

Check Canola for Aphids, and Cabbage Maggot

Tom A. Royer, Extension Entomologist

I received a report of a canola field that was heavily infested with green peach aphids, and had some activity from cabbage maggot. Both insects are known pests of canola, as well as other crucifer crops.



Cabbage maggot is the larvae of a fly that was introduced from Europe in the 19th century. The fly resembles a common house fly but is smaller and ash grey in color. It overwinters as a pupa and emerges in spring. Flies begin to lay eggs (up to 200 per female) about 1 week after emergence. The larva is a small, white, legless maggot. When they hatch, they move into the soil and start feeding on small roots and root hairs, and eventually tunnel into the taproot. They will feed for 3-4 weeks and pupate in the root or in the soil near the root. They may cause swollen, hollowed out area at the base of the stem at the soil line. Heavy infestations can cause reduced bloom, severe lodging and yield loss. Infestations will be much greater during cool wet springs. There is no registered insecticide available to control cabbage maggot.



Green peach aphids are pale green to yellow (and sometimes pink) with long cornicles and antennae and measure 1/8 inch. Adults may be winged or wingless. They feed on more than 40 plant families, including many vegetable and fruit crops (and canola!). Scout for green peach aphids by looking on the underside of the leaves. Treatment threshold is 100 aphids per plant. Green peach aphids are notorious for developing resistance to insecticides, particularly pyrethroids, which are the primary registered insecticides for use in canola. The only other non-pyrethroid insecticide registered for aphid control is methyl parathion. It will be beneficial to use a ground applicator to apply an insecticide with increased spray volume. Therefore, select the high end of any labeled rates AND apply at maximum gallonage to ensure thorough coverage. This will reduce the possibility poor control. Current recommendations for control of aphids in canola are listed in [CR-7667, Management of Insect and Mite Pests in Canola](#).



The British Invade Oklahoma Wheat; but it's NOT the Beetles!

Tom A. Royer, Extension Entomologist

I received an e-mail from Wes Lee, Extension Educator in McClain County, asking me to help identify some aphids that were found wandering around on the flag leaves of wheat plants. The next day received a call from a producer in Grant County asking about some

aphids feeding on the stems and heads of his wheat. I made a visit to the producer's field and my suspicions were confirmed; this may be Oklahoma winter wheat's year of the English grain aphid.

English grain aphids are one of the cereal aphid "clan" that are commonly found in wheat. This aphid is slightly larger than the greenbug and has a "spidery" appearance because of its long legs and narrow, long cornicles. The pale green body of the wingless English grain aphid adult measures 2.5 millimeters and both cornicles and legs are completely black. Winged adults are also present, and they are similar in size. They tend to live on the exposed parts of wheat, such as the flag leaf and in and on the heads of wheat.



We rarely see them in large numbers in Oklahoma, because they really can't take the heat or the wind of a "normal" Oklahoma spring. They are easily dislodged by wind and rain, and

will suffer high mortality. However, we have had a very cool spring that was followed by 2 years of drought, and according to experienced entomologists that deal with them more regularly in the south eastern US, outbreaks are predicted after experiencing "several" dry growing seasons. This year appears to be perfect for them to survive and multiply in Oklahoma.

English grain aphid can injure developing wheat kernels. It is also a vector of barley yellow dwarf disease. Treatment thresholds are dependent on the growth stage of the wheat plant. In the southeastern U.S., where outbreaks are more common, a threshold 5 per stem from flag leaf to head emergence, and 10 per stem from head emergence to milk stage. Once plants reach soft dough, it is no longer necessary to treat. For producers that are considering a fungicide application at this time, I suggest that they check their fields for English grain aphids. If aphid numbers reach treatment thresholds, consider including an insecticide with your application. Also, because English grain aphids are susceptible to high mortality from windy, rainy weather, check fields after a wind-driven rain, as it can stop a growing infestation in its tracks. Check [CR-7194, Management of Insect and Mite Pests in Small Grains](#) for insecticides that are registered for control of cereal aphids.

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