



# Pest e-alerts



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Vol. 12, No. 12

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

Apr 26, 2013

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## Wheat Disease Update

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Reports of stripe rust were more common from Oklahoma this past week. Yesterday (25-Apr) I and Nathalia Grachet (OSU graduate student) looked at wheat in central Oklahoma to the southwest, west, and northwest of Oklahoma City (OKC). Wheat in this area was variable, but mostly around GS 10 (boot stage) to heads just emerging. Fields where freeze damage occurred showed a wide range of tiller maturity.

Fields around Apache, OK (about 75 miles southwest of OKC) including the variety trial showed light powdery mildew and leaf spotting (tan spot/septoria/stagonospora) with stripe rust found in one field located about 10 miles west of Apache – not severe but the incidence was spread across the field (variety unknown). On our return trip to Stillwater, we found stripe rust on lower to mid leaves in the variety demo at Minco (about 25 miles southwest of OKC) with the most severe rust on Duster (right). Powdery mildew was severe on lower leaves of the wheat in the field surrounding the variety demo. No rust was observed at the variety trial at Kingfisher



(about 30 miles northwest of OKC), and no leaf rust was found at any stop. Although not severe, stripe rust also was observed this past week around Stillwater/Perkins by Dr. Art Klatt (OSU wheat geneticist/breeder) and by Mark Gregory (OSU Southwest Extension Agronomist) in the variety trial near Chickasha (30 miles southwest of OKC). Dr. Klatt also reported severe powdery mildew in his plots near Perkins. Symptoms indicative of barley yellow dwarf are common around Stillwater and on the trip yesterday, however, freeze damage symptoms make it difficult to comfortably identify BYD without confirmation in the lab.

**IMPORTANT NOTICE:**

Recently we have received samples that have not been correctly packed for shipping. Please read the following and follow what is stated if you are involved with shipping samples to the OSU Diagnostic Lab for analysis as this will help to ensure proper diagnosis.

If you would like to submit a sample to the Plant Disease and Insect Diagnostic Laboratory, be sure to collect a proper sample. If samples are not collected or packaged properly, they may arrive in poor condition and may be inadequate for testing (Fig 1).



**Fig 1.** Improperly packaged wheat samples will rot during shipment and are inadequate for testing.

When root or stem rots are suspected, entire wheat plants should be collected including roots. Secure the roots in a plastic bag to prevent soil from getting on the foliage (Fig 2).



**Fig 2.** Roots of wheat plants wrapped in a plastic bag and secured with a rubberband to prepare for shipment.

If a plant virus is suspected, it is not necessary to collect the entire plant. Collect symptomatic leaves and wrap them in a dry paper towel (Fig 3). The leaves should be sealed within a plastic bag for shipment (Fig 4).



**Fig 3.** Wheat leaves with yellowing and streaks collected for virus testing. Wrap symptomatic leaves with dry paper towel in preparation for shipment.

In cases where diseases of wheat heads are suspected, include at least 10 symptomatic heads for examination and ship them within a sealed plastic bag.



**Fig 4.** Fig 5. Secure wheat leaves in a sealed plastic bag to prevent drying out during transit.

Never add water or wet paper towels to any sample you submit. Always complete a sample submission form which can be found online at the following web address.

<http://entopl.okstate.edu/pddl/pdidl-form.pdf>

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

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