

## Wheat Disease Taking Yield

Over the last couple of weeks, we have seen a shift in some of the disease pressure in Kansas.

Leaf rust appears to be making a late run on wheat fields with moderate to high levels in south central and southeast Kansas.

Look for levels to increase over the next 10-14 days in central and northern counties. Surveys in southern counties found severities of 15 to 70% in fields from Anthony in the south central to Pittsburg in south east.

In addition to the leaf rust, speckled leaf blotch has substantially increased in severity similar to leaf rust. Incidences although as not as common as leaf rust, similarly are at very high levels. South central was notable for this disease.

Other foliar diseases that were of concern three weeks ago have been somewhat lost to these

other infections. Stripe rust in southern counties that was of everybody's concern has ceased in activity because of some very unseasonably warm temperatures and the application of fungicides. In a low percentage of fields, stripe rust has resumed sporulation with cooler weather.

Another disease out in fields that can be confused with foliar disease and barley yellow dwarf is bacterial leaf streak. This disease causes streaking of leaves similar to stripe rust and leaf spots from speckled leaf blotch. If one is lucky when looking with a hand lens, you can observe shiny exudate on the leaf and water soaking of tissue. Purpling necrosis of the flag tips can also be observed and confused with barley yellow dwarf. The disease also causes a glume-blotch.

Speaking of barley yellow dwarf, it again is reported to be at moderate to high levels in visited fields of the past two weeks. Incidences vary greatly from field to field but 80 percent incidence was not uncommon in fields of central and south central Kansas. Lower levels were observed in south east and east central Kansas. Three weeks ago, wheat streak was all the talk with BYD a distant second.

Other reports of disease include take all, dry-land foot rot, loose smut, Cephalosporium leaf stripe, and powdery mildew.

**Can you tell which image below is bacterial leaf streak and speckled leaf blotch? Answer on back**

### Special points of interest:

- *Leaf Rust, Speckled Leaf Blotch, and Barley Yellow Dwarf robbing fields*
- *Foliar nematode in greenhouse material*

Leaf rust



PLANT PROTECTION AND WEED CONTROL  
PROGRAM

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## 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.



## INVASIVE SPECIES

## Greenhouse and tree diseases

A number of diseases have been seen both in the landscape and in retail centers. The observations include black spot of rose, Dutch elm disease, brown rot of cherries, apple cedar rust of cedar, apple and crabapple, rust on malva, hosta virus x, sycamore anthracnose, Volutella blight of pachysandra, hollyhock rust and the list goes on. For myself, brown rot has taken out about 50% of my cherry crop.

Impatiens necrotic spot virus has not been a disaster for some poor greenhouse operators this year. That is good.

The most notable find in green-

house and retail centers has been foliar nematode in the coral bells or huechera (see image). This disease appears as necrotic lesions on the leaves delimited by veins. The nematode requires wet leaf tissue to spread. In the past, reports have been on hosta. Hot dry weather in Kansas normally will keep this disease in check in many planting situations.

Wheat:: top image is bacterial leaf streak, bottom speckled leaf blotch

