

Post Rock Extension District Column

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What are the guidelines to follow when planting wheat late?

Producers are busy drilling their 2023 wheat crop so stay tuned for some guidelines to remember with late planted wheat. Mother Nature finally brought some needed moisture a couple of weeks ago for producers that were waiting for moisture to plant their wheat. So planting wheat late can definitely change the growth development with less time to tiller. The following are some guidelines to remember.

The most important guideline is to **increase the seeding rate**. With the limited time for tillering in the fall, the wheat plant relies more on the primary tillers. So increasing the seeding rate will help compensate for reduced fall tillering which has higher yield potential along with less developed root systems. Fall tillers, of the wheat plant, tend to have a higher yield potential than spring tillers. So every week planting is delayed past the end of the optimal planting date range, the seeding rate should be increased by about 10-15% which is about 10-15 lbs. per acre. As I have mentioned before, seeds per acre seeding rate rather than pounds per acre is a more accurate planting rate especially with the different kernel sizes. The “average” seeds per pound is about 15,000 for most wheat varieties, but if you are planting certified seed, it should be provided for you. That would be approximately an increase of 225,000 – 300,000 seeds per acre in central Kansas with a maximum seeding rate of 975,000 to 1,200,000 seeds/Acre or about 120 lbs./acre. Remember this would be the maximum seeding rate, so you could work up to that depending on when your wheat is planted.

Another late planted adjustment for wheat would be placing a **starter phosphorus fertilizer** with the seed which promotes early-season wheat growth and tillering. This can also help to compensate for the delayed planting. Additionally, phosphorus is less available at colder soil temperatures, which can result in a phosphorus deficiency under cold weather conditions. So consider using about 20-30 lbs. per acre of phosphorus fertilizer directly with the seed, regardless of your soil phosphorus levels. This placement method, with the seed, is more effective at this time of year than other application methods. The later the planting date, the more fall root development is slowed so the closer the fertilizer is to the seed, the sooner the plant roots can get to it.

Using a **fungicide seed treatment** or **planting certified seed** can also help with later planted wheat. Planting wheat into colder soils increases the time needed for germination and emergence. So there is increased potential for seed and soil-borne diseases that can affect seedlings and early-season wheat

development. Fungicide seed treatments can protect the seed and the seedling during the extended time it is subjected to potential seedling diseases, improving your stand establishment under poor growing conditions. Remember to thoroughly coat the seeds to ensure good protection. K-State Research and Extension has an excellent resource entitled, “Wheat seed treatments”, available online or at your local Extension Office.

Lastly is **variety selection**. Varieties have specific tillering ability and it may be worth noting that when selecting your wheat variety. A variety that has high-tillering ability may offset some of the consequences of late planting as it might still be able to produce one or two tillers during the fall, whereas a low-tillering variety may produce none.

If you have further questions on late planted wheat, contact me at any Post Rock Extension District office in Beloit, Lincoln, Mankato, Osborne or Smith Center.

Post Rock Extension District of K-State Research and Extension serves Jewell, Lincoln, Mitchell, Osborne, and Smith counties. Sandra may be contacted at swick@ksu.edu or by calling Smith Center, 282-6823, Beloit 738-3597, Lincoln 524-4432, Mankato 378-3174, or Osborne 346-2521. Join us on Facebook at “Post Rock Extension” along with our weekly “Ag News Roundup” every Friday. To receive our weekly AG NEWS, call any of our offices in Beloit, Lincoln, Mankato, Osborne or Smith Center.. Also remember our website is www.postrock.ksu.edu and my twitter account is @PRDcrops.