



Northern Rivers Hemp Association

Fact Sheet No 1 Industrial Hemp History & Uses

Hemp originated in Central Asia and its cultivation for fibre has been recorded in China as early as 2800BC. Japan has a history of using hemp for food and rope for thousands of years and producing hemp paper in the 7th Century. The Japanese have a long tradition of using hemp in ceremonial garments of Shinto priests and Imperial families. Cultivation spread through Mediterranean Europe during the Middle Ages and the remainder of the world as explorers, colonizers and sea traders relied on hemp for rope and sails. Most countries in the world have a history of hemp growing up until the 1930- 50's.

It is well documented that when the American company DuPont began successfully manufacturing plastic and nylon from petrochemicals and other industries, they exerted pressure that resulted in the prohibition of industrial hemp for countries trading with America. By the end of the 1960's many countries had legislated hemp and cannabis (psychoactive high THC) together as prohibited substances. This has been responsible for much of the confusion surrounding industrial hemp today.

The Scandinavian, Russian, French, Italian, Portuguese and 'Eastern Block' countries such as Hungary and Romania were not subject to America's leadership and maintained hemp cultivation, but on a reduced scale. Many of the cultivars used in recent times by Australian researchers have come from these countries.

In the past ten years, most countries have legislated to allow the cultivation and use of Industrial Hemp again, under licence.

Hemp in Australia

Some historians maintain that Australia was also established as a hemp colony to supply fibre to an increasingly fibre-hungry world. Sir Joseph Banks supplied hemp seed to the First Fleet in Australia. Free seed was given to settlers by early Governors to encourage cultivation. Throughout the early nineteenth century, Australia was an important producer for the increasing world demand for hemp. Hemp was grown in Australia up until the 1937 when the Australia government agreed to follow the US by prohibiting the cultivation of hemp. There is little history available on the Australian hemp industry, although it is known to have been grown around the Northern Rivers and records about resilient Hunter River varieties exist.

Throughout Australia, for the past 10-15 years researchers have revived breeding stock and farming and research in value adding, has been substantial. In November 2008, NSW was one of the last states in Australia to pass legislation to allow for the cultivation and use of hemp under licence. Australia currently prohibits hemp seed use in food, although an application to Food Standards Australia New Zealand (FSANZ) is being considered in October 2010.

What is Industrial Hemp

Industrial hemp – botanical name *Cannabis sativa*, is an aromatic, erect annual herbaceous plant. The Chinese landrace varieties are typically tall, cane like plants raised for the fibre. These plants can grow from 2m-5m or more in 3-4 months. Many countries also have a long history of use hemp seed for food. These varieties are usually shorter and bushy. Due to the high protein and exceptional Omega 3, 6 & 9 qualities, hemp seeds are making a market resurgence as a food source and in health supplements.

There are three usable parts of the hemp plant.

The outer fibre known as the Bast fibre, is the green bark of the hemp plant. The fibre is easily removed at harvest by hand, or through a machine called a de-corticator, or the stalks can be retted (aged in paddock or pond) to remove the fibre.

The inner fibre or woody core known as the Hurd of the plant is a lightweight material. Some varieties produce a greater Hurd component than others.

The seeds, dependent on the cultivar, can be eaten whole or crushed to produce foods (where seed production for consumption by humans and livestock is legal) and industrial oils.

Uses

There are innumerable uses for hemp. Before industries based on fossil fuels, it was a staple crop for food, fuel and fibre throughout the world.

Some current uses of fibre are industrial textiles, automobile panels, clothing, rope, canvas, cordage, plastics and all grades of paper including archival paper, mulch and weed matting. The cellulose can be readily converted to ethanol. There is also increasing use in composite fibreboards, masonry, insulation and paneling in buildings and plumbing products and other building materials, replacing heavier toxic fibres like fibreglass or non-renewable resources. The absorbent nature of the Hurd makes exceptionally good animal bedding products and it has been shown to be useful in mopping up oil spills.

Chemicals – Hempseed oil can be manufactured into numerous products, including biodiesel, artist and industrial paints and varnishes.

Environmental – Hemp has been described as a carbon sink. It takes up vast amounts of carbon during its rapid growth and this can be locked up in durable products. Hemp's bio-remedial qualities enable it to improve soil structure and mop up toxic wastes including heavy metals and excess nutrient. Planted densely it achieves weed suppression and doesn't require pesticides or fungicides. It is also exceptionally good in the farm nutrient cycle as a rotation crop.

Food and Health Industry - The oil and nutty seed centre can be used as a source of food for humans, animals and birds. Hemp seed has a variety of uses in health food supplements, breads, cakes, health food bars, milk and ice-cream, edible oil and soaps and cosmetics.

FAQ's

What is the difference between industrial hemp and cannabis (marijuana)?

Industrial hemp is a low THC cultivar. In NSW, farmers are required to plant seed that has a THC level of 0.5% or less and monitor THC levels in crops. Cannabis is a high THC psychoactive plant with THC levels of 5-20%.

Can anyone grow hemp?

Every state has its own hemp legislation to comply with. In NSW, hemp production is licenced by NSW Department of Agriculture (DPI). To comply with the application you must first undergo a police check. Once granted, the licence is specific about where seed is sourced, it's certification, who is involved in cultivation, where and how crops are grown, harvested, stored and used.

Is it possible to grow hemp for food?

No, it is currently prohibited for human consumption in Australia.

Where can I get information about applying for a Hemp Licence and growing Hemp?

Contact NSW Industry & Investment website, licence applications and growing information is available. For further growing and industry information contact www.northernrivershemp.org