



Plant Disease in Kansas

Wheat disease present but remains a likely historical low

Special points of interest:

- *Bacterial leaf streak and barley yellow dwarf are the two most visible wheat diseases currently present.*

During recent wheat survey of the past three weeks, observers found that diseases have made little increase other than being present. The two most common diseases of any noteworthiness were bacterial leaf streak and barley yellow dwarf.

Bacterial leaf streak has in areas which received rainfall, become the most important foliar disease. This disease caused by a *Xanthomonad* bacteria appears as brown streaking to blotches on leaves. Water soaking of leaf spot margins and sticky shiny exudate can frequently been seen. Some fields have over 50 per cent incidence and 20% severity of the flag leaf but many of those fields where the disease is present have only minor levels of the disease. Bacterial leaf

streak has been increasingly more of an issue of recent years and reasons are unclear. Some of this observed trend is likely a combination of variety selection, tillage, and maybe most importantly recognition.

Below is an image (J. Appel) taken of bacterial leaf streak from Stafford County in SC Kansas last week.



Barley yellow dwarf is in scattered fields in eastern and some central Kansas counties. Plants are stunted, showing a bright yellow flagging sometimes with a mosaic of color, and leaf necrosis. Typical spots of 5-8 ft in diameter of infected plants have not been seen but instead only single plants or tillers.

Other diseases observed have been trace levels of tan spot, wheat streak mosaic, and loose smut. Although not a disease, stem maggot was noteworthy in survey of south central and southwest fields during survey. Leaf rust reported by the USDA Cereal Rust Lab is as close as TEXAS! Not very close I would say. We though may expect something somewhere such as NW Kansas to get a few reports in June.

Greenhouse disease still a very important issue

Greenhouses continue to battle viral disease this spring. In Wichita and various other locations, Tobacco Mosaic Virus has caused some destruction of petunias in retail centers. Despite continued effort by KDA staff and greenhouses in addressing the problem, some TMV has got out to the retail side of the business. It demonstrates how big of an issue that

this breach in plant health was and the ability of the virus to be easily transmitted.

In other operations, Impatiens Necrotic spot virus caused many plants to be destroyed in a group of stores in the Wichita area. The source of the infection is unknown but thrip populations were an issue.

A new report of a disease was white smut of gallardia. This

leaf spot was causing white corky circular spots. It was shipped in from an out of state source.

White Smut of Gallardia C. Copeland, KDA



Plant Protection and Weed Control
Kansas Department of Agriculture

1320 Research Park Drive
Manhattan, Kansas 66502

Phone: 785-862-2180
Fax: 785-862-2182



**AUTHOR: JON A. APPEL
PLANT PATHOLOGIST
KANSAS DEPARTMENT OF
AGRICULTURE**

**MANHATTAN, KANSAS
PHONE: 785-537-3155
EMAIL: JON.APPEL@KDA.KS.GOV**



INVASIVE SPECIES

Plant Protection and Weed Control Program

Plant Protection and Weed Control staff work to ensure the health of the state's native and cultivated plants by excluding or controlling destructive pests, diseases and weeds. Staff examine and analyze pest conditions in crop fields, rangelands, greenhouses and nurseries. Action taken to control potential infestations of new pests, whether they are insects, plants diseases or weeds, is beneficial to the economy and the environment.

Our Mission is to:

- Exclude or control harmful insects, plant diseases, and weeds;
- Ensure Kansas plants and plant products entering commerce are free from quarantine pests;
- Provide customers with inspection and certification services.

The Plant Disease Survey in Kansas has been conducted since 1976. The survey addresses disease situations in field crops, native ecosystems, and horticultural trade. The Kansas Department of Agriculture works cooperatively with Kansas State University and Extension programs, United States Department of Agriculture, and various commodity groups.

Kansas Department of Agriculture moves in June 13-15

The Kansas Department of Agriculture officially moves in the Manhattan facility in June.

The address is 1320 Research Park Drive, Manhattan 66502.

Phone numbers will be changed also.