

Stripe rust shows up in Alberta cereal crops

Fungicide applications after flowering will not protect against yield loss, and ‘the window is slamming shut at this point’

By Barb Glen

Stripe rust has blown into southern Alberta on winds from the U.S. Pacific Northwest, but it’s unlikely that fungicide applications will be effective at this stage of crop growth.

Michael Harding, crop pathologist with Alberta Agriculture, said stripe rust appeared about one month ago in Lethbridge-area winter wheat crops and more recently in the Brooks region. It has also been identified in durum and in barley, although the latter is likely a different species of the fungus.

“This is one of the years that it’s been blowing around,” Harding told those attending a July 23 plot hop, either virtually or in person, that was held by the Farming Smarter applied research group.

He said stripe rust has been identified in every field surveyed south of Calgary and across the width of the province.

Fungicide applications made after crop flowering will not protect against yield loss and “the window is slamming shut at this point.”

Stripe rust is identifiable by yellow-orange pustules along the leaf veins in susceptible crops. Wheat is generally more susceptible than barley or triticale. Most wheat varieties in common use are resistant to stripe rust, said Harding. It can overwinter if there is a “green bridge,” such as winter wheat under snow cover or the presence of volunteer cereals, but does not survive in soil.

He advised caution on winter wheat seeding, especially if doing it early. Fall rye is tolerant or resistant “but we fear we are in the middle of a race shift,” said Harding, so that should be considered in cropping decisions.

Powdery mildew has also appeared in some crops, said Harding. Spraying should be considered if mildew is evident upon flagleaf emergence. Losing lower leaves to mildew won’t affect yield.

Above normal precipitation in the region earlier this summer, at least until a recent hot, dry spell, is conducive to development of aphanomyces in pulses and Goss’s wilt in corn. However, all tests for wheat streak mosaic have been negative for that disease so far.

Harding said measures taken to avoid infection from COVID-19 in people have parallels when it comes to crop protection and should encourage a more tactical approach.

As with COVID, prevention of crop diseases is the best defence. That includes crop rotation, weed control, use of clean seed and treated seed, equipment sanitation and use of resistant varieties.

Mike Gretzinger, left, and Michael Harding discuss cereal leaf diseases within Farming Smarter test plots July 23 near Lethbridge. | Barb Glen photo

