

Terpenes

Anytime you smell cannabis or virtually any fruit, herb, tree, flower, or plant, you smell its terpenoids. Terpenoids are the basis of most natural fragrances, flavorings and colorings, all spices and herbs derive their unique aromas and tastes from terpenoids.

Say you have a 18% THC Jack Herer variety and 18% THC Northern Lights variety. The Jack is pure “get up and go” and the Northern Lights could “couchlock” an elephant. With the same amount of THC, why the difference in effects?

The answer is found in each cannabis strains essential oils. Both cannabis varieties smell very different. This difference is due to the presence of different volatile essential oil called terpenoids. In cannabis, terpenoids are primarily produced in the flowers and leaves, especially in the trichomes.

Terpenoids interact with cannabinoids, like THC, and modify THC's effect. That's why different varieties of cannabis with similar smells often have similar effects. Piney smelling strains tend to be stimulating. Grape scented strains tend to be relaxing. There are over 200 different terpenoids in cannabis, but only a dozen or so Terpenoids are found in enough quantity to significantly modify a cannabis strain's effects.

Terpenoids are the biggest family of natural plant chemicals, with over 30,000 produced in nature. They're found in all organisms. Chlorophyll, beta-carotene, and vitamin E are examples of well known terpenoids found in plants.



A-PINENE

ALSO FOUND IN PINE NEEDLES

- Anti-inflammatory
- Bronchodilator
- Aids Memory
- Anti-bacterial



LINALOOL

ALSO FOUND IN LAVENDER

- Anesthetic
- Anti-convulsant
- Analgesic
- Anti-anxiety



BETA CARYOPHYLLENE

ALSO FOUND IN BLACK PEPPER

- Anti-inflammatory
- Analgesic
- Protects cells lining the digestive tract



MYRCENE

ALSO FOUND IN HOPS

- Contributes to sedative effects of strong indicas
- Sleep aid
- Muscle relaxant



LIMONENE

ALSO FOUND IN CITRUS

- Treats acid reflux
- Anti-anxiety
- Antidepressant

The Major Cannabinoids

THCV *tetrahydrocannabivarin*

Few human studies have been conducted with this analog of THC. THCV is unique as it acts as a CB1 antagonist at lower doses but, is a CB1 agonist at higher doses. Studies show that THCV produced weight loss, decreased body fat and increased energy expenditure in obese mice. These results may support the potential use of THCV in the treatment of metabolic syndrome.

THC *tetrahydrocannabinol*

THC interacts with both the CB1 and CB2 receptors, similar to the body's own endocannabinoid called anandamide. THC functions as a psychoactive/euphoriant, it is responsible most of cannabis' psychoactivity. In addition, THC is an analgesic, potent anti-inflammatory, muscle relaxant, antispasmodic, and bronchodilator.

CBN *cannabinol*

CBN is not produced by the cannabis plant, it is formed by exposing THC to oxygen. CBN is good for measuring how well a cannabis product has been stored at treated. THC acid on the plant converts to THC over time, or with the heat, then oxidizes into CBN. When combined with THC a potent sedative effect is created.

CBG *cannabigerol*

Cannabigerol is the parent of both THC and CBD. It is rare in the harvested plant, since most of it has been converted to the other cannabinoids. CBG is an anti-fungal and a powerful antibiotic against drug-resistant bacteria. CBG may play a role in mood control via Serotonin activity moderated through the CB1 receptor.

CBC *cannabichromene*

CBC is rare in cannabis, primarily because it's only produced by a few varieties and only very early in the flowering stage. CBC is effective as an anti-inflammatory, analgesic, and has antibiotic and antifungal properties. CBC shows promise as an effective anti-depressant based on animal studies.

CBD *cannabidiol*

CBD isn't psychoactive and it reduces side effects of THC including anxiety, rapid heartbeat, hunger, and sedation. CBD is more versatile than THC and has been shown to be a powerful analgesic, anti-nausea, anti-anxiety, anticonvulsant, and anti-inflammatory. It's neuroprotective anti-oxidant properties are greater than that of Vitamins C or E. CBD is also effective in treat Staph and MRSA infections.

If you'd like to learn more about the latest developments in the science of medical cannabis, visit Abatin Wellness Center of Sacramento. Call us at **(916) 822-5699** or visit us online at **abatinsacramento.com**.