



Planting Industrial Hemp for Grain & Fiber Production in Kansas

2025 Guidelines, Recommendations & Best Practices



2025 Industrial Hemp Season in Kansas

Thank you for your interest in planting and growing industrial hemp in Kansas. The Kansas Hemp Consortium (KHC) has been researching and working with hemp producers since the industrial hemp program officially launched in the state during 2018. With the reintroduction of this crop on farms throughout the midwest, there is much to learn and important information to share that increases the odds of success for the crop and resulting industry.

Research, collaboration and the support of public institutions are all essential to hemp as the crop grows to reach its full potential. The recommendations contained here, in the *Industrial Hemp Planting Best Practices for Grain & Fiber Production* guide, reflect the experience of those involved to date and are subject to change as more is learned about the crop. Thank you for getting involved and making positive contributions to the industrial hemp community in Kansas and the midwest.

Industrial Hemp Production Season Timeline

March

- Soil and field prep

Late March/Early April

- Recommended planting date in Kansas and similar latitudes

May

- Weed control focus and cultivation if possible
- Fertilization recommended

June

- Evaluate reproductive organ development and pest pressure

July/August

- Schedule and perform crop sampling

August/September

- Harvest and grain drying, deliver dried grain to Midwest Hemp Technology for processing

October

- Ret stalks in the field and deliver to Midwest Hemp Technology for processing

This general timeline is fleshed out in the information that follows with recommendations and resources that may be helpful along the way. Industrial hemp is new to U.S. farmers and while there is a lot of potential, there are also a lot of potential pitfalls to be mindful of along the way. KHC recommends attending a hemp field day and connecting with existing producers and your processing partner for support throughout the process.

United State Department of Agriculture's Hemp Producer Licensing

- **\$25** Fingerprinting at local law enforcement agency
 - (\$25 is the rate charged at the Sedgwick County Law Enforcement Training Center, fees in most areas of the state are likely similar)
- **\$18** FBI Criminal History Report Application fee
- **\$0** USDA Licensing Fee - [Find out more and apply here](#)
- **\$125** Crop Sampling Fee
 - Estimate per lot for USDA licensed hemp sampling contractor and DEA licensed lab test

In 2025, Kansas transitioned hemp producer licensure from the state's department of agriculture to the USDA. USDA hemp producer licenses are issued for a three year term. [Find out more and apply here.](#)

Industrial Hemp Genetic Trialing & Recommendations

In 2021, Kansas Hemp Consortium tested six different industrial hemp genetics. Because planting conditions and techniques were the primary contributors to the success and failure of those fields, it was difficult to fully evaluate the potential for each genetic variety in the Kansas climate with just one season of data. Research continued and, in 2022, KHC sourced two genetic varieties for comparison. Both were focused on grain production as their primary commodity but also produced fair amounts of fiber, hurd and environmental benefits. Today, KHC continues gathering production data from growers across the region to better understand regional recommendations and performance specs related to specific industries.

For grain production, KHC recommends New West Genetics hybrid and open pollinated varieties for maximum yield and professional agronomic support. Reach out to request a seed catalog and pricing information from New West Genetics

Depending on your desired outcomes and growing conditions, there may be other good options in hemp seed genetics. Research, recommendations and varietal specific data for grain, fiber and hurd production are also available through the multi-state hemp variety trials. Connect with KHC for more detailed information on genetic varieties recommended for fiber production, other uses and geographies..

Industrial Hemp Planting Recommendations

Success on dryland is critical to the embrace of industrial hemp across the country. KHC test fields in 2021, 2022, 2023 and 2024 were all on dryland. Planting specifics detailed below assume dryland planting.

Hemp seeds require moisture to germinate. The optimum planting date is before the last frost in March. This and all other recommendations made here are what's suggested by current research for weed pressure mitigation and a successful stand.

Planting recommendations specific to planting New West Genetics 2463:

- Planting depth: No more than ½ inch deep
- Soil Temperature: 45 to 55 degrees Fahrenheit
- Soil pH: 6 to 7
- Vegetation Period: 100 to 110 days depending on a number of factors such as seeding date and temperatures
- Seeds per pound: 40,000 seeds per pound
- Bushel: 44 pounds in typical test weight

Insurance - Recommendations available as part of whole farm policies after one year of production. Restrictions apply but coverage for hemp producers is available outside of the Federal Crop Insurance Program. Contact Assure Group or your local agent for more information.

Planting & Cultivation Equipment

When discussing your production plan, KHC's goal is to identify existing on-farm equipment that can function successfully for planting and harvesting agricultural hemp. There are varied planting recommendations depending on the type of equipment available. For questions regarding the implementation of equipment on your farm, please connect with KHC for recommendations specific to what you have available.

Seeding equipment options:

- 30 inch planter
 - Plates
 - High rate sorghum plates or small milo plates
 - 90-cells
 - Targeting 550,000 seeds per acre, 400,000 plants per acre
 - Translates to about 18 pounds per acre with the seeds about an inch apart
 - In row spacing similar to soybeans
- 7.5 inch drill
 - Drill at 25 pounds per acre
- Broadcast planter with agitator on top inch of soil

Planting density:

30' Rows - 18 lbs/acre (planter)

7' Rows - 25 lbs/acre (drill)

Seed Cost: \$7/pound average

Weed Control

In 2024, **Sonalan** was approved as a pre-emergence labeled for agricultural hemp grain production. Treating your field with a pre-emergent may be helpful but can hopefully be avoided by planting before the last frost and incorporating cover crops. It is important to remember that Sonalan won't kill the existing weeds so that needs to be done with tillage or burn downs.

Sonalan application on 40 acres

- 200 gallons of spray solution satisfies the minimum spray volume requirement of 5 gallons/acre
 - Sonalan application rate is a maximum of 3 pt/acre
- 15 gallons of Sonalan in the solution
- Incorporate in the top 2-3 inches with shallow tillage or 0.5" of water after application

Cultivation is used as a tool for weed control. If planting on 30 inch rows, consider [GreenField Robotics](#) for cultivation. The company takes drone footage of the field soon after planting for weed management later in the season.

Harvest and Sell Hemp Grain and Fiber Crops

Yield Goals Per Acre:

- 1500 Pounds Grain
- 2000 Tons Bailed Stalks

See the **Harvest Guide** from Midwest Hemp Technology for detailed instructions on harvesting hemp grain and fiber for specs and quality markers. Meeting specific requirements for drying, retting, bailing and delivering properly to a processing facility increases the value of the crop.

Contact Midwest Hemp Technology for purchase contracts on hemp grain and fiber bales.

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Hemp's Bright Future Based in Research

Kansas Hemp Consortium is committed to the growth of hemp in Kansas and the midwest. It is our sincere hope that everyone who plants industrial hemp in the 2025 season sees success. The hemp industry still has a great deal of growing to do. Regulations are settling and new markets are opening up. Harvest and handling infrastructure is starting to come together.

Please be encouraged to stay involved and grow the Kansas industrial hemp industry. From bioplastics to livestock rations, there is room for many sub-specialty markets to develop and mass market appeal is growing. Over the next few years, supply and demand will both increase. The environmental benefits of industrial hemp are unsurpassed and will play a critical role in carbon reduction programs that are gaining traction.

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