INTRODUCTION:
THE DIFFERENCES BETWEEN
CANNABIS SATIVA, INDICA, & HYBRIDS
Introduction: The Differences between Cannabis Sativa, Indica, & Hybrids

Attributed to Zach Reichard (edited for readability by KHHF July 2014)

When conversation turns to the topic of cannabis, people often focus on distinctions between Sativa and Indica marijuana varieties rather than strain potency or taking a “dab” (forms of high grade product using a butane intake process). The main intention of this article is to shed light on the uses and basic differences between the currently available marijuana options.

Although cannabis strains come from a relatively small number of plant genes, they have become significantly intertwined and more complex related to years of crossbreeding.

A growing number of people benefit from cannabis medicinally and scoff at those who brag about their fancy named brands of “kryto-chrono-chronolite” as comedian Kat William’s jokingly calls it in a popular stand-up routine. The majority of product users in states that have not legalized medical marijuana could not care less if the buds Sativa or Indica, and most do not have a clue regarding the differences.

Many are quick to point out that previously there was little choice in the matter, when marijuana tokers resorted to sneaking around and grabbing whatever they could find through contacts/friends. The cannabis back then was unnamed, plus nine times out of ten of low quality.

In recent years, marijuana product options have opened up to include an extensive range of cannabis, both medicinally and in variety. This has made some medical marijuana users to become rather persnickety when it comes to choosing one’s medicine. While this may come across as pretentious, it is often a matter of being informed of the medicinal and psychoactive effects of different strains and varieties.

It is a recognized fact that most people in the U.S. do not have choice luxury yet. That being said, medical marijuana users are wise to become familiar with the different types of cannabis and their effects from a purely educational standpoint. For those who live in an area where marijuana is legal for medicinal and/or recreational purposes, the following information will hopefully serve as an introductory guide to making selections.

Sativa vs. Indica Differences

Considering the different types of cannabis, there are two main varieties, or classifications, that make up the majority of all marijuana strains appearing on dispensary, delivery service, and collective menus. The two main strains are popularly known as Cannabis Sativa and Cannabis Indica. Here are their basic characteristics:
First, note that *Cannabis Sativa* plants grow taller and thinner than Indica strains. Sativa strains originated in the equatorial countries of Columbia, Mexico, Thailand, and South East Asia. They thrive in warmer weather. The leaves of Sativa are much narrower than those of Indica, and are typically a lighter shade of green.

Sativa plants can grow to astonishing heights of up to 20 feet when cultivated outside, and they have much longer vegetation periods. Once the plant begins to flower, it can take from 10 to 16 weeks to fully mature. Since vegetation periods are on the long side, these plants typically produce a higher yield (3 ounces to 1 pound per plant) compared to Indica strains, but they tend to possess a lower THC percentage (around 12 to 16% on average).

Sativa plants are also known to be pungent smelling, with aromas ranging from sweet and fruity, to earthy with undertones of diesel fuel. Many select sativa strains such as Cherry AK, Green Crack, Trainwreck, Jack Herer, and J-1 have a similar sweet and peppery smell that are characteristic of Sativa. Some other strains like Trainwreck are more peppery, while Cherry AK is extremely sweet smelling. Although these strains provide similar effects, there are distinctive differences in smell, formally known as their ‘terpene profile’. Once one becomes familiar with the different terpenes that are present in cannabis, it then becomes feasible to detect strain differences based on scent alone.

**Cannabis Sativa strains are effective in treating mental and behavioral issues related to stress, anxiety, depression, and attention deficit hyperactivity disorders (ADHD).**

Sativa strains are known to produce an uplifting and cerebral effect on humans that is typically energizing and stimulating. Sativa can make one laugh (even uncontrollably) and/or engage in in-depth conversations about the meaning of life or the nature of DNA double helix. These strains often cause those under their influence to deeply analyze the human experience and think creatively, which makes *Cannabis Sativa* very popular among philosophers, artists and musicians. Some Sativa options even have been found to enhance light and sound, making music, movies, and other genres more vibrant.

