

Stripe Rust Update June 20, 2006

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It is time to check your wheat fields for stripe rust. The pathogen is widespread in eastern Pacific Northwest. By June 16, stripe rust reached 30% of severity on susceptible winter wheat entries and 10% on susceptible spring wheat entries in our disease monitoring nurseries at the Pendleton Experiment Station in Oregon. In the nurseries near Walla Walla, stripe rust severity reached 100% on susceptible entries in both winter wheat and spring wheat nurseries. Stripe rust was found in some winter wheat fields from Walla Walla to Colfax, WA and was more easily found in spring wheat fields. By June 20, stripe rust from natural infection reached over 100% severity on susceptible winter wheat entries and 30% on susceptible spring wheat entries in our nurseries near Pullman. Stripe rust was found in commercial spring wheat fields in the Palouse area, about 10% plants infected with severities less than 5% and generally on lower leaves. Because the wet and cool weather conditions in the past three weeks, we will likely see more rust development in the next two weeks. Based on the weather forecast, temperatures will likely be favorable for development of stripe rust symptoms. Therefore, plants infected during the last two weeks will show stripe rust symptoms in the next two weeks. However, the forecasted dry conditions indicate that stripe rust infection during the next two weeks will likely be reduced. The forecasted temperatures from now on will allow the high-temperature adult-plant (HTAP) resistance to kick in. As the winter wheat crop ranges from heading to soft dough stages, the winter wheat crop should be ok without fungicide spray, unless highly susceptible cultivars are grown. Fields of spring wheat cultivars like Alpowa with HTAP resistance may not need fungicide spray this year, while fields of susceptible spring wheat cultivars should be checked for stripe rust and considered to spray with fungicides when stripe rust incidence or severity reach 5 to 10% to obtain the maximum protection with only one application.

Barley stripe rust was observed in our disease monitoring nurseries near Walla Walla, WA. The severity was up to 30% on susceptible entries on June 16.