

Should Hemp Be Legalized for Production in America?

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Outline

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 - B. Thousands of hemp products.
 - C. Thesis: America should take the same steps as many other countries around the world and should legalize hemp for farming, research, and production.

- II. Body
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 - 1. History.
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A crop used in ancient times for seafaring is being given a new life today around the world. Hemp has been around for over 6,000 years, and today its uses and products number over 25,000 (“Hemp Facts,” 1997). It seems like America, with its ample farming space, would be cashing in on this crop. However, that isn’t the case. Hemp farming was prohibited in the 1950’s, and today America imports around \$500 million of hemp products a year (Yonavjak, 2013). Why? The plant’s close family resemblance to marijuana, and denial alone is keeping this miracle plant from being farmed in America. We are busy polluting our environment with processing chemicals instead of fighting to advance technologies; the toxic waste from paper mills alone is devastating ecosystems, and deforestation has ravaged our countryside. America should take the same steps as many other countries around the world and should legalize hemp for farming, research, and production.

In the span of a decade, America completely changed its stance on a plant whose known properties never changed. The Chinese started using hemp around 4500 B.C. for ropes, sails, and other fishing equipment. Hemp was used in Japan around 3000 B.C., and there found wider uses, including clothing, and paper (“Hemp,” 2013). Hemp soon dominated the known world as a fiber crop and was later even seen as a cash crop to England; therefore, it was made mandatory to grow hemp in Jamestown. In spite of this push, hemp never became a profitable crop in America, and the country soon began importing masses of hemp annually. “By the 1800’s, the United States imported 3,400 tons of its hemp with a peak importation of 5,000 tons annually during the 1820’s and

1830's" ("Hemp," 2013). Hemp finally became a popular crop in America during World War II. Before the war, the US was importing much of its hemp from Philippines, but after the Japanese occupied the area in 1942, the American government began pushing farmers to grow the crop. During this time, hemp growth was extraordinary; in 1943 and 1944, 200 million pounds of hemp were grown ("Hemp," 2013). Nevertheless, hemp growth stopped by the same government that was pushing it in the name of patriotism just a few years before. "The last crop was grown in Wisconsin in 1958, and by 1970 the Controlled Substances Act (CSA) formally prohibited cultivation" (Yonavjak, 2013). America was founded with hemp as a crop, yet it became illegal just because it looks like another plant.

So what is America's issue with hemp? Hemp, marijuana and hops are all part of the *Cannabaceae* family, and hemp and marijuana fall into the *Cannabis* genus together ("Hemp; Plant," 2014). Although the psychoactive properties of hemp are null, it is in the same Schedule 1 class of drugs as LSD and heroin (Runyon, 2015). Marijuana is a Schedule 1 drug because of its tetrahydrocannabinol (THC) levels, which range from 5-25%. While industrial hemp has very little THC, countries like Canada that grow industrial hemp have a maximum THC content of 0.3%. Further research shows that both hemp and marijuana have another unique compound called cannabidiol (CBD), which is shown to counteract the psychoactive effects of THC. This is important to industrial hemp since hemp produces more CBD than THC, and marijuana produces more THC than CBD ("Five

Differences Between Hemp and Marijuana,” 2014). Hemp and marijuana are not chemically or anatomically the same plant, and they need to start being viewed separately again by the American government.

There are many differences between growing and farming hemp and marijuana, which police officers can easily be trained to notice. For instance, marijuana plants are grown farther apart, so plants can bush out and grow large leaves. Hemp is grown closer together to create a taller plant, with more stalk for product (“Hemp Facts,” 1997). Hemp is grown as a male and does not flower, while marijuana is grown female, and the flowers are the prize of the plant. Marijuana is usually grown indoors and is highly cultivated for maximum yield whereas hemp is grown outdoors and little notice is paid to the individual plants (“Five Differences Between Hemp and Marijuana,” 2014). Police forces may worry less about growers trying to hide marijuana in their hemp fields because if a farmer did plant hemp next to marijuana, it would actually create a less potent marijuana plant and not produce a higher THC content in the hemp plant (“Hemp facts,” 1997). Hemp is naturally resistant to pests and grows so close together that it out-competes weeds, meaning there is little to no need for chemical pesticides or herbicides (“Hemp Facts,” 1997). Hemp is such an amazing crop because of how well it grows in most climate and soil types, without any painstaking care.

The pollution that the paper industry creates is devastating our ecosystem, but we could stop dumping tons of chemicals into our ecosystem if we switched to hemp. In

fact, the paper industry is the third largest polluter in our country, dumping approximately 220 million pounds of toxic pollution into our environment every year. Three million tons of chlorine alone is being dumped into our waterways every year, after being used to chemically turn paper into that pristine white we know so well (Briggs, 2004). Hemp does not use chlorine in the process to turn from pulp into paper. A less toxic process is used because of hemp's low lignin content, which causes a natural brightness ("Hemp Facts," 1997). Hemp paper is acid free and is completely biodegradable and compostable ("Industry," n.d.). There are many ways that switching from wood products to hemp products in the paper industry would benefit our environment.

Deforestation is a huge problem in America, with estimates saying that only 5% of forests America are virgin forests (Briggs, 2004). With a rate of 3-8 tons of product per acre, hemp crops can produce four times the average amount of fiber, compared to the same forest acreage. That comparison is also based on one year of hemp growth, while it would take many more years than that to grow a forest ("Industry," n.d.).

Another reason hemp pulp is superior is that it can be recycled up to ten times, compared to wood, which can only be recycled twice. Hemp pulp can be made from the fibers of the outer hemp stalk and the inner core, also known as hurd of the stalk, which contributes greatly to hemp producing four times as much pulp as wood. We can even use some of the same machinery we use to make paper from wood, since once hemp is

turned into pulp the machines cannot tell the difference from wood pulp (“Industry,” n.d.). Tests have been conducted in a paper mill with hemp hurds, which showed hemp paper, “according to official tests would be classed as a No. 1 machine-finish printing paper” (Dewey & Merrill, 2006). This proves that hemp can produce the same quality paper as wood, with the added benefit of less chemical processing.

The advantages for growing hemp, specifically to be used for paper, include the amount of hemp pulp that can be obtained from plants versus trees. Hemp paper can be recycled many more times than paper from wood, and also hemp paper production uses far fewer chemicals, so much less toxic waste will be dumped into the environment. The paper itself, being acid free, can last much longer than paper from wood. The oldest paper known on Earth is hemp; the *King James Bible* and first two drafts of the Declaration of Independence were written on hemp paper (“Industry,” n.d.). Our ancestors knew how useful hemp could be, and the papers have stood the test of time, which shows their quality.

Legislators are continuing their prohibition on hemp under the guise of a number of myths. Objections against legalizing hemp include burdening local police forces. However, in countries with legalized hemp, there is no such correlation. They say hemp is a source of THC, which people will use to get high, but it is scientifically shown that hemp does not have enough THC to induce any psychoactive effects. People believe hemp has always been treated this way, in the same context as marijuana, but that is also false. It

has not even been a full century since the laws banning hemp have been enacted in America; before this time hemp had flourished as a crop for thousands of years (West, 1998). America needs to realize the great potential that awaits it through hemp farming; America should legalize hemp for all purposes, including research, farming, and production.

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