Wheat Planting – by Ed Lentz, Hancock County Extension

Wheat is one of few crops planted in the fall in our area. Farmers have two management seasons to successfully grow wheat, the fall and the spring.

Farmers have to consider five important fall management practices to produce high yielding and high quality wheat. These practices include variety selection, planting date, planting depth, seeding rate, and crop nutrition.

**Variety selection.** Selected varieties should have yield potential, high test weight, good straw strength, and adequate disease resistance. Diseases of concern include powdery mildew, stagonospora leaf blotch, and head scab.

Seed of the selected variety should be properly cleaned to remove shriveled kernels and treated with a fungicide to prevent seed-borne diseases.

**Planting date.** Wheat should be planted after the Hessian fly safe date. The Hessian fly can decimate wheat fields. Research by Ohio State University has established dates across the state when the fly should no longer be a threat in a given area.

The fly free dates for our area include: September 24 – Wood County; September 25 – Hancock and Putnam Counties; and September 26 – Hardin and Wyandot Counties.

The best time to plant is within 10 days after the Fly Safe Date. Planting after October 20 may result in inadequate growth, which may decrease winter hardiness and yield. Late plantings are generally caused by delayed soybean harvest or wet weather.

**Planting depth.** Proper planting depth is critical for tiller development and winter survival. Seeds should be planted at a one half inch depth.

Farmers have to insure that soybean residue is uniformly spread over the soil surface especially when planting no-till into soybean stubble. Mats of residue or uneven residue will interfere with planting depth.

Planting depth should not be reduced for late planting or wet conditions. Planting less than one half inch is the main cause of heaving and freezing injury, which will result in low tiller numbers and poor over-winter survival.

**Seeding rate.** Low seeding rate has little effect on yield, but high seeding rates may increase lodging and increase the risk of diseases, such as powdery mildew.
Optimal seeding rates are between 1.2 and 1.6 million seeds per acre. For drills with 7.5-inch row spacing this is about 18 to 24 seeds per foot of row with normal sized seed. Seeding rate should be increased when planting later than two weeks after the Hessian fly safe date.

**Plant Nutrition.** A soil test should be completed to determine lime, phosphorus and potassium needs. Soil pH should be between 6.3 and 7.0.

Wheat requires more phosphorus than corn or soybean. Soil test levels should be maintained between 25 - 40 ppm for optimal production. Phosphorus should not be added to fields that have soil test levels higher than 50 ppm.

Wheat planted no-till into soybean stubble should receive 20 – 30 pounds of nitrogen to promote fall tiller development.

Farmers have to balance their time between planting wheat and harvesting corn and soybeans in the fall. However, farmers know they need to be attentive to planting management practices since 80% of their wheat yield will be the result of doing things right in the fall.

The Ohio State University Extension office in Hancock County has many publications on wheat production.