

UNDERSTANDING CBG The Definitive Guide on High-CBG Hemp

Since the end of the eighty-year-long prohibition on industrial hemp, there has been a surge in market demand for hemp-derived products. The range of these products varies, from topicals and tinctures, to textiles and even construction-grade concrete (also known as 'Hempcrete').

With a wide range of hemp seed geneticists focused on producing higher amounts of CBD, there is a dark horse that is quickly gaining in popularity and is currently underserved: CBG.

CBG (also known as Cannabigerol) stands out from the crowd of hemp-derived cannabinoids for one fascinating reason.

It is known as the "Mother" of all cannabinoids due to the fact that it is the precursor to all other cannabinoids.

While the research is still in its early stages, scientists have transitioned resources and focus onto this powerful molecule and the downstream market is taking notice.

And one Italian geneticist has dedicated the last several years to unlocking hemp seed genetics that has made CBG a potential game-changer.

In this e-book, we will walk you through the origin of the Matterhorn CBG Varietal, as well as the medical potential and the market security that comes from farming this revolutional cannabinoid.



highgradehempseed.com



MATTERHORN CBG

LEARN ABOUT MATTERHORN CBG IN THE VIDEO LINKED BELOW.

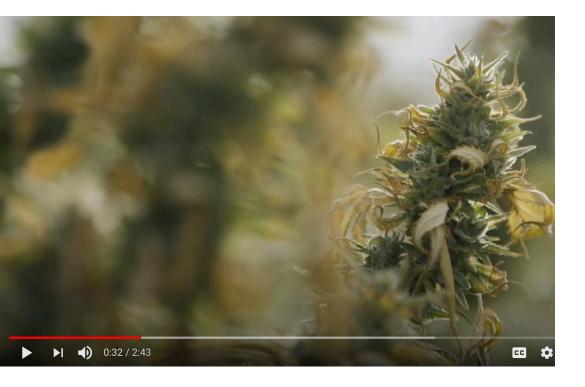


TABLE OF CONTENTS

03 Medical Potential	08 Farming for CBG is Possible with Matterhorn
The Endocannabinoid System	09
05	Conclusion
The Market Potential	10
06 Is CBG Ready for the Big Leagues?	High Grade Offers Matterhorn CBG
07 The Story of Matterhorn CBG	

CONTACT US: HIGHGRADEHEMPSEED.COM OR (833) 867-7333

MEDICAL POTENTIAL

Hemp-derived cannabinoids have made an impact in both the medical field and in consumer goods. The most commonly known cannabinoid is CBD, but there is no reason to believe CBG products won't follow CBD's billion dollar trend. CBG is a minor cannabinoid that is making major waves in the industry.

CBG (also known as cannabigerol) stands out from the crowd of hemp-derived cannabinoids for one fascinating reason. It is known as the "mother" or "OG" cannabinoid, due to the fact that it is the precursor to all other cannabinoids such as CBD (Cannabidiol), CBN (Cannabinol), CBC (Cannabichromene), and THCA (Tetrahydrocannabinolic Acid).

CBG also activates both CB1 and CB2 receptors in the endocannabinoid system. This means it could possibly hold the cumulative qualities of all the other cannabinoids put together.





THE ENDOCANNABINOID SYSTEM

Understanding the endocannabinoid system makes it easy to see why CBG is such a game changer. Here are the basics:

- The human body's central nervous system is made up of nerve cells that release chemicals called neurotransmitters.
- Neurotransmitters carry messages that regulate performance and activity of various body parts and systems.
- Neurotransmitters are released and then in turn taken up, or reabsorbed, by the receiving cell terminal or receptor.
- Nerve cells also secrete endocannabinoids, which are cannabinoids created by the human body, to regulate cellular function and maintain homeostasis.
- The system of nerves cells that regulate cannabinoid secretion and reuptake is called the endocannabinoid system, or ECS.
- When this system gets out of balance, plant-derived cannabinoids, or phytocannabinoids such as CBG and CBD, can be introduced to balance and alleviate various physical ailments.

