SEEDING RATES

In a normal year, wheat cultivars vary between 10,000 and 18,000 seeds per pound. This difference can impact the actual seeding rate if a grower seeds wheat in bushels per acre. For example, in Table 8 seeds per pound of variety 4 and variety 6 vary by 35%. If a grower planted in bushels per acre, he would plant 35% more seed of variety 6 than variety 4, potentially over-planting or under-planting one of the cultivars.

Table 8. Example of seeds per pound of wheat grown in one year in Georgia.

Variety	Seed/pound
1	9,610
2	11,340
3	14,823
4	12,064
5	11.172
6	16,316
7	12,741
8	14,538
9	15,534
Average # seeds per pound	13,126

Seeding based on seeds per acre is much more accurate than seeding based on weight per acre. Generally, a seeding rate of 30 - 35 seeds per square foot is desirable. Information in Table 9 provides appropriate seeds per row foot for various row widths.

When planting on 7.5 inch row widths each linear foot of row should contain 20-25 seeds depending on germination. If planting date is delayed, seeding rates should be increased by 15-20%. The use of certified seed will help insure you are planting seed with a minimum germination of 85% and free of noxious weeds.

Table 9. Seeds per row foot needed to achieve certain seeds per square foot at different seeding widths.

	Seeds /sq. ft.			
Row widths in.	30	35	40	45
6	15	18	20	23
7	18	20	23	26
7.5	19	22	25	28
8	20	23	27	30
10	25	29	33	38

It is important that any seed you plant is tested for germination. Thorough seed cleaning will often increase the germination of a seed lot because it eliminates some non-viable seed.

Information in Table 10, illustrates the differences in pounds per acre between two lots of seed planted at various row widths and seeds per row foot.

Yield potential is maintained when wheat is planted as accurately as possible. Therefore calibrate grain drills each time you change cultivar or seed lots

Table 10. Pounds of seed per acre as determined by row width, seeding rate and seeds per pound.

	Row width					
	6"		8"		10"	
Seed/row ft.	12,000	15,000	12,000	15,000	12,000	15,000
18	130.7	104.5	98.0	78.4	78.4	62.7
22	159.7	127.8	119.8	95.8	95.8	76.7
26	188.8	151.0	141.6	113.3	113.3	90.6
30	217.8	174.2	163.3	130.7	130.7	104.5

Straw Utilization

Straw utilization has become increasingly important in the economic value of wheat production. There are many uses of wheat straw such as; residue for conservation tillage, landscaping, residue to reduce soil erosion during road or building construction, mushroom production, horse bedding, hay feeding and others.

Varieties vary in their ability to produce straw from year to year. Table 11 is provided to demonstrate differences found in varieties. It appears the difference in dry matter production between varieties that are over 36" tall versus those less than 36" on average is about 30 lbs/A. Therefore, height is a good indicator of total dry matter production. If the straw is removed from the field, remember to apply the same amount of nutrients to the subsequent crop that are removed by the straw.

Table 11. Example of Straw Yield of Different Soft Red Winter Wheat Varieties (lbs/A), Griffin.

Variety	Ht-in.	Griffin
AGS 2000	38	2572
USG3209	36	3149
Pioneer 26R61	38	2021
Pioneer 26R24	37	2777
USG 3259	40	2666
Pioneer 26R12	36	2173
Crawford	34	2352
SS535	34	2235
Coker 9152	33	2478