Green: A Field Guide to Marijuana explores today's very best cannabis strains in glorious full color. The “Primer” section demystifies the culture of this complex flower and explains the botany that makes each strain unique. The “Buds” section describes the variations of lineage, flavor, aroma, and mental or physical high that define 170 exceptional strains. Smart, practical, and beautiful, Green is essential reading for both the cannabis connoisseur and the occasional toker.
In order to truly appreciate and enjoy all the wonderful things marijuana has to offer, we must first lay a healthy foundation of knowledge on which to build our experiences. Lies, propaganda, and misinformation about marijuana have proliferated throughout history and it is only through proper education and the sharing of accurate information that we can start to undo the harm this has caused. Famous scientist and botanist George Washington Carver wisely said, “Education is the key to unlock the golden door of freedom.” Hopefully, with the help of the enlightenment provided in this book, we can all continue to spread the truth that has already begun turning this key.
## What Is Marijuana?

Figuratively, marijuana is earth’s greatest gift to mankind. Physically, marijuana is a natural body and mind-altering treat. Literally, marijuana is the budding flower of the female cannabis plant.

But what makes marijuana so desirable is that it naturally produces a multitude of diverse chemical compounds called “phyto-cannabinoids.” When consumed, these cannabinoids produce a variety of wide-ranging effects on the human mind and body by activating and stimulating our body’s internal cannabinoid receptors. All humans and animals naturally possess these “endo-cannabinoids” receptors. This complex cannabinoid system is the very reason cannabis has been consumed for both recreational and medicinal purposes by ancient cultures and modern societies alike.

The most well-known cannabinoid is called delta 9-tetrahydrocannabinol (THC). It is the psychoactive chemical that produces the desirable “high” or “stoned” feeling when consumed.

The other primary cannabinoid is known as cannabidiol (CBD). It has been found to be an effective treatment for a wide range of health conditions and thanks to modern scientific research, we’ve finally been able to quantify and prove these health benefits.
What Are Strains?

A marijuana strain is simply a particular variety of the cannabis plant. Not so simple is the breeding process and genetic makeup within each strain. Lucky for us all there are master growers, creative breeders, and other amazing minds hard at work behind the scenes hunting for, cloning, and creating all the super strains that are available to all of us today.

But you don’t need to be an expert to understand that all strains fall into one of three main categories: (1) **sativa**, (2) **indica**, or (3) **hybrid**. Sativa and indica strains are the two main naturally occurring species, and hybrid strains are a mix of the two. As new hybrid strains are developed they are crossbred with other existing strains, giving growers endless opportunities to experiment and produce the next great strain. No matter if a strain is a natural variety or a hybrid, each will have very specific qualities and unique psychoactive effects (What’s Your Phenotype, see page 18).

As more and more strains become available, it can seem overwhelming to figure out which ones are best to procure and enjoy. You obviously can’t rely on all the crazy and unusual names given to these strains, so what do you do? For starters, it’s best to begin by narrowing down your choice to the variety type.

Sativas are known for being a “daytime” strain because they provide you with an uplifting and energetic head high. Indicas on the other hand are a better “nighttime” strain and will get your body stoned, making you feel relaxed, mellow, or even sleepy.

Hybrids provide a combination of effects that depend on the strains’ lineage—their parents. Typically these hybrids are either indica or sativa dominant, meaning they will express the characteristics of the dominant variety with less characteristics of the secondary variety. An indica-dominant hybrid might give you a strong body buzz without feeling tired, or a sativa-dominant hybrid may make you very sociable and cheerful but still calm and relaxed. Other times, a hybrid can be a “true” hybrid, meaning that it is an even mix of both varieties.

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What’s Your Phenotype?

The term phenotype or “pheno” will inevitably come up when talking about cannabis strains. It’s one of those heady words that is actually pretty basic in concept but very complex in nature. By definition, a phenotype is simply any living thing’s observable characteristics. In the cannabis plant these traits include size, shape, color, THC content, bud density, flavor, and smell to name a few. All these various traits can come together in a multitude of combinations adding to the complexity and variety of strains.

Seeing and smoking an assortment of strains will help you to start noticing these distinctions in phenotypes and more importantly help you to figure out what traits you like or don’t like. If you prefer an energetic high, a pure sativa strain like Durban Poison (see p/166) will carry that trait. Or if you prefer the mellowing smoke of an indica strain, than maybe a strain like Platinum OG (see p/298) is worth trying. There are even strains bred with amazing flavors like Bubble Gum (see p/114) or Blueberry (see p/144).

