Hemp vs. Marijuana - Do You Know the Difference? Get the Facts! Get Involved!

By Kammy McElwain for Colorado Hemp Fest

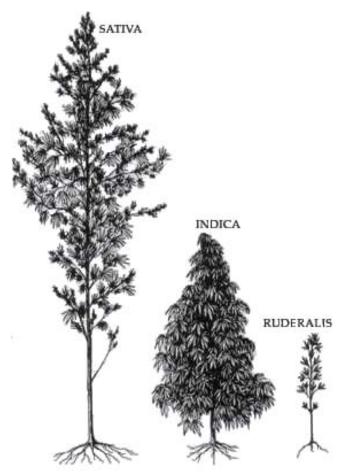
Apparently, it depends on who you ask, where you live, and in what time period. "The Columbia History of the World states that the oldest relic of human industry is a piece of Mesopotamian hemp fabric dating back to approximately 8,000 BC".ⁱ In most cultures for the last several thousand years, hemp has been a primary agricultural crop used for food, clothing, medicine, spiritual uses, and more. The terms "hemp", "marijuana", and "cannabis" generally referred to any variety of the plant itself, regardless of end use. The different English terms are an indication of the etymology of the words.

Cannabis is a genus in the plant family cannabaceae, and has three species: sativa, indica, and ruderalis. Within these three species are several strains. Industrial hemp is a variety of the cannabis sativa plant species. Cannabis has 483 known chemical compounds, including 65 or more cannabinoids, one of which is THC, the main psychoactive chemical substance.

"Since the early 1970s, *Cannabis* plants have been categorized by their chemical phenotype or "chemotype", based on the overall amount of THC produced, and on the ratio of THC to CBD."ⁱⁱ However, up until the 1930's, no distinctions were made, and growing hemp was as American as apple pie.

Colorado is one of the first states to stand for freedom for our farmers, allowing them to grow industrial hemp again beginning in 2012. In 2014, 1600 acres of hemp were planted in Colorado. Registration with the CO Department of Agriculture is required for both commercial production, as well as for research and development with industrial hemp.

As of 5/9/16, twenty-eight states have legalized hemp cultivation in accordance the US 2014 Farm Bill which defines industrial hemp as "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." Amendment 64 of the Colorado Constitution uses



this same definition, with any cannabis containing above .3% THC considered as marijuana.

The biggest problem with the .3% THC limit in defining hemp is that it precludes most **heirloom hemp varieties.** Even with this current definition, Colorado hemp farmer Scott Perez was quoted in a June 2015 article in the *The Journalⁱⁱⁱ* as saying ""I saw a headline this week that indicated the outlook for hemp was hazy," said Perez. "That's simply not true. Industrial hemp is on the verge of becoming an agricultural revolution.""

Industrial hemp has over 50,000 uses^{iv} and has been cultivated worldwide for thousands of years. Every part of the plant can be utilized, with different varieties being developed for numerous industries. Some of the general uses of industrial hemp include food, fiber, building materials, plastic and composites, auto parts, paper, cordage/rope, medicinal, therapeutic, cosmetic, animal feed and bedding, mulch, compost, water and soil purification and regeneration, weed control, and biofuels.

Both hemp seeds and hemp leaves can be consumed. According to USDA nutritional values. one serving of 100 grams of hulled hemp seeds provides 64% of the Daily Value (DV) of protein, over 100% DV of B1, manganese, phosphorus, magnesium, and zinc, 24%-61% DV of Vitamins B2, B3, B6, and B9, iron, and potassium, as well as 1% DV of Vitamin C, 5% Vitamin E, and 7% calcium. "Hemp plants produce seeds that contain between 25-35% oil by weight. This non-transfatty-acid oil is high in a perfect balance of essential fatty acids (EFAs: Omega-3, 6, 9) considered to be necessary to maintain health.".^v "Hemp protein contains all of the essential amino acids in more nutritionally significant amounts and at a ratio closer to "complete" sources of protein (like meat, milk and eggs) than all other seeds except soy." vi

Hemp needs less than half the amount of water needed to grow corn, and at least 14 times less water than cotton.



Hemp plant. A flowering male and B seed-bearing female plant, actual size; 1 male flower, enlarged detail; 2 and 3 pollen sac of same from various angles; 4 pollen grain of same; 5 female flower with cover petal; 6 female flower, cover petal removed; 7 female fruit cluster, longitudinal section; 8 fruit with cover petal; 9 same without cover petal; 10 same; 11 ame in cross-section; 12 same in longitudinal section; 13 seed without hull. Photo file: File:Cannabis sativa Koehler drawing.jpg Created: 31 December 1886 From Franz Eugen Köhler's Medizinal-Pflantzen. Published and copyrighted by Gera-Untermhaus, FE Köhler in 1887 (1883–1914).

