

Emerald

M A G A Z I N E

From Farmer to Innovator

Lawrence Ringo's Story of Hybridizing for the Greater Good

Landrace Strains

Keeping the Heritage of Ancient Strains

UK Skunk Psychosis!

An Investigation into the Term



RICK SIMPSON
Q&A with
the Man Himself

Valhalla
Confections

Gummies for
Grown-Ups

THE STRAIN ISSUE

SPRING HAS SPRUNG



NORTHERN EMERALDS



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The Publishers Word Christina De Giovanni

Life is as fragile as the leaves on trees. You never know when the next one is going to fall.

In Loving Memory of Michael Martino
1986 - 2017

Dear Reader,

Thank you for picking up the April issue of the *Emerald Magazine*.

If cannabis has taught me anything over the years, it's that life sprouts in various forms, and continues to blossom as the seasons change. This April, we've highlighted a variety of different strains, and the breeders, cultivators and culture that continues to inspire us. Cannabis plays a role in the lives of many, and like its life cycle, we grow, bloom and ail with it.

I'd like to dedicate this month's issue to a very special soul who left this world all too soon. Michael Martino passed away in March of 2017. I owe part of my personal success to this man. He was one of my, and the magazine's, biggest fans; he loved watching it sprout from a tiny seedling and grow to what it is today. Wherever we go after this life, I can only hope it is as bright and beautiful as the flowers that bloom. Like Michael, many people have made history in this industry, whether it's through direct cultivation, or the impact they've made on other people's lives. Lawrence Ringo's legacy lives on due to his renowned contribution to CBD. Rick Simpson is another who has dedicated his life to the cause, spreading the plant's truth to all corners of the world.

Our cover this month is dedicated to another person who made her mark on cannabis. Francine Baeza of Fish Rock Farms in Point Arena, California helped develop new strains through cross-breeding and worked to preserve original, heritage strains. The cover shot is a cross of *Blue Dream*, *Sour Diesel*, and *Granddaddy Purple*, lovingly called *Purple D. Francine*.

From all of us here at the magazine, we wish everyone a spectacular growing season and a happy, productive year. May your buds bloom like never before. May your practices precede you, and may your true light shine through in your work.

Join us next month for our Yoga Issue, as we dive deep to explore relaxation and mindfulness.

Cheers,
Christina De Giovanni
Publisher



RICK SIMPSON

Getting to Know the Engineer Gone Cannabis Advocate Behind the Revolutionary Extraction Method

MELISSA HUTSELL

Following a severe head injury in 1997, Rick Simpson turned to cannabis after traditional medicine failed him. The oil he created proved beneficial; not only did he find relief in the plant, but he also found its topical use to help cure his skin cancer. Since then, he's become a household name. His extracts, known as RSOs, have helped countless people worldwide find hope and healing in the plant's properties.

We spoke to Rick about his journey so far. Here's what he had to say:

The Emerald Magazine: How did you develop your methods of producing medicinal extracts from cannabis, and how did you know the proper way to use this medication?

Rick Simpson: I am a power engineer by trade and therefore, I had a great deal of experience working with many different types of equipment. So, developing my own methods to remove the medicinal resins from the bud material of the cannabis plant did not prove to be very difficult. About a year after I suffered my head injury, I discovered that just smoking cannabis was much more effective in treating my condition than anything the medical system was supplying. Though smoking cannabis did provide me with at least some relief, it simply did not have the healing power required, which would allow me to function normally.

Since to some degree, smoking cannabis had proved to be beneficial, I began to wonder if the essential oil from this plant might be the key to giving me the relief I required. So, in 1999 I produced my first medicinal cannabis extract. Since it was a very strong concentrate, I was somewhat fearful to put it to good use, because I thought that something of this nature may indeed present a danger. About three years after producing this extract, the medical system told me that they had no solution to my medical problems, so I was now on my own.

Having nowhere else to turn, I then began to ingest small doses of this extract and I continued to increase my dosage. The positive medical effects I experienced, and the harmless nature of this medication, provided me with the solution I was looking for. Since the use of these extracts had proved to be non-addictive and did not present a danger, I began to supply cannabis extracts to others who were suffering with a vast array of medical problems. The results these patients achieved, and the amount of extract they required, then made it possible for me to develop the protocol, which I brought to the public's attention on my website, PhoenixTears.ca.

Emerald: A few years ago, it was predicted that your name would become widely known, now that this has taken place. How has this impacted you?