The coming years of research will likely show a myriad uses of CBG and its ability to balance the ECS. Here are a few of the areas researchers are currently looking at, in regard to the medicinal value of CBG. Access the studies by clicking the links below:

- Anxiety
- Stomach and bone cancer
- Prostate, breast, and bladder cancer
- Colorectal cancers
- Pain Relief
- Inflammation
- Inflammatory Bowel Disease
- Neuroprotective potential
- Oral bacteria
- Parkinson's Disease
- Huntington's Disease
- Motor Disorders
- Antibiotics

"The ECS is involved in various pathophysiological conditions in central and peripheral tissues. It is implicated in the hormonal regulation of food intake, cardiovascular, gastrointestinal, immune, behavioral, antiproliferative, and mammalian reproduction functions."

ENDOCANNABINOID SYSTEM: AN OVERVIEW OF ITS POTENTIAL IN CURRENT MEDICAL PRACTICE. NATIONAL INSTITUTE OF HEALTH

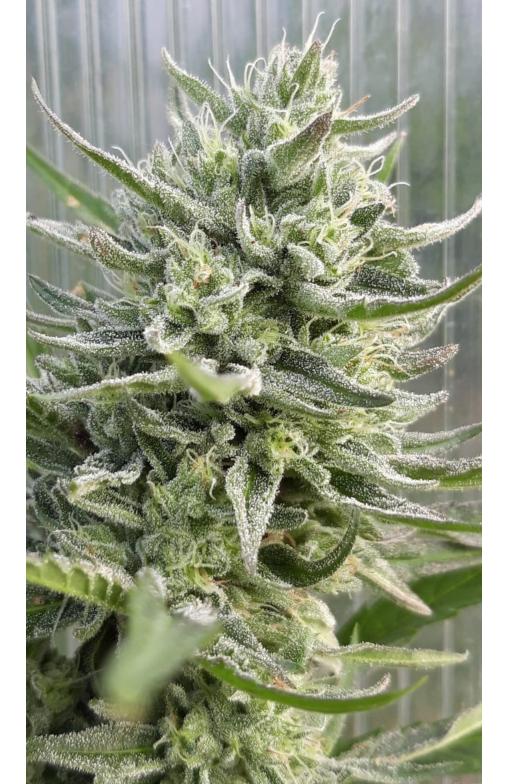


MARKET POTENTIAL

While the research is still in the early stages, scientists the world over have transitioned resources to focus on the powerful CBG molecule, and the downstream market is taking notice. Industrial hemp markets are poised to continue their upward growth. Projections are that the industrial hemp market will grow from 4.6 billion in 2019 to 26.6 billion by 2025. According to Sean Williams of the Motley Fool, the global cannabis market, which includes sales estimates for 22 counties, should grow from \$17 billion in 2019 to \$50 billion by 2029.

When viewed from the perspective of medical advances, potential pharmaceutical breakthroughs, and consumer goods, CBG hemp varietials are well-positioned to be at the forefront of this growing sector.

5



IS CBG READY FOR THE BIG LEAGUES?

CBG is poised to make a substantial impact in the medical and consumer goods pharmaceutical markets. In the past there was one factor limiting CBGs introduction into these markets on a large scale: the relatively low levels of CBG found in each plant.

Because of the normally low levels of CBG in an industrial hemp plant, and it's high potency for medical applications, CBG has been nicknamed the "Rolls Royce" of cannabinoids.

Previous varietals of CBG contained low quantities of the cannabinoid, making growing hemp for focused CBG production cost-prohibitive. According to Janelle Lassalle of Forbes magazine, "Either you give up your entire crop to process and produce pure CBG prior to the conversion into other cannabinoids, or you wait until it's time to harvest the hemp plant." says Floyd Landis, founder of the retail outlet Floyd's of Leadville.

According to a recent Forbes article, the genetics of the plant is still the primary price factor. If you use higher-CBG hemp strains, the cost to extract the CBG goes down because you need less material to extract it. This problem has been solved, and now CBG is ready to join the big leagues of the green rush.

6

THE STORY OF MATTERHORN CBG

The story of Matterhorn CBG is a tale of faith and perseverance.

Matthais Ghidossi, an Italian hemp geneticist, has dedicated the last several years to unlocking the hemp seed genetics that would open up CBG production and facilitate its introduction into the wider cannabinoid market. The strain he has developed will make CBG a viable force in the hemp industry.

