

Michigan Industrial Hemp Education and Marketing Project



- MIHEMP is a state wide non-partisan, non-profit org.
- Our mission is to educate the public and state government officials about Industrial Hemp and try to clear up the myths and teach the facts through meetings and seminars and setting up booths at public events.

A green and white combine harvester is shown in a field of tall hemp plants. The harvester is positioned on the left side of the frame, with its large front wheel and rear wheel visible. The hemp plants are dense and green, reaching up to the harvester's cutting mechanism. The harvester's body is primarily green with white accents, and it has a large glass-enclosed operator's cab. The background shows more of the hemp field under a bright sky.

Industrial Hemp

What it is and is not

Facts and Myths

- **MYTH:** Hemp and Marijuana are the same plant.
- **FACT:** Hemp is a cousin to Marijuana with visible differences, much like comparing a St. Bernard and a Chihuahua in the dog family.

Facts and Myths

- **MYTH:** Smoking industrial hemp gets a person high.
- **FACT:** The THC levels in industrial hemp are so low that no one could get high from smoking it.

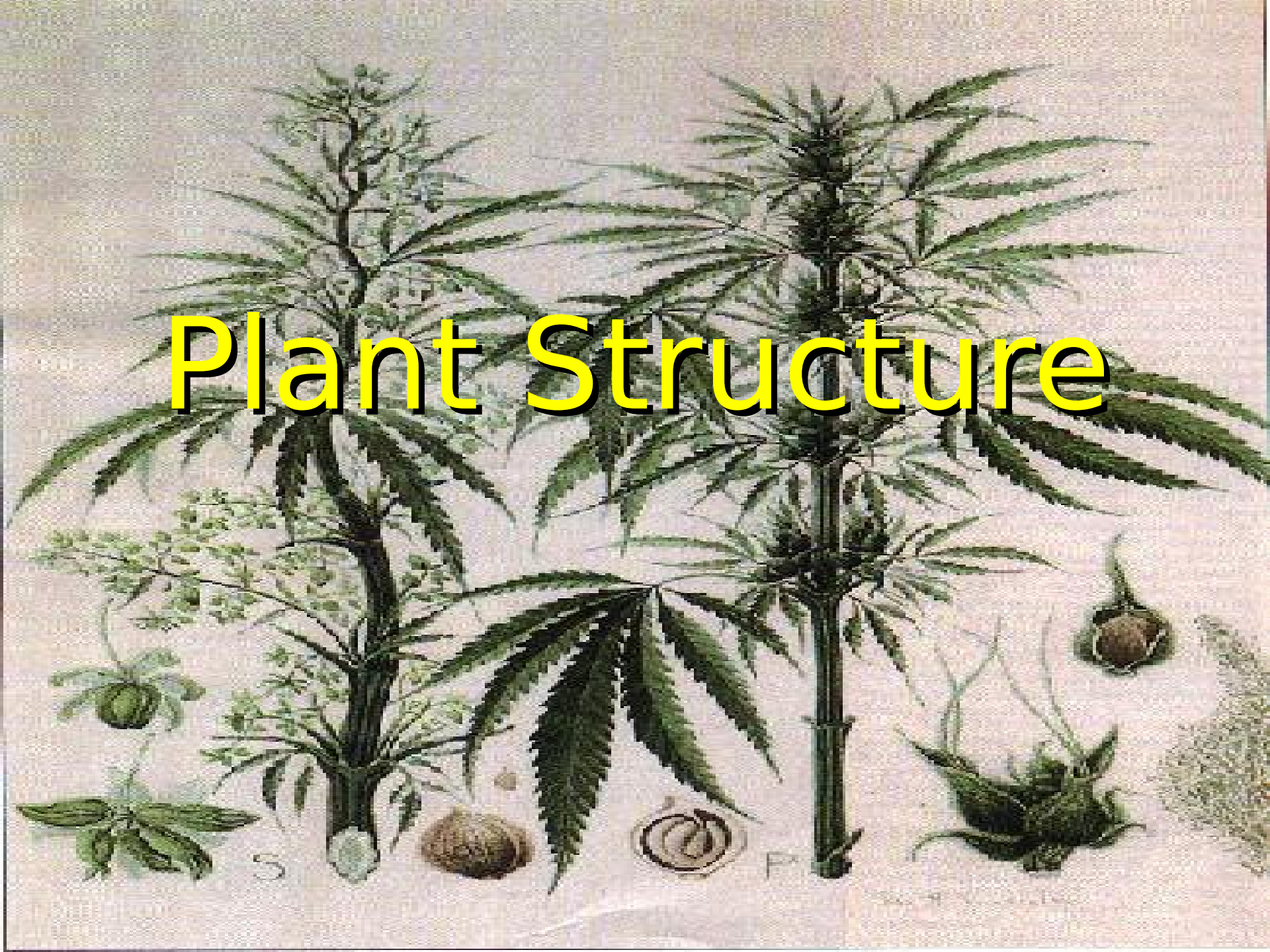
Myths and Facts

- **MYTH:** Hemp fields would be used to hide marijuana plants.
- **FACT:** Hemp is grown quite differently from marijuana. Moreover, cross-pollination between hemp plants and marijuana plants would significantly reduce the potency of the marijuana plant.

Myths and Facts

- **MYTH:** Feral hemp must be eradicated because it can be sold as marijuana.
- **FACT:** Feral hemp, or ditchweed, is a remnant of the hemp once grown on more than 400,000 acres by U.S. farmers. It contains extremely low levels of THC, as low as .02 percent. It has no drug value, but does offer important environmental benefits as a nesting habitat for birds. About 99 percent of the “marijuana” being eradicated by the federal government—at great public expense—is this harmless ditchweed.

Plant Structure



Plant Structure

- The hemp plant is harvested for its fibers, seed, seed meal and seed oil.
- Hemp is a distinct variety of the plant species *cannabis sativa* L. Due to the similar leaf shape, hemp is frequently confused with marijuana.
- Although both plants are from the species *cannabis*, hemp contains virtually no THC (delta-9-tetrahydrocannabinol), the active ingredient in marijuana.

Plant Structure

- Hemp is an annual plant that grows from seed, hemp can be grown on a range of soils, but tends to grow best on land that produces high yields of corn.

