

Sativa vs. Indica: What to Expect Across Cannabis Types and Strains



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Things to consider

The two main types of cannabis, sativa and indica, are used for a number of medicinal and recreational purposes.

Sativas are known for their “head high,” an invigorating, energizing effect that can help reduce anxiety or stress and increase creativity and focus.

Indicas are typically associated with full-body effects, such as increasing deep relaxation and reducing insomnia.

Although research examining these effects is limited, it appears these plants have more in common than previously thought.

Many in the cannabis industry have moved away from the terms Indica, Sativa and hybrid and started classifying the different “strains” or, more correctly, “chemovars” as:

- Type I: high THC
- Type II: THC/CBD combined
- Type III: high CBD

More and more, the cannabis industry is moving away from the term “strains” and using chemovars (chemical varieties) instead, since the word “strain” is often used to refer to bacteria and viruses.

In other words, the category, or type, of cannabis may not be the greatest indicator of the effects you’ll experience.


Here’s how to find the right plant for your needs, strains to consider, potential side effects, and more.

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The often-applied rule of thumb is that sativas are more invigorating and energizing, while indicas are more relaxing and calming — but it isn't really that simple.

Individual plants produce varying effects, even among the same type of cannabis. It all depends on the plant's chemical composition and the growing technique used.



Instead of looking at the type alone — sativa or indica — look at the description the grower and dispensary provide.

Oftentimes, the plant types are broken down into [specific chemovars](#), or breeds.

Chemovars are distinguished by their individual cannabinoid and terpene content. This “cannabinoid profile” will provide the user with the best information to help them determine which chemovar is best suited for them.

Relying on names does not provide the user with the necessary information to pick the correct profile. These compounds are what determine the chemovar's overall effects.

Cannabinoids

Cannabis plants contain dozens of chemical compounds called cannabinoids.

These naturally occurring components are responsible for producing many of the effects — both negative and positive — of cannabis use.

Researchers still don't understand what all of the cannabinoids do, but

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These include:

- **THC.** THC is the main psychoactive compound in cannabis plants. It's responsible for the "high" or state of euphoria associated with cannabis use. Levels of THC have been increasing as growers try to create hybrids with a greater concentration of the compound.
- **CBD.** CBD is non-impairing or non-euphoric. It doesn't cause a "high." However, it may produce many physical benefits, such as reducing pain and nausea, preventing seizures, and easing migraine.
- **CBN.** Cannabinol (CBN) is used to ease symptoms and side effects of neurological conditions, including [epilepsy](#), [seizures](#), and uncontrollable muscle stiffness.
- **THCA.** Tetrahydrocannabinol acid (THCA) is similar to THC, but it doesn't cause any psychoactive effects. Its potential benefits include reducing inflammation caused by [arthritis](#) and [autoimmune diseases](#). It may also help reduce symptoms of neurological conditions like [Parkinson's disease](#) and [ALS](#).
- **CBG.** Cannabigerol (CBG) is thought to help reduce [anxiety](#) and symptoms of [obsessive-compulsive disorder](#), [post-traumatic stress disorder](#), and [depression](#).

Terpenes

A great deal of attention is paid to the amount of THC and CBD in a given strain, but newer research suggests that terpenes may be just as impactful.

Terpenes are another naturally occurring compound in the cannabis plant.

The terpenes present directly affect the plant's smell. They may also influence the effects that specific strains produce.

According to [Leafly](#), common terpenes include:

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also have microbial and pain-reducing effects.

- **Caryophyllene.** The peppery, spicy molecule may help reduce anxiety, ease symptoms of depression, and improve ulcers.
- **Linalool.** Linalool is said to help improve relaxation and boost mood with its floral notes.
- **Myrcene.** The most common terpene, this earthy, herbal molecule may help reduce anxiety and [insomnia](#) so you can sleep better.
- **Ocimene.** This terpene produces notes of basil, mango, and parsley. Its primary effects may include easing congestion and warding off viruses and bacteria.
- **Pinene.** As the name suggests, this terpene produces an intense pine aroma. It may help boost memory, reduce pain, and ease some of the not-so-pleasant symptoms of THC, such as nausea and coordination problems.
- **Terpinolene.** Cannabis with this compound may smell like apples, cumin, and conifers. It may have sedative, antibacterial, and antifungal properties.
- **Limonene.** Bright, zippy citrus notes come from this terpene. It's said to improve mood and reduce stress.
- **Humulene.** This terpene is deeply earthy and woody, like hops or cloves. Cannabis strains with this molecule may help reduce inflammation.
- **Eucalyptol.** With notes of eucalyptus and tea tree oil, this molecule is refreshing and invigorating. It may also help reduce inflammation and fight bacteria.

