



CropLinks June 29, 2018

Stripe Rust

Stripe Rust was discovered in the valley, on winter wheat, this week. This disease is a relatively new one to most growers in Nova Scotia.

The spread and onset of Stripe Rust can occur very rapidly. Stripe Rust is spread through wind currents over very long distances. Spores can also be moved on clothing and equipment from field to field. Once infection takes place, small, circular spots that are vivid orange-red in color, form on the lower leaves. Collectively, these spots (spores) look like long stripes.



The open pustules cause moisture and nutrient loss in the leaf. If left untreated, spores will move up the young plant to the flag leaf, where yield loss will occur. Conditions of high humidity and cooler temperatures (11-22°C) are favourable for the onset of stripe rust. However, once the disease has been established, drier conditions do not limit the progression of the disease.

Stripe Rust is not necessarily a disease that causes losses prior to the emergence of the flag leaf. But once it moves up the plant from the lower leaves to the flag leaf, the effects are

detrimental to a producer's yield. In **Truro** and area most winter wheat is just entering the bloom period (anthesis). Early infection on a susceptible variety can cause yield losses of 40%. If left untreated, the disease can infect the glumes and the head of the plant, causing grain quality to be affected. Winter wheat in most of the **Valley** is coming to the end of bloom and infection. This late in the game, infection may not lead to large yield losses on winter wheat. Spring Wheat, especially varieties with low resistance, are most at risk to this disease. It is important to know if you are dealing with a resistant variety when you are making a decision on whether you will need to spray.

If there is a 'green bridge' Stripe Rust can move from winter wheat, to spring wheat, back to winter wheat in the fall and then over winter. Recognition of Stripe Rust in Nova Scotia should have influence on this fall's selection of winter wheat varieties for your farm. A producer should use resistant wheat varieties as his first line of defense against the disease.

Once Stripe Rust is detected, a fungicide application is the only method to control the spread of the disease. Chemical products in wheat tend to be preventative in nature and should be applied before the disease is a serious problem. Chemical options include Stratego, Prosareo, Folicur, Priaxor, Blanket and Quilt, Trivapro, Acapela, Bumper and Headline.



Interseeding Corn with a Cover Crop

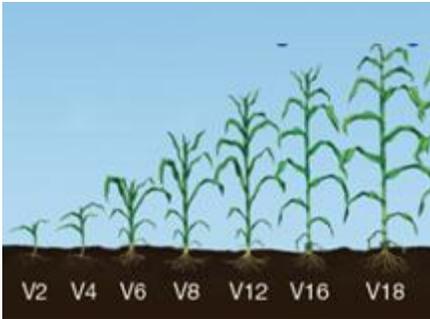
Corn in most of Nova Scotia is ranging from 3-6 leaf stage. Weed control decisions should be behind us.....on to topdressing and **COVER CROP/INTERSEEDING!**

Why?

- to capture some escaping nitrogen after harvest
- to hold soil on the field, cuts down on wash outs
- gives floatation to massive harvest equipment in the fall
- it is good for your soil biology
- adds organic matter
- some of your neighbors are doing it, and you need to be cool too

When?

V6-V8 at this point you are beyond the critical weed free period for corn and yield should not be effected



What?

Ryegrass: is the common answer. 15-25 lbs/ac Within ryegrass there are a few different types:

- Italian will not send out a seed head in the establishment year and may winter kill
- Annual Ryegrass may be your least expensive option. It should winter kill
- Perennial Ryegrass usually over winters in Nova Scotia and gives you reliable growth in the spring

Clovers: Some producers will add red clover to the mix to give some diversity and add a nitrogen fixing legume to the stand. 6-8 lbs/ac

Whatever you chose for species you should limit yourself to small seeded species. These require less water to imbibe and establish compared to large seeded species such as small grains. This is very important as the seed will most likely be broadcast on. These species also have to be shade tolerant as it will be living under the corn canopy until the corn plants start to mature and die back.

What about the residual herbicide I have laid down for weed control in my corn?

Table 1: Potential for injury to ryegrass and clover cover crop interseeded in corn.

Herbicide	Annual ryegrass	Clover
Converge XT	Safe	injured
Callisto	Some injury - some stand reduction	injured ***
Engarde	Some injury - some stand reduction	injured **
Integrity - Set up rate	Safe	Not injured
Integrity - full rate	Injury - stand reduction	Some injury
Primextra	Injury - stand reduction	Some injury
Lumax	Injury - stand reduction **	injured **
Treflan/Prowl	Injury - some stand reduction *	Some injury
Focus	Injury - stand reduction **	Slightly injured
Frontier Marksman	Injury - some stand reduction *	Some injury

(*) Indicates severity of damage, more * = more damage

Source: Dr. Darren Robinson, University of Guelph, Ridgetown Campus, project funded under GF2

We know Roundup, Pardner, and Banvel (engenia) are ok, Destra IS depends when it is applied.

How?

How do you get that seed out there? I believe the best way is to broadcast it on with a spinner spreader. Most three point hitch fertilizer spreaders with a little bit of adjustment will handle the small seeds and give you a decent spread pattern, albeit a little narrower than you would like. The three point hitch hopper will carry a lot of seed when you are only applying 25 lbs/ac.

An air flow fertilizer spreader is also an excellent option. The push the seed receives as it is launched out of the diffusers gives the seed enough force to be seated in the soil surface giving it some seed to soil contact.

The Cadillac is a proper inter-row seeder but the overhead is hard to justify, if you are just starting out.

CropLinks and other notices will be digital in the future. If you would prefer to have them come to a different e-mail address please contact Sonny.

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