



Ethnobotanical Leaflets



Economical Possibilities For *Cannabis*

By Marcel Dudley

There are many economical possibilities for *Cannabis*, the plant is highly resourceful in many ways and could be the agriculture wonder child (plant) for the next century for those that haven't taken advantage of it's resources. This paper will do an over view of some of the important resources that can be produced from of *Cannabis*.

Cannabis sativa is a high, vertical annul herb that is able to grow to heights ranging from 3.3 to 16.4 ft. The *Cannabis* plants are wind-pollinated, with male and female flowers developing on separate plants. Male flowers are yellow in color and up to 1/5 inches long with no petals. A leafy covering with thick, glandular hairs surrounds the female flowers; the hairs are present on the leaves and stem. (The uppermost leaves mostly have only one leaflet; the rest are palm-like with about 3-11 tooth leaflets per leaf. The variety has a great deal to do with the form of the plant, some varieties are grown for fiber (hemp) which has fewer branches than those are grown for other purposes. The seeds are able to germinate at temperatures above 10 C, during the growing season it needs temperatures of about 15 o-25 o C and a nice amount of rainfall. [\(1\)](#)

Cannabis seems to have originated somewhere in Central Asia and was cultivated for its fiber. The herb has been grown in China for at least 4,500 years, it is thought to have reached Europe by 1500 BC. By 500 AD, it had become a significant fiber crop for this part of the world.(The narcotic properties were known in India by 100 BC, this aspect of the plant was not recorded in Europe until later. The drug was not introduced to Western medicine until 1840. The production of the fiber requires the seed to be sown thickly, with harvesting happening between four to five months after sowing. The male plants produce the best fiber and are usually harvested first, the female plants are allowed to stand in order for the first seeds to be collected. [\(2\)](#)

The production of the drug requires the plant to be sown thinly. The procedures in India require that the plants are planted in rows and thinned when 8 inches high. The male plants are pulled out as soon as they can be recognized , while the unfertilized female plants are allowed to continue growing until they are about five month older. [\(2\)](#)

There are three main purposes for the cultivation of the *Cannabis* plants: fiber from the stems, oil from the seeds, and a narcotic substance from the leaves and flowers. The varieties used for fiber are known as hemp and are valued for its long, durable fibers. They are the main manufacture of items such as canvas, twines and rope. There is about 35% oil yield from the seeds, which is used in paints and varnishes, in the manufacture of soaps and poultry feed for birds. (2)

Three different classes of narcotic are produced: *Bhang*, which is the dried leaves and flowering shoots of male and female plants. The second is *Ganja*, which is the dried and compressed, unfertilized female flowers and the third is *Charas*, which is the crude resin collected from the tops of the plants by rubbing or beating. (2) Hot tropical climates promote the production of the narcotic resin, which is highly concentrated within the leaves and stems.

The economic potentials for *Cannabis* are vast; for instance, *Cannabis* and clay have been used as construction material for a long time. In France, a 100% natural house can be built for a reasonable price. The reason for this is the main construction is not out of wood. The roof is made of brick; the walls are a mixture of *Cannabis* fiber and mineral tissues. A material that is superior to concrete in weight, durability, solidity, and price is also used. The material is called Isochanvre, which is a mixture of minced *Cannabis* fiber, iron oxide and other ingredients. The material can be used in combination with lime and natural cement. (2)

The combination of economical facts build for a better house. This would be based on facts like the walls breathing, thermal isolation is better, and the house is quicker and cheaper to build. Most importantly the house can be recycled and no harm would have to come to nature.

The plant offers other economic possibilities from the seeds and oils. For example, the seeds are edible for birds and humans. The seeds are a rich source of essential proteins, fats and are an important food for cardiovascular patients, and vegetarians. There are even *Cannabis* seedbanks that advertise highly fertile seeds that are unsterilized, unprocessed and unadulterated in any way. Of course the seeds are sent with discretion and confidentiality. The oils are also useful for technical purposes and graphic industry. The combination of *Cannabis* oil and leaven can even produce a very strong washing powder. (3)

The plant is also a great material for acquiring quality cellulose for paper and cardboard. Dry *Cannabis* has 50% cellulose, and contains four times less hemicellulose and ten times less lignin as wood. On an area unit *Cannabis* can produce four times more cellulose than a forest. This would mean that the *Cannabis* industry is a closer friend to nature than the wood industry. Another purpose for the plant would involve the herb fiber, which is very strong; an example of the quality of the fiber would be utilization of it as a thermal-isolation material on the space shuttles and car brakes. The plant has even been used to produce a *Cannabis* line of blue jeans, which is four times tougher than the ordinary blue jeans. (3) The jeans even have a greater thermal capacity and can be washed without washing powder. The fiber is even used for wallpaper, isolation materials, filters, paper, cigarettes, and documents.

The medical benefits of *Cannabis* outweigh any of the agricultural or general purposes looked at, the

plant offers relief for many suffering people. The therapeutic properties of *Cannabis* have been known, documented and practiced by numerous cultures for over 5,000 years. The medicinal benefits of the herb have not been fully taken advantage of because of federal authorities. In Canada and the United States indefensible propaganda of classifying the herb as a highly dangerous narcotic without any medicinal value since 1937. (4)

Despite the illegality of *Cannabis* for medicinal purposes, a great deal of evidence has been known for many years. The plant is known to aid people suffering from the following: cancer chemotherapy, epilepsy, multiple sclerosis, AIDS, paraplegia, quadriplegia, chronic pain, migraine, menstrual cramps, labor pains depression, and many other disorders. (4) One area where a great deal of research has been done is the area of glaucoma. Glaucoma is a condition where the channel through which the fluid flows gradually increases, causing increasing damage to the optic nerve and gradual deterioration of vision. This condition is the second largest cause of blindness, and affects at least 6.5% of the elderly. The standard treatment has unpleasant or dangerous side effects and has little effect on intraocular pressures in the end stage of the disorder. *Cannabis* relieves the intraocular pressure greatly and restores vision, with none of the serious side effects. The discovery that *Cannabis* lowers intraocular pressure was made accidentally during a police experiment. They were trying to discover if *Cannabis* caused pupil dilation in users, so that they could detect and arrest them more easily. The result of patients using *Cannabis* as part of the therapy has successfully allowed patients to retain their sight longer avoiding the gradual painful deterioration to blindness that is inevitable.

There is a light at the end of this tunnel, which would be that *Cannabis*-containing eyedrops could be developed in the future. Two other areas where the herb is being put to use are AIDS and cancer. The plant is not curing patients, but it is aiding patients by allowing them to keep weight, by stimulating appetite and preventing nausea. (4)

If society and the government would remove the blinders and myths about *Cannabis*, maybe more good than harm could come from the plant. The economical impact that the herb would have on the U.S. market would be well worth it. The plant is used illegally by many people anyway. They could even follow the example of the European countries, which are making the most of it.

References:

- (1) <http://www.thc.nl/>
- (2) <http://area51.upsu.plym.ac.uk/infoserv/drugs/graphical/grphdope.html>
- (3) <http://www.hempnation.com/libaray/recreational/whopub-abstract.html>
- (4) <http://www.foobar.co.uk/users/ukcia/medical/>

[EBL HOME PAGE](#)

Southern Illinois University Carbondale / Ethnobotanical Leaflets /

URL: <http://www.siu.edu/~ebl/>

Last updated: 15-May-98 / du