Alternatives for creating this season’s wheat crop

The unusual wet spring weather has affected crop rotations in the area. Fall wheat plantings generally follow soybean harvest. However, for most soybean fields harvest will be too late to timely plant wheat this fall. Thus, farmers will consider other field alternatives to plant wheat.

The most common alternative will be to plant wheat in fields that were unable to plant corn or soybeans and were left idle during the summer growing season. In a few situations, a farmer may plant wheat after wheat. This is a risky adventure because of the potential for disease problems.

Even though wheat is planted in the fall, it will not be harvested until next summer. However, the vitality of the wheat in the fall may account for 75 percent of the yield potential. Thus, fall management practices are critical for high-yielding wheat and one of the key practices is timely planting.

Farmers like to plant wheat within ten days of what is called the “fly-free safe date.” This is the date that university research has established that the risk from Hessian fly is minimal, since they have migrated out of the area. The Hessian fly has the potential to devastate wheat stands.

The fly-free date will be reached for most of the counties in our area this week. These dates are Sept. 24 for Wood County; Sept. 25 for Hancock and Putnam counties; and Sept. 26 for Hardin and Wyandot counties.

There are other advantages by planting after the fly-free date — it reduces the risk of certain diseases, such as barley yellow dwarf. Aphids are vectors for this yield-reducing and plant-stunting virus. By waiting to plant, cooler temperatures reduce the population of aphids.

Farmers may plant wheat in late October, but how early winter sets in will determine the outcome of that decision. In general, wheat should be planted before Oct. 20 to have adequate growth for yield and winter hardiness. Even so, larger yields are generally obtained from plantings closer to the fly-free date.

Besides planting date, farmers have to consider other important fall management practices to produce high-yielding and high-quality wheat. These practices include variety selection, planting depth, seeding rate and nutrient recommendations.

- 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.

All three diseases can decrease yields; however, Fusarium head scab can also produce a toxin that will prevent a farmer from selling their wheat. Farmers must select moderately resistant varieties for head scab and use a fungicide to prevent toxin development and yield losses under certain weather conditions.

- Planting depth: Proper planting depth is critical for tiller development and winter survival. Seeds should be planted 1½ inches deep.

Farmers have to ensure 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 1½ inches is the main cause of heaving and freezing injury, which will result in low tiller numbers and poor 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 fly-free date.

- Nutrient recommendations: A soil test should be completed to determine lime, phosphorus and potassium needs. Soil pH should be between 6.3 and 7.0.

Phosphorus soil test levels should be maintained between 25 to 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 to 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 early management practices, since 75% of their wheat yield will be the result of doing things right in the fall.

More information may be found on planting wheat on page 69 of the Ohio Agronomy Guide, which can be downloaded at https://stepusosu.osu.edu/sites/hcs-soy/files/472%20Ohio%20Agronomy%20Guide%2020%20Ed%20Repeat_0.pdf

Lentz is extension educator for agriculture and natural resources for the Ohio State University Extension Service in Hancock County. He can be reached at 419-422-3851 or via email at lentz.39@osu.edu.

Lentz can be heard with Vaun Wickerham on weekdays at 6:35 a.m. on WFEN, at 5:45 a.m. on WKXA-FM, and at 5:28 a.m. at 106.3 The Fox.