It’s the strain’s unique combination of phenotypes that makes each strain so distinct and special. Each strain is carefully bred to express very specific trait combinations with all this information stored right into its own DNA. This unique genetic makeup—referred to as the strain’s “genotype”—is what allows the same strain to be grown again and again. The genetics will always be the same but sometimes the phenotypes can vary—this is what you call “variations in phenotype.” Variation in phenos in the same strain is okay, but if they’re completely different than either the plant was improperly grown or you’re not getting what you paid for. This is why educated smokers talk about phenotypes and why it’s so important to know which pheno to look for when trying new strain varieties.

For example, every bud shown here is the same strain called Girl Scout Cookies (see p/182). Each bud came from the same genetic code but is grown from different producers or crops. As you can clearly see, not all buds from the same genotype will look or behave the same. This is why when you buy Girl Scout Cookies from one source, that bud’s characteristics may vary slightly from the same strain bought elsewhere. Maybe the color is slightly off, or perhaps the smell is more pungent, or maybe the effects don’t last as long. Why? Most often, it’s the environment that directly affects a strain’s phenotypes. Things like where the plant was grown, soil conditions, fertilizers, even the light or water source can directly effect the strain’s inherent ability to properly express its desired traits—some may be suppressed while others may be exaggerated. Ultimately, it’s how these phenotypes are revealed that will determine whether or not you have an award winning bud or a poorly grown dud.
Terpenoids
Aromas, Flavors, and Therapeutic Effects

In addition to cannabinoids, the components of the cannabis plant’s essential oils, called terpenoids, play an important therapeutic role in the overall entourage effect. The aromas and flavors of any given cannabis strain also depend on which terpenoids predominate. While nearly 20,000 terpenoid compounds have been found in all types of plant life, just over 200 of these terpenes have been identified in cannabis with the following eight occurring in significant amounts and most frequently.

### Terpenoids

#### Alpha-pinene
Also found in Pine needles
Flavors: piney, rosemary
Therapeutic effects: anti-inflammatory, antibacterial, anti-memory, bronchodilator (aids breathing)

#### Beta-caryophyllene
Also found in echinacea
Flavors: citrus, oily, spicy
Therapeutic effects: anti-inflammatory, gastric cytoprotectant (cell protectant)

#### Caryophyllene Oxide
Also found in lemon balm
Flavors: clove, peppery, spicy, woody
Therapeutic effect: Antifungal

#### Limonene
Also found in lemons
Flavors: citrus, juniper, lemon, peppermint, rosemary, tangerine
Therapeutic effects: immune stimulant, antidepressant, anti-anxiety

#### Linalool
Also found in lavender
Flavors: candy spice, floral, herbal
Therapeutic effects: antianxiety, anticonvulsant, sedative

#### Myrcene
Also found in hops
Flavors: acrid, citrus, clove, fruity
Therapeutic effects: anti-inflammatory, sedative, analgesic (pain relief)

#### Nerolidol
Also found in oranges
Flavors: berry, floral, sweet, woody
Therapeutic effects: sedative, antifungal, skin protectant

#### Phytol
Also found in green tea
Flavors: creamy, earthy, floral, vanilla
Therapeutic effects: anti-insomnia

### CANNABACEAE

Hops (used to make beer) and cannabis are both members of the same Cannabaceae plant family. Unfortunately, hops don’t contain any THC but do have similar terpenoids that give pungent beers like IPAs an aroma very similar to marijuana.

CANNABIS

Terpenes in cannabis provide a multitude of diverse aroma and flavor profiles. Since taste actually uses the same olfactory senses as smell, we can break down all the main flavors found in cannabis strains into five simple categories: (1) sour, (2) spicy, (3) sweet, (4) bitter, and (5) savory. Each strain has its own unique combination of flavors and this graph breaks down the most common types.
Buyer’s Guide

When it’s time to finally part with your hard-earned cash and buy some buds, it’s important to know what to look for in order to make sure you’re getting your money’s worth. If you’re able to buy from a legitimate marijuana dispensary then you can trust the weed is going to be stellar. The dispensary’s “bud-tender” will be able to detail each strain’s specific phenotypes or they will be able to recommend a strain based on your own preferences. But if you’re like the majority of recreational smokers, you have to build a trusted network to score some dank nugs. Even still, there’s always a chance your regular hookup could have some bad weed from time to time or your budget simply can’t afford the best. So here are some important things to examine and rate to determine if the buds make the grade.

