

HEMP 101

Since hemp was federally decriminalized in 2018, it has become a topic of much interest in Oregon which is one of the leading growers of hemp in the nation. Much remains to be learned about the crop and its potential to address needs in fiber, textiles, construction, health and wellness, and food. Much also remains to be unlearned about hemp, as many people understandably have questions and too often associate hemp exclusively with its close relative, marijuana. The following document serves to address some of the more common misperceptions of the plant while also providing some new insights into what we already know to be true, and what we can begin to predict about its future potential.

Hemp is not marijuana

The plants may look the same, but marijuana contains more than 0.3 delta 9 tetrahydrocannabinol (THC), which is the chemical component in the plant that causes euphoric, psychotropic highs when consumed.

What is the history of hemp in the U.S.?

Industrial hemp was a major commodity crop in the U.S. in the 18th century, until it was banned and considered illegal in the mid-1930s. In 2014, the Farm Bill allowed for the cultivation of industrial hemp within an authorized program under strict guidelines. And in 2018, the Farm Bill decriminalized the cultivation of industrial hemp, designating the U.S. Department of Agriculture's Agricultural Marketing Service to develop regulations regarding hemp production.

What is CBD?

CBD stands for Cannabidiol and it is produced by the plant to ward off pathogens. It also nurtures seed production and is being researched for its potential biological and medical uses.

Known uses for hemp

Unlike many other crop commodities, the entire hemp plant can be used for a variety of uses in foods, healthcare, the built environment, and more. Hemp has been used as a food product since ancient times, providing for a number of essential nutrients and vitamins. Hemp seeds are a source of protein and vegetable oil, similar as produced by canola and soybeans. There are other valuable compounds produced by hemp flowers and leaves including cannabinoids and other hemp essential oils, as well as cannaterpenes that can be used as a flavor and aroma ingredients. CBD is a cannabinoid that was approved in 2018 by the FDA as a new medicine for the treatment of two rare forms of epilepsy in children.

Economic opportunities for hemp

As a new crop, the potential economic opportunities to innovate with a highly versatile plant are only starting to be calculated. However, according to the Brightfield Group, an analytics firm that tracks the cannabis industry, the hemp-derived CBD market alone is expected to grow from \$618 million in 2018 to \$22 billion by 2022.

Industries that are looking for hemp innovation

Many industries see value in hemp to create more sustainable innovation. These are varied and diverse touching nearly every aspect of the U.S. economy. Some of the most relevant include:

- Agriculture
- Health/Pharma
- Energy
- Defense
- Manufacturing
- Clothing
- Commerce/Import - Export
- Environment
- Transportation
- Animals
- Food
- Banking/Finance



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