In 2016, Ghidossi started working on developing CBG in Switzerland, in partnership with a company operating in medical THC production for the Swiss government. At that stage, the Swiss market was already showing some promising results from CBG genetics, but High Grade's breeder was searching for new material to work with, for real industrial hemp strains.

He decided to purchase some Carmagnola seeds. Carmagnola is a varietal that has been grown in Italy for more than 15 years, and it has a reputation for being consistently within THC compliance levels. Matthias planted about 6,000 of these seeds in Switzerland and started selecting any plants that had an interesting terpene profile or flower structure.

Then it happened: the dream came to fruition. Ghidossi caught a tiny glimpse of white across a sun-drenched field of hemp.

The plant he spotted had an intense white flower that made it stand out – even at a distance.



Upon closer inspection, this flower had a very different terpene profile than typical Carmagnola. It was this plant, with its white flower, that became the original mother of Matterhorn. She contained about 5% CBG, which caused the white color in the bud. Matthias was enthusiastic, and he slowly realized he had discovered something special. Now, after 3 years and a lot of hard work, Matterhorn CBG (known as Perugina in the EU) has finally made a name for itself in the marketplace.

What makes Matterhorn CBG stand out in its class is its consistently high levels of CBG, reliably testing at 12.46% to 15% CBG. Farmers can reach these high levels while still maintaining compliance with THC regulation, because Matterhorn's THC levels are typically around 0.09%.

These game-changing results are the reason Matterhorn derived its name from the tallest mountain in the Swiss Alps.



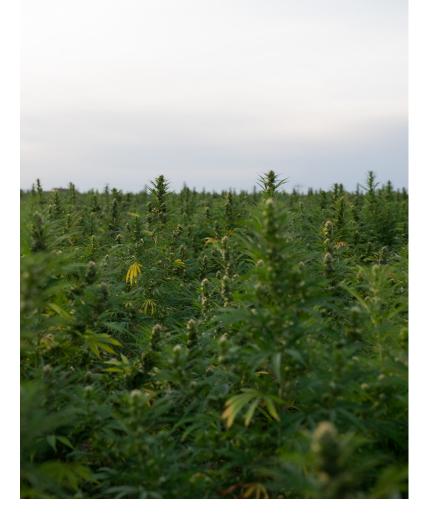
FARMING FOR CBG IS POSSIBLE WITH MATTERHORN

Matterhorn CBG has two years of field trials and has proven itself to be uniform, stable, and unique. Germination rates are at 95% and feminization rates are 98%, producing one male to every 4,000 females. The high level of CBG and consistent THC compliance make Matterhorn a great option for farmers looking to get into the CBG market or to diversify.

Besides being an ideal candidate for CBG extraction, Matterhorn is also highly smokable. Ghidossi paid close attention to the terpene profile which is described as having effervescent notes of citrus with notes of lemon and lime.

Matterhorn CBG is the perfect example of why it's important for farmers to use original genetics. Quality, compliance, and consistency vary from breeder to breeder, and using lower-quality or unproven hemp genetics can result in wasted time, lower profits, and lost crops for farmers.







CONCLUSION

The green rush following the signing of the 2018 Farm Bill has led farmers across the country to transition their operations to include fields or greenhouses of industrial hemp. While CBD has taken much of the seed genetic spotlight, the medical and market potentials are also researching the potential health benefits of CBG.

CBG has the potential to revolutionize the pharmaceutical and consumer goods markets of hemp-derived products. Big players are getting into the cannabinoid market, and there seems to be unlimited potential for the hemp industry.

Matterhorn CBG, with its high levels of CBG, can be the strain that paves the way for CBG to break down previous barriers in the pharmaceutical and consumer goods markets.

9



HIGH GRADE OFFERS MATTERHORN CBG

We encourage farmers to grow Matterhorn CBG for its enormous potential, compliance, and stability. Farmers know that good harvests come from good seed genetics, and that is what you get when you buy High Grade varietals.

High Grade is unequivocally enthusiastic about Matterhorn CBG. Matterhorn seeds and starts are now available in the United States, exclusively from High Grade Hemp Seed.

We're shipping now, and you can reserve your seeds and starts here. https://highgradehempseed.com/our-collection/cbg-matterhorn/

GET IN TOUCH

- 833-TOP-SEED (867-7333)
 info@highgradehempseed.com
 HighGradeHempSeed.com
- O @hghseed

