



Availability of Industrial Hemp Seed

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Issue: There is very little industrial hemp seed in Colorado to support a growing interest in industrial hemp production. The seed that is available is not certified to produce plants with a THC content at or below 0.3% thereby placing additional crop risks on the farmer. In addition, there is no research as to which industrial hemp varieties from other countries will function well in our climate putting further crop risk on a farmer using untested imported seed.

Solution: Develop certified seed varieties through a partnership with the Colorado Department of Agriculture and Colorado State University.

The primary impediment to increasing development and production of industrial hemp in Colorado is the lack of viable industrial hemp seed. Because industrial hemp is not differentiated by definition from marijuana at the federal level and therefore subject to the Controlled Substances Act (CSA) of 1970 (CSA, 21 U.S.C. §801 et. seq, almost no industrial hemp has been cultivated to produce seed nor has viable hemp seed of known or documented origin been legally imported in decades. Therefore the current available seed bank of industrial hemp is extremely small in Colorado.

There is a small amount of hemp seed being produced in Colorado since the passage of the Colorado Industrial Hemp Act in 2013. However most of this seed is highly variable in quality, is not a specific variety and THC levels remain uncertain. There are currently no varieties certified to produce plants that remain below 0.3% THC and thus no certified seed.

The only ways to improve seed availability of certified varieties so that THC, quality and agronomic characteristics can be predicted, is to develop varieties within the state and import industrial hemp seed and test varieties from other countries. Because industrial hemp is regulated by the CSA, importation of industrial hemp seed requires a Drug Enforcement Administration (DEA) registration and import permit. To date the DEA has been very reluctant to grant registrations and import permits to import viable hemp seed.

The most recent Farm Bill contained a provision that authorized industrial hemp research within certain parameters. This provision is in SEC. 7606 and stated “that notwithstanding the Controlled Substances Act (21 U.S.C. 801 et seq.), the Safe and Drug-Free Schools and Communities Act (20 U.S.C. 7101 et seq.), chapter 81 of title 41, United States Code, or any other Federal law, an institution of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)) or a State department of agriculture may grow or cultivate industrial hemp if— (1) the industrial hemp is grown or cultivated for purposes of research conducted under an agricultural pilot program or other agricultural or academic research; and (2) the growing or cultivating of industrial hemp is allowed under the laws of the State in which such institution of higher education or State department of agriculture is located and such research occurs.”

This provision provides for state departments of agriculture and institutions of higher education to obtain a registration and import permit for industrial hemp seed for research purposes. Because Colorado law allows industrial hemp cultivation, this provision is applicable to Colorado. However Section 7606 does not provide a provision for the DEA to issue registration and import permits for individual farmers to import industrial hemp seed.

Since passage of this Farm Bill the Colorado Department of Agriculture (CDA) obtained a registration under the CSA to import industrial hemp seed. CDA does not have the resources of either agricultural land or staff to conduct its own research. However some of Colorado's institutions of higher education typically conduct research of this kind and are well equipped to do so. The CDA is working with Colorado State University and the University of Colorado Boulder to identify research priorities for industrial hemp. With its registration and subsequent import permit, CDA can obtain industrial hemp seed from sources worldwide and provide them to the institutions of higher education. In this arrangement CSU and CU Boulder would not have to obtain a DEA registration and import permit.

One of the priorities of this research will be to develop certified seed varieties for Colorado. This will be the gateway to seed availability for Colorado's farmers. Certified seed would allow the growers to be confident the THC content will be below 0.3%. This would then lessen the burden of both time and cost to test the grower's fields. A win for all parties involved. However development of certified varieties is not a rapid process. It will be several years before these varieties would be available for sale to farmers.

One other potential option for industrial hemp research to be conducted would be for CDA to develop a pilot program according to the provision of SEC. 7606 of the Farm Bill. However one of the provisions of this is that it must be done in a manner that ensures that only institutions of higher education and State departments of agriculture are used to grow or cultivate industrial hemp. Therefore cooperators (individual farmers) would have to enter into an agreement to operate as an agent of the CDA under its direct control. This may be so restrictive that it is not beneficial to the cooperators because anything produced would be the property of the CDA and would have to be returned. In addition, CDA does not have available staff to oversee this program or funding to pay the growers to participate in this research.

CDA believes our strong relationship with CSU to develop certified seed varieties is the most viable, cost effective and sustainable option to increase industrial hemp seed availability for Colorado's farmers.

Critical Definitions:

Industrial hemp means a plant of the genus cannabis and any part of the plant, whether growing or not, containing a delta-9 tetrahydrocannabinol concentration of no more than three-tenths of one percent on a dry weight basis. Colorado Industrial Hemp Act C.R.S. 35-61-101 (7).

Delta-9 tetrahydrocannabinols has the same meaning as "tetrahydrocannabinols" as set forth in section 27-80-203 (24), C.R.S. Colorado Industrial Hemp Act C.R.S. 35-61-101 (5)

Certified seed means industrial hemp seed, including Colorado heritage cannabis seed, that has been certified by an organization recognized by the department as having no more than three-tenths of one percent of delta-9 tetrahydrocannabinol concentration on a dry-weight basis. Colorado Industrial Hemp Act C.R.S. 35-61-101 (1)

Marijuana: The term marijuana means all parts of the plant *Cannabis sativa* L., whether growing or not; the seeds thereof; the resin extracted from any part of such plant; and every compound, manufacture, salt, derivative, mixture, or preparation of such plant, its seeds or resin. Such term does not include the mature stalks of such plant, fiber produced from such stalks, oil or cake made from the seeds of such plant, any other compound ... or preparation of such mature stalks (except the resin extracted therefrom), fiber, oil, or cake, or the sterilized seed of such plant which is incapable of germination. CSA (21 U.S.C. §802(16))

Farm Bill Hemp Provision

SEC. 7606. LEGITIMACY OF INDUSTRIAL HEMP RESEARCH.

(a) IN GENERAL.—Notwithstanding the Controlled Substances Act (21 U.S.C. 801 et seq.), the Safe and Drug-Free Schools and Communities Act (20 U.S.C. 7101 et seq.), chapter 81 of title 41, United States Code, or any other Federal law, an institution of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)) or a State department of agriculture may grow or cultivate industrial hemp if—

(1) the industrial hemp is grown or cultivated for purposes of research conducted under an agricultural pilot program or other agricultural or academic research; and (2) the growing or cultivating of industrial hemp is allowed under the laws of the State in which such institution of higher education or State department of agriculture is located and such research occurs.

(b) DEFINITIONS.—In this section:

(1) AGRICULTURAL PILOT PROGRAM.—The term “agricultural pilot program” means a pilot program to study the growth, cultivation, or marketing of industrial hemp—

(A) in States that permit the growth or cultivation of industrial hemp under the laws of the State; and

(B) in a manner that— (i) ensures that only institutions of higher education and State departments of agriculture are used to grow or cultivate industrial hemp;

(ii) requires that sites used for growing or cultivating industrial hemp in a State be certified by, and registered with, the State department of agriculture; and (iii) authorizes State departments of agriculture to promulgate regulations to carry out the pilot program in the States in accordance with the purposes of this section.

(2) INDUSTRIAL HEMP.—The term “industrial hemp” means the plant *Cannabis sativa* L. and any part of such plant, whether growing or not, with a delta-9 tetrahydrocannabinol concentration of not more than 0.3 percent on a dry weight basis.

(3) STATE DEPARTMENT OF AGRICULTURE.— The term “State department of agriculture” means the agency, commission, or department of a State government responsible for agriculture within the State.