Plant Structure

- The long slender primary fibers on the outer portion of the stalk are considered bast fibers.
- Hemp fiber possesses properties similar to other bast fiber plants such as flax, kenaf, jute and ramie, and excels in fiber length, strength, durability, absorbency, antimildew and antimicrobial properties.

Plant Structure

- The core fiber is derived from the sturdy, wood-like hollow stalk of the hemp plant. Sometimes referred to as "hurds", it is up to twice as absorbent as wood shavings, making it an excellent animal bedding and garden mulch.
- It can be easily blended with lime to create a strong yet lightweight concrete or plaster.

Plant Structure

- Its high cellulose content means it can be applied to the manufacturing of plastics.
- It is biodegradable and possesses antimildew and antimicrobial properties.

Benefits of Hemp



Benefits of Hemp

- **Industrial hemp grows without the need of fungicides, herbicides or insecticides. Although it needs some nitrogen fertilizer, its deep roots can improve the soil's structure.**
- **Hemp paper is acid-free and takes less energy and fewer toxic chemicals to produce than wood fiber paper.**

Benefits of Hemp

- **Hemp is high in omega 3 and omega 6 Essential fatty acids (EFA's)**
- **EFA's are components of fat that humans need to be healthy, however, our bodies can't produce them and therefore they must be obtained through the diet.**

Benefits of Hemp

- **Clothing made of hemp fiber is lightweight, absorbent and, with three times the tensile strength of cotton, strong and long-lasting.**
- **Bricks made from hemp are stronger than concrete and are one sixth of the weight**



Hemp in America

Past and Present

Early America

- **1619: Jamestown Colony, Virginia, enacts the New World's first Hemp legislation, ordering all farmers to grow Indian hemp seed. Mandatory hemp cultivation laws were passed in Massachusetts in 1631 and in Connecticut in 1632.**

Early America

- **June 28, 1776: The first draft of the Declaration of Independence is written on Dutch hemp paper. A second draft, the version released on July 4, is also written on hemp paper. The final draft, signed by the Founders, is copied from the second draft onto animal parchment.**

Early America

- **June 19, 1812: The United States goes to war with Great Britain after being cut off from 80% of its Russian hemp supply. Napoleon invades Russia to sever Britain's illegal trade in Russian hemp.**

