however has not been thoroughly tested. Steward has a caution label and is not a restricted use product. It also has only a 12 hour re-entry interval.

Indoxacarb (active ingredient in Steward) has a novel mode of action that inhibits the sodium-ion entry into nerve cells, resulting in paralysis and death by caterpillars ingesting the material. Do not apply more than 45 fluid ounces per acre per crop. The use rate varies from 5.6 to 11.3 ounces per acre depending on the crop and pest complex. It has shown good to excellent activity against earworms, armyworms, loopers, and cutworms in any of the new crops. While it also has a label for alfalfa weevil control, results of trials conducted under Oklahoma conditions over the last three years have not shown this product to be very effective against this pest. In addition, aphids seem to thrive on it in alfalfa. I believe this compound has its best fit in the peanut, soybean, and cotton areas. On peanut, soybean, and alfalfa Steward has a 14, 21, and 7 day pre-harvest interval, respectively. Similar to Tracer, Steward is highly toxic to bees exposed to direct treatment on blooming crops and weeds.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Samuel E. Curl, Director of Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Dean of Agricultural Sciences and Natural Resources.