### New Hookups

When buying from a new source, whether it be a new dispensary or new friend of a friend’s source, make sure that at first you buy only a small amount to test their product before purchasing larger amounts the next time around. Any reputable source will respect this gesture and it could save you from wasting your time and money on a bad connection.

### Appearance

<table>
<thead>
<tr>
<th>Bag Appeal</th>
<th>Low Grade: Poor</th>
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<th>High Grade: Great</th>
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<tbody>
<tr>
<td>Texture</td>
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<td>Average: Full and well-cured</td>
<td>Fluffy dense buds, no shake</td>
</tr>
<tr>
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<td>Clean, green</td>
<td>Rich, vivid</td>
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<td>Mild</td>
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</tr>
<tr>
<td>THC Content</td>
<td>&gt;1-5%</td>
<td>6-14%</td>
<td>15-25%+</td>
</tr>
<tr>
<td>Price</td>
<td>$</td>
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### Feel

How does the bud feel when you touch it? Properly dried and cured buds should be neither dry nor wet, neither rock-solid nor brittle. The bud should feel dense and squishy. When you break it up, it should be easy to grind and feel sticky. It shouldn’t crumble into a fine powder (too dry) or clump into hard balls (too wet). Any stems should bend then break when bent, not just bend without breaking or quickly snap off.

### Smell

Does it smell appealing? The aromas should be pleasant and appetizing to you. Chances are if you like the way it smells, you’ll love the way it tastes. Just keep in mind that smell has nothing to do with potency, just flavor. Some of the best and strongest buds can smell very harsh and even skunky-like or can just have a slight, subtle fragrance. One exception is if the buds smell very “green”—sort of like fresh lawn clipping—then it probably wasn’t cured properly and won’t be very potent. The other is if it smells like dirt.

### Pedigree

Was the cannabis grown from a reliable source? More often than not, you’re going to have to take a leap of faith and trust the seller’s word. Once you build a strong bond with your source, hopefully they’ll share more growth information with you. On the other hand, if you’re buying from a dispensary you can always ask them about the genetics, how the cannabis was grown, and other valuable information so you can keep tabs and refer back to the growers or breeders you trust when trying a new strain.

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### Personal Experience

How did it make you feel? Above all else, this is the most important factor to consider when buying bud. This is a very personal preference that only you can experience, so it’s worth taking notes and keeping a journal on which strains you’ve tried, where you bought them, and what you enjoyed (or didn’t enjoy) about them so you can start appreciating and recognizing all the wonderful and distinct experiences various strains have to offer.

### The Negative Effects

New users and experienced smokers alike might sometimes experience a few negative effects after taking a new strain. Don’t panic, these minor side effects are temporary and should wear off quickly, so just relax and let the time pass. If they mess with your high, stop using that strain and try a new variety next time.

### The Prerimer

Content

- **Flavor**

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### Primer

- **Appearance**

Do the buds look appealing? At first glance, you should be excited when looking at the bud. It shouldn’t be crushed, compressed, or crumbly looking. It should have a nice distinct fluffy nugget shape and the colors—greens, reds, and/or purple hues—can be light or dark and should look clean and vibrant, not dull and dirty. The bud should also look nicely manicured, meaning all the bigger leaves and extra stems trimmed off nicely, not left on or hacked away.

### Trichomes

Can you see tiny crystals all over the bud? Your buds should have plenty of clear or amber-tinted resin crystals if you expect to get the most effects from it. Ideally, it will be glistening with crystals but sometimes stirring and moving can cause some to fall off, which isn’t a big deal. But if they are seen in odd patches, or there are only a few crystals, or none at all then the herb was not properly taken care of and you shouldn’t pay top dollar for it.

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### Dry Mouth

- **Mouthwash**

### Headache

- **Water**

### Dizziness

- **Steady Breathe**

### Dry Eyes

- **Eyes Saline**

- **Glasses**

- **Towels**
Cannabis Strains

Marijuana has come a long way since the days of our ancestors. Today, creative minds across the world are cultivating and crossbreeding cannabis plants to create modern-day marvels in the form of majestically beautiful and one-of-a-kind strains—from heirloom landraces to creatively named super hybrids. The following pages will guide you through some of the best varieties of marijuana strains we could find, organized alphabetically by strain name. While the breathtaking focus-stacked images will give you a high-definition visual of their appearance, the profile information will provide you with the unique details specific to each individual strain. Each profile includes the following:

- **STRAIN NAME**
  The name given to the strain by the original breeder or grower.