Are you FOR FAIR TRADE and FREE ENTERPRISE?

Do you believe in liberty and justice for all? "We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness." Did you know that the Declaration of Independence was written on hemp paper?

According to the Hemp Industry Association, USA, due to federal drug laws, "It is currently illegal to grow industrial hemp for food, oil, paper or fabric in the USA, but it is perfectly legal to export hemp to the U.S. and to process, consume and wear it there." Even with cultivation in Colorado being made legal, freedom to utilize the crops to their full potential is limited due to several regulations both at the state and federal levels.

Laws must be repealed or enacted to ALLOW U.S. CITIZENS to buy and sell U.S. FARM CROPS AND RAW GOODS instead of being required to purchase imported items for use in foods, processing, manufacturing, and consumer goods!

Hemp is found in several retail items in the USA, from clothing, to hempcrete, to pet food. "The 2002 figures for global hemp sales were US\$250 million. US \$150 million in the United States alone."^{vii}

"In 2005-2008, hemp food sales have averaged 47% annual growth, making hemp one of the fastest-growing natural food categories."^{viii}

"2015 Annual retail sales for hemp products estimated at \$573 million."^{ix} Personal care products make up 26% of this market, followed by industrial applications at 20%, consumer textiles at 17%, food at 16%, Hemp CBDs at 11%, supplements at 8%, and other consumer products make up the remaining 2%.

The industrial hemp industry in Colorado is poised to bring sustainable growth to our economy. CO lawmakers are striving to make rules that make sense for farmers, processors, manufacturers, retailers, and consumers. It is crucial that our representatives hear from you! Colorado, again, is proving to be one of the leaders in granting, protecting, and maintaining FREEDOM and FAIRNESS to producers and consumers, alike.

Get the facts! Get involved!

Hit **Hemp on the Slope** on 7/30 at Salt Creek Ranch from 11am-7pm, presented by Salt Creek Hemp Co.

And join us at **Co Hemp Fest** 8/12-8/14 behind the Drive-In at 57510 Hwy 330 to learn more about the BENEFITS of INDUSTRIAL HEMP. See the full cycle and the numerous areas in the industrial hemp supply chain that are literally an entrepreneur's dream!



Connecting local farm and ranch operations with other farmers and small businesses throughout the full cycle of the hemp industry is one long-term objective of Co Hemp Fest. Approximately thirty hemp-related and local small businesses and organizations will be exhibiting and sharing their vision of this "new" industry which can bring sustainable economic growth to Western Colorado.

Around twenty expert speakers will be sharing their knowledge and experience on the main stage over three days - 8/12-8/14/2016. Many will also be available during our Q&A Expert Panel Sessions, and at the Info &/or Media Tents throughout the weekend. Also on the main stage, hemp demos will be presented, and twenty or so bands will be entertaining festival-goers with a wide range of musical styles. Volunteers are still welcome!

Tickets are on sale online at cohempfest.org/hemp_fest_co_tickets.html; in

Plateau City, CO at **The Drive-in**; at **Grand Mesa RV Park** in Mesa, and in Grand Junction on Horizon Drive at **Western Slope Communications**, on Main St. at **Triple Play Records**, and in Cottonwood Mall at **Natural Order Supply**.

"Without agriculture, there is no culture..."

A benefit for Western Colorado Agriculture Resource Center, CO Hemp Fest will feature educational sessions about industrial hemp and a business expo for hemp-related products and local vendors, non-profit booths, as well as several activities for the entire family. The primary goals for the festival are: to educate the public about and promote the benefits of hemp; for local and hemp vendors to have a venue filled with people interested in hemp products and the farm-toconsumer cycle; and also for our entertainers, vendors, sponsors, and non-profits to get great exposure and support. The theme for 2016 is "Freedom & Farming".



Links to several articles, as well as more thorough definitions are available at http://cohempfest.org/hemp_info.html

ⁱⁱ https://en.wikipedia.org/wiki/Cannabis

^{ix} Ibid.

http://www.hempfarm.org/Papers/Hemp_Facts.html

ⁱⁱⁱ http://www.the-

journal.com/article/20150604/NEWS01/150609915/Hemp-corridor-sprouts-on-US-160-

^{iv} http://www.voteindustrialhemp.com/

^v http://www.hempfarm.org/Papers/Hemp_Facts.html ^{vi} lbid.

vii Ibid.

viii http://www.thehia.org