



# Pest e-alerts



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## Check Canola for Aphids

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I have received scattered reports of cabbage aphids infesting canola racemes and low levels of green peach aphids feeding on canola leaves. Cabbage aphids are small, 2.0-2.5 mm (1/12 inches) blue-gray aphids with short cornicles. They are usually covered with a powdery wax coating. They are often found clustering on the developing panicle (below). They can cause plant stunting, distortion of growth, and flower abortion.



Green peach aphids are pale green to yellow (and sometimes pink) with long cornicles and antennae and measure 1/8 inch. They are found in winter and spring on leaves (below). Their feeding can cause stunting and defoliation. They can also transmit plant disease-causing viruses such as cauliflower mosaic and turnip mosaic viruses.



Scout for aphids by looking on the underside of the leaves, and racemes. For cabbage aphids, research conducted in Australia suggests that an insecticide application is justified if 20% of the racemes are infested with cabbage aphids.

For green peach aphids, research conducted by Dr. Kris Giles at OSU found that an average of one green peach aphid per plant can reduce seed yield by about 0.5 lb per acre. Thus, if the cost of an application is \$10 per acre, and canola is bringing \$0.20 per pound (quote from ADM Farmer Services 04/08/2016 [www.adm.com](http://www.adm.com)), an infestation of 100 aphids per plant would cause yield loss of \$10.00 (50 lb, x \$0.20/pound) which is equal to the cost of the application. This is known as the **ECONOMIC INJURY LEVEL (EIL)**. We typically set the **ECONOMIC**

**THRESHOLD (ET)** below the EIL, in this case at 80% of the EIL (80 aphids per plant) to give time to schedule an application before the EIL is reached. Below is a set of suggested ECONOMIC THRESHOLDS, based on the cost of the application.

<b>Application Cost</b>	<b>Economic Injury Level</b> (Application cost/0.5 lb/aphid x \$0.20/lb)	<b>Economic Threshold</b> (0.8 x EIL)
<b>\$8.00/acre</b>	80 aphids/plant	64 aphids/plant
<b>\$10.00/acre</b>	100 aphids/plant	80 aphids/plant
<b>\$12.00/acre</b>	120 aphids/plant	98 aphids/plant
<b>\$14.00/acre</b>	140 aphids/plant	112 aphids/plant

Current recommendations for control of aphids in canola are listed in CR-7667 “Management of Insect and Mite Pests in Canola” available online at <http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-3045/CR-7667web2009.pdf>.

Transform<sup>®</sup> insecticide is no longer registered for use in canola as of November 11, 2015. Only existing stocks that have already been purchased and delivered to the grower before the cancellation can be applied according to the label.

Remember, green peach aphids have a history of developing resistance to pyrethroids, which are the primary registered insecticides for use in canola. Thorough coverage of an insecticide application is necessary to obtain optimal control. With all pesticides, review label restrictions for applications during bloom, as honeybees can be killed if exposed to several of the registered products. One registered product, Beleaf<sup>®</sup> (FMC Corporation) does not have any restrictions for application during bloom.

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

The pesticide information presented in this publication was current with federal and state regulations at the time of printing. The user is responsible for determining that the intended use is consistent with the label of the product being used. Use pesticides safely. Read and follow label directions. The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Cooperative Extension Service is implied.

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