

Fall Wheat Management



Factors YOU Control to Optimize Yield

Six decisions you make now can determine your wheat yield next summer:

1. *Variety Selection*
2. *Seedbed Preparation*
3. *Fall Fertility*
4. *Seeding Rate*
5. *Planting Date*
6. *Fall Insecticides*

1. Variety Selection: Choose Pioneer® brand varieties that have a proven history of high, consistent yields and agronomic performance in your area. Your Pioneer sales representative can show you yield data to help you pick the highest yielding varieties for your farm with proven agronomic performance.

2. Seedbed Preparation: “If you would not plant corn into the seedbed you have prepared, then do not plant wheat into it.” Seed-to-soil contact is very important, as well as a smooth surface to allow the drill to work. If you are going to no-till, then no-till; if you are going to work the ground, then work the ground all the way. We get in trouble when we try to save a pass or two. One disking into 200-bushel corn stalks is not going to result in a very good seedbed. When soils are sometimes dry and fluffy in the fall, a packer pulled behind a tillage tool can be of great value to really firm the soil. Extremely rough conditions will cause the drill units to bounce, causing poor seed placement and depth control. Most drills are really nothing but “controlled spillage.” So, planting speed also plays a vital role in achieving good seed placement. Speeds no faster than 4 mph in no-till and up to 6 mph in tilled conditions are recommended.

3. Fall Fertility: The key is to have enough N in the fall to encourage adequate, but not excessive, growth prior to dormancy. Following soybeans usually requires a little less; however, the residual N from the beans will be somewhat of a slow release type of N and hard to calculate. Standard recommendations are 200#/acre of DAP in the fall which will get 36 units of N and adequate P, and 100-200#/acre of potash. Although wheat does not require high amounts of K, the corresponding double-crop beans can definitely utilize the applied K. As always, soil tests should help determine the actual P and K needs of a given field.

4. Seeding Rate: Seeding rates in wheat are somewhat guided by planting date. The rule of thumb is the later you plant, the thicker you plant. As the planting date is delayed, less tiller development will occur in the fall. Therefore, to maintain optimum head counts in the spring, planting rates need to be increased to compensate. The other thought is that the main stem on a plant always has a larger head than the subsequent tillers of that same plant. By increasing the number of plants, you theoretically increase the number of primary heads and the average head size across a field will be larger. Refer to the seeding rate chart on the next page.

5. Planting Date: Plant after the Hessian fly-free date for your area to minimize the risk of infestation.

6. Fall Insecticides: The great debate — to use an IST or not. The question can only be answered by you. ISTs on wheat do work, and work very well for controlling fall aphids. Can a timed application of an insecticide in the fall do the same thing? For the most part, yes. The key here is scouting and willingness to shut down another piece of equipment to go spray wheat. Fall thresholds are only 3-5 aphids/foot of row—pretty low for any insect. Under the right conditions, these populations can explode in a matter of days, so timing of the application is critical. A common practice the last few years has been applying DuPont™ Harmony® in the fall for weed control and tank-mixing an insecticide with it. This can work very well as long as the timing of the two products coincides.



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Seeding Rate Chart

Seed Rate $\frac{\text{seeds/sq yd} \times 4840}{\text{seeds/lb}} = \text{seed rate lb/acre}$

	Seeds / sq yd			
	1 st Oct.	10 th Oct.	25 th Oct.	10 th Nov.
Good Soil Conditions	275	300	325	375
Normal	300	325	350	400
Poor soil conditions/no-till	325	350	400	475

Increase seed rate if **broadcasting** seed. 400 if good, 450 if average, 500-550 if poor or late.
 Decrease if very good drill, 6" spacing.
 Increase if old drill, poor placement.

Wheat Seed Rate Calibration Chart

	Seeds Per Square Yard							
	250	275	300	325	350	400	450	500
Row Width	Seeds Per Foot of Row							
6"	13.9	15.3	16.7	18.0	19.4	22.2	25.0	27.8
7"	16.2	17.8	19.5	21.0	22.7	25.9	29.2	32.4
7.5"	17.4	19.1	20.8	22.6	24.3	27.8	31.3	34.7
8"	18.5	20.4	22.2	24.1	25.9	29.6	33.3	37.0
Seeds Per Pound	Pounds Per Acre							
9,500	128	140	153	166	178	204	230	255
10,000	121	133	145	157	169	194	218	242
10,500	115	127	138	150	161	184	207	230
11,000	110	121	132	143	154	176	198	220
11,500	105	116	126	137	147	168	189	210
12,000	101	111	121	131	141	161	182	202
12,500	97	106	116	126	135	155	174	194
13,000	93	102	112	121	130	149	168	186
13,500	90	99	108	117	125	143	161	179
14,000	86	96	104	112	121	138	156	173
14,500	83	92	100	108	117	135	150	167
15,000	81	89	97	105	113	129	145	161
15,500	78	86	94	101	109	125	141	156
16,000	76	83	91	98	107	121	136	151
16,500	73	81	88	95	103	117	132	147
17,000	71	78	85	93	100	114	128	142