



# Agronomy Factsheet:

## STRIPE RUST

### THREAT

Stripe rust, also referred to as yellow rust in other regions of the world, can cause more than 70 per cent yield loss in susceptible varieties if left untreated (Crop Protection Network). Once present, the disease quickly increases in severity.

### STRIPE RUST IN ONTARIO

Typically, in Ontario, stripe rust infection starts from disease spores that are blown in on storm systems from the U.S. when the disease is actively releasing spores. However, in 2025, stripe rust overwintered in some Ontario regions, as ideal conditions allowed spores to survive under a blanket of snow, with unfrozen ground providing an ideal environment for the disease to survive on volunteer wheat as the host. The ability of the disease to overwinter allowed earlier infection from the host to the adjacent winter wheat crop. Earlier disease infection and the rapid spread of the disease, leading to earlier infection and multiple generations of disease spore generation, allowed for faster spread in Ontario.

### IDENTIFICATION

Stripe rust causes yellow to orange, blister like-lesions that are arranged on the leaf of plant. Stripe rust can easily be wiped off onto clothing and shoes. If the disease continues to be untreated, rust pustules may develop on parts of the wheat head and impact grain quality.

\*Not to be confused with leaf rust, which forms scattered pustules on the leaf and is not arranged in stripes.

### FAVOURABLE CONDITIONS

- 10 to 18 °C.
- Intermittent rain or dew.
- Hot temperatures can slow down disease progression, but not always.
- The disease can spread through wind and by walking through fields with contaminated clothing/footwear.



This information is provided by Grain Farmers of Ontario agronomy team and the OMAFA Field Crops Team.

## CONTROL

- Variety selection is key, visit GoCrops.ca for information on a variety's level of resistance.
- Scout regularly. If rust is found in one area of the province, the entire province should be on the lookout for stripe rust.
- Once the disease is identified in the field, take decisive action and spray a fungicide.
  - If seven to 10 days away from anthesis or a T3 fungicide application and a susceptible variety is being grown, apply a fungicide to protect against stripe rust. Please refer to the OMAFA Crop Protection Hub for a list of registered products.
  - If beyond the swollen boot stage (GS 45), do not apply a fungicide containing strobilurin.
  - Always read and follow labels and be aware of pre-harvest intervals.
- If disease is present, wash your clothes and shoes before entering a non-infected field.
- Volunteer wheat after harvest should be controlled to limit the possibility of overwintering the disease.



## WHAT TO DO TODAY

The first step is prevention by selecting a more tolerant variety; ratings can be found at GoCrops.ca.

When the disease is found, and a susceptible variety is being grown, spray. If a moderately resistant or resistant variety is being grown, continue to scout regularly.

## MORE INFORMATION

[Crop Protection Network](#)

[Field Crop News](#)

[Fungicide information- OMAFA Crop Protection Hub](#)

[GoCrops.ca](#)



Mary Burrows, Montana State University, Bugwood.org