

Method to Estimate Soybean Yields

Yield estimates are more accurate the closer the plants are to physiological maturity. The following calculation is generally accurate to $\pm 25\%$ of the actual yield.

- Step #1 Count the # of pod-bearing plants in 1/1000 acre.
- ❖ 7 inch rows count # of plants in a 75 ft section of a row.
 - ❖ 15 inch rows count # of plants in a 35 ft section of a row.
 - ❖ 30 inch rows count # of plants in a 17.5 section of a row.
- Step #2 Determine pods per plant by counting the number of pods (containing at least one or more seeds) from 10 randomly selected plants. Divide the total number of pods by 10 to get pods/plant.
- Step #3 Calculate the estimated yield by using the following formula

$$[(\# \text{ of plants}) \times (\text{pods/plant})] \div 60 = \text{bu/acre}$$

Example: *If the number of pod-bearing plants in 1/1000 acre was 125 and the average number of pods per plant were 30, the estimated yield would be:*

$$125 \times 30 \div 60 = 62.5 \text{ bu/acre}$$

NOTE This example is based on an average of 2.5 seeds/pod, 2500 seeds/pound, and 60 pounds per bushel. Repeat steps 1 and 3 several times throughout the field to improve the accuracy of the yield estimate.

- Step #4 If the # of beans/pod and/or the # of beans/pound are known, then instead of step #3 use the following formula:

$$[(\# \text{ of plants}) \times (\text{pods/plant}) \times (\text{beans/pod})] \div (\# \text{ of beans/lb}) \times (.06) = \text{bu/acre}$$

Example: *If the number of pod-bearing plants in 1/1000 acre was 125 and the # of pods per plant were 30, the beans/pod was 2.2, and there were 2400 seeds/lb., the estimated yield would be:*

$$(125 \times 30 \times 2.2) \div (2400 \times .06) = 57.29 \text{ bu/acre.}$$