- **TYPE**
  The strain’s variety—
  - **sativa** (100%) (100%)
  - **sativa hybrid > 60%** (≈ 50% sativa + 50% indica)
  - **hybrid 50%** (≈ 50% sativa + 50% indica)
  - **indica hybrid > 60%** (≈ 60% indica)
  - **indica** (100%) (100%)

- **LINEAGE**
  The genetic female and male parents.

- **SMELL/TASTE**
  The common aromas and flavors.

- **COMMON EFFECTS**
  The common physical and psychoactive effects.

- **TOP MEDICINAL USES**
  Conditions the strain has been known to help.

- **AWARDS**
  Any major awards received (1st, 2nd, or 3rd place).

- **SIMILAR STRAINS**
  Other strains that share similar phenotypes.

- **DESCRIPTION**
  A brief outline of other pertinent information about the strain.
5Gs × OGSD

TYPE
hybrid

LINEAGE
(Dieselberry × Witches Weed) × (OG Kush × Sour Diesel)

SMELL/TASTE
lemon, acrid, fuel

COMMON EFFECTS
uplifted, creative, euphoria

TOP MEDICINAL USES
mood enhancement, stress

SIMILAR STRAINS
Chemdawg p/132
Allen Wrench p/66
NYC Diesel p/274

This unique breed hails from the infamous Humboldt County region of California—well regarded as the birthplace of modern-day hybrid cannabis cultivation. This strain consists of elite genetics combined with great breeding skills to produce a nice one-off hybrid that’s as potent as it is stinky. The dense buds have a very lemony aroma and flavor, mixed with a fuel funk and a dash of sour orange zest. Overall, 5Gs × OGSD is a prime example of a Humboldt original.
Abusive OG

This variety of the renowned OG Kush is rumored to have origins that trace back to the famous rap artist and marijuana advocate Snoop Dogg. Regardless of the rumors, Abusive OG is no doubt a prime example of an OG—very dense nugs heavily coated in crystals with a unique sour pine flavor commonly referred to as “kushy.” These buds’ ability to deliver a long-lasting, body-buzzing high is what makes Abusive OG a cut above the rest.

The Legend of OG

When “OG” is used in a strain name, it typically refers to its lineage back to the original OG Kush strain. The initials OG are thought by most to mean “Ocean Grown” for OG Kush’s roots in Southern California, while some attribute OG to mean “Original Gangster” to represent the first generation of a strain. Semantics aside, OG strains are widely popular and highly coveted for their distinct flavors, appearance, and enduring effects.
**Afghani**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>indica</th>
</tr>
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<tbody>
<tr>
<td>LINEAGE</td>
<td>Landrace (Afghanistan)</td>
</tr>
<tr>
<td>SMELL/TASTE</td>
<td>spicy, citrus, earthy</td>
</tr>
<tr>
<td>COMMON EFFECTS</td>
<td>body buzz, sleepy, couch-lock</td>
</tr>
<tr>
<td>TOP MEDICINAL USES</td>
<td>insomnia, pain</td>
</tr>
<tr>
<td>SIMILAR STRAINS</td>
<td>G-13, Sour Bubble, Purple Sticky Punch</td>
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Afghani is known throughout the world as one of the finest pure indica cannabis strains. Its dark sticky flowers are a fast and easy grow and its monstrous resin production and trademark indica effects make it an indispensable component in the breeding of many other famous hybrid strains. The mellow, exotic flavors smoke smooth and hit strong. A favorite nighttime strain, Afghani’s ability to produce long-lasting and body-numbing physical effects is second to none.
This supersticky bud blends two legendary landrace strains to create a very effective and powerful indica-dominant stunner. The smoke is earthy flavored with subtle hints of sweet strawberry, and the heavy full-body high can be felt almost as soon as you exhale—and then it seems to last forever. Newcomers to Afgoo may experience a couch-lock effect with this perfect nighttime treat. A hint of euphoria will also creep in (thanks to its Maui Haze genetics), making Afgoo a great smoke to end a long, hard day.
Afwreck

Although crossed with Afghani, Afwreck's phenotypes have been influenced mostly from its powerful Trainwreck parent. This strong sativa has a pleasant mix of sweet and sour flavors that are balanced with a fresh floral aroma. The effects immediately focus exclusively on the mind while the Afghani makes a late guest appearance to add a subtle body high that finishes off the buzz nicely.