

Research Proposal Instructions:

- **Complete the following sections**, either by utilizing the fillable form or by providing your answers on a separate page(s). *Handwritten submissions are strongly discouraged.*
- **If answering on a separate document**, please label each section (A-F).
- **Be concise:** Your research proposal should be as concise as possible; **not to exceed 2 pages total.**
- **For more information on how to write a research proposal**, please see the Technical Bulletin on How to Conduct Research on Your Farm or Ranch by visiting <https://www.sare.org/Learning-Center/Bulletins/How-to-Conduct-Research-on-Your-Farm-or-Ranch>.

SECTION A: Identify your research question and objective, including a statement of the type of research to be conducted and its purpose.

Analyze industrial Hemp samples for Kansas producers for nutrients.

SECTION B: Identify your experimental design.

Analyze customer samples in a timely manner using sound testing practice.

SECTION C: Explain what will be measured and what data will be collected.

We will be analyzing plant samples for nutrients, any of the following:

Calcium, Magnesium, Potassium, Copper, Iron, Manganese, Zinc, Sulfur, Nitrogen, Phosphorous, Total Carbon, and Chloride.

SECTION D: Explain how the project will be implemented, including location and size of your anticipated research areas (in acres or square feet), duration of your research operations and variety of industrial hemp that will be used in your research.

All processing of plant samples will occur in our labs in Throckmorton Hall, KSU Campus.

SECTION E: Explain how research data will be collected, recorded and analyzed.

We dry plant samples in a 60 degree Celsius oven, then grind the sample in a Wiley Mill to prepare for analysis. Samples are acid digested, extracted or combusted for nutrient analysis.

SECTION F: Explain how the data will be interpreted and how conclusions will be drawn, including anticipated results.

We will report nutrient analysis results to producers.