After providing these extracts to thousands of people who were suffering with a great number of severe medical problems, I've come to the conclusion that there is no more effective or safer medicine on this planet to treat any condition.

”

Photo by Davor Pongracic

RS: The main upside to my efforts I have seen thus far concern the fact that many are now using my information to heal themselves, and countless individuals worldwide are now aware of this plant's amazing healing powers.

Emerald: Tell us about the challenges you have faced since going public.

RS: First, I had to face the fact that the government of Canada, much the same as many other governments worldwide, is corrupted to the core. Instead of welcoming this sensible solution to most of our medical issues, the Canadian government chose to persecute me and tried to prevent the public from learning the truth. In addition, the mainstream media also did everything possible to discredit my work. This has made it very difficult for me to achieve my goal of informing the public. I also had to deal with all the negative propaganda regarding the use of this plant that people everywhere had been exposed to. Though this propaganda was based on nothing more than a pack of lies, I found that a great number of individuals could simply not accept the truth. Therefore, if this knowledge was ever to be made public, the only way I could accomplish my aims was to fund this crusade myself. To the present day, whatever funding I have available goes right back into this cause.

I think it can only be said that fighting for the natural right of us all to have free access to this natural life saving medication has certainly taken its toll on my life...

Emerald: Why do you provide all your information for free?

RS: Our current medical systems are doing little or nothing to help anyone, and it appears that they are only interested in turning vast profits. I felt that the public deserved an alternative to all this medical madness, which can actually help them deal with their medical issues in a sensible, inexpensive, non-addictive manner. I decided that the greatest number could only be reached if I provided all this information for free. I also went on to provide these extracts to patients at no cost to achieve this same purpose.



Emerald: Why did you not patent your process, especially now when there are so many copycats or criminals online who claim to be you?

RS: I simply don't have the funding required to put a patent in place. Even if I had tried to do so, I am quite certain that my application would have been rejected anyway. It disgusts me that so many of those who have criminal intentions towards the sick and suffering are now using my name to enable them to supply low quality extracts to the public. Protecting my name would require a great deal of money, which as of yet, I have been unable to acquire. For years, I've openly warned the public about the activities of all these con artists. If these individuals were actually supplying the public with the highest quality extracts possible, there would be no need for them to use my name at all, since the healing powers of properly produced cannabis extracts will make their own reputation in a very short time.

So once again I am warning the public to avoid doing business with those who are using my name, since a great number of them are simply using this ploy to steal your money.

Emerald: You developed RSO as a treatment and ultimately you were successful in curing your own cancer. What are some of the things you've learned about its use since you first developed these extracts?

RS: At first, I had trouble comprehending that there was any medication on earth that actually could be looked upon as a cure-all. But after providing these extracts to thousands of people who were suffering with a great number of severe medical problems, I've come to the conclusion that there is no more effective or safer medicine on this planet to treat any condition. It's only through ignorance and corruption on our government's part that has allowed the use of this

natural lifesaving medication to remain prohibited and lay dormant and neglected during the last several decades. For 25 years, I worked in the medical system myself as an engineer and I saw first-hand, the inability of the drugs and treatments which doctors employed, to be of much help to anyone.

Doctors tell those who are suffering from serious diseases, such as MS, terminal cancer, or AIDS, that their conditions are incurable and the only thing they can try is to manage their symptoms with the use of pharmaceuticals. Treating patients in this manner certainly produces large profits for the drug industry, but it does little or nothing to ease the suffering or save the lives of these individuals. The public must come to realize that there is a much safer and more sensible solution to serious medical issues, other than what is being offered by our current medical systems. For once the medical use of cannabis extracts come into play, I have seen many patients who were deemed to be incurable by the medical system, return to a state of good health. So never let anyone in a white coat try to convince you that you are in a hopeless state of health. With the use of high quality medicinal cannabis extracts, you will probably find that your condition can at least be controlled effectively. Also in a high percentage of cases, patients who were suffering with life threatening conditions now claim to have been completely cured, and much like me, they have the evidence to back these statements up.

Emerald: Can you tell us the names of some of the strains you've had success with?

RS: Those who are interested should go over the information available on my website, PhoenixTears.ca. [...]. To produce these extracts properly, one should always use the bud material from sleepy sedative indica varieties, which contain THC levels of 20 percent or more.

