



## Corn Planting Guide

### Fertility/pH:

Take a soil test in the fall to determine your pH and nutrient balances. This will allow time to correct problems with pH and reduce your expenses if your soil already has a good balance of nutrients. For corn and most plant species, optimum growth occurs when the soil pH is around 6.5. Corn uses about 1 to 1.5 lbs. of nitrogen per bushel yield. Corn also removes about 0.4 lbs. of Phosphorus per bushel yield and 0.3 lbs. of Potassium per bushel yield. This means that a 100 bushel corn yield, will remove 100-37-27 from your soil. You will need to replace whatever is removed prior to next year's planting. Urea is a common nitrogen fertilizer supplying 46 units of N per 100 lbs. of product. In the example above, at a minimum, you would need to add about 225lbs of urea to replace the 100 units removed. Urea can be broadcast onto a dry soil prior to a rain or tilled into the soil. P and K fertilizers are not as sensitive to moisture and can be applied at planting or tilled into the soil. Potash provides about 60 units of K per 100 lbs. and Super Triple Phosphate supplies about 45 units per 100 lbs. of product applied. Other sources of N are Ammonium Nitrate at 34% N and Ammonium sulfate at 21% N. All fertilizer and herbicide applications should be applied before the corn reaches 30 inches tall.

### Seed Bed Preparation:

Corn needs to be planted into a firm, weed free seed bed. Corn can be no-till planted or conventionally planted in to tilled ground. While it is possible to broadcast corn, you will need to increase the seeding rate by 10% to make up for the less desirable method.

### Planting Time:

Corn can be planted after the last frost of the spring when soil temperatures reach 50°F. Early plantings yield better than late plantings, although corn can be planted up to mid-June.

### Planting Depth/Seeds Per Acre:

Corn seed can be planted up to two inches deep, preferably with a planter. Planting deep helps improve stalk strength. Always plant into a moist, well drained soil. Corn does not grow well with long periods of standing water or poor drainage. Seed planting populations can vary from 24,000 to 36,000 seeds per acre depending on fertility, moisture availability, and desired yield. The bag of corn contains 80,000 kernels.

This chart shows the number of seed to be dropped per row foot to achieve the 24,000 to 36,000 seeding population of a 20-40 inch row.

Population Seeds/acre	20 inch row Seeds/ft	30 inch row Seeds/ft	40 inch row Seeds/ft
24,000	0.9	1.4	1.8
30,000	1.1	1.7	2.3
36,000	1.4	2.1	2.8

### Row Spacing/Weed Management:

Row widths can vary from 20 to 40 inches wide to allow tractor or ATV sprayer traffic without damaging the plants. Narrower rows help shade out weeds quicker. Roundup Ready corn is easy to manage using Roundup herbicide (glyphosate) alone, or in combination with Atrazine herbicide for pre-emergent control of weeds. Up to two applications of Roundup can be applied on RR Corn at 32 oz. per trip with 41% glyphosate or 26 oz. with 48.7% glyphosate. Applications should occur before the corn is 30 inches in height.