

To: Local News
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Corn Planting

In many situations, the evolution of the seed rate increases as you have more availability of water, or more precipitation.

In Kansas seeding rates vary from as few as 15,000 seeds per acre in western Kansas, to as many as 28 to 30,000 seeds per acre in the eastern side of the state.

But choosing the maximum seeding rate for a region is not always the best decision. Especially on limited resources.

If more than about 5% of the plants are barren or if most ears have fewer than 250 kernels per ear, the corn seeding rate may be too high. If there are consistently more than 600 kernels per ear or if most plants have a second ear contributing significantly to grain yield, the corn seeding rate may be too low.

Of course, the growing conditions will influence ear number and ear size as well, so it is important to factor in the growing conditions for that season when interpreting these plant responses. In addition to the growing conditions, nutrient status can also influence the final number of grains per ear. For example, severe nitrogen deficiency will have a high impact on the final number of grains, ear size and ear number.

When you start doing the math on the number of seeds planted and bushels harvested, you may rather stay on the optimum or something less to the maximum. If you are exactly on the maximum, you may be taking a higher risk.

When other factors are more limiting, increasing seeding rates way beyond the maximum may not influence your return on more bushels.

Keep in mind that the potential ear size and potential number of kernel (1,000-1,200 per ear) are set before silking, but the actual final number of kernels is not determined until after pollination and early grain fill due to relative success of fertilization and degree of early abortion.

Think about your optimal seeding rate; when you go way beyond the optimal seeding rate...you make your crop more dependent on precipitation and other factors.

A video about some of the research done by K-State Extension Row Crop specialist Ignacio Ciampitti is available at <https://youtu.be/h7L5ReVqMdU>