Industrial Hemp Production in New Jersey:Frequently Asked Questions

Fact Sheet 1302





Cooperative Extension

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Q: What is industrial hemp?

A: Industrial hemp is from the plant species *Cannabis sativa* and is used to produce a variety of industrial and consumer products. Hemp is a source of fiber and oilseed grown in countries worldwide. Many products, including fibers, textiles, paper, construction and insulation materials, cosmetic products, animal feed, food, and beverages can be produced from hemp. By definition, industrial hemp is low (less than 0.3%) in tetrahydrocannabinol (THC), the cannabis plant's primary psychoactive chemical.

Q: Is industrial hemp the same as marijuana?

A: Industrial hemp and marijuana are different varieties of the same plant species, *Cannabis sativa*. While both are botanically the same species, different varieties or cultivars have been developed for distinct purposes and are grown with different cultural practices. Marijuana is cultivated for production of the psychoactive plant chemical tetrahydrocannabinol. Industrial hemp is typically cultivated for fiber, seed, and cannabidiol (CBD) oil. Federal and state law requires that the concentration of THC must be less than 0.3% in industrial hemp.

Q: What are some of the uses of industrial hemp?

A: There are over 25,000 reported uses for industrial hemp products globally according to a 2018 Congressional Research Service report. Industrial hemp is grown mainly for fiber production (fabrics, yarns, paper products, construction materials, etc.) or seed production (food products, culinary oils, soaps, lotions, cosmetics). Some varieties are suitable for dual-use production. Hemp is also grown for the production of cannabidiol oil extracted from resins produced largely in its flowers. CBD is used as a health supplement with purported health benefits including pain relief, inflammation, and others.

Q: What happens if an industrial hemp crop tests higher than the 0.3% THC regulatory limit?

A: By definition, the plants are no longer considered industrial hemp. Under current regulations, the crop would not be legal to harvest and must be destroyed. New Jersey forthcoming regulations will mandate the sampling and crop destruction protocols.

Q: Is hemp oil the same as CBD oil?

A: Cannabidiol oil is sometimes called "hemp oil." CBD oil should not be confused with hemp seed oil. Cannabidiol is a naturally occurring compound largely found in and extracted from the resinous flowers of cannabis. CBD is one of more than a hundred phytocannabinoids, which are unique to cannabis. Seed oil is made from pressing the hemp seed, similar to the processing of oil from sunflower or canola seed.

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Q: How does the 2018 Farm Bill affect hemp production?

A: The recently enacted 2018 Farm Bill (PDF) removes industrial hemp and its derivatives containing less than 0.3% THC from the Controlled Substances Act, thus legalizing the cultivation of industrial hemp and the hemp derivative CBD oil. The 2018 Farm Bill directed USDA to establish a regulatory framework for hemp production in the United States. USDA established the U.S. Domestic Hemp Production Program through an interim final rule. This rule outlines provisions for the USDA to approve plans submitted by States and Indian Tribes for the domestic production of hemp. The 2018 Farm Bill stands to significantly change hemp farming and product businesses. With legalization, growers can move industrial hemp products across state lines and national borders. However, with that freedom potentially comes more competition; as more producers enter the market and production expands nationally.

Under Section 10133 of the 2018 Farm Bill (PDF) the State of New Jersey submitted a Hemp Production Plan to USDA to take charge of the regulation of hemp production in the state. New Jersey was among the first states to have its Hemp Program approved by the USDA. The USDA approved the New Jersey Hemp Plan (PDF) on December 27, 2019.

All state plans submitted to the USDA must include:

- A way to keep track of land on which hemp is produced within the state;
- Methods the state will use to test THC levels in hemp plants;
- A way to dispose of plants or products that have THC concentrations that exceed legal limits;
- A procedure for inspecting hemp producers;
- A plan for enforcing the law;
- A system for filing a hemp producer's information to the USDA; and
- Assurances that the state has the resources to carry out the plan.

In August of 2019, the NJ Hemp Farming Act, (P.L.2019, c.238) was signed into law. This law legalizes hemp production in New Jersey, permitting farmers and businesses to grow, handle, process, and sell hemp for commercial purposes, pursuant to an application process established by the New Jersey Department of Agriculture (NJDA). Previously, farmers and businesses were only legally permitted to cultivate hemp under New Jersey's Industrial Hemp Pilot Program, which restricted hemp growth to academic or agricultural research. The NJ Hemp Farming Act repealed and replaced the pilot program.

Q: Is it legal to grow industrial hemp in New Jersey?

A: The New Jersey Department of Agriculture has adopted new rules to establish the NJ Hemp Program (PDF). The objective of the program is to provide licenses for growing, processing, and handling hemp pursuant to the NJ Hemp Farming Act, and the 2018 Farm Bill.

The program establishes a schedule of fees to be paid based upon whether the hemp producer will be growing, processing, or handling hemp.

In order to produce hemp in compliance with the NJ Hemp Farming Act, a farmer must obtain a permit from the NJDA under the NJ Hemp Program (PDF) to be a "hemp producer." A "hemp producer" is defined by the law as "a person or business entity authorized by the [NJDA] to cultivate, handle, or process hemp …." Any person or entity that is not a hemp producer or an agent of a hemp producer who engages in the cultivation, handling, or processing of hemp will be subject to the same penalties as those related to marijuana.

Q: Can industrial hemp be produced organically?

A: Yes, like other commercial crops the opportunity exists to market industrial hemp to the organic consumer. According to USDA Organic Regulations (7 C.F.R. Part 205), only industrial hemp produced in accordance with the 2014 Farm Bill, as articulated in the Statement of Principles on Industrial Hemp issued on August 12, 2016 by USDA, and USDA organic regulations may be certified as organic. USDA accredited certifiers should direct questions regarding the guidance to their Accreditation Manager. These regulations will likely be amended to comply with the 2018 Farm Bill.

Q: What risks might be encountered while producing Industrial Hemp?

A: Just as producing any crop, there are risk factors associated with industrial hemp production. It is important that producers carefully evaluate the potential costs, market opportunities and technical feasibility of any production system before beginning any new crop. Factors to consider when evaluating the production of industrial hemp include:

- Currently industrial hemp is not covered by crop insurance. This may change under the 2018 Farm Bill.
- Presently, there are no pesticides labeled for insect, disease, or weed control.

- Inputs including; specialized equipment/implements, trained labor for hand-harvesting, controlled atmosphere structures (high tunnels or greenhouses), and other resources may be needed and should be considered during budgeting.
- Proper variety selection is important and dependent upon whether the product end use will be fiber, seed, or CBD oil.
- As the industry is just beginning to develop, hemp marketing and processing facilities are limited.
- Recognize that "THC spikes" have been reported in industrial hemp crops planted in other states. A THC spike is when the THC concentration exceeds the regulatory limit of 0.3%. The crop must be destroyed if the THC level exceeds the regulatory limits established for industrial hemp. Further research is needed to determine what, if any, production practices or environmental conditions can contribute to THC spikes.

Q: Is industrial hemp production economically viable for New Jersey?

A: As is the case with any emerging agricultural product, limited data exist to quantify the economic feasibility of industrial hemp production in New Jersey. The Hemp Industries Association (HIA) reported total United States sales of hemp products at nearly $800 million in 2017, with significant increases in the sale of hemp-based products, foods, and supplements as compared to 2016 estimates. Although industrial hemp production may provide an opportunity for New Jersey, it is crucial that producers carefully examine the market and accessibility of market channels as part of a marketing plan for their operation.

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