

HEMP BASICS 101

Hemp Overview

Hemp is a distinct variety of the plant species *Cannabis sativa* L. It is a tall, slender fibrous plant similar to flax or kenaf. Farmers worldwide have harvested the crop for the past 12,000 years for fiber and food, and Popular Mechanics once boasted that over 25,000 environmentally friendly products could be derived from hemp.

Unlike marijuana, hemp contains only minute (less than 1%) amounts of tetrahydrocannabinol (THC), the primary psychoactive ingredient in marijuana. In addition, hemp possesses a high percentage of the compound cannabidiol (CBD), which has been shown to block the effects of THC. For these reasons, many botanists have dubbed industrial hemp "anti-marijuana."

More than 30 industrialized nations commercially grow hemp, including England and Canada. The European Union subsidizes farmers to grow the crop, which is legally recognized as a commercial crop by the United Nations Single Convention on Narcotic Drugs, the North American Free Trade Agreement (NAFTA) and the General Agreement on Tariffs and Trade (GATT). Nevertheless, US law forbids farmers from growing hemp without a federal license, and has discouraged all commercial hemp production since the 1950s. Hemp groups are working to allow American farmers to once again have legal access to this agricultural commodity.

Introduction from Industrial Hemp (from article written by John Roulac in 1997)

Imagine a crop more versatile than the soybean, the cotton plant, and the Douglas fir tree put together...one whose products are interchangeable with those from timber or petroleum...one that grows like Jack's beanstalk with minimal tending. There is such a crop: industrial hemp.

Hemp was once indispensable to world commerce. New World colonists and traders were able to cross the Atlantic Ocean because the hemp ropes and sails of their ships, unlike other natural fibers, resisted salt damage. Not so long ago, it was inconceivable for an economy to function without hemp. The 1913 Yearbook of the U.S. Department of Agriculture called hemp "the oldest cultivated fiber plant," mentioned how the crop improves the land, and said that it yields "one of the strongest and most durable fibers of commerce."

Then, in 1937, fiber hemp fell victim to the anti-drug sentiment of the times when the U.S. Congress passed the Marihuana Tax Act. The intent of this law was to prohibit the use of marijuana, but it created so much red tape that the production of industrial hemp became nearly impossible. Now hemp's natural fiber and seed oil were no longer available to compete with wood pulp, cotton, and such newly patented petroleum products as inks, paints, plastics, solvents, sealants, and synthetic fabrics.

The fact is that hemp grown for fiber, whether by George Washington in 1790, by Kentucky growers in 1935, or by English farmers in 1994, has never contained psychoactive qualities. If one were to roll leaves from an industrial hemp plant into a cigarette and smoke them, no euphoric effects would be experienced even if a thousand hemp cigarettes were smoked. The potentially psychoactive chemical in hemp is delta-9 tetrahydrocannabinol (THC). A plant

cultivated for marijuana has a 3 to 15 percent THC content or more, while industrial hemp generally contains one percent or less.

How do governments continue to justify the prohibition of hemp farming? Their primary justification is that the licensing of industrial-hemp farms will lead to an increased supply of illegal marijuana. Yet the vast fields of fiber hemp grown from France to Russia have never been—could never be—used for drug trafficking. (Incidentally, stands of fiber hemp are planted very closely together, and look completely different from cultivated marijuana.)

Hemp's versatility was explained in a 1938 Popular Mechanics magazine article, "New Billion-Dollar Crop": "Hemp is the standard fiber of the world...and can be used to produce more than 25,000 products." The list running throughout this book provides a sampling of hemp's cornucopia of products. Chapter 3 will highlight major hemp-product categories, from construction materials and cosmetics to paper, textiles, and even plastics.

Industrial hemp is a valuable, low-cost biological resource that can be grown in most climates. It is a hardy plant whose rapid growth and high resistance to diseases largely eliminate the need for costly herbicides or pesticides. Hemp can play an important role in rural economic development: new jobs and businesses can be created to produce hemp products, for both local consumption and marketing to other regions.

In his October 30, 1988, editorial in California's most conservative newspaper, The Orange County Register, senior columnist Alan Bock stated that "Since 1937, about half the forests in the world have been cut down to make paper. If hemp had not been outlawed, most would still be standing, oxygenating the planet."

Major hemp-growing countries today include China, England, France, Holland, Hungary, and Russia. Nations that ban hemp production are missing an important economic opportunity. Australia, Canada, and Germany, although they still prohibit hemp farming, now allow selected farms to plant hemp for research purposes.

In the U.S., a promising crack in the "hemp wall" appeared in November of 1994 when the Governor of Kentucky, Brereton C. Jones, announced the formation of a new task force to evaluate the feasibility of, in the Governor's words, "...hemp and related fiber crops production as a supplement crop to tobacco."

As this book goes to print, State Senator Lloyd Casey of Colorado is introducing the Hemp Production Act of 1995 for consideration by the Colorado State legislature.

Hemp will be like the Internet, which two years ago wasn't even on the corporate or government radar screen. Two years from now, knowledge of hemp and its products will have spread to homes and businesses throughout the world.