

Medicago sativa

[Synonyms : *Medicago afghanica*, *Medicago agropyretorum*, *Medicago asiatica* subsp. *sinensis*, *Medicago beipinensis*, *Medicago falcata*, *Medicago grandiflora*, *Medicago kopetdagi*, *Medicago mesopotamica*, *Medicago orientalis*, *Medicago polia*, *Medicago praesativa*, *Medicago praesativa* subsp. *spontanea*, *Medicago sativa* subsp. *grandiflora*, *Medicago sogdiana*, *Medicago tibetana*, *Medicago varia*]

LUCERNE is a perennial. Native from south-western Asia to the Mediterranean it has pea-like, violet-blue (occasionally white) flowers.

It is also known as Alfalfa (English, Finnish, German, Spanish, Swedish), *Bersim hegazi* (Arabic), *Blålusern* (Swedish), Buffalo grass, Buffalo herb, Brazilian clover, Burgundy clover, Burgundy hay, Burgundy trefoil, Chilean clover, Cultivated lucern, *Erba medica* (Italian), Great trefoil, *Gullusern* (Swedish), Holy hay, *Jatt* (Arabic), *Kaba yonca* (Turkish), King of fodders, *Lucerna siata* (Slovak), Lucifer, *Lupinella* (Italian), *Lusern* (Swedish), *Luserni* (Finnish), *Luzerna* (Italian, Portuguese), *Luzerne* (Dutch, English, French, German), *Luzerne cultivée* (French), *Maglys Rhuddlas* (Welsh), *Mailanen* (Finnish), Mail clover, *Medica* (Italian), Medick, *Medikago kultiva* (Esperanto), *Mielga* (Spanish), *Mu-su* (Chinese), Purple medic, Purple medick, Purple medicle, *Saat-Luzerne* (German), Sainfoin, Sanfoin, *Schneckenklee* (German), *Sichelklee* (German), Sickle medick, *Sinimailanen* (Finnish), Snail clover, Snail flower, Spanish clover, Spanish medick, Spanish trefoil, *Svensk höfrö* (Swedish), *Tolice setá* (Czech), *Tolice vojtěška* (Czech), *Trèfle de Bourgogne* (French), and *Vojtěška* (Czech); and in flower language is said to be a symbol of life.

Many varieties exist in different forms – and is a major source of chlorophyll and vitamin K₁. Any nectar is food for bees and butterflies.

Warning – the whole plant is potentially poisonous. Human beings suffering from systemic lupus could experience a relapse if lucerne tablets or capsules are ingested. Animals feeding on this species can develop photosensitivity and horses particularly can become jaundiced.

Sativa means ‘cultivated’.

Lucerne is believed to have been cultivated in China since the early part of the Han Dynasty when traditionally General Chang Chien (died 114 BC) a Chinese explorer is said to have introduced it from abroad. Archaeologists have found seeds in Iran that date back at least 6,000 years. The plant was imported into ancient Greece from the East and is mentioned by some of the classical Roman writers. Britain first became aware of it only in 1757.

It has been cultivated as long as flax (*Linum*) and has managed to spawn as many different varieties. Today when lucerne is being cultivated commercially the seed is usually inoculated to ensure growth. It is pollinated by the honey-bee and some authorities claim that until the honey-bee was introduced to North America (it is not native north of Mexico) attempts to introduce lucerne there especially in the north-west seemed to be doomed to failure. Others suggest that despite its earlier introduction it only became an important crop from 1850 when a gold miner brought seeds to California from Chile and that other states were only able to begin cultivation when new varieties were found in the

20th Century. Whichever is correct it is now an important forage crop in the United States.

After its introduction to North America lucerne came to be familiar to some North American Indian tribes. While the Okanagan-Colville Indians put it in their cooking pits as a sweet flavouring, the Shuswap fed the grass to their horses and some of the Navajo Indians cultivated it for fodder for their livestock (especially in Winter for which they harvested and stored it). Costanoan Indians applied a hot leaf poultice for earache.

The Arabs have fed their horses on lucerne for centuries (the high protein content develops great strength), and it has been found that the milk yield increases if it is one of the foodstuffs fed to cows. Today it is widely cultivated as a high protein fodder.

Lucerne has also been used in making paper and has been experimented with unsuccessfully as an ingredient for cigarettes.

Although the plant does not have many traditional uses medicinally, it is believed by some authorities that it could be a future foodstuff for humans as well as animals – of even greater importance than identified to date. As yet its taste in the West appears not to have endeared itself either in cigarettes or as food for human consumption (apart from the sprouts familiar to many as a salad vegetable) although it can be found in some health food shops – and was resorted to for soup in Spain during the 1936-1939 Civil War there. On the other hand in the East for instance in China the young leaves are eaten as a vegetable.

Medicinally, the plant has long been used to help convalescent patients to gain weight. It was found relatively recently that the amount of vitamin C in the fresh leaves is 4 times that in the same weight of citrus juice (*Citrus*). Despite this any recent claims that lucerne could be instrumental in the prevention or treatment of arthritis, intestinal disorders, kidney disease or scurvy cannot be supported by scientific research carried out so far.