



# Pest e-alerts



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## Alfalfa Problems not Over

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Although drought conditions have broken across the state, the status of alfalfa production is still under assault. We began the season with severe limitations in soil moisture, and extremely early weevil populations. Many growers elected to control these weevil populations early and hoped that alfalfa aphids would be simultaneously managed. Fortunately, rains arrived and alleviated much of the concerns about aphids; however, alfalfa weevil populations were the highest ever experienced. Many growers have made multiple applications for weevils this year and much of this was justified. Unfortunately, multiple applications can eliminate beneficial organisms (ladybird beetles, parasitic wasps, etc.). With the continued mild weather and weevils emerging early, we continue to see adult activity and may subsequently experience problems with more larval populations. The summer dormant period for weevil adults is cued in by temperature to some extent, but the primary driver is daylength in which the larvae matured. Since the daylength was still relatively short for much of the early populations, weevil adult activity may continue for a period of time followed by oviposition (egg laying) activity. The

latter scenario remains to be seen, but could potentially occur. Growers with heavy adult alfalfa weevil populations are encouraged to manage these numbers. Now, how and when should they be managed? Unfortunately, we do not have well established thresholds for adult alfalfa weevil populations. Many growers have made the mistake of ignoring adult populations if the alfalfa is close to harvest and this may not be a bad decision if harvest is immediate; however, if harvest is delayed weevil adults will further continue defoliation and then begin feeding on stem epidermal tissue, further degrading the quality of an already depleted and compromised crop.

In the Chickasha area, with one application, there are noticeable spots of stunted alfalfa but relatively light aphid populations; however, adult weevils are beginning to emerge. In the Pauls Valley area, where multiple applications (4 or more) have been made, beneficial organisms are less common and adult weevils are emerging. In the Cordell area, two applications have gotten us to the point of harvest with adult weevil populations exploding onto the scene. The question at this point concerns our approach to the adult weevil populations and what if anything should be done about these insects?

Because of the threat to beneficial organisms, the high investment in the first cutting and the potential for building up resistance in the weevil population, I feel strongly that late applications for adult weevils should be avoided if possible. For growers who have managed to preserve their first cutting and are seeing adult weevil populations hanging around, I suggest an early harvest. We are certainly exploring some new territory in alfalfa insect management this year (as we did last year), as the drought ends, heavy early insecticide use and incredibly high numbers of alfalfa weevils have created some new challenges for growers and/or applicators to confront. With the spring rains many of these challenges hopefully are behind us; however, the change in climate may spark other formidable challenges. Thorough scouting and active involvement in managing damaging insect populations can pay incredible dividends for maintaining a productive, long stand in alfalfa.

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## **Armyworm Moth Flights = CHECK YOUR WHEAT!**

Tom Royer, Extension Entomologist

Dr. Alan Knutson, Extension Entomologist in Dallas reports that wheat producers south of Dallas are battling armyworm infestations. I have noticed armyworm moth flights the past few evenings on my way home from our canola variety tours. These flights could deliver a crop of armyworm caterpillars within the next few weeks, so producers and crop consultants need to check wheat fields for signs of infestation and the worms themselves. Armyworm infestations tend to be focused around waterways, areas of lush growth, or areas with lodged plants. These are the areas to watch closely and determine if the whole field is infested, or the infestation is restricted to a localized area.

Yield loss from armyworm feeding can occur in two ways. First, they cause physiological yield loss when they feed on the flag leaf. They can also cause direct yield loss by “clipping heads” as plants become mature and lose green tissue. Fortunately, head clipping is rare in winter wheat. The head clipping I have noticed over the years occurred on secondary



tillers bearing small, green heads that won't contribute much to yield.

Early signs of an infestation include leaves with ragged margins that have been chewed. "Frass" i.e. the excrement from armyworm caterpillars, may be deposited around the base of wheat stems. Scout for armyworms, at 5 or more locations looking for "curled up worms". Armyworm caterpillars tend to feed at night, so a good strategy is to bring a flashlight and check fields after dusk when the armyworms are feeding up the plant stems and grain heads.

The suggested treatment threshold for armyworms is 4-5 unparasitized caterpillars per linear foot of row. Parasitized armyworms can often be recognized by the presence of small white eggs the size of a period on a newspaper that are attached behind its "neck". Generally if wheat is past the soft dough stage, control is not warranted unless obvious head clipping can be seen, and caterpillars are still present and feeding. Worms feeding on the awns after soft dough will not cause enough yield loss to justify the expense of an insecticide application.



Armyworms have a number of natural enemies that help keep populations in check, if given a chance. In particular, parasitic wasps and flies attack them. If you find small white cocoons littered on the ground that are about  $\frac{3}{4}$  the size of a cue tip, the natural enemies have already taken care of the problem.



I will keep you updated on any armyworm developments that are occurring. Consult [CR-7194 Management of Insect and Mite Pests of Small Grains](#) for information on insecticides registered for control of armyworms.

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