



# Pest e-alerts



---

Entomology and Plant Pathology, Oklahoma State University  
127 Noble Research Center, Stillwater, OK74078  
405.744.5527

---

Vol. 12, No. 19

<http://entopl.okstate.edu/Pddl/>

May 29, 2013

---

## Wheat Disease Update

Bob Hunger, Extension Wheat Pathologist  
Jeff Edwards, Small Grains Extension Agronomist



I and Nathalia Grachet (OSU Graduate Student) returned Friday from a trip and field days in the panhandle of Oklahoma. Wheat at Lahoma (25 miles west of Enid) ranged from full berry (watery) to the milk stage. Driving further to the northwest after about Alva was depressing as the condition of the wheat and the landscape in general deteriorated with what seemed like each passing mile. The field days we attended were at Balko (40 miles east of Guymon) and Hooker (20 miles northeast of Guymon). Wheat in these trials ranged from flowering to full berry (watery). Rick Kochenower (Panhandle Area Specialist – Agronomy) related the story that demonstrates the resilience of wheat. The Balko area was hit hard by the last freeze in April such that he felt there would be no wheat there. However, a mild May with just a little moisture allowed secondary tillers to come back, and if some rainfall and mild temperatures occurs for the next couple of weeks, some wheat will be harvested in the area. This is not the scenario over the entire panhandle. According to Rick, wheat in Cimarron County (far western county in the panhandle) is all but gone primarily due to drought whereas in Texas and Beaver County freeze and drought have both played a role in severely impacting wheat production.

Leaf and stripe rust were found this past week around Stillwater but not at a typical incidence or severity; leaf rust is especially lacking. Dr. Art Klatt reported being able to easily find leaf rust in his plots near Perkins, OK (15 miles south of Stillwater) in the range of 5-20S, which is lighter than typical. At Lahoma, Nathalia and I found both leaf and stripe rust but at low incidence and severity (especially leaf rust). Leaf spotting was more common, but it was difficult to determine if this was *Septoria*, *Stagonospora*, tan spot and/or physiological.

Signs of wheat streak mosaic and barley yellow dwarf can still be observed, especially around Lahoma where flag leaves are still mostly green. In the panhandle and northwestern OK it is difficult to discern virus damage from freeze and drought.

**Nebraska:** Dr. Stephen Wegulo (Small Grains Extension Pathologist, Univ of Nebraska, Lincoln, NE) 24-May-2013: Wheat in Nebraska is mostly in the boot to heading growth stages. There have been no new reports or observations of rust diseases since the observation of stripe rust at Mead on May 7. On May 21 and 22, I surveyed wheat fields in Lancaster, Saline, and Saunders Counties in southeast Nebraska. I did not find any rust diseases. The stripe rust that was observed at Mead on May 7 stopped activity following the high temperatures we had during the week of May 13 (including 100+ ° F on May 14), and never spread, similar to Carl Bradley's observation in Champaign County, IL.



---

## Watch for Armyworms in Wheat

Tom A. Royer, Extension Entomologist



We have a late-maturing wheat crop that has fought its way through freezes, howling winds and it is now receiving some needed rain. This cool weather is also helping slow the maturity of the wheat. Right now, wheat is vulnerable to infestation from armyworms. Armyworm infestations typically occur in late April through the first two weeks of May, but obviously, the cooler spring we have experienced this year has delayed their development.

Armyworm infestations occur more frequently around waterways, areas of lush growth, or areas with lodged plants. These areas should be checked first to determine the size of the infestation.

Early signs of an infestation include leaves with ragged margins that have been chewed. You may find "frass" i.e. the excrement from armyworm caterpillars, around the base of wheat stems. They also tend to clip heads from developing wheat plants. The head clipping I have noticed

over the years we usually restricted to secondary tillers with very small, green heads that would not likely contribute much to yield.

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 look at fields after dusk when they are feeding up on the plant stems. The suggested treatment threshold for armyworms is 4-5 unparasitized caterpillars per linear foot of row.



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 have noticed that there has been some fungicides being applied during the past few weeks. If an insecticide was added to that spray, it is likely to have reduced any armyworm population already established in the field. Still, it is important to check the field. 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 when plants are past soft dough will not cause enough yield loss to justify the expense of an insecticide application.



Consult [CR-7194 Management of Insect and Mite Pests of Small Grains](#) for information on insecticides registered for control of armyworms.

---

**Dr. Richard Grantham**  
**Director, Plant Disease and Insect Diagnostic Laboratory**

Oklahoma State University, in compliance with Title VI and VII of the Civil Rights Act of 1964, Executive Order 11246 as amended, Title IX of the Education Amendments of 1972, Americans with Disabilities Act of 1990, and other federal laws and regulations, does not discriminate on the basis of race, color, national origin, gender, age, religion, disability, or status as a veteran in any of its policies, practices or procedures. This includes but is not limited to admissions, employment, financial aid, and educational services.

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