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Sativa in-depth



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- **Origin:** *Cannabis sativa* is found primarily in hot, dry climates with long sunny days. These include Africa, Central America, Southeast Asia, and portions of Western Asia.
- **Plant description:** Sativa plants are tall and thin with finger-like leaves. They can grow taller than 12 feet, and they take longer to mature than some other types of cannabis.
- **Typical CBD to THC ratio:** Sativa often has lower doses of CBD and higher doses of THC.
- **Commonly associated effects of use:** Sativa often produces a “mind high,” or an energizing, anxiety-reducing effect. If you use sativa-dominant strains, you may feel productive and creative, not relaxed and lethargic.
- **Daytime or nighttime use:** Because of its stimulating impact, you can use sativa in the daytime.
- **Popular strains:** Three popular sativa strains are Acapulco Gold,

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Indica in-depth



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- **Origin:** *Cannabis indica* is native to Afghanistan, India, Pakistan, and Turkey. The plants have adapted to the often harsh, dry, and turbulent climate of the Hindu Kush mountains.
- **Plant description:** Indica plants are short and stocky with bushy greenery and chunky leaves that grow wide and broad. They grow faster than sativa, and each plant produces more buds.
- **Typical CBD to THC ratio:** Indica strains often have higher levels of CBD, but the THC content isn't necessarily less.
- **Commonly associated effects of use:** Indica is sought after for its intensely relaxing effects. It may also help reduce nausea and pain and increase appetite.
- **Daytime or nighttime use:** Because of its deep relaxation effects, indica is better consumed at night.
- **Popular strains:** Three popular indica strains are Hindu Kush, Afghan Kush, and Granddaddy Purple.

Hybrid in-depth

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Each year, cannabis growers produce new and unique strains from different combinations of parent plants. These cannabis hybrids are often grown to target specific effects.

- **Origin:** Hybrids are typically grown on farms or in greenhouses from a combination of sativa and indica strains.
- **Plant description:** The appearance of hybrid strains depends on the combination of the parent plants.
- **Typical CBD to THC ratio:** Many hybrid cannabis plants are grown in order to increase the THC percentage, but each type has a unique ratio of the two cannabinoids.
- **Commonly associated effects of use:** Farmers and producers select hybrids for their unique impacts. They can range from reducing anxiety and stress to easing symptoms of chemotherapy or radiation.
- **Daytime or nighttime use:** This depends on the predominant effects of the hybrid.
- **Popular strains:** Hybrids are typically classified as indica-dominant (or indica-dom), sativa-dominant (sativa-dom), or balanced. Popular hybrids include Pineapple Express, Trainwreck, and Blue Dream.

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A third type of cannabis, *Cannabis ruderalis*, also exists. However, it isn't widely used because it usually doesn't produce any potent effects.

- **Origin:** Ruderalis plants adapt to extreme environments, such as Eastern Europe, Himalayan regions of India, Siberia, and Russia. These plants grow quickly, which is ideal for the cold, low-sunlight environments of these places.
- **Plant description:** These small, bushy plants rarely grow taller than 12 inches, but they grow rapidly. One can go from seed to harvest in little more than a month.
- **Typical CBD to THC ratio:** This strain typically has little THC and higher amounts of CBD, but it may not be enough to produce any effects.
- **Commonly associated effects of use:** Because of its low potency, ruderalis isn't routinely used for medicinal or recreational purposes.
- **Daytime or nighttime use:** This cannabis plant produces very few effects, so it can be used at any time.
- **Popular strains:** On its own, ruderalis isn't a popular cannabis option. However, cannabis farmers may breed ruderalis with other cannabis types, including sativa and indica. The plant's rapid growth cycle is a positive attribute for producers, so they may want to

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Potential side effects and risks

Although cannabis use is often associated with potential benefits, it can also produce unwanted side effects.

