



**THE OHIO STATE UNIVERSITY**

COLLEGE OF FOOD, AGRICULTURAL,  
AND ENVIRONMENTAL SCIENCES

### **Hardin County Extension News Release**

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### **Wheat Harvest Tips**

*Hardin County* – The wheat crop is drying down very fast and harvest is starting in some parts of the state. As harvest continues over the next few weeks, growers should keep their eyes on the weather and the moisture content of the grain to ensure good quality wheat. Wheat grain is about 30 percent moisture when it reaches physiological maturity and can be harvested efficiently and easily when the grain moisture is between 14 and 20 percent. Harvesting above 20 percent grain moisture increases kernel damage, and reduces storability, test weight, and germination percentage.

Delaying harvest past the time that grain reaches 14 percent moisture reduces yield about one-fourth bushel per acre per day, increases cutterbar loss, and decreases test weight each time the grain is wetted by rain or very heavy dew. Exposure of the grain to rain after maturity may lead to sprouting and mold development. Also, the risk of loss by bird and rodent feeding increases as does the potential loss due to fire, hail, high wind, and other weather factors. Yield, test weight, germination percent, grain quality, and harvest efficiency are greatest when the grain moisture is between 14 and 20 percent moisture at harvest. Within that range wheat grain moisture decreases about one percentage point per day with normal weather conditions.

Wheat harvest date impacts both grain yield and quality. Delaying wheat harvest puts the crop at risk for increased disease, lodging, sprouting, and harvest loss. Last year in Clark County, OSU evaluated wheat harvested on June 29 (at 12% moisture content) and July 8 (at 14% moisture content). Grain moisture increased between June 29 and July 8 due to 0.58" rain between the two dates.

When wheat harvest was delayed until July 8, yield decreased by 9 bu/acre, test weight decreased by 2.9 pound per bushel, and vomitoxin level increased by 0.86 parts per million. Using a grain price of \$4.50 per bushel and discounts from a local elevator, the difference the delayed wheat harvest resulted in a loss of \$87 per acre compared to the June 29 harvest. With funding from the Ohio Small Grains Marketing Program, the University is continuing this research. However, this new work will be comparing grain yield and quality of wheat harvested at ~20% moisture to ~13% moisture.

Plan to complete harvest before the grain moisture drops below 14 percent and before it starts raining. Assuming that ideal harvest conditions last for six days enables one to estimate the moisture level at which harvest must start. If the crop can be harvested in two days, harvest can be delayed until the grain reaches 16 percent moisture. For a crop that will require six or more days to harvest, threshing should start when the grain reaches 20 percent moisture.

Check combine thoroughly for worn or broken parts that should be replaced and then lubricate according to the operators' manual. Adjust cylinder speed, concave clearance, fan speed, and screens for wheat. Service the motor and remove any combustible material from the motor compartment to make the machine field ready so harvest can start on time and at the proper grain moisture content.

The height of the wheat plant varies across most fields and the grain table will need to be very low because some of the plants are very short. The secondary tillers are always shorter than the main tiller, so it is prudent to check their height and be sure they are collected in to the grain table.

*Article written by Laura Lindsey, Pierce Paul, Jim Beuerlein, and Dennis Mills - OSU Extension Small Grains Specialists, and revised by Mark Badertscher, OSU Extension Agriculture and Natural Resources Educator-Hardin County.*