

The difference between Hemp and Marijuana

What is the difference between Hemp and Marijuana?

An overall overview:

The cut to chase answer is: the difference is in its use. The two are related through the same species of plant, both are forms of the plant *Cannabis Sativa L.* They are essentially weeds that will grow in a wide variety of conditions, climates, and soil types. Over the years both plants have been used for a wide variety of uses. However, they are not the same.

While industrial-grade hemp is a rather helpful resource in the world, it lacks the stimulating power of the substance known as delta-9 tetrahydrocannabinol, or for short, THC. It is this active chemical of THC that brings about the “high” associated with marijuana. The term ‘*Hemp*’ commonly refers to the industrial/commercial use of the cannabis stalk and seed for textiles, foods, papers, body care products, detergents, plastics and building materials. The term ‘*marijuana*’ refers to the medicinal, recreational or spiritual use involving the smoking of cannabis flowers.

According to US law, hemp is the stalks, stems and sterilized seeds of *cannabis sativa*, and marijuana is the leaves, flowers and viable seeds of *cannabis sativa*. Male or female cannabis has no differentiation by law or science, beyond sex.

What Makes Marijuana a Drug?

No matter how you feel about marijuana, whether you would classify it as a medicine, a drug, a recreational tool, or a narcotic doesn’t really matter. What makes it this way is its THC (delta-9-tetrahydrocannabinol) content. It takes at least 3% THC in order to get high and higher quality marijuana (used for drug consumption) will have 10-15% THC.

How Much THC Does Hemp Have?

Due to the way hemp is grown and its separation from marijuana, hemp has a much lower THC content. Industrial hemp contains only about 0.01% – 1.5% THC (Tetrahydrocannabinoids, the intoxicating ingredients that make you high) while marijuana contains about 5% – 10% or more THC. The low amount of THC is what makes hemp worthless for getting high. It has been estimated by some

researchers of hemp that it would take an acre of hemp to get high. In one acre of hemp there is about 10-20 tons of plant material grown. Think about that.

Do they grow together? How can you tell them apart?

Often it is argued by those who know there is a difference between hemp and marijuana that they could be grown together thereby deceiving authorities and passerby while effectively providing marijuana for those who wish to use it. This isn't an option however. Hemp is grown in rows one to two inches apart. The plants are grown very close together and shoot up toward the sky till they are taller than full grown men. They have a woody core and are stiff and hard to walk through. Marijuana on the other hand is grown with lots of room to bush out. You want 18" or more worth of space between the marijuana bushes. You want them to have lots of low branches (something that doesn't happen on hemp), leaves, and soft flexible stems. These growing methods encourage THC development making it better for use as a drug.

Growing hemp and marijuana together isn't an option. By doing that you get cross pollination which leaves both plants infertile. When they cross pollinate you lose the buds of the flowers and the seeds. With hemp these parts are very useful for a wide variety of uses (oil, food, seed for the following year). With marijuana the bud is the part of the plant that has the most THC, if this doesn't fully develop due to cross pollination then you lose a lot of the material that can be smoked.

The difference in THC levels make hemp and marijuana a lot different. There are thousands of products that can be made from hemp, but it must be set aside that hemp and marijuana are the same thing. It must be understood that hemp cannot be smoked for a high, marijuana cannot be grown in place of hemp and fool authorities, and marijuana and hemp cannot be grown together (or even within a mile radius of one another).

Compared to cannabis sativa indica, cannabis sativa sativa (industrial hemp variety) has a much stronger fiber. This fiber can be used in anything from rope and blankets to paper. Marijuana fiber has a low tensile strength and will break or shred easily, making it a poor fibrous plant when compared to industrial hemp.

Industrial hemp also grows differently than THC-containing cannabis (Marijuana). Hemp is typically grown up, not out, because the focus is not on producing buds but on producing length of stalk. In this way, hemp is a very similar crop to bamboo. The stalk contains the fiber and hard, woody core material that can be used for a variety of purposes, even carpentry. Generally, THC-producing marijuana plants are grown to an average of five feet in height. Industrial hemp on the other hand is grown to a height of ten to fifteen feet before harvest. Also, it is fairly difficult to

grow concealed marijuana within industrial hemp crops as the DEA alleges. Since industrial hemp is grown so close together and is generally a very narrow, vertical growth crop, any THC-producing marijuana would stick out like a sore thumb. Its wide growth would require a large amount of space to itself in order to get adequate sunlight from beyond the tops of the competing industrial hemp plants.

The two also differ in the areas that they can be effectively grown. THC-producing Marijuana must be grown in generally warm and humid environments in order to produce the desired quantity and quality of THC-containing buds. However, since industrial hemp does not contain these buds, and the hardy parts of the plant are the more desired, it can be grown in a wider range of areas. Generally, industrial hemp grows best on fields that provide high yields for corn crops, which includes most of the Southwest, Southeast, and Northeast United States. Furthermore, since industrial hemp can use male plants as well as female plants (since the object is not THC production), higher crop yields can result.

Hemp also has little potential to produce high-content THC when pollinated. As long as industrial hemp plants are pollinated by members of their own crop, then the genetics will remain similar with low levels of THC. One would have to place several marijuana plants in close vicinity in over several generations order to alter the genetics substantially of the offspring.

Since there are so many differences between low-THC industrial hemp and high-THC marijuana, it seems to make sense that it would be a fostered, rather than demonized crop. Although technically hemp is not illegal to grow, it requires obtaining a special permit from the DEA. These permits are rarely given out and require that the crop be surrounded by security measures such as fences, razor wire, security guards, or dogs. Industrial hemp could transform the economy of the United States in a positive and beneficial way, and therefore should be utilized to its full potential.

<http://rediscoverhemp.com/inform/the-difference-between-hemp-and-marijuana/>

