

Blackleg continues to spread in Willamette Valley

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Mitch Lies/For the Capital Press Blackleg, shown here on a turnip plant in a field near Lebanon, Ore., is showing up in a patchwork pattern of crucifer seed fields in the Willamette Valley.

An Oregon State University scientist is finding the disease in a “patchwork” pattern in Oregon's Willamette Valley.

Lebanon, Ore. — Oregon State University plant pathologist Cindy Ocamb reported at a crucifer disease field day May 14 that she is finding seed fields infected with blackleg around the Willamette Valley.

The discovery is not unexpected, she said, given that blackleg infections were severe last year and infected crop residue provides a source for the disease to persist and spread.

Ocamb said she is finding the disease in a “patchwork” pattern and that different fields have different levels of disease — a disparity she attributed to lack of timely management with fungicides.

Ocamb advised growers to refrain from planting susceptible crops within one-quarter mile of a field that hosted a blackleg-infected crop the previous year.

“And the farther apart the better,” she said, noting that the fungus’ windblown spores could be moving “tens of miles” and not just a few miles, as once suspected.

Ocamb also said that she noticed some fields went from less than 1 percent infection to between 80 and 100 percent in a matter of weeks during rainy weather, showing that the disease’s secondary inoculum is readily splashed by rain from infected plant stems and leaves.

While the disease moves systemically down a plant and can cause lesions on storage roots, it does not move systemically up a plant to infect seed, Ocamb said. Seed infection typically occurs from inoculum splashing onto seed heads during pod development.

Ocamb said she started seeing the blackleg fungus in October in commercial vegetable seed fields and in fields planted as part of a three-year OSU experiment to determine the effect of brassica crops, such as canola, on specialty seed production.

Fields that were treated in the fall with a fungicide were performing better than fields that went without a fall treatment, Ocamb said.

Ocamb also reported she has found light leaf spot in fields in recent weeks, a disease relatively new to North America. It started appearing in valley fields during February, she said.

According to literature, growers in the United Kingdom, where light leaf spot is common, report 22 percent yield loss in oilseed crops infected with the disease, Ocamb said.

Many of the seed treatments and fungicide applications that target blackleg are expected to also control light leaf spot, Ocamb said.

Ocamb said she fears blackleg infection in 2016 in Western Oregon could be even worse than this year.

“Seed fields will probably face more pressure next fall,” Ocamb said.

“I think it is going to be critical that we not only treat seed, but have a fungicide campaign with early sprays in the fall,” Ocamb said.

In addition to increasing chances of plants dying from blackleg, plants infected in the fall are more susceptible to other pathogens, Ocamb said.

An ODA proposal that would mandate field inspections for five years provides an indication of how long the scientific community believes it will take for Oregon growers to get the disease under control.

“The industry and the ODA believe a limited time period (five years) of mandatory inspections ... is necessary to bring the blackleg epidemic back under control,” the proposal states.

Ocamb added: “I think it is going to be important that everybody joins the control party.”