

THCV: The 'Sports Car' of Cannabinoids

[California Cannabinoids™](#) is a California Corporation formed in 2017, to provide the cannabis industry and consumers access to tetrahydrocannabivarin (THCV), a rare but popular cannabinoid known for its unique properties. They are the exclusive provider of Doug's Varin™, a line of high THCV products known around the world to have the highest concentrations of THCV.

More than a decade ago, investigation on THCV was spearheaded by GW Pharmaceuticals who wanted to research its therapeutic potential in metabolic disorders and weight loss. Metabolic issues can cause high blood pressure, blood sugar imbalances, increased abdominal fat, and high or low cholesterol.

Since then, [animal studies](#) have found that the compound may decrease fat in the liver, balance insulin, reduce hunger cravings, improve bladder control, and have therapeutic potential for schizophrenia, Parkinson's, epilepsy, and nausea reduction. In [human trials](#), THCV has been found to change elements of brain functioning related to food intake and improve blood sugar control for participants with type 2 diabetes. In laboratory studies, THCV has shown promise in decreasing inflammation, pain, liver damage, and may be useful as an anti-acne agent.

THCV is a possible novel treatment for obesity-associated glucose intolerance. GW Pharmaceuticals are studying plant-extracted tetrahydrocannabivarin for type 2 diabetes. It is known as [GWP42004](#), those with a technical mind should read this [THCV research paper](#) which discusses potential uses of THCV for diabetes. Since diabetes is such a widespread condition, any future potential THCV drugs would have a very wide application.

[This THCV research document](#) looks at the treatment of diabetes with THCV alone, and in combination with CBD. This [THCV statement from GW Pharmaceuticals](#) is interesting reading for those interested in potential medical uses and applications for THCV.

The research from GW Pharmaceuticals is interesting, but there are no medical promises yet. A lot more work needs to be done. But all the interest from 'big pharma' tells us that the senior pharmaceutical boffins have a sense of expectation that the cannabinoids have a useful bio-potential. It's almost as if they expect to find each new cannabinoid is useful for something. It's just a question of finding out what.

THCV has a euphoric mood lift similar to THC. But, at the same time THCV is thought to dampen the effects of THC. Technically [THCV is known as a cannabinoid receptor type 1 antagonist](#). THCV is also thought to be appetite suppressing, with roles in the metabolic process and a possible interest as a diabetes treatment. This [Dutch Passion blog on THCV, CBG and CBD](#) is interesting background info on new cannabinoid research and breeding.

THCV is probably the most sought-after cannabinoid on earth. Industry people call it things like "the sports car of weed" and "skinny pot," terms that allude to its effects and rarity.

In 2017, [Vice news followed Franco Loja and Arjan Roskam](#), the founders of the famous Green House Seed Company, into the Democratic Republic of the Congo as they looked for rare plants that might produce THCV. A grueling journey brought back a strain that tested at only 1.1 percent THCV—a fairly tiny amount, but enough for Roskam to say that it was "worth the effort, going into the jungle, fighting your way through, bribing your way through, in the end you have the reward." Loja later died after contracting malaria on a subsequent trip in January 2017.

What about THCV could entice someone to risk death to hunt for it?

It's not because it will just get you higher. In fact, it appears to create effects that are almost the opposite of what most people associate with smoking weed. THCV has been shown to be energizing and appetite suppressing, two traits that make it an obvious candidate for a valuable form of pot. Who in America doesn't want to lose weight and get more energy from an herbal drug?

The business appeal of THCV is painfully obvious. GW Pharmaceuticals, the British company that has used the cover of America's pot prohibition to go light years ahead of any other single company in developing pharmaceutical pot medicine, has won a number of American patents for the isolation and use of THCV as medicine. One of GW Pharmaceuticals patents gives [a laundry list of uses for THCV](#), including treating obesity, schizophrenia, epilepsy, cognitive disorders such as Alzheimer's disease, bone disorders, bulimia, obesity associated with type II diabetes, and drug, alcohol, or nicotine abuse or dependency.

GW Pharmaceuticals has yet to publicly release any THCV, and it is exceptionally hard to find in any significant quantities on the recreational cannabis market. [The highest THCV result](#) in the 2014 High Times cup in Seattle was only 1 percent THCV. Even in the concentrate category that year, THCV tested up to only 2 percent.

I called and e-mailed every pot grower, breeder, and retail buyer I knew in the state, and I still couldn't find anything that could beat these percentages. The most fruitful result was from Western Cultured, the Bellevue farm that grows the best lemon haze on the market. Western Cultured is helmed by Brianna Hughes, who told me that most of their strains test at a minimal THCV level, but their Dutch Treat can run higher thanks to "a special genetic line we've kept since 2012 in the medical cannabis days."

"Most of our strains have trace—less than 0.2% THCV, but our Dutch Treat runs around 1.0 to 1.4%," Hughes wrote in an e-mail.

She had just cut down a new batch of Dutch Treat and sent it out for testing. A few days later, she e-mailed me back with the results. That latest batch was at 1.31 percent, right within Hughes's expected range.

That is an impressive result—remember Loja and Roskam were able to get only 1 percent from heirloom pot they had scoured the Congo for—but it is probably not enough to elicit those diamond-studded effects. There's some evidence that THCV behaves in very different ways depending on how large of a dose we give our bodies. At a low dose, it might be only a fraction as psychoactive as its common cousin

THC. But at a high dose, it turns into the appetite suppressing, stimulating sports car of a drug that everyone wants to get their hands on.

And there are strains with high levels of THCV. Just nothing that's for sale in Washington State, it seems. Eventually I got ahold of someone who actually has a lot of THCV. Kymron deCesare, the chief research officer for Steep Hill Labs in Tukwila, is one of the few people in the United States to have a legitimate supply of THCV.

"For more than a year and a half, I have been sitting on six pounds of plant matter that I know for a fact contains 200 to 250 grams of THCV," deCesare told me over the phone. "I have not extracted that yet because I am not going to consider touching it until I have exactly the right extraction equipment so nothing gets gooped up. It's so valuable, I cannot afford to make a mistake."

How did deCesare come into possession of more than 200 grams of the most sought after cannabinoid on earth? Mostly by accident. A California medical farmer, who goes simply by Doug, sent deCesare a sample of flower he thought was from a Harlequin strain, which is supposed to be high in CBD. But deCesare's testing showed something very different: The flowers came back with a remarkably high amount of THCV. In light of this discovery, deCesare named the strain "Doug's Varin," after the farmer, and has continued to work on refining the strain's THCV content, according to [an interview "Doug" gave to a trade journal](#) published in 2015.

Will Doug's Varin soon be on the shelves of retail stores across America? Probably not, as deCesare said he couldn't comment on Steep Hill's plans for the strain, although he did indicate the company is actively researching it.

Any seasoned hunter will tell you that not all hunting trips return any game, and so it went with my search for some tetrahydrocannabinol I could try, the so-called "sports car" of pot. That doesn't mean we should stop keeping an eye out for these rare cannabinoids. We are still in the early stages of rigorous research on all that pot has to offer.

One of the most promising aspects of this research is the spread of professional cannabis testing labs across the country. The industry now has scientists at its disposal for testing for rare cannabinoids. Jeffrey Raber, founder of the cannabis lab the Werc Shop, said it is "exceptionally nominal" to test for cannabinoids beyond just THC and CBD, and added that exploring these other compounds might be a way for companies to set themselves apart in the industry.

"If I'm a cultivator that feels pressure because everyone is doing the same thing I am doing, then do something else," Raber said. "If you're the first with something new like that, it can be really beneficial to that group and solidify your place in the marketplace."