This includes:

- dry mouth
- dry eyes
- dizziness
- anxiety
- paranoia
- lethargy
- increased heart rate
- decreased blood pressure

Most of these effects are associated with THC, not CBD or other cannabinoids. However, any cannabis product can produce side effects.

The method of use may increase your risk for side effects, too.

For example, smoking or vaping cannabis can irritate your lungs and airways. This may lead to coughing and respiratory problems.

Oral cannabis preparations, such as gummies or cookies, are less likely to affect your overall respiratory health.

However, though the effects are felt more slowly, ingested cannabis, especially THC, is more potent as it converts to 11-hydroxy-THC, which produces stronger psychoactive effects that can last for hours and in some people, days.

Strains to consider for certain conditions

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Gold				nausea, pain
Blue Dream	Hybrid	<1%	30%	Pain, cramps, inflammation, insomnia, mental fog, PTSD
Purple Kush	Indica	<1%	17–22%	Chronic pain, muscle spasms, insomnia
Sour Diesel	Sativa	<1%	20–22%	Fatigue, stress, acute pain, mental fog, anxiety, PTSD
Bubba Kush	Indica	<1%	14–25%	Insomnia, acute pain, nausea, low appetite, PTSD
Granddaddy Purple	Indica	<0.1%	17–23%	Low appetite, restless leg syndrome, insomnia
Afghan Kush	Indica	6%	16–21%	Acute pain, insomnia, low appetite
LA Confidential	Indica	0.3%	16–20%	Inflammation, pain, stress
Maui Wauai	Sativa	0.55%	13–19%	Fatigue, depression
Golden Goat	Hybrid	1%	23%	Depression, anxiety, mental fog, low energy
Northern Lights	Indica	0.1%	16%	Pain, mood disorders, insomnia, low appetite
White Widow	Hybrid	<1%	12–20%	Low mood, mental fog, social anxiety
Super Silver Haze	Sativa	<0.1%	16%	Stress, anxiety, mental fog, low energy

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				anxiety
Supernatural	Sativa	<1%	22%	Migraine, glaucoma, headaches, low moods

Keep in mind that the potency of cannabinoids and terpenes will vary among growers, and while certain strains may be helpful for certain conditions, your own experience may vary.

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How to choose the right product for you

When you're looking for the right cannabis product for you, keep these considerations in mind:

- **Know what you're trying to achieve.** What you're trying to feel or treat will help you narrow your options. Talk with the dispensary employee about your goals for cannabis use, whether that's treating insomnia, reducing anxiety, or increasing energy.
- **Understand your tolerance.** Some strains, such as Pineapple Express, are considered "entry level." Their effects are typically mild and tolerable. Strains with higher levels of cannabinoids may be too potent for a first-time user.

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medications. When in doubt, ask a doctor or other healthcare professional about your individual benefits and potential risks.

- **Decide on a desired consumption method.** Each technique for consuming cannabis has benefits and drawbacks. If you smoke or vape cannabis, you may feel effects more quickly, but it can irritate your lungs and airways. Gummies, chewables, and foods may be easier to tolerate, but the effects take longer, and they may be much more potent than inhalation.

Legality

Cannabis isn't legal everywhere. A few years ago, all cannabis products were illegal in most parts of the United States. Today, many states have legalized cannabis for medical or recreational purposes, or both.

CBD laws are also evolving. Some states allow it for medicinal purposes, but they heavily regulate the source in order to prevent THC-laced CBD products.

Before you attempt to purchase or use cannabis, you should [know the laws for your state](#).

Keep in mind that cannabis is still illegal under federal law. If you don't know the laws where you are, you could face legal consequences.

You may be subject to different laws if you live outside of the United States.

The bottom line

If you're curious about how cannabis might help you, talk with a doctor or other healthcare professional, or speak with a knowledgeable cannabis clinician.

They can discuss its potential positive and negative effects on your individual health and help you find something that suits your needs.

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Then, you can begin to explore your options. Finding the right option for you may take time. You may also find that you don't tolerate cannabis well.

If you live in a state that has legalized cannabis, you can visit a dispensary and talk with a trained staff member. They may be able to recommend specific strains or other products to suit your individual needs.

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1. The article was updated with a correction to address reader feedback and ensure accuracy.

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