PLANT DISEASE AND INSECT ADVISORY

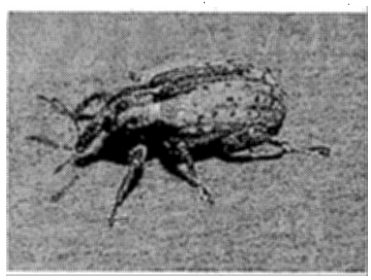
Department Entomology and Plant Pathology
Oklahoma State University
127 Noble Research Center
Stillwater, OK 74078

Vol. 1, No. 3 Web version: http://plants.okstate.edu/Pddl/advisory.htm Feb 19, 2002

Alfalfa Weevil - Never say never

Phil Mulder - OSU Extension Entomologist
Kelly Seuhs - Extension Assistant

This title may seem somewhat strange, but it makes sense to the people that attended the state Alfalfa Hay and Seed Association meetings in El Reno this past week. The statement was made that alfalfa weevils have never reached damaging thresholds before 150 degree days. That statement may still be true in many parts of the state; however, reports have surfaced from Grady County (currently with about 116 degree days) that damaging larval populations are already present. This is a testimony to Mother Nature; she can always find a way to make us look bad. In discussing these infestations with the person that scouted the field it became apparent that the majority of the population was still quite small (tiny yellow larvae) with a few larger larvae in the sample. Infestations were estimated to be around 70-80 larvae per 30 stems, with up to 8 larvae per stem in some cases. In addition, plant stems are still extremely short, therefore, these high numbers are unacceptable. Most of the little shot hole feeding that the young larvae will do generally won't effect a strong, vigorous plant; however, if the plants are relatively small and under additional stresses then this damage could be consequential. We have records of this occurring previously in Oklahoma. In 1995, damaging larvae were present as early as February 6. However, these populations were not as intense as they appear to be in 2002. It is also not unusual to have treatable thresholds attained shortly after reaching 150 degree days (170-180 DD) and we have 2-3 years on record of treating threshold populations in mid to late February.



Growers should be encouraged to scout their fields as soon as possible upon attaining 150 degree days or even slightly before to assure themselves that the weevils are not getting the upper hand. If an early application is needed, we have good information (over the last two years) to support a stubble treatment with the newer pyrethroid compounds (Warrior-T or Fury). In the past two years, treatments made with these compounds, before threshold was reached, provided approximately 85% control. Keep in mind; this is 85% of a relatively light population. What this suggests is that a second application will be likely this year if the first treatment is made before obtaining a threshold. The threshold is based on sampling 30 stems across a field and shaking those stems into a white bucket, then counting

the numbers of weevil larvae per 30 stems. Measure the alfalfa in inches and obtain the degree days from your closest county extension office. A copy of OSU Current Report #7177 can help you in making that treatment decision based on the information from your sampling and degree day measurements. Keep in mind that the sampling procedure assumes that you will miss many of the small larvae, because they will be tied up tightly in the terminals and hard to dislodge. In addition, the smaller ones can be counted on a basis of 2:1. This means for every two small larvae you obtain, count them as one large larva. This way you don't treat young, actively hatching populations before threshold is attained. Fury and Warrior-T should be quite competitive with some of the short residual compounds and should provide longer control. At last pricing, Fury was available for about $170.00 per gallon. With a range in application of 2.4 to 4.3 ounces, this translates into $3.18 to $5.71 per acre, not including application costs. These prizes are likely to vary a great deal over the state. Warrior-T will also be in the range of $4 to $8 depending on rate. These two pyrethroids are the only two we have tested in a stubble application, before attaining threshold levels. Continue to check fields, particularly early-treated ones, up till harvest time to insure that weevils are under control.

Army Cutworms Continue to March in Oklahoma

Tom A. Royer, Extension Entomologist

Producers need to remain vigilant for signs of army cutworm activity. I just put out an insecticide trial to evaluate several insecticides for control of army cutworm in wheat, and they were still quite active in several fields in west central Oklahoma. Worms ranged in size from about ½ inches to over 1 inch long. Any wheat fields that have not attained good establishment are still vulnerable. The suggested treatment threshold is 2-3 cutworms per linear foot of row. I will share results of the insecticide trial when available.

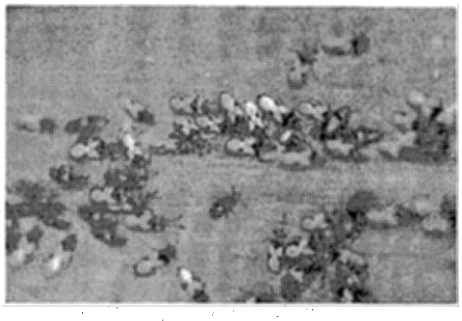
I have received questions about just how long these worms will be around, and some are curious about the apparent different sizes of caterpillars that can be seen in a field. This species is univoltine, which means that only one generation occurs each year. Eggs are laid in the fall, from August through October, and this moth likes to lay them on bare soil. One moth can lay from 1000 to 3000 eggs. These eggs hatch soon after being deposited, which explains the different sizes of larvae that one can see in a field. Larvae feed throughout the winter growing through 7 molts before they turn into pupae. Most larvae will be gone by late March. Moths will begin emerging in April, and they will fly northward to the Rocky Mountains to spend the summer.

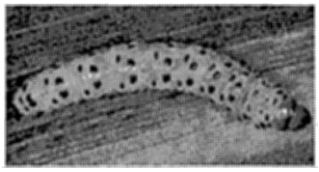
Fury Registered for Alfalfa, Corn, Sorghum and Wheat

Tom A. Royer, Extension Entomologist

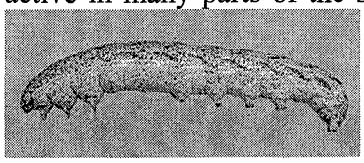
Fury 1.5 EC and Mustang insecticides, both produced by FMC Corporation, have recently received registration for use in alfalfa, corn, sorghum soybean and wheat in Oklahoma. Both of these products contain the active ingredient zeta-cypermethrin, which is a pyrethroid. Fury and Mustang have a wide spectrum of activity against numerous insect pests. They are registered for various leaf-feeding caterpillars, alfalfa weevil, cutworms, webworms and plant bugs in alfalfa.

They can control armyworms, cutworms, corn rootworm beetles, corn borers and stalk borers in corn; armyworms, corn borers, corn earworms chinch bugs, false chinch bugs, and stink bugs in sorghum; and armyworms, cutworms, and chinch bugs in wheat. Both products can be applied at rates of1.9-4.9 fluid oz per acre, depending upon the pest being controlled. Check the label for the range of rates for each pest. Aphids, such as greenbug or blue alfalfa aphid are listed on the label, but with the caution that they are for suppression, not outright control.





This registration comes at a good time for alfalfa and wheat growers because army cutworm is active in many parts of the state, and Fury 1.5 EC should be quite effective on cutworms and other caterpillars. It also has a desirable waiting period for those that graze cattle on either of these crops. Fury has a pre-harvest/pre-grazing interval of 3 days in alfalfa, and 14 days for wheat.



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 and has been prepared and distributed at a cost of for copies.

Richard Grantham
Director
Plant Disease and Insect Diagnostic Laboratory