

MEDICINAL PLANTS

Lecture 4 *Cannabis sativa* L.



B.Sc. 3rd (6th Sem)

**DR. NIDHAN SINGH
I.B. (PG) COLLEGE, PANIPAT**

MEDICINAL PLANTS-4

Cannabis sativa L.

MARIJUANA Vern. Bhang, Charas

Belongs to Cannabinaceae family, a native of Asia, and is now cosmopolitan, being cultivated and also naturalised around the world over thousands of years. The popular and highly narcotic "Ganja", "Hashish", "Bhaang" and "Charas" are illegally traded in drug market and are seriously abused. Besides, it is a popular as a source of hemp fibre. Being used from centuries as a source of industrial fiber, seed oil, food, recreation, religious and spiritual moods and medicine.

The illegal trading (smuggling) in various forms is a serious issue and causes many financial and legal disasters.

Cannabis sativa

Morphological Features

Annual, coarse herb usually under 1 m, may grow even higher, branches short, leaves palmately 3-7-segmented, segments narrow, toothed. Plant dioecious, male and female flowers borne on separate plants, female flowers greenish, usually borne in axils near the stem tips, fewer in number, male flowers yellowish, larger, with pendulous anthers, borne in axillary clusters. The fruit is an achene.



Cannabis sativa

CULTIVATION

It cannot be grown commercially in India, except Uttarakhand which has recently permitted the farmers of most parts of the state to grow hemp. The permit is only for industrial purposes and it cannot be sold in open market or cannot be used as a drug. Excise department issues license for growing this. However in many parts of world it is permitted to grow. Much of the abuse in India is done from the wild and luxuriant growth of this plant after monsoons.

It is raised from seeds and the most useful part from narcotics or medicinal point of view are tender shoots or apical parts of female flowers. As it grows abundantly in wild, the abusers easily get access to it. The tender female flowers, as well shoot tips are crushed to emit the narcotic chemicals.

Cannabis sativa

Medicinal Properties

The dried leaves and floral buds are known as marijuana, which is consumed mostly by smoking or sometimes by adding into some preparations. The resinous secretions from female plant are known as "hashish", which can also be smoked or eaten.

The most active chemical compound with profound psychoactive effects is THC (delta-9 tetrahydrocannabinol), which causes the sense of "highness" euphoria, happiness, relaxation. The perceptions of time, smell, taste, hearing and space may be lost.

The pulse rate, pupil diameter and appetite is increased.

Coordination and concentration are impaired on consumption, thus enhancing the risk while driving or handling any machinery.

Regular use is habit forming and invokes panic, loss of self-consciousness.

Cannabis sativa

Uses

The fiber of the cannabis plant is cultivated as industrial hemp with uses in textile manufacturing.

Seeds can be used as bird food, also yield hempseed oil, can be used for cooking, lightening or paints.

Various kinds of tinctures, drinks and ointments have also been prepared since very old times.

The plant is having hallucinogenic, hypnotic, sedative, analgesic, and anti-inflammatory properties due to the high concentration of narcotic chemicals.

THANKS- ANY QUERIES?