Delta 3 Carene Terpene: Strain, Benefits, And More



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You take a hit of CBD, weed, or delta 8, and pretty soon, your mouth shrivels up. This is a phenomenon referred to as "cotton mouth."

You can thank delta-3-carene for that.

It's annoying, but this moisture-depleting terpene more than makes up for it with the benefits it offers.

This guide holds all you need to know about delta-3-carene — including what current research shows — so you can justify the cottonmouth (as if you needed an excuse).

What Is Delta-3-Carene?

Delta-3-carene is a bicyclic monoterpene found in cannabis, cyprus, rosemary, basil, and many other common herbs.

Its citrusy, woodsy scent makes it a good food flavoring and is often added to cosmetics. In fact, its ability to suck moisture up makes it popular for skincare and cosmetic products.

In cannabis plants, delta-3-carene is considered one of the minor terpenes — which means it rarely takes center stage and is most often found in concentrations below 0.1%.



What Does Delta-3-Carene Smell Like?

Delta-3-carene gives off a sweet, citrusy — almost lemony — scent with unmistakably woodsy, piney characteristics and cyprus undertones.

This terpene is used as more of a supportive role in terpene blends to add a subtle hint of woodiness without going overboard.

Plants That Contain Delta-3-Carene

You'll find this terpene in plenty of different species of plants, including cannabis, basil, cypress, juniper berries, rosemary, fir needles, and bell peppers and more.

Just like cannabis, none of these herbs contain very high levels of delta-3-carene — it's a supportive terpene through and through.

How Common Is Delta-3-Carene in Cannabis?

While it's uncommon to find delta-3-carene in high amounts, most strains contain at least a little.

Here are 7 strains with relatively high delta-3-carene concentrations:

- 1. AK-47
- 2. Arjan's Ultra Haze
- 3. Jack Herer
- 4. OG Kush
- 5. Super Lemon Haze
- 6. Super Silver Haze
- 7. Skunk No. 1



Delta-3-Carene Research & Effects

Besides the notorious cottonmouth, delta-3-carene can help you relax and sleep better. Even better, this terpene defies mainstream misconceptions by (potentially) boosting mental focus, alertness, and memory retention.

The truth is that there isn't much research available on this terpene. Most of the benefits of this compound come from anecdotal reports and early research involving animals and cell cultures.

With that said, there have been some promising results nonetheless.

1. Bone Health

One study looked at eighty-nine compounds and evaluated each on their anabolic activities. The research suggested that adding delta-3-carene to our diet could improve bone health because of its anabolic activity in bone metabolism.

Because of this, experts believe delta-3-carene may help improve bone strength.

2. Inflammation

Another study compared the effectiveness of *Bupleurum gibraltaricum* essential oils from different regions, all with similar compositions. The oil with the highest amount of delta-3-carene proved to be most effective against acute inflammation in this particular study.

3. Sleep

Perhaps the most exciting aspect of delta-3-carene is how it affects the GABAA-benzodiazepine (BZD) receptors.

Alpha-pinene causes an almost hypnotic effect through these same receptors, and because delta-3-carene has a similar influence, it might have similar results, though there are no studies on this so far. Current research does show that delta-3-carene to be effective at improving sleep because of how it interacts with the GABAA-BZD receptors.

The implications might go far deeper, though, in how this could impact medicine and brain health.

Learn More: Terpenes for Sleep: Does It Help?

4. Neuroprotective

Delta-3-carene shows strong antioxidant activity (*in vitro* research), opening up a world of potential applications for its use.

Antioxidants are under the radar as a possible therapy to reduce or prevent brain injury.

Reactive oxygen species (ROS) increase the chance of neuronal damage and functional deficits. There's often an increase of free radicals and an imbalance of pro-oxidant and antioxidant agents in neuro disorders.

The antioxidant system helps save neuronal cells from oxidative stress, so targeting this system could reduce the oxidative stress tied to neurodegenerative disorders.

Chemical Structure of Delta-3-Carene



Delta-3-carene is a clear, bicyclic monoterpene commonly found in cannabis, basil, rosemary, and Cyprus. As a monoterpene, delta-3-carene is structurally-related to other common terpenes, including borneol, camphene, citral, P-cymene, eucalyptol, fenchol, geraniol, geranylacetate, isopulegol, limonene, linalool, myrcene, ocimene, phellandrene, pinene, sabinene, terpineol, terpinolene, and many others.

• IUPAC Name: 3,7,7-trimethylbicyclo[4.1.0]hept-3-ene

Molecular Formula: C10H16
Molecular weight: 136.23
Boiling point: 170°C/338°F

· Solubility: Alcohol, organic solvents

Does Delta-3-Carene Get You High?

Terpenes don't affect the endocannabinoid system the same way cannabinoids as THC and CBD do. THC binds to the CB1 receptors found in the ECS, causing the high you feel.

Terpenes don't bind to these receptors and only influence the body in a general sense. They usually give feelings of relaxation, focus, energy, and wellbeing.

Both terpenes and cannabinoids have pharmaceutical potential, but we need more research to back the current studies and anecdotal evidence.

Summary: What Makes Delta-3-Carene Special?

Each terpene has a unique scent and provides a specific set of benefits, even though they overlap in many areas.

Delta-3-carene stands out for its uncanny ability to reduce every bodily fluid we have — which can come in handy. It's perfect if you have a runny nose or heavy menstruation.

Until we know more, we can only look at its potential. So far, it seems we might see this terpene used in future medicines to help bone growth, memory, and sleep.

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