

Estimating Corn Silage Yield

This can be done by counting, weighing, and sampling the number of corn stalks in 1/1000th of an acre. Corn plants are chopped at a stubble height of 8 - 12 inches and weighed to “estimate” the tons of wet corn silage per acre. This should be done at 3-5 locations in the field. If the plants are chopped and dry matter determined, the tons of silage dry matter yield can be calculated. If the number of ears per stalk is counted, then the ears per acre can also be determined. The number of plants to count and weigh depends on the spacing of the rows. The weight of the plants divided by 2 will provide the estimated silage yield.

Row Spacing, Inches	Length of Row to Sample
36	14 feet, 5 inches
30	17 feet, 10 inches
20	26 feet
15	34 feet

Example: The plants from 17 feet, 5 inches with a 30” row spacing weigh 40 lbs. This gives an estimated yield of 20 tons per acre ($40/2$). If the plant dry matter was 35%, then the calculated dry matter yield per acre would be 7 ($20 \cdot 0.35$).

There are also some rule of thumb calculations that can be used. These are:

One estimate of silage yield for corn plants without ears or poorly pollinated ears is 1 ton of dry matter (30%) for each foot of plant height. This does not include the tassel. Corn that is 4 feet high would yield about 4 tons of 30% dry matter corn silage.