

NDSU

WILLISTON
RESEARCH EXTENSION CENTER

Ag Alert

Northwest North Dakota

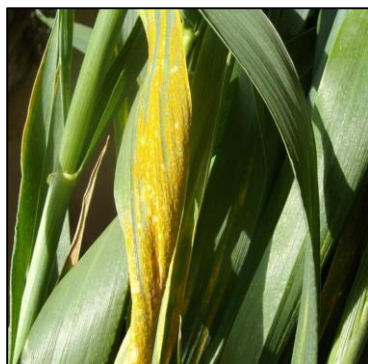
For more information contact Clair Keene, Area Extension Specialist at 701-774-4315 or clair.keene@ndsu.edu

KEEP AN EYE OUT FOR STRIPE RUST ON WHEAT

Stripe rust was reported last week on winter wheat in research plots in Cass County (South Eastern ND) and Adams County (South Western ND). Incidence was low at both locations, but this is a reminder that scouting for foliar diseases of small grains should start now. Stripe rust is caused by a fungus called *Puccinia striiformis* and its development is favored by cool, humid weather. The fungus grows fastest when temperatures are between 50 and 60°F. Disease development is inhibited when overnight temperatures are above 68°F or there are several consecutive days of temperatures in the mid-80s or above. Stripe rust can be identified by small, bright orange to orange-yellow blister-like lesions that are arranged in stripes on the leaves. Stripe rust usually occurs only on the leaves but symptoms can develop on the head when incidence is severe. The color of stripe rust is bright orange (comparable to Cheetos®) whereas the color of stem rust is a darker reddish-brown, like rust on a car.

If stripe rust is detected, a fungicide application may help protect yield. Research conducted by NDSU is showing that timing of fungicide application is key to seeing a yield benefit. Fungicide application at the 4-6 leaf stage of wheat did not increase yield while fungicides applied at flag leaf increased yield approximately 10-12 bushels over an untreated check. Protecting the upper leaves that contribute the most energy to grain development is important when dealing with stripe rust. Products containing triazoles (Folicur, Tilt), strobilurins (Headline), or both these modes of action (Quilt, Twinline) are effective on stripe rust. Consult the [NDSU 2016 Fungicide Guide](#) for more information on product selection.

Portions of this information supplied by Andrew Friskop, NDSU and Erick DeWolf, KSU



Left photo: Stripe rust on wheat
(source Mourad Louadfel, bugwood.org)

Right photo: Stripe rust on upper
leaves of wheat (source NDSU)

MARK YOUR CALENDARS FOR SUMMER FIELD DAYS

Williston REC dryland & horticulture tours, Williston, ND
Nesson Valley irrigated site tour, 25 miles E of Williston on 1804
North Central REC field day, Minot, ND

Thursday, July 14
Friday, July 15
Wednesday, July 20