

Worksheet for Estimating Soybean Yields Prior to Harvest

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- Use the following table to determine the row length that equals 1/1,000 of an acre for your row width.

| Row width (in inches) | Length of a single row to equal 1/1,000 of an acre |
|-----------------------|--|
| 7 | 74 feet and 8 inches |
| 7.5 | 69 feet and 8 inches |
| 8 | 65 feet and 4 inches |
| 15 | 34 feet and 10 inches |
| 20 | 26 feet and 2 inches |
| 22 | 23 feet and 8 inches |
| 30 | 17 feet and 5 inches |

- Measure the distance determined in step one and count the number of pod-bearing plants. Repeat this 10 more times in representative areas of the field and record your stand counts in the following table. Add the individual counts together, divide by 10 and multiply by 1,000 to get the average stand count per acre.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|----|
| | | | | | | | | | |

Plant population per acre = _____

- Select 10 random plants and count the number of pods per plant. Record these in the following table and calculate the average number of pods per plant.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|----|
| | | | | | | | | | |

Average number of pods per plant = _____

- Calculate the average number of pods per acre by multiplying the average population by the average number of pods per plant.

Average number of pods per acre = _____

- Calculate the average number of seeds per acre by multiplying the average number of seeds per pod by 2.5 (seeds per pod). Reduce this to 2.0 for poor growing conditions occurring in August.

Average number of seeds per acre = _____

- Calculate the average number of pounds of soybeans by dividing the average number of seeds per acre by 3,000 seeds per pound. This is a reasonable estimate. Greater accuracy can be obtained by using the actual seed size for the variety planted in the field. Consider adjusting the seed size based on the growing conditions that occurred during seed fill as stress occurring at this time reduces seed size (increases seeds per pound) and rain or irrigation increase seed size (decreases seeds per pound).

Average number of pounds of soybeans per acre = _____

- Calculate the estimated yield by dividing the average number of pounds of soybeans per acre by 60 (pounds per bushel @ 13% moisture).

Estimated yield per acre @ 13% moisture = _____