

April 26, 2012 Stripe Rust Update.

Hello All! I put out a PNW Pest Alert earlier in regards to stripe rust, and I am following up with this one. (I don't like to clog your in box with too much email...) The Good News is NO news! I have seen no confirmed cases of stripe rust. So far, I have been from Idaho Falls to Buhl and places in between, and while there may be a needle in the haystack, I have seen no actively sporulating pustules.

I have seen Barley Yellow Dwarf Virus in Charles winter barley in the Buhl area. (The symptoms were confirmed by positive results from PCR tests done in Alex Karasev's lab in Moscow.) I suspect early planted wheat and barley were invaded by aphids flying from other crops (such as corn) and bringing viruses with them. Aphid populations were high last fall, and there are also a lot of overwintering lady bugs. If there are infected crops, there is not much to do at this point other than management for economically optimal yields – reducing plant stress will reduce losses. However, losses can be significant with early season infections. Symptoms include yellow and yellow tinged with red “flagging” on leaves of infected plants on older and newer leaves, and stunting and / or dwarfing of plants.

This is what we are watching for this year's crops:

I have seen severe root rot / Rhizoctonia infection resulting from a substantial green bridge situation where winter wheat was planted into volunteer spring wheat. The winter kill in these fields was substantial. In this same area around Burley, I frequently saw of eggs of Cereal Leaf Beetles on leaves of wheat and typical CLB larval damage that probably occurred in the fall, 2011.

Stripe rust:

Dr. Brad Brown (University of Idaho) has not seen stripe rust yet in the Parma area.

Dr. Xianming Chen (USDA-ARS in Pullman) is seeing stripe rust in the areas where it typically overwinters, and reports it is widespread and severe in areas of northwestern Washington, California and western Oregon (Corvallis area). Stripe rust has recently been confirmed in the Walla Walla area but at very low levels. Dr. Chen feels these levels are similar to the 2010 season, and far below last year's level (2011).

Dr. Mike Flowers (Oregon State University) is reporting stripe rust in western Oregon and recently reported active stripe rust on susceptible varieties (Stephens, Tubbs 06 and ORCF-102) in Eastern Oregon.

Current recommendations: Fungicides are not recommended at this time. However, I know a lot of fungicides have already been applied with herbicides and this is a good preventative measure in susceptible winter wheat varieties. Spring wheat in many areas is up and growing, and planting has begun in areas such as Soda Springs and Ashton (up to a month early in some areas!). Stripe rust, if it blows in from our west and north, will only gain traction later this season, and may only be of concern in susceptible spring wheat. We will, however, keep everyone updated if we see stripe rust moving into our areas from the west.

Cheers,
Juliet

Juliet Marshall

Associate Professor, Cereals Pathology and Agronomy