Medical marijuana patients looking for morning or daytime relief could benefit from accompanying their breakfast or lunch with a vaporizer packed with **Strawberry Diesel** or **Cherry AK**. Both of these options are known to offer long lasting clarity (even “cerebral” creativity) that can result in an uplifted and energetic mood/state of mind. Caveat: Driving or working with hazardous equipment/substances under the influence of cannabis is illegal and NOT advised.
Cannabis Indica

The Cannabis Indica is a shorter (2 to 4 feet tall) stout plant with smaller yields (1.5 to 2.5 ounces per plant), but higher potency (~18% THC) compared to Cannabis Sativa. Indica plants are believed to originate from the Middle East (Pakistan and Afghanistan), so they can thrive in cool seasonal environments. Indica strains are typically darker green in coloration and have shorter, fatter leaves.

Since Indica plants are shorter, they are better suited for indoor growing. Indica buds are thick, dense, and they flower from 8 to 12 weeks. The flavors and smells of Indica include; pine, pungent skunk, earth, hash, or a sweet and sugary fruit flavor.

Commonly medical marijuana patients use Cannabis Indica to relieve stress, provide full-body pain relief, and help initiate quality sleep @ bedtime.

The human effects produced by Indica strains involve relaxation, characteristically providing a full-body, or “couch-locked” effect. Although Indica strains are good for those days spent curled up on the couch watching TV, or surfing the web, many medical marijuana patients use Indica after a long day at work to relieve stress, provide full-body pain relief, and help with sleep onset at bedtime.

Indica strains are accepted treatment options for chronic pain, muscle spasms, anxiety, nausea, appetite stimulation, and sleep deprivation. Individuals who suffer from diseases such as multiple sclerosis, fibromyalgia, lupus, sleep apnea and insomnia tend to benefit from the effects of Cannabis Indica. Patients looking for the optimal Indica to hasten sleep onset should consider trying any strain with “OG” or “OG Kush” in its genetics; Popular Indica night-time strains include GDP, Pure Kush, and God’s Gift, all of which provide significant pain relief coupled with moderate sedative effects.

Hybrids Explained

There are a wide range of cannabis options in between Indica and Sativa strains. These options are known as “Hybrids” and show traits directly related to the genetics in any particular lineage. Hybrids can be broken down into three basic categories:

1. **Sativa-dominant Hybrids**: These hybrids provide a cerebral high with a relaxing body effect (physical and mental stress relief). Examples of strains that are Sativa-dominant hybrids include Mars OG, Neptune OG, Headband, Juicy Fruit, J1, Sour Diesel, and Purple Trainwreck.

2. **Even Hybrids (50/50)**: These are ideal strains for people seeking a perfect balance of head and body. Examples of 50/50 strain hybrids include Cheese, White Widow, Blue Dream, Blue Widow, XJ-13, Purple Diesel, and Super Silver Haze.

3. **Indica-dominant Hybrids**: These strains provide a full-body pain relief, with a relaxing head high. They are recommended for nighttime use to go to sleep, or daytime relief from minor pain. These strains tend to be beneficial for patients who suffer from various types of autoimmune diseases as well as insomnia or depression. Examples strains that are Indica-dominant hybrids include Tahoe OG, SFV OG, Kosher Kush, Skywalker OG, Purple Urkle, Girl Scout Cookies, and Blackberry Kush.
CANNABIS FACTOID: It is interesting to note that even when one compares strains across the “pure Indica” and “pure Sativa” categories, there are clear differences in terms of human effects. For example, Durban Poison is a pure Sativa strain from Africa that offers an uplifting mental outlook. Panama Red, also a pure Sativa strain, is known to create a more mellow, relaxed mental state. These two plants originated from different continents and have dissimilar effects, but are both classified as pure Cannabis Sativa. Bottom line—classification of cannabis is far more complex than what even “experts” have believed in the past.

Other Types of Cannabis

Cannabis Ruderalis is another type of cannabis with potential benefits which have only begun to be explored. This category of cannabis grows wild in parts of Eastern Europe and Russia, so it is adapted well to colder climates. Ruderalis contains lower percentages of THC, but is frequently cross-bred with sativa strains to produce plants that grow shorter like Ruderalis, but can also flourish in more extreme weather outdoors where pure Cannabis Sativa typically does not do well. These hybrids are known as auto-flowering strains, because of the short flowering period Ruderalis is noted for (2 to 3 weeks after germination).

