

Hemp Seed - at the Crossroads

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The Wild Wild West Makes This Look Tame!

- ▶ Fraudulent CoA's - Same one in multiple states with different names
- ▶ Fraudulent Seed Test Results - same one for multiple varieties
- ▶ Variety Name Changes -

What Laws and Regulations Govern Seed?

- ▶ Federal Seed Act of 1939
- ▶ Indiana Code 15-15-13 Indiana Seed Law
- ▶ IAC 360-1-1 Administrative Rules - updated 2019

Is Hemp Seed Governed By Same Rules?

- ▶ YES!!!!
- ▶ ABSOLUTELY YES!!!
- ▶ WITHOUT A DOUBT YES!!!
- ▶ YES! Yes! Yes! Yes! Yes! YES! Yes!
- ▶ No Doubt about it under any circumstances.... The answer is Yes!

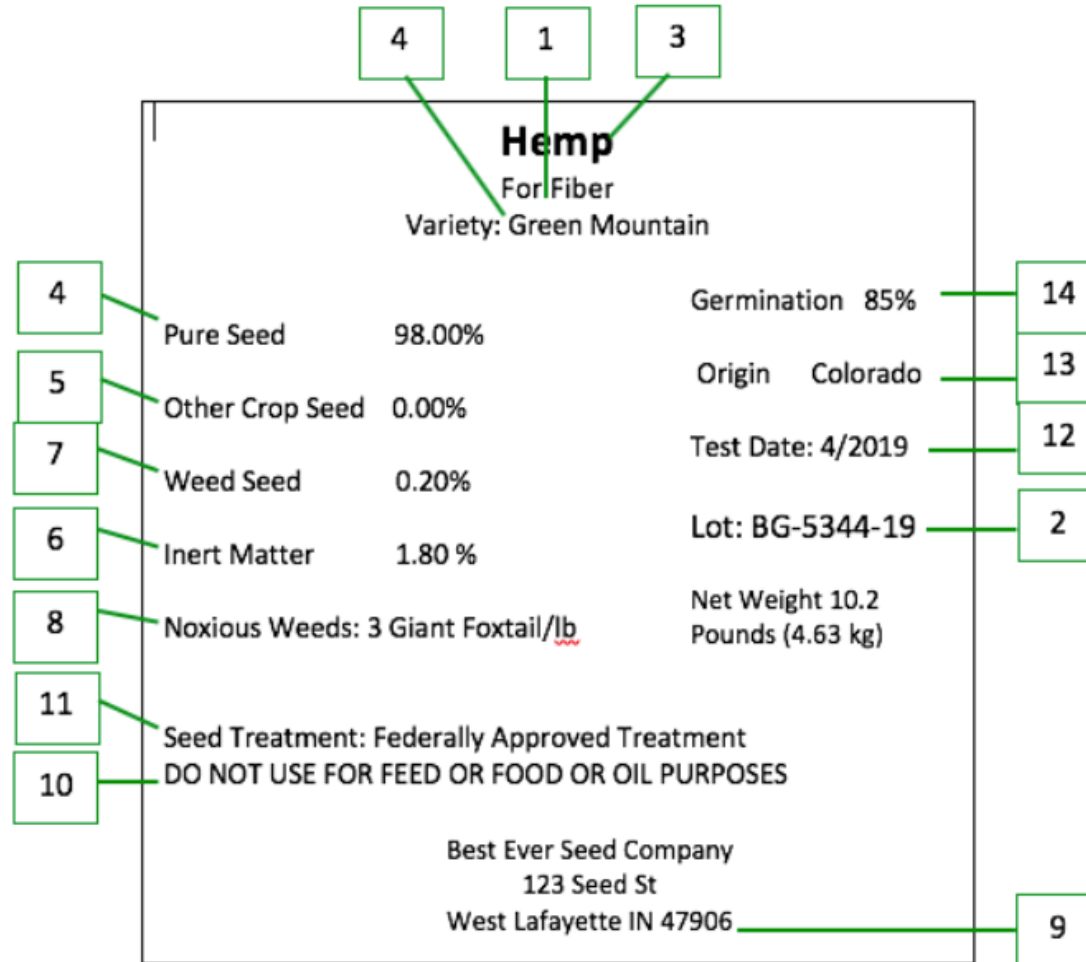
So, What Does the Seed Law and Rules Say?

- ▶ Seed Must be Tested
- ▶ Seed Must be Labeled
- ▶ Seed Cannot Be Sold In Indiana Without A Seed Permit
- ▶ A Stop Sale Can Be Put on Any Seed Not Labeled, Not Tested and Sold Without A Seed Permit
- ▶ Detailed records of all seed sales must be kept for minimum of 2 years

What needs to be on a label?

