



Plant Disease in Kansas

Hot dry conditions dominate row crop diseases

Special points of interest:

- *The new pine wilt cycle has begun.*

It seems like Kansas crop production cannot get much of a break from summer conditions of heat and limited rainfall. Some areas of the state including northern and some western counties have had some decent rains. The soil profile though is so dry that these rains are not adding much to the sub-soil profile for reserves when the precipitation does occur. Much of the corn unless irrigated in eastern Kansas is under extreme stress or has moved into senescence. Soybeans, grain sorghum, and sunflower are also under much stress.

What diseases are now of significance or may be at a later date? Speaking with Dr. Doug Jardine, KSU Plant Pathology Extension leader, he believes the corn/alfatoxin potential is high

along with charcoal rot for soybeans. The high soil temperatures are ideal for charcoal rot Dr. Jardine said. Doug also reported that Rhizoctonia stem rot has been a problem to some bean fields.

In recent survey (Jon Appel) of southeast fields, little disease was found. Low levels of brown spot and bean pod mottle virus were observed in soybean. Most plantings were just trying to survive. For corn, some fields were being salvaged for silage. In a few locations where planting was late and had received rains, common maize rust and gray leaf spot were at low detectable only levels.

The most significant disease in the row crops is Goss's wilt of corn. Goss's wilt was reported by Doug in several extreme

northwest counties. Dr. Jardine stated that where hail damaged the crop, the disease had gone systemic in the corn killing plants thus reducing yield potential. Nebraska production is reported to have a much broader and more severe problem with the disease.

In a side note, recent review of statewide wheat disease observations indicate Stripe Rust and Barley Yellow Dwarf were the most important diseases to 2012 yields according to KSU and KDA pathologists. Formal release will be in early August of the disease story on wheat production.

Pine wilt now active

It is that time of the year when pine wilt symptoms are appearing. Typically, we see a few trees in July coming down with the disease so it is not surprising that symptoms of new death are now being observed. It is important for landowners and those interested in stopping this disease sample trees. With the drought conditions, pine wilt is

easily confused with lack of water and heat loss. Management of pine wilt is critical if indeed the pine died of pine wilt.

Diagnosis can be done by submitting samples for laboratory analysis. These labs can be found by contacting private or public laboratories. Internet

searches can identify these labs.



PLANT PROTECTION AND WEED CONTROL
PROGRAM

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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.

Trees, shrubs, and ornamentals

A few diseases have been reported during plant health certification inspections.

Host virus X of hosta, cedar-apple rust, tip blight of juniper, and rust of ornamental grasses were reported in eastern Kansas production. In south central Kansas, cedar-hawthorn rust was observed in one nursery on hawthorn and in landscape plantings in Manhattan. In other landscape observations, Phoma stem blight was active in perennial Vinca plantings killing out plants and brown patch in fescue lawns has some reports.

Boxwood blight, a potential problem to the Kansas Shrub of

the Year in 2011, has not been reported in inspections or informal observations of landscapes in eastern and central Kansas. High temperatures are a good remedy for this particular disease.

In native situations, Dutch Elm Disease is active and killing American Elm trees in much of the eastern half of Kansas.

Thousand Cankers of Walnut survey is just beginning with both visual observations of the disease and a trap program for the small bark/twig beetle that transmits the disease. Survey activities will focus in eastern and central regions.