

Expert Herbal Reality Resource

Cannabis

Names

Botanical Name *Cannabis Sativa*

Family: Cannabaceae

Common names: Marijuana, pot, green, hash, grass, green, mary jane, weed

Description

Cannabis is an annual, flowering herb with fine, serrated and segmented leaves that are palmately compound or digitate. Both the male and female parts of the plants flower, and the female part produces seeds.



Constituents

Cannabis like all plants has a plethora of compounds that work in synergy together and compounds range from cannabinoids to volatile oils, terpenes and alkaloids. This phenomenon has helped many scientists shift from the perspective of having one “saviour” compound to acknowledging that complex multi-molecule extracts very often work with better efficacy and safety. Research has also shown us the individual uses of each molecule which we have summarised below. Please note that some of these studies were conducted on animals and individual compounds may not work the same in humans. Nonetheless cannabis has been used clinically for all of these different conditions.

- CBD (cannabidiol)- anxiety, inflammation, seizures (8)
- THC (Δ^9 -tetrahydrocannabinol)- parkinson’s, psychoactive, pain, appetite (9)
- CBG (cannabigerol)- huntingtons, parkinsons, multiple sclerosis, IBS, antibacterial (10)
- Linalool- pain, anti-inflammatory (11)
- Myrcene- pain, anti-inflammatory, antioxidant (12)
- Pinene- cancer (13), anxiety (14)
- B-Caryophyllene- alzheimers, inflammation, wound healing (16), inflammation (15)

Traditional use

Cannabis has been used across cultures for thousands of years. In Ayurveda the plant is associated with Shiva it is written in the fourth Veda that this plant relieves anxiety and has been used ceremoniously. It was also used for insomnia and headaches amongst other ailments.

In Chinese medicine it is known as one of the 50 fundamental herbs and it is used for over 100 ailments, including gout and rheumatism. It was also used in ancient Greece, and has been cited in texts by Galen and Dioscorides.

What practitioners say

There is some controversy amongst practitioners about the use of medical cannabis, and given its legal history and potential side effects this debate is to be expected. However, there are many doctors, specialists and scientists who are ardently for the use of this plant especially for conditions where quality of life can be significantly improved or where there are limited pharmaceutical treatments.

Now there are medical cannabis clinics in the UK, particularly for issues such as pain and insomnia. Globally there has been a huge shift in the legislation (as well as the cultural perceptions) of this plant and it is more freely available for all sorts of conditions, as well as recreational use.



Evidence

Sleep: Research was conducted on 147 subjects from 2 cannabis clinics in Southern California. 116 of these patients reported difficulty sleeping, and 31 reported no issues with sleep. Sleep latency (how long it takes to fall asleep) was recorded, as well as sleep quality and dreams. Subjects fell asleep significantly faster, and 79% reported increased sleep quality (2).

Epilepsy: A review was conducted of 4 trials, focusing on the use of CBD (one of the main active compounds in cannabis) for Lennox–Gastaut syndrome (LGS) and Dravet syndrome (DS). Seizure frequency decreased by at least 50% for 37.2% of patients (3). There are various potential mechanisms of action for CBD and epilepsy, including blocking the breaking down of anandamide, targeting abnormal sodium channels and activation of transient receptor potential of vanilloid type-1 (TRPV1) (4).

Appetite: Two trials showed that oral THC found in cannabis can stimulate the appetite and may slow down weight loss in people with advanced cancer. It is thought that the endogenous cannabinoid system regulates feeding behaviour, for example it has been shown that anandamide (an endocannabinoid) in mice leads to increased appetite. CB1 receptors which are part of the endocannabinoid system are present in the hypothalamus where food intake is controlled (5).

Pain: A trial was conducted with 176 who suffered with chronic pain, and were treatment resistant to opioids and other drugs. Factors such as pain severity, opioid consumption, and physical, social and emotional wellbeing were measured. Overall results show that there was a significant improvement in pain and functional outcomes and a significant reduction in opioid use (6).

Safety

There are various risks associated with cannabis, for example some people feel confused, anxious and paranoid when using cannabis.

There are also more serious potential implications as regular users have a higher risk of developing a psychotic illness such as schizophrenia. Risk is especially high with people who; have underlying mental health conditions such as psychosis and schizophrenia, start smoking at a young age, smoke regularly, use it for a long time, and smoke stronger types such as skunk. Additionally, if there is a family history of schizophrenia then risk is increased.

Dosage

Dosage varies massively depending on an individual, what is being treated and method of administration. For example, cannabis can be smoked, applied topically, eaten or used in a spray.

References

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