

**Industrial Hemp Research Report, Kraig Roozeboom¹, Jason Griffin², Lucas Haag¹
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Research Questions:

- Q1. Which of the approved varieties are best suited for fiber, grain, or CBD production in KS?
- Q2. What is the productivity of industrial hemp across a gradient of non-irrigated to fully irrigated conditions in northeast KS?

Objective:

The objective of the research is to answer the above questions in field conditions in northeast Kansas. The purpose is to generate baseline data evaluating basic production questions to inform recommendations for new hemp growers and to enhance our understanding of the water resource required to produce industrial hemp.

Methods:

All experiments were planted using a Randomized Complete Block Design with four replications per treatment. Variety trials were planted in 6ft x 22ft plots using a grain drill equipped with a seed cone to meter small amounts of seed. Plot size was reduced to account for limited seed supply of some varieties.

Plots were planted on June 4 into a stale seed bed that had weeds controlled with herbicide application the day before planting. Flooding resulting from a rain event on June 22-23 killed enough plants in all plots to render them unusable.

All plots were replanted on July 2, but a large rain event on July 3 flooded plot area again, inhibiting emergence enough that all plots were deemed unusable. Plots could not be replanted a third time because the seed supply had been exhausted and planting date was getting late enough to risk crop failure due to frost.

Data, results, interpretation:

Not applicable because of stand failure due to flooding.