- ▶ Germination percentage
- ▶ % Pure Seed
- ▶ % Inert
- ▶ % Other Crop
- ▶ % Weed Seed
- ▶ Noxious Weeds claim
- ▶ Variety Name - **MUST BE NAMED...** Not allowing Variety Not Stated
- ▶ Labeler Information, including full address
- ▶ Germination date (test date)
- ▶ Origin (where grown)
- ▶ Lot #
- ▶ Arbitration Statement

Acceptable Label



Germination Rate Percentage

- ▶ AOSA Labs follow strict rules to test germination rates on seed, including hemp seed
- ▶ Tests are done in special equipment that controls temperature, humidity and light.
- ▶ Temperatures range from 20 C to 30 C on a set time. Replicating day length and day/night temperature swings
- ▶ Germinated seed is counted twice. At 3 days and at 7 days
- ▶ Final test date is the month and year you put on the seed label for germination test date

- ▶ **NEED A MINIMUM OF 800 SEEDS FOR COMPLETE TEST...**
- ▶ **Yes... even if it is feminized CBD crop selling for a dollar a seed.**

Germination Tests on Hemp 2016-2019

- ▶ 45 Germination Tests in 2019
- ▶ Average germination rate? **52%**
- ▶ Some was part of a three year study of what holds germ and what doesn't.
- ▶ First year seed? **Around 70-75%** germination.
 - ▶ Playing with pre-chill on a study for AOSA - Association of Official Seed Analysts
- ▶ When in doubt? Ask for the Seed Lab Report

Percent Pure Seed, Inert, Weed Seeds and Other Crop Test

- ▶ Highly trained and accredited seed analysts test and analyze the seed
- ▶ Looking for seeds that are not hemp - is it an agricultural crop or weeds?
- ▶ Looking for partial seeds, missing key parts
- ▶ Looking for chaff and other things in the seed that are not hemp seed
- ▶ Looking for weed seeds



Noxious Weeds Test

- ▶ Looking for any weed seeds that are on the Indiana Noxious Weed Seed Lists
- ▶ IAC 360-1-1-5 and IAC 360-1-1-6
- ▶ Two kinds of noxious weed seeds
 - ▶ Prohibited - the seed lot cannot be sold without cleaning and a new clean test
 - ▶ Restricted - can have up to 0.25% of these weeds and still sell it
 - ▶ HOWEVER, these weeds must be listed on the seed label and #/lb found



Labeler Information Section

- ▶ Complete name of responsible company or person
- ▶ Complete address

Lot Number

- ▶ Original Grower determines the size of the lot and the lot number
 - ▶ Examples: 19-001-xxx Can be any numbering system
- ▶ From one field, or from one farm? Can be one lot of seed
- ▶ **If two or more lots of seed are combined the seed is now a blend and must be labeled as a blend**
 - ▶ New lot number would be assigned at this point.

Coating Material Test

- ▶ Hasn't hit hemp yet but is coming
 - ▶ Clay or polymer to help protect the seed and aid in germination rates
 - ▶ Think Scott's seed commercials

Kind and Variety

- ▶ These are fixed - cannot be changed downstream
- ▶ The seed kind is hemp or cannabis sativa L.

- ▶ Variety names are assigned by the original breeder and cannot be changed
- ▶ Let that sink in...

- ▶ We have evidence of several hemp variety names being changed in 2019.

- ▶ It is extremely important to know who you are buying from!!!
- ▶ Cannot emphasize this enough. Buy seed from professionals!

Disclaimer and Microorganism Expiration Date

- ▶ Hemp seed cannot be treated or inoculated yet
- ▶ When that happens labelers must add a disclaimer that the seed cannot be used for food, feed or oil purposes
- ▶ Also, if inoculated with a microorganism the expiration date of the microorganism must be included on the label

Origin

- ▶ Where the seed was grown
- ▶ If blend, all states must be listed

Arbitration Statement

- ▶ Indiana law requires two parties who cannot agree on seed quality issues and cannot settle the dispute themselves to go to a state appointed arbiter.
- ▶ Common among states

Where can I get this information in hard copy?

- ▶ OISC Hemp website has a document that walks you through the labeling process.
- ▶ Simply do a google search for Office of Indiana State Chemist hemp and go to Section 7 of the website.
 - ▶ How to test and label hemp seed

Other Hemp Seed Tests

- ▶ Percentage feminized?
 - ▶ Indiana Crop Improvement Association in Lafayette

Certified Seed?

- ▶ What is Certified Seed? Doesn't that mean it has been tested and is low THC?
 - ▶ NO... Certified Seed has nothing to do with THC or CBD
- ▶ Certified Seed is grown from Registered, Breeder or Foundation Seed Stock
- ▶ Requirements for producing certified seed include
 - ▶ special land requirements
 - ▶ planting eligible stock
 - ▶ field inspections
 - ▶ proper seed labeling
 - ▶ meeting standards based on complete lab analysis.

Hemp Seed Sellers

- ▶ Must keep detailed records for 2 years of all transactions including
- ▶ Price
- ▶ Quantity
- ▶ lot number
- ▶ Variety
- ▶ who sold to
- ▶ who purchased from (or grower name and contact information)

Hemp Seed and Genetics in 2019

- ▶ Vast Majority of hemp seed not tested and labeled in 2019 - nationwide
- ▶ Documented hemp seed sellers changing variety names to help “compete” with others in industry - not legal.
 - ▶ A variety name stays with the variety for life
 - ▶ Several varieties sold that are not actual varieties, do your detailed research

Helps

- ▶ Office of Indiana State Chemist FAQ: https://www.oisc.purdue.edu/hemp/pdf/hemp_faq.pdf
- ▶ Twitter updates @IndianaChemist
- ▶ OISC Hemp Website: <https://www.oisc.purdue.edu/hemp/index.html>
- ▶ Purdue Hemp website www.Purduehemp.org
- ▶ Indiana State Department of Agriculture: <https://www.in.gov/isda/>
- ▶ AAFCO statement on animal feeds and hemp: https://www.aafco.org/Portals/0/SiteContent/Announcements/AAFCO_Guidelines_on_Hemp_in_Animal_Food_2.pdf?v2
- ▶ AOSCA Seed Certifying Information: <https://www.aosca.org/>
- ▶ Indiana Crop Improvement Association: www.indianacrop.org

Questions??

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