Early America

- **December 1937: The Marijuana Tax Act is signed into law, initiating 60 years of Hemp prohibition and annihilating a multi-billion dollar industry.**
- **DuPont and other synthetic materials manufacturers reap vast profits by filling the void left by the criminalization of industrial hemp.**

Early America

- **February 1938: Popular Mechanics describes hemp as the new billion dollar crop. The article was actually written in the spring of 1937, before hemp was criminalized.**
- **Also in February 1938, Mechanical Engineering calls hemp the most profitable and**

Early America

- **1941: Popular Mechanics introduces Henry Ford's plastic car, manufactured from and fueled by hemp.**
- **Hoping to free his company from the grasp of the petroleum industry, Ford illegally grew hemp for years after the federal ban.**

Early America

- **1942: The Japanese invasion of the Philippines cuts off the U.S. supply of Manila hemp. The U.S. government immediately distributes 400,000 pounds of hemp seeds to farmers from Wisconsin to Kentucky.**
- **The government requires farmers to attend showings of the USDA educational film *Hemp***

Early America

- **1957, prohibitionists reasserted a total ban on hemp production in the United States.**
- **That federal ban remains in effect today.**

A photograph of a group of people in a field. In the foreground, a man wears a black cap with 'DEA' on it, a white t-shirt with 'AMERICA' and a star, and blue jeans. To his right, a woman in a black vest over a white shirt carries a child on her back. In the background, another woman in a white shirt and dark shorts is visible. The text 'Hemp in America Today' is overlaid in yellow.

Hemp in America Today

American Hemp Today

- **Although American companies still manufacture products with hemp they must import hemp from other countries.**
- **The leading exporters of raw and processed hemp fiber to the United States are China, Romania, Hungary, Italy, Canada, and India.**
- **The leading exporters of hemp oil and seed are the United Kingdom, Canada, Switzerland, and China.**

American Hemp Today

- **The United States is the only Industrialized nation in the world that does not have an Industrial Hemp program.**
- **Yet we are the largest importer of hemp and hemp products in the world.**

American Hemp Today

- **Here in Michigan American car companies import Parts made of Hemp from Canada to build cars.**

American Hemp Today

- **Ford, GM, Chrysler, Saturn, BMW, Honda, and Mercedes are currently using hemp composite door panels, trunks, head liners, etc.**
- **Hemp composites are less expensive than it's fiberglass counterparts. Hemp fiberglass replacements only cost 50 to 70 cents a pound. These hemp composites replace carbon and glass fibers, which have environmental and weight problems, and run from 60 cents to 5 dollars a pound.**

American Hemp Today

- **The reason why virtually all European car makers are switching to hemp based door panels, columns, seat backs, boot linings, floor consoles, instrument panels, and other external components is because the organic hemp based products are lighter, safer in accidents, recyclable, and more durable.**

American Hemp Today

- Agri-Food Canada and Statistics Canada data show that the quantity of hemp seed exports increased 300% from 2006 to 2007.
- Hemp oil exports had an 85% increase.
- Hemp fiber exports showed a 65% increase.

American Hemp Today

- According to the Canadian Hemp Trade Alliance farmers were expected to grow 10,000 to 15,000 acres in 2008.

American Hemp Today

- Two North Dakota Farmers backed by a state law permitting industrial hemp production and a friendly state Department of Agriculture, Wayne Hauge and David Monson, the latter also a Republican state legislator, applied for licenses from the DEA to grow hemp. When the DEA failed to act on their applications, they sued in federal court.
- At this time they are waiting on a decision from the 8th District Federal Court of Appeals. If successful, the decision would allow States rights to regulate the crop.

American Hemp Today

- On the Federal level, HR 1866, the Industrial Hemp Farming Act of 2009 was introduced on April 5th 2009 and if enacted, the bill would permit industrial hemp production based on state law, without preemption by the federal government under the Controlled Substances Act.

