

SUMMER DIGEST 2020

LANDRACEBRANDS

ON THE FARM

2020 ushers in a new era at Landrace Farms as Ian Keith is promoted to Farm General Manager. Some might say it's overdue, but we're just stoked that Ian can fully deploy his wealth of knowledge, passion, and ethics into a magical growing season for Landrace & Grass Valley Farms. The early season has been marked with colder than normal temps at night (May – June), with the summer seeming to have started late... BUT it's here now and our ladies are loving life under the intense Okanogan sun.

Located on the Okanogan Valley floor, just off the south end of Osoyoos Lake in the heart Oroville, our farm is uniquely situated to take advantage of the fertile soil, indigenous microorganisms, and diverse weather patterns creating a distinct terroir. We experience daily winds from the north and south due to the proximity to the large lake. In the morning we get pleasant northerly cooling winds off the lake and when the temps rise in the rest of the valley, the warm air rushes back out to the lake from the south and the adjacent valleys running West to East.

Resting on the valley floor creates some additional advantages over many of our friendly farms located at elevation on top of the steep valley walls. The most significant difference occurs in the late fall, also the most pivotal time of the grow season, where are friends experience much cooler weather and can become serious problem if the temps dip to low. For example, they can experience snow and ice storms, whereas on the valley floor we are only hit with rain.

Ryan Sevigny, President



Hemp, at this point, is nothing new to the recreational cannabis industry in Washington. We first felt the impacts of hemp cannabinoids in 2017 as some companies began importing CBD isolated from hemp. At the time, a kilogram of CBD distillate extracted from cannabis grown in state was worth upwards of \$10,000-12,000.

Now, as I write this article, I can purchase a kilogram of pure 99.9% CBD isolate for \$500! And since the passing of the Hemp Farm Bill in 2018, we can even purchase CBD sourced from hemp grown responsibly in America. The globalized nature and federal legality of the hemp economy and derivative products allow for massively scaled production that individual state-bound processors cannot compete with. Which begs the question, "What is the financial point of growing it ourselves, when it can be purchased for orders of magnitude less than the cost of growing it in cannabis form?"

WHAT'S THE DEAL WITH Δ8-THC?

David Brookshier, Lab Director



This is where things get interesting. As the chemistry around cannabis evolves and draws the interest of more professionals across a wide variety of other industries, new processing possibilities emerge. The new hot "tek" spreading like wildfire among cannabis/hemp processors is a process that chemically converts CBD into THC. Depending on the specific parameters and catalysts used in performing the reaction, CBD can be converted to a distillate product that is majority Delta-8 THC (D8), Delta-9 THC (D9), or Delta-10 THC (D10). These different variations of THC are what is known as ISOMERS. Isomers are compounds that have an identical chemical formula, but the elements in that formula are arranged in slightly different configurations, which leads to different molecular properties and effects. All of these THC isomers (D8, D9 and D10) have the same chemical formula, $C_{21}H_{30}O_2$, but have a wide variety of effects. The true effects of D8 and D10 aren't yet fully understood, but anecdotally D8 seems to give a high that is similar in feeling to D9, whereas D10 isn't as noticeably psychoactive.

This brings us to the current D8 craze that is starting to sweep the legal hemp and recreational cannabis markets. In the above process where CBD can be converted to a mixture of THC isomers, the "easiest" and most low effort version of the process converts CBD to an almost pure D8 distillate product. 99.9% CBD isolate can be converted, in a matter of a few hours, into 80-

90% pure D8! Combining this with the fact that D8 does get you high (unlike CBD), and there are currently thousands (potentially millions) of kilograms of CBD isolate available at rock bottom prices, and you can start to understand the scale of this market sweep. Except for a handful of states, you can legally sell D8-THC products as hemp derived cannabinoids and just like with CBD, we are starting to see this hemp-derived THC making its way into our I502 market. The question is, will THC prices be able to weather this new hemp storm? Or will this further tank cannabis values, dropping prices on all non-flower (AKA made with hemp-derived oil) products to the point where growing cannabis in state under I502 isn't worth it unless you are selling all of it as flower? And how will this impact product variety, quality, and availability?

Outside of the potential economic issues, the "easy" conversion process stated above only converts 80% or 90% into D8 THC, with the remaining 10-20% of the weight being unknown compounds. Also, due to the nature of the chemical conversion, these unknowns are unlikely to be benign plant compounds but rather traces of the toxic catalysts used in the reaction. Do we really, with Governor Inslee's Vape Ban still in the rearview mirror and a surging national respiratory pandemic on our hands, want to introduce another potential health risk to consumers?



THE LEGEND OF THE BEARD

Ian Keith, Farm General Manager

It's 1996 and up to this point I had some trouble filling out a mustache or goatee, let alone the masterpiece I have to today, but that was possibly the furthest thing from my mind. You see, I was living a normal teenage life with the normal ups and downs associated with all things high school. However, things got real for me when I started to experience terrible stomach and gut related pains. Me being me, I tried to tough it out but after a couple weeks my mom found me curled up in a ball on my bedroom floor and rushed me to the hospital. 2 weeks later, 45lbs lighter (I started at 135lbs soaking wet) and countless tests later, my mother decided it was time and discharged me as the doctors had nothing conclusive about my ailments, other than I was most likely going to develop pancreatic cancer and die.

As a 16-year-old gear head, my own mortality wasn't something I thought about but once home with this news, I had no choice. After discussing best options with my mom, we sought the advice of a Naturopathic doctor. I was given some enzymes mostly containing papaya and cannabis, thus launching my lifelong journey with cannabis at my side.

I spent the next 11 years without an incident, consistently searching for the right cultivar for me and was able to find Where's My Bike? This cultivar with its unique terpene profile and unusual amount of CBG content, I found the perfect cultivar. Finally, having found what I consider the ideal medicine for me, I was able to find some normalness in life and without getting into the "why" I stopped consuming cannabis, I did, and it happen again. Finding myself in

the hospital once more, I remember feeling true appreciation, wildly amazed and extremely eager. It was then that I truly understood and appreciated the power of the plant. I found amazement that something traditional doctors, their advanced technology, testing and treatment plans, could not remedy what Mother Nature produces naturally. The energetic eagerness took over and it was then, I decided that I must to continue to discover new cultivars, with the potential to remedy



other ailments, sharing the amazing benefits of Cannabis!

Now 40, and my beard in all its magnificence can look back and confidently say that owe my life to this plant. Obviously, there have been numerous people to help me through this terrible ailment and I owe a lot to their support and love but without cannabis, I'm not sure that I would be where I am and more importantly who I am today, without the paradigm shift cannabis has brought into my life.