

### Kansas Wheat Crop Battles Drought And Disease

The Kansas wheat crop is currently facing three major hurdles: development being almost three weeks ahead of normal stages, drought conditions, and stripe rust and increasing disease pressure.

March's freezes were of particular concern to farmers statewide because of the early maturity of the crop. According to USDA National Agricultural Statistics Service, as of April 5, Kansas winter wheat jointed was 42 percent, ahead of 26 last year and the five-year average of 28.

"The wheat being ahead of schedule is a concern because there is a greater likelihood that a possible freeze event might coincide with more susceptible phases of crop development," said Romulo Lollato, Kansas State University wheat extension specialist. "Depending on cold temperatures' duration and intensity, freeze can be devastating to wheat yields."

Kansas' turbulent weather is always a concern on the top of farmers' minds, but one concern pops up more frequently than any other.

"What is really concerning for this crop is the lack of moisture," said Aaron Harries, Vice President of Research and Operations at Kansas Wheat. "So far soil moistures have maintained decent levels, but that moisture will be used up quickly during wheat's growing season."

The April 5 U.S. Drought Monitor for Kansas listed 93% of the state in moderate to severe drought conditions. This was up from only 3% of the state in January.

As the wheat plant continues to grow, so will its water consumption. Blue tinted leaves can be a sign of freeze damage for farmers, but the tint can also mean bad news for moisture levels. As time progresses, pay special attention to emerging leaves. If the newly emerged leaves are green, the tiller will probably be healthy, but if the new leaves are yellow, this is an indicator that the tiller is dead.

Another factor in final harvest yields will be disease pressure. Moisture is a doubled edged sword for wheat because what's good for the wheat is also good for diseases. Lollato has seen everything from heavy stripe rust to speckles of powdery mildew and leaf rust statewide.

"We are already seeing stripe and leaf rust established in many counties in susceptible varieties," said Lollato. "If we do have moist weather (not necessarily rainfall, but high relative humidity would do it), producers will definitely have to be out and scouting to know the conditions in their fields and decide whether to trigger the fungicide application."



*Rust found on wheat leaves.*

To finish the growing season strong, Lollato suggests monitoring the current conditions of wheat fields to make informed decisions that increase producer profitability.

"The probability of yield gain due to fungicide will depend on risk level and cultivar susceptibility, being greater in susceptible cultivars in high risk environments," said Lollato. "By scouting often and knowing the conditions in their field really well, producers can make an informed decision whether to spray a foliar fungicide or not."

Kansas Wheat CEO Justin Gilpin says rusts are having a much larger impact than in the past. Disease pressure not only has a detrimental impact on yields, but as we saw last year, can also have a negative impact on the quality of the grain.

"Fungicide usage is especially important this year," he said. "We highly encourage farmers to spray."