HEMP States

- To date 15 States have passed pro Hemp Legislation.
- **Arkansas**
- **California**

HEMP States

- **Hawaii**
- **Illinois**
- **Kentucky ***
- **Maine**

HEMP States

- **Maryland**
- **Minnesota**
- **Montana**
- **New Mexico**

HEMP States

- **North Carolina**
- **North Dakota ***
- **Vermont**
- **Virginia**
- **West Virginia**

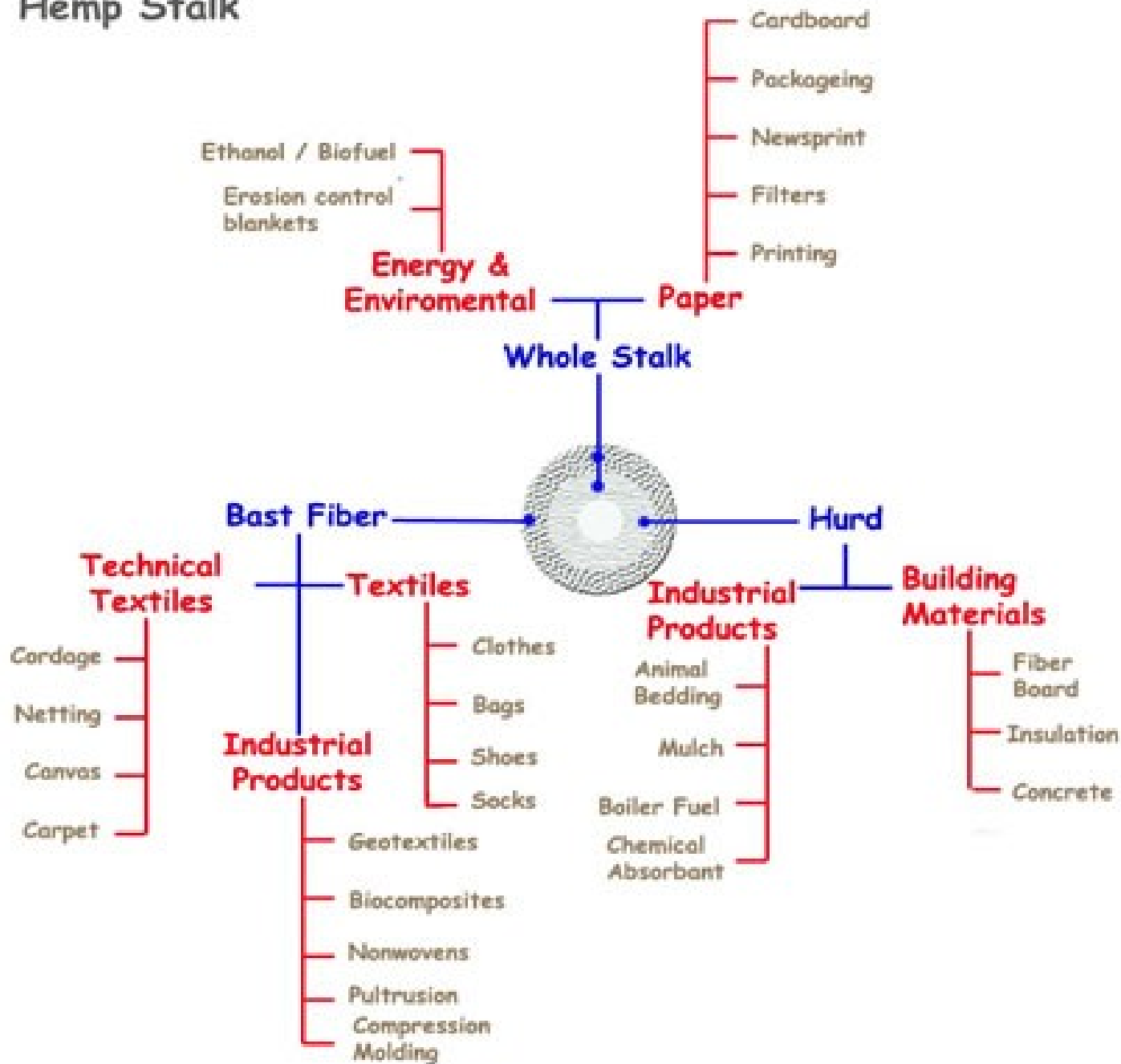
A close-up photograph of a person's hand holding a black and silver electric shaver. The shaver is positioned against a blue and red striped background, possibly a piece of clothing. The hand is wearing a black watch with a silver metal link bracelet. The shaver has a circular silver head and a black handle. The text "What can be made with Hemp?" is overlaid in yellow on the image.

What can be made with
Hemp?

