

Control Seed Costs to Manage Profits

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Knowing just how much each management practice costs in a farming operation is a critical step to understanding where costs can be kept in check. Seed costs have been increasing and the addition of technology traits as well as seed treatment options can drastically affect the final per acre price of seed.

Typical seed costs on a per acre basis can vary between \$40 to \$70 for corn and \$25 to \$50 for soybean, depending on the desired plant population, variety/seed lot, seed quality and seed cost per bag. A spreadsheet tool has been developed to help farmers and crop managers easily calculate their actual costs and easily compare total costs for two seeding rates for a number of different varieties and/or seed lots.

The tables below illustrate an example comparing seed corn costs for 26,000 and 30,000 plants per acre on 30-inch rows for four different varieties on a 1000 acre farm. Table 1 shows the seed tag/bag data (weight, germination and purity), cost per bag (80,000 kernel unit), and number of acres for each variety/seed lot. Table 2 shows actual weight and number of seed per acre, the total number of bags needed, cost per acre for each variety/seed lot and the total and average seed cost for 26,000 plants per acre. Table 3 shows corresponding information for a target [population of 30,000 plants per acre. Note that a calculation is also made for a drill or planter calibration at both seeding rates (weight and number of seeds [pounds] per acre and weight of seed [grams] in a 200-ft strip).

Table 1. Seed tag data, cost per bag and number of acres for each variety/seed lot.

Variety	Lot No.	No. Seeds per bag	Weight per bag lb	Germ %	Purity %	Cost per bag	No. Acres
Corn1	xx1	80,000	39.80	95	99.0	\$ 125.00	250
Corn2	xx2	80,000	41.23	85	99.0	\$ 150.00	250
Corn3	xx3	80,000	44.08	92	99.0	\$ 150.00	250
Corn4	xx4	80,000	49.30	95	99.0	\$ 180.00	250

Table 2. Seeding rate, number of bags and cost for each variety at 26,000 seeds per acre.

Desired stand 1000/ac	Lot No.	gm / 200 ft of row	lbs seed / acre	actual seeds / acre	No. bags	Cost	
						per seed lot	per acre
26	xx1	72	13.8	27,645	86	\$ 10,799	\$ 43.20
	xx2	83	15.9	30,897	97	\$ 14,483	\$ 57.93
	xx3	82	15.7	28,546	89	\$ 13,381	\$ 53.52
	xx4	90	17.2	27,927	87	\$ 15,709	\$ 62.84
Total (and average)					359	\$ 54,372	(\$ 54.37)

Table 3. Seeding rate, number of bags and cost for each variety at 30,000 seeds per acre.

Desired stand 1000/ac	Lot No.	gm per 200 ft of row	lbs seed / acre	actual seeds / acre	No. bags	Cost	
						per seed lot	per acre
30	xx1	83	15.9	31,898	100	\$ 12,460	\$ 49.84
	xx2	96	18.4	35,651	111	\$ 16,711	\$ 66.84
	xx3	94	18.1	32,938	103	\$ 15,440	\$ 61.76
	xx4	103	19.9	32,223	101	\$ 18,126	\$ 72.50
Total (and average)					415	\$ 62,737	(\$ 62.74)

The difference in per acre costs is substantial for both populations and emphasizes the need to use high quality seed. The total cost between these target populations is \$8365 or \$8.36 per acre for the seed lots shown. Growers are encouraged to use this spreadsheet tool to help record and control seed costs. It can be used to quickly calculate seed costs for other scenarios with corn or soybean and is available on the University of Kentucky Biosystems and Agricultural Engineering website (www.bae.uky.edu/ext/Grain_Storage/Calculators).

Figure 1 shows a typical range in corn seed costs at plant populations ranging from 22,000 to 34,000 plants per acre for 100, 500 and 1000 acre operations. Note that the total cost difference between desired stands is \$209 per 1000 plants/100-acres for the specific mix of seed quality and varieties shown in Table 1.

Figure 1. Typical range in corn seed costs at different plant populations for 100, 500 and 1000 acre operations.

