

The Ideal Biotech Plant: Let's Revisit Hemp

Thomas Jefferson Hoban IV

Tension continues to mount over genetically modified crops. The biotechnology industry is banking on its ability to utilize plants for an assortment of industrial and pharmaceutical products. However, the food industry and consumer groups have serious reservations about the industry's plans to genetically modify common food crops, such as corn, to manufacture pharmaceuticals and industrial chemicals.

What we need for this emerging and important industry is a plant that has all the technical advantages of corn; but is not widely used in food production. We need a plant that can produce large quantities of seed while growing like a weed in a wide range of conditions.

It would be great if there was a plant that we already knew how to breed and manage for maximum production. Scientists also need a plant that is easy to genetically modify. Consumer groups would be thrilled if that plant could also be raised in an ecologically sustainable manner.

The good news is that this plant already exists: hemp! The bad news is that a small group of US ideologues currently holds this ancient crop plant hostage.

People have used hemp around the world for over 3,000 years. All parts of the plant provide useful materials. America's founding fathers recognized this plant, along with tobacco and cotton, as the cornerstone of our young economy. In fact, Thomas Jefferson himself not only raised and praised the crop but was also dedicated to scientific research on "hemp-culture."

Unfortunately, US policy took a wrong turn in the 1930s. Prohibitionists lost their battle with alcohol and needed a new target. Marijuana was an easy choice because it was not widely used in the US (except among Mexican immigrants, jazz musicians, and other "undesirables.") Over the subsequent decades, right-wing fundamentalists have

used misleading propaganda and discriminatory law enforcement to vilify hemp, along with smoking grade marijuana.

At a time when we desperately need new engines of economic growth, this well-known and beneficial plant could “fire up” the American economy. Those companies and countries that invest in hemp biotech will be richly rewarded as the markets for hemp-based products have enormous growth potential. Unfortunately, the current prohibition effectively restricts ANY research into hemp production for industrial purposes -- not to mention any scientific evaluation of the potential benefits and uses of medical marijuana.

Recent surveys show over three-quarters of Americans support the medical use of marijuana, while just as many agree that marijuana users should not be sent to jail. Clearly there will be popular support for the industrial use of hemp. In fact, the European community and Canada are rapidly moving to legalization of marijuana, and US medical marijuana advocates are making strong headway at the state level.

Marijuana (hemp’s consciousness-bending cousin) is already the largest cash crop in many parts of the US and the world. Unfortunately, all that money is now off-the-books, meaning the public is denied a huge pot of tax dollars. We should simply regulate these plants the same way we control other more harmful -- but legal – plant based products (i.e., alcohol, cigarettes and some questionable “nutritional supplements.”)

Hemp has the potential to serve as a cost-effective, safe, and versatile solution to the impasse facing the biotechnology enterprise. All parts of the plant (seeds, stalks, leaves) can be used to produce a wide range of medicines, health supplements, and industrial materials. Congress should immediately take steps to legalize and promote this special plant. The US Department of Agriculture should take over all regulation and eliminate the ineffective and unjust programs of the Drug Enforcement Administration.

Hemp deserves an expanded, R&D program through the USDA and our Land Grant Universities. Once we map the hemp genome we will be able to fully unlock the power within this versatile plant. Then companies will be able to deliver innovative value-

added products to the market place that will lead to improved health care, cleaner industrial processes, and a range of other benefits.

The same consumer groups who now oppose genetically modified food crops should applaud the use of such a sustainable and well-understood crop. In fact, many “green groups” in Europe also support international legalization of hemp. The biotech industry could get behind efforts of NORML and others who seek a more rational approach to one of humanity’s oldest and favorite crops.

For almost 70 years, conservative ideologues have waged a costly and losing war against marijuana in the US. Like the current ban on stem cell research, hemp is a victim of moral objections by a powerful minority. The Dutch, Danes and Canadians are leading the development of new cannabis hybrids and positioning themselves to reap the hemp economic harvest.

This issue should be addressed in the upcoming campaigns. Those politicians who get behind the legalization of hemp will harvest a bumper crop of popular support. Our founding fathers would applaud a willingness to change course and take another look at one of nature’s most valuable plants.

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Dr. Hoban is a professor of sociology and anthropology at North Carolina State University. For the past 15 years he has studied the social implications and public perceptions of biotechnology. His forthcoming book "Swimming on the Edge" examines the legacy of the sixties counterculture.