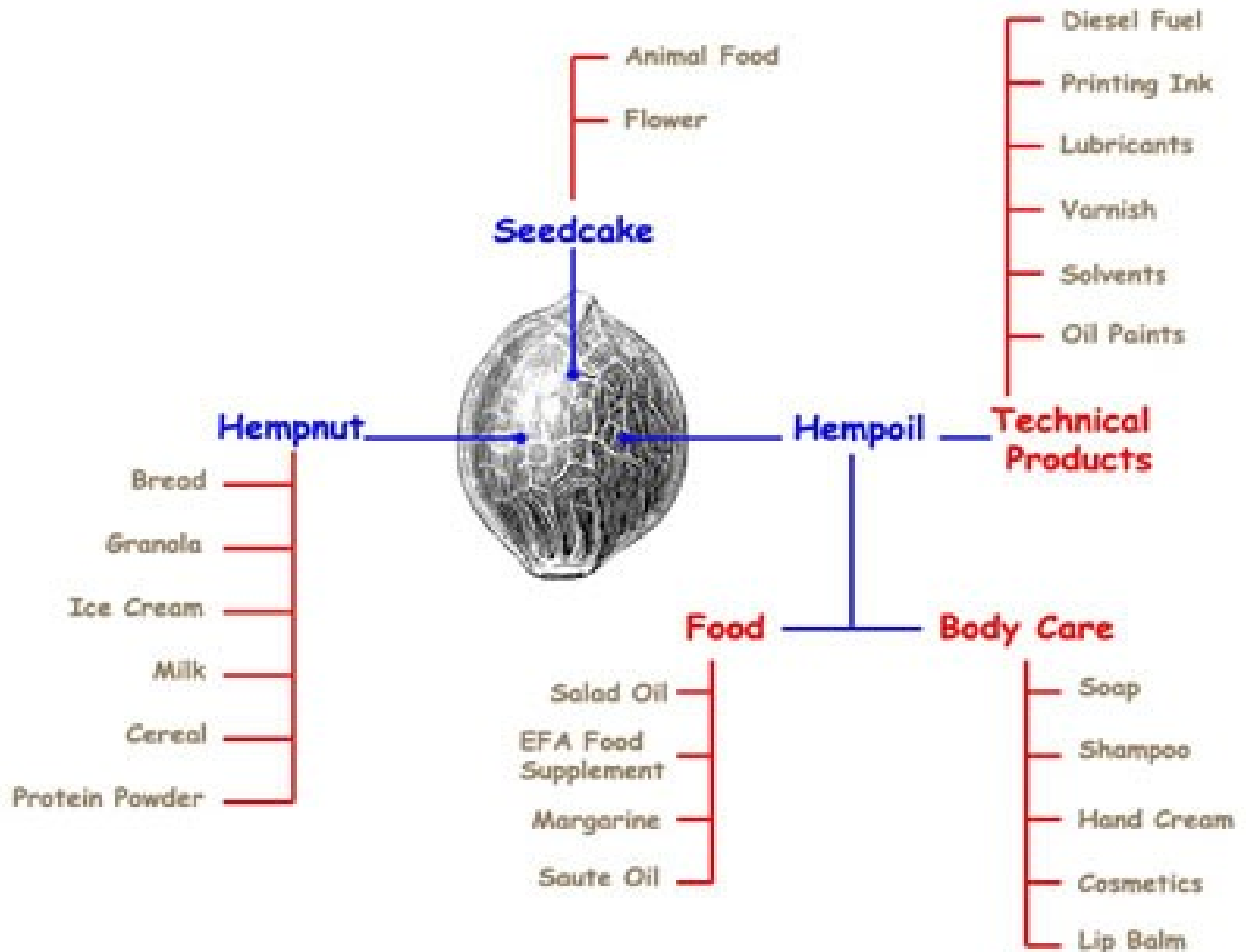
What can be made with Hemp?

- **An estimated 25,000 to 50,000 products can be made with hemp.**

Hemp Stalk



Hemp Seed



How you can help

- **Talk to family and friends (educate others).**
- **Write letters to federal and state legislators.**
- **Join MIHEMP, there is strength in numbers.**

Resources for Information

- **Read The Emperor Wears No Clothes by Jack Herer**
- **Watch Standing Silent Nation**
- **www.votehemp.com**
- **www.mi-hemp.org**