Ruderalis strains are more resistant to insect infestation and disease pressures, and are believed to have a higher CBD (cannabadiol metabolite) content. The whole life span of these plants can be as short as 7 weeks, plus they are relatively simple to grow, which has made them more popular among home growers.

Conclusion

Cannabis is a multifaceted plant with numerous possible strain combinations that can become mind-boggling to classify. It is more complex than simply classifying strains as Sativa or Indica, but nevertheless, it is anticipated with some hope that this guide will at least provide some basic, introductory information on the topic, and give the interested medical marijuana user (or care giver) baseline information and ability to recognize the differences in the medicinal cannabis buds in terms of target benefits.

Here are a few additional links and resources regarding the classification(s) of cannabis:


DISCLAIMER: The information contained in this article and following tables are not intended to replace a one-on-one relationship with a qualified health care professional, nor is it intended as specific medical advice. Each individual is uniquely different. Please consult a competent health care professional before making any decisions regarding the personal use of medical cannabis.
THE DIFFERENCES BETWEEN SATIVA & INDICA STRAINS

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<thead>
<tr>
<th>SATIVA</th>
<th>INDICA</th>
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<tr>
<td>Anti-Anxiety</td>
<td>Sedating</td>
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<tr>
<td>Anti-Depressant</td>
<td>Relaxing</td>
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<tr>
<td>Reduces Nausea</td>
<td>Muscle Relaxant</td>
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<td>Increases Focus</td>
<td>Decreases Nausea</td>
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<tr>
<td>Increases Creativity</td>
<td>Treats Acute Pain</td>
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<tr>
<td>Increases Serotonin</td>
<td>Increases Appetite</td>
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<tr>
<td>For Day Time Use</td>
<td>Increases Dopamine</td>
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<tr>
<td>Relieves Headaches &amp; Migraines</td>
<td>For Night Time Use</td>
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<tr>
<td>Reduces Awareness of Pain</td>
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Product Examples:

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<thead>
<tr>
<th>SATIVA DOMINANT</th>
<th>INDICA DOMINANT</th>
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<tbody>
<tr>
<td>NYC DIESEL (60/40)</td>
<td>G-13 (60/40)</td>
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<tr>
<td>SOUR DIESEL (80/20)</td>
<td>JACK FLASH (55/45)</td>
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<tr>
<td>SOUR WILLIE</td>
<td>VIOLATOR KUSH</td>
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<tr>
<td>GOLDEN GOAT (70/30)</td>
<td>ORANGE KUSH (80/20)</td>
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<tr>
<td>PURPLE HAZE</td>
<td>BANANA KUSH (80/20)</td>
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<td>CRYSTAL CHUNK (80/20)</td>
<td>BERMERE KUSH (60/40)</td>
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<tr>
<td>GOLD SKUNK</td>
<td>WINTERBERRY</td>
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MOST COMMON CANNABINOID + POTENTIAL BENEFITS
CANNABIS CONTAINS CANNABINOIDs

A non-psychoimimetic cannabinoid found in the Cannabis species. THC is the cannabinoid responsible for the main psychoactive effects patients are familiar with.

CBL (CANNABINOL)

Found in largest quantities in Cannabis varieties indigenous to central Africa, like certain phenotypes from Malawi. It is currently being researched as a treatment for metabolic disorders including diabetes, as well as serving as a potential appetite suppressant.

THCV (TETRAHYDROCANNABIVarin)

Within structural similarity to the other natural cannabinoids, including tetrahydrocannabinol, tetrahydrocannabinol varin, cannabidiol, and cannabinol, among others.

CBC (CANNABICBD1)

A mildly-psychoactive cannabinoid that comes about from the degradation of THC, there is usually very little CBN in a fresh plant.

CBD (CANNABIDOL)

With respect to the medical potential of the cannabis, CBD may hold the most promise for many serious conditions. CBD is a non-psychoactive cannabinoid that is believed to reduce the psychoactive effects of THC.

Take a closer look...