Industrial Hemp – Legal Issues

Introduction
Industrial hemp (Cannabis sativa) is a fiber and oil seed crop with a wide variety of uses. Hemp fibers have been used to manufacture hundreds of products that include twine, paper, construction materials, carpeting, and clothing. Seeds have been used in making industrial oils, cosmetics, medicines, and food. This fiber crop also has potential as a cellulosic ethanol biofuel. Currently all hemp products sold in the U.S. are imported or manufactured from imported hemp.

Industrial hemp was widely grown in the United States from the Colonial Period until the mid-1800s. During that time, Kentucky established itself as the leading hemp producer in the U.S. After the Civil War, hemp production declined in Kentucky, as well as in other areas of the country. Production temporarily resumed as part of the war effort during World War II. However, once the war was over, acreages dwindled until U.S. production ended in 1958. However, the last couple of decades have brought a renewed interest in commercial hemp as an alternative or supplementary crop. As the pro-hemp movement has spread, a number of states, including Kentucky, have passed laws favoring its production, generally in connection with scientific, economic, and environmental research studies.

Hemp vs. Marijuana
Industrial hemp’s relationship to marijuana was one of several factors that led to the demise of commercial production in the U.S. Hemp and marijuana are genetically different cultivars of the same plant species (Cannabis sativa), and are distinguished from one another based on their use and tetrahydrocannabinol (THC) levels. THC is the main chemical that gives marijuana users their “high.” While marijuana cultivars typically contain 3% to 15% THC by weight, cultivars for hemp production contain only trace amounts (less than 1%), reportedly below psychoactive levels. In turn, varieties grown for narcotic use produce poor quality fiber. Production practices for marijuana and hemp differ, with each aimed at maximizing the specific plant characteristics needed for their respective end uses. However, the two crops are so similar in appearance that they can only be distinguished with certainty by chemical analysis.

Federal Laws
The first federal law restricting hemp production was the Marihuana Tax Act of 1937. This measure placed all Cannabis sativa under federal regulation, requiring growers,
importers, and processors of this crop to be registered and taxed. Industrial hemp production was further restricted when the Controlled Substances Act of 1970 categorized any product containing THC as a Schedule I drug, regardless of narcotic content level or use. As a result, the cultivation of all *C. sativa*, including industrial hemp, is now strictly regulated by the federal government.

Since 2005, several federal bills (referred to as The Industrial Hemp Farming Act) have been brought before Congress, subsequently dying in committee. Each bill proposed to amend the Controlled Substances Act to exclude industrial hemp varieties of *C. sativa* from the definition of marijuana. In addition, the licensing of hemp production would be placed into the hands of state governments, and thereby removed from federal regulation. The proposed law did not seek to change the illegal status of marijuana.

On February 7, 2014, President Obama signed the Agricultural Act of 2014 (the federal farm bill) into law. It included Section 7606, Legitimacy of Industrial Hemp Research, which authorized institutions of higher education or state departments of agriculture in states that have legalized hemp to grow industrial hemp if it is grown “for purposes of research conducted under an agricultural pilot program or other agricultural or academic research.” Pilot programs are defined as programs to “study the growth, cultivation, or marketing of industrial hemp.” Sites used for growing industrial hemp must be certified by, and registered with, that state’s department of agriculture. State departments of agriculture are authorized to implement regulations to carry out the pilot programs.

**Kentucky Hemp Pilot Programs**
The signing of the farm bill in 2014 opened the door for hemp production to return to Kentucky. Senate Bill 50, passed by the Kentucky General Assembly in 2013, made industrial hemp exempt from the state controlled substances act, but also required Kentucky to follow the federal hemp rules and regulations. The farm bill’s authorization of state departments of agriculture in states that have legalized the crop to administer hemp pilot programs paved the way for research to begin. The Kentucky Department of Agriculture has established an Industrial Hemp Program as a result of Senate Bill 50 and the farm bill.

The KDA has initiated pilot programs across Kentucky, and has promulgated regulations in compliance with the farm bill. Growers interested in participating in pilot programs should complete the application available on the KDA’s website; the URL is listed under Selected Resources at the end of this document.

The pilot programs are affiliated with the University of Kentucky, Kentucky State University, Eastern Kentucky University, Morehead State University, Murray State University, the University of Louisville, and Western Kentucky University. Each program has its own research focus. These include the cultivation of Kentucky heirloom hemp seed; the cultivation of European seed for research on hemp fiber; the detoxifying and environmental effects of hemp; basic hemp production practices and production costs; the feasibility of hemp as a source of renewable energy; and medical research. Despite challenges in acquiring seed, the planting of research plots began in the spring of 2014. The University of Kentucky’s hemp pilot program was planted on May 27th and harvested on September 23rd. UK is conducting research to determine the varieties that are best suited for Kentucky; the effects of nitrogen fertilization; yields of seed and fiber; and possible disease, insect and weed problems.

**Summary**
While the passage of SB 50 paved the way for industrial hemp production at the state level, at this time, growers who are interested in growing hemp need to apply and be approved to participate in pilot programs established by the KDA and
authorized by the farm bill.

**Selected Resources**

*Books and reports in print*

*On the Internet*
- Economic Considerations for Growing Industrial Hemp: Implications for Kentucky’s Farmers and Agricultural Economy [http://www2.ca.uky.edu/cmspubsclass/files/EconomicConsiderationsforGrowingIndustrialHemp.pdf](http://www2.ca.uky.edu/cmspubsclass/files/EconomicConsiderationsforGrowingIndustrialHemp.pdf)
- Industrial Hemp (Agricultural Marketing Resource Center, 2013) [http://www.agmrc.org/commodities__products/fiber/industrial_hemp.cfm](http://www.agmrc.org/commodities__products/fiber/industrial_hemp.cfm)
- Industrial Hemp Profile (Agricultural Marketing Resource Center, 2012) [http://www.agmrc.org/commodities__products/fiber/industrial_hemp_profile.cfm](http://www.agmrc.org/commodities__products/fiber/industrial_hemp_profile.cfm)

*Laws*
- Kentucky Legislature: SB50 (2013) [http://www.lrc.ky.gov/record/13rs/sb50.htm](http://www.lrc.ky.gov/record/13rs/sb50.htm)

*For additional information, contact your local County Extension agent*

Educational programs of the Kentucky Cooperative Extension Service serve all people regardless of race, color, age, sex, religion, disability, or national origin.

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