



K-STATE
Research and Extension

Extension Agronomy

eUpdate

04/18/2016

These e-Updates are a regular weekly item from K-State Extension Agronomy and Steve Watson, Agronomy e-Update Editor. All of the Research and Extension faculty in Agronomy will be involved as sources from time to time. If you have any questions or suggestions for topics you'd like to have us address in this weekly update, contact Steve Watson, 785-532-7105 swatson@ksu.edu, Jim Shroyer, Crop Production Specialist 785-532-0397 jshroyer@ksu.edu, or Curtis Thompson, Extension Agronomy State Leader and Weed Management Specialist 785-532-3444 cthompso@ksu.edu.

1. Special Edition: Stripe rust alert!..... 3

1. Special Edition: Stripe rust alert!

The recent rains across Kansas (Figure 1) will be beneficial to the wheat crop, but will also increase stripe rust activity on wheat. Stripe rust was already established at low levels in many areas of central Kansas and the recent rainfall greatly increases the risk that the disease will move the upper leaves soon (Figure 2). This movement to the upper leaves is important because they contribute most of the energy used by the plant to make grain. The disease has already reached the upper leaves in many fields in the southeast region of the state, which received more rain in previous weeks than other regions.

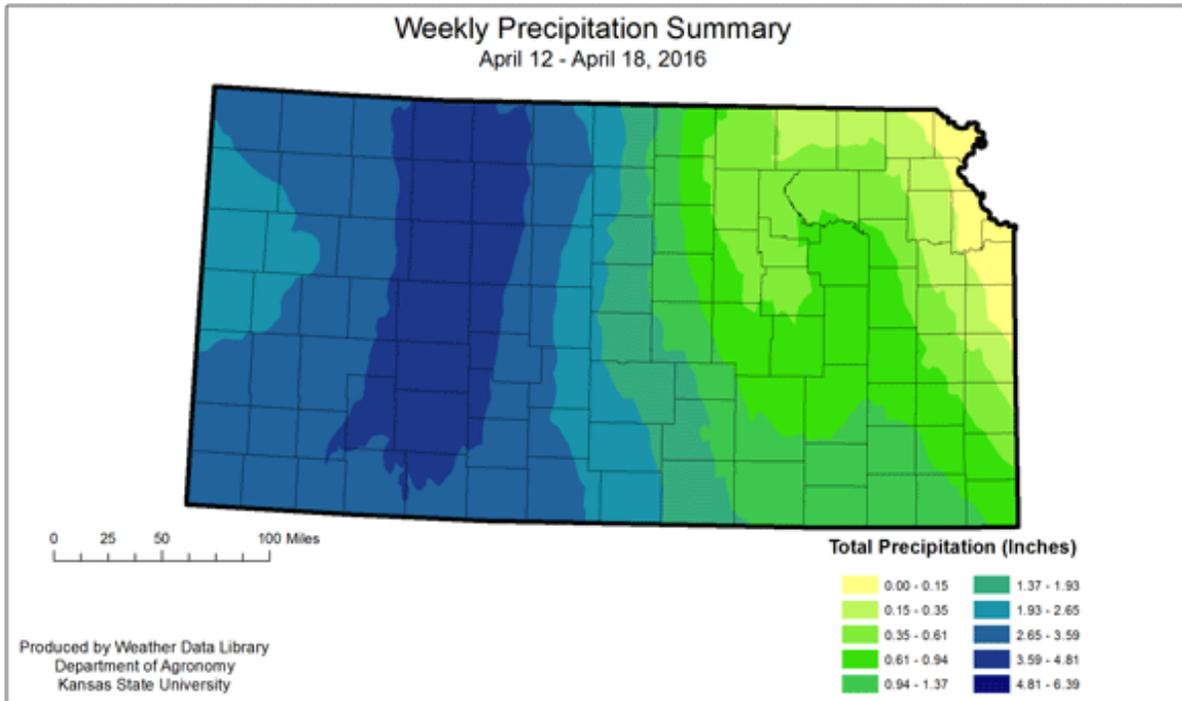


Figure 1. Precipitation summary for April 12-18, 2016. This rainfall may stimulate additional infections of the stripe rust fungus.

ready to spray when the weather clears.

Wheat farmers have a lot of fungicide options to choose from although product availability may vary regionally in the state. Most of the products are rated very good to excellent on stripe rust (Table 1). In general, the largest reductions in disease severity and greatest increases in wheat yield or grain quality occur when fungicides are applied between full extension of the flag leaves and anthesis (when the male flower parts have just begun to emerge). Applications intended for the management of glume blotch or head scab should be made between the beginning of anthesis and 50 percent flowering. Always consult the product label for specific growth stage restrictions and preharvest intervals (PHI) before making fungicide application.

Table 1. Efficacy of many widely marketed fungicide products against stripe rust.

Fungicides					
Class	Product	Active Ingredient	Rate (fl. oz./acre)	Stripe rust rating	Preharvest
Strobilurin	Approach SC	Picoxystrobin 22.5%	6.0 - 12	Excellent**	Feed
	Evito 480 SC	Fluoxastrobin	2.0 - 4.0	--	Feed day
	Headline 2.09 EC	Pyraclostrobin 3.6%	6.0 - 9.0	Excellent**	Feed
Triazole	Caramba 0.75 SL	Metconazole 8.6%	10.0 - 17.0	Excellent	30 d
	Tilt 3.6 EC*	Propiconazole 41.8%	4.0	Very good	Feed
	Proline 480 SC	Prothioconazole 41%	5.0 - 5.7	Very good	30 d
	Folicur 3.6 F*	Tebuconazole 38.7%	4.0	Excellent	30 d
	Prosaro 421 SC	Prothioconazole 19% Tebuconazole 19%	6.5 - 8.2	Excellent	30 d
Mixed modes of action	Absolute Maxx SC	Tebuconazole 22.6%	5.0	Very good	35 d
		Trifloxystrobin 22.6%			
	Fortix	Fluoxastrobin 14.8%	4.0 - 6.0	Excellent	Feed day
		Flutriafol 19.3%			
		Benzovindiflupyr 10.3%			
	Trivapro A EC + Trivapro B SE	Propiconazole 11.7%	4.0 + 10.5	Excellent	Feed
		Azoxystrobin 13.5%			
		Metconazole 7.4%			
	TwinLine 1.75 EC	Pyraclostrobin 12%	7.0 - 9.0	Excellent	Feed
		Fluxapyroxad 14.3%			
	Priaxor	Pyraclostrobin 28.6%	4.0 - 8.0	Excellent	Feed
		Propiconazole 11.7%			
	Quilt Xcel 2.2 SE*	Azoxystrobin 13.5%	10.5 - 14.0	Excellent	Feed
		Prothioconazole 10.8%			
	Stratego YLD		4.0	Very good	Feed

		Trifloxystrobin 32.3%			day
	Approach Prima SC	Cyproconazole 7.17%	3.4 – 6.8	Excellent	45 d
		Picoxystrobin 17.94%			

* Multiple generic products containing the same active ingredients also may be labeled in some states.

** Efficacy may be significantly reduced if solo strobilurin products are applied after stripe rust infection has occurred.

Source: *Foliar Fungicide Efficacy Ratings for Wheat Disease Management 2016*, K-State Research and Extension publication EP-130: <http://www.bookstore.ksre.ksu.edu/pubs/EP130.pdf>

Erick DeWolf, Extension Wheat Pathologist
dewolf1@ksu.edu

Mary Knapp, Weather Data Library
mknapp@ksu.edu

Chip Redmond, Weather Data Library
christoperredmond@ksu.edu