

Black leg in Canola – Facts and FAQs

The top lines of defense:

1. Crop rotation – be sure that canola, other Brassica crops, mustard family crops, weeds, and cover crops containing Brassica or mustard family species are only grown in the same field every 4 years.
2. Control volunteers and Brassica weed species. Tarp your trucks and duct tape any holes or gaps.
3. Buy black leg resistant varieties that have been tested and certified blackleg-free and have a seed treatment (e.g. Helix Xtra, Helix Vibrance, Prosper 400 and Prosper Evergol). **In Washington state a green WSDA tag should be on every bag of seed that certifies it has been tested and found blackleg-free.** This includes cover crop mixtures containing brassicas. When in doubt, ask!
4. SCOUT your fields. If black leg is discovered, consider applying fungicide (read and follow label instructions).

Some FAQs:

- What is black leg?
Black leg is a disease of **canola** and other Brassica species caused by the fungus *Leptosphaeria maculans*, also commonly called *Phoma lingam*. It can be a serious disease of **canola** and can cause significant yield losses in *susceptible* varieties. Another species, *L. biglabosa* has also been found in WA, but it is usually avirulent or mildly virulent. However, isolates from this region need to be tested to confirm this.
- Has black leg been found in WA State?
Until 2016, it was only in very low levels in a few scattered locations. However, in 2017, it was found in more locations in the Odessa/Ritzville area. It has also been observed in Idaho and Oregon. That should serve as a reminder of why we need to keep this disease out of areas where the disease currently does not appear to be present.
- Is black leg only an issue in winter canola?
No, black leg can impact any Brassica crop, e.g. spring canola, rapeseed, mustard, tillage radish, and also Brassica weeds. It can also be a major problem in vegetable brassicas - cabbage, broccoli, cauliflower, turnip, mustard, etc., and especially the seed production of these crops in northwestern Washington and the Columbia Basin. This disease could have a major impact on this industry.
- Should I scout my field? What if my canola winterkilled? And what should I look for?
Definitely scout your fields! Black leg symptoms can be found on growing plants, winterkilled residue and residue from crops one and two years prior. For winter canola, look for lesions on primarily the lower leaves and leaf material that died back during the winter. The center of the lesions will have tiny black specks (pycnidia) (see photos below). The pycnidia may also be present on canola residue/stalks from previous crops. The lesions may be small and tricky to spot; be willing to get a close look near the base of the plants. If you had a cover crop containing Brassica species that residue should also be observed. Collect suspicious leaves, stems, and/or residues, and drop off or mail to WSU, UI, or OSU. See contacts at the end of this document.
- Should I go ahead and apply a fungicide just to be safe?
Not necessarily. Resistant or moderately resistant varieties should stop the disease if and when it enters the vascular (stem) tissue. In susceptible varieties, fungicide will help prevent non-infected plants from getting infected, but won't kill the disease established in the plant if it's already present.

- How do I know if the seed I buy has been tested and certified black leg free?
The WA State Dept. of Agriculture requires ALL Brassica crops or cover crops containing Brassicas go through testing, seed treatment and certification. The certification (green tag from WSDA) must be clearly marked on any Brassica seed sold for any purpose. Seed company reps should also be able to supply this information in the absence of a seed tag that lists black leg information.
- Where can I find more information?
The WA Oilseed Cropping Systems website (www.css.wsu.edu/oilseeds) has resources ranging from sampling protocol to a presentations about black leg by WSU seed pathologist Dr. Lindsey du Toit.
- Are there WSU/OSU/UI/USDA-ARS people available to meet me at my fields to scout together?
Yes, several contacts are listed below. Also consider contacting your crop consultant, seed salesman, or your WSU County Extension Educator.



CONTACTS:

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