

# Plant & Soil Sciences

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## Extension Newsletter



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### *Brown Wheat Mites Showing Up in Wheat*

*By Tom Royer*

As if the prolonged La Niña drought hasn't caused enough trouble with our winter wheat crop, it can also assist pest problems, such as greenbugs and brown wheat mites to develop. Ron Wright, Custer County Extension Educator, Agriculture has been receiving reports that brown wheat mite populations are growing in some wheat fields. Producers need to remain alert to these problems so that their wheat does not suffer dual effects from dry growing conditions PLUS brown wheat mites or greenbugs.

This mite is small (about the size of this period.) with a metallic brown to black body and 4 pair of yellowish legs (see picture to the left). The forelegs are distinctly longer than the other three pair. Brown wheat mites can complete a cycle in as little as 10-14 days. They attach their eggs to soil particles and will undergo up to 3 generations each year, but have probably already completed at least one or two by now. Increasing populations will lay red-colored eggs, but spring populations begin to decline in mid-late April when females begin to lay white-colored "diapause" eggs.

Brown wheat mites cause problems in wheat that is already stressed from lack of moisture. They feed by piercing plant cells in the leaf, creating a fine stippling that gives infested leaves a grayish cast. As injury continues the plants turn yellow-bronze, then dry out and die. These mites feed during the day, so the best time to scout for them is in mid-afternoon. They do not produce webbing and will quickly drop to the soil when disturbed.

Brown wheat mite numbers can build up and cause yield loss under dry conditions. Scout fields by direct counts; tap plants over a white sheet of paper and count dislodged mites to get more accurate counts. An insecticide treatment is warranted if your field inspection reveals 25-50 brown wheat mites per leaf in wheat that is 6-9 inches tall. An alternative threshold is "several



Brown Wheat Mite



Brown Wheat Mite Eggs



Brown wheat mites on growing wheat

hundred” per foot of row. However, make sure you check your field before deciding to spray, especially after a good rainfall, as this pest is just one hard driving rain away from being killed off.

Check CR-7194, Management of Insect and Mite Pests in Small Grains for registered insecticides, application rates, and grazing/harvest waiting periods. It can be obtained from any County Extension Office, or found at the OSU Small Grains Extension Website at <http://wheat.okstate.edu/wheatmanagement/insectsdisease/index.htm>

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To receive an electronic copy of the OSU Plant and Soil Sciences Extension Newsletter, contact Jeff Edwards at [jeff.edwards@okstate.edu](mailto:jeff.edwards@okstate.edu).

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## Upcoming Events

### *Winter Canola field tours*

- |                |  |
|----------------|--|
| April 11, 2011 | 10 AM - Alfalfa County<br>2 PM - Kingfisher County<br>5 PM Canadian County                               |
| April 12, 2011 | 9 AM - Harmon/Jackson County<br>1 PM - Comanche County<br>3 PM - Cotton County<br>6 PM - Stephens County |
| April 13, 2011 | 9 AM - Noble County<br>1 PM - Oklahoma County<br>4 PM - Grady County                                     |
| April 14, 2011 | 9 AM - Dewey County<br>1 PM - Blaine County<br>3:30 PM - Major County<br>6:30 PM - Garfield County       |

### *Sustainable Ag Summit*

- |                     |                                    |
|---------------------|------------------------------------|
| April 19 & 20, 2011 | OSU Wes Watkins Center, Stillwater |
|---------------------|------------------------------------|

### *Wheat Field Days*

- |             |                         |
|-------------|-------------------------|
| May 5, 2011 | 10 AM - Canadian County |
|-------------|-------------------------|