I have experienced wonderful results with the use of 100 percent pure indica strains. But if for some reason a pure indica strain with the proper characteristics is not available, one might also consider the use of an indica/sativa cross, which contains 90 percent indica genetics. At present, there are so many different individuals and companies supplying seeds on the internet and elsewhere that often, this makes it very hard to decide where one should turn. Therefore, I would also advise the public that, if possible, they should try to purchase their seeds from the same company who had originally brought some of these well-known medicinal varieties out. This should help to ensure that you will be able to obtain high quality medicinal seeds, which can grow plants that have the right healing qualities. When the life of someone you care about is on the line, only the best will do.

Emerald: What qualities make RSO and what distinguishes these extracts from others?

RS: The term Rick Simpson Oil or RSO simply means that these extracts are the highest quality medicinal cannabis extracts possible. This is what sets them apart from all the others.

In reality, I never wanted this term to become popular, but my late friend Jack Herer was the one who coined it. Even though I made it clear to Jack that I considered this substance to be hemp oil, Jack still continued to call it Rick Simpson Oil. Due to all the respect that Jack commanded in the cannabis movement, others soon began to use the same term as well, so Jack Herer himself is the man who made this term popular.

Emerald: Tell us about your books.

RS: I have published two books on this subject, "The Rick Simpson Story" and "Rick Simpson Oil -- Nature's Answer For Cancer." At present, I am now working on my third book.

"The Rick Simpson Story" describes how I discovered the healing qualities of the cannabis plant. It explains to the public the corruption that one must face when trying to introduce something, which would be of great benefit to all mankind. Although I discussed the treatment of many diseases in this book, it seemed the public wanted to know a great

deal more. So we put together "Natures Answer For Cancer" to fulfill this role.

My books do not pull any punches and I have openly named everyone who has stood in the path of this plant's medicinal use. If you really wish to learn what is wrong with our world, I think you will find the answers to these questions between the covers of the books I have written.

Last year, my wife Danijela started her own publishing company, Simpson RamaDur. "The Rick Simpson Story" has been translated into Spanish, and "Nature's Answer For Cancer" into German. In the near future, we are planning to publish my books in Italian, Polish and Hebrew. My books are being translated into many different languages with one goal -- to spread the knowledge about the healing abilities of cannabis oil.

Emerald: You moved to Europe in 2009; could you tell us about your decision and how cannabis is regarded there?

RS: During the seven years I have spent in Europe, I have always found that for the most part, the people of Europe are much more open minded about the medicinal use of this plant. In 2013, I spent many months in Canada, but due to the corruption of the Canadian government and the apathy of the Canadian people themselves, I could no longer bear to remain in my own homeland. Therefore, I boarded a plane in early November 2013 and I returned to Europe, where I had found attitudes to be much more favorable towards the medicinal use of this plant. I still have grown children living in Canada and since I do not look at this country as being a decent place to live any longer, I plan to resettle my children in

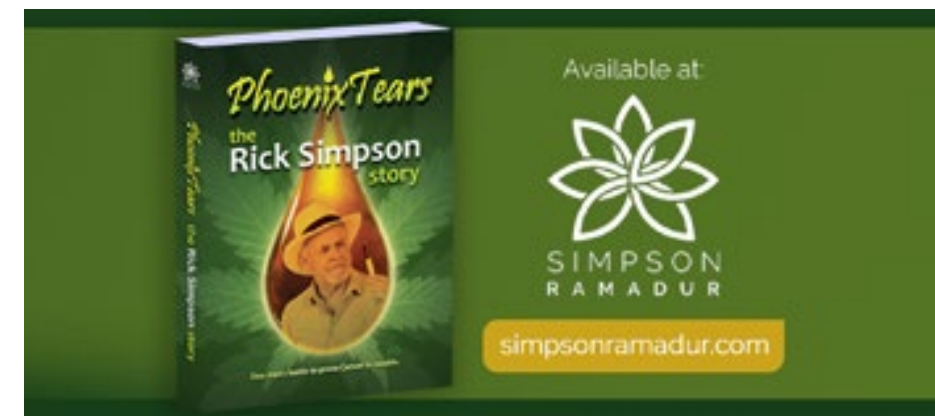
another country elsewhere, in which they can at least find some freedom...

Emerald: How has your perspective of cannabis evolved since you developed the oil?

RS: After seeing this plant's true healing abilities, I have come to regard the cannabis plant as being one of the few things on this planet that is actually worthy of worshiping. For not only can this plant heal our bodies, it can also provide a rational solution to most of the other serious problems mankind is currently facing. In addition, cannabis can provide our species with a much more sensible and sustainable future; is this not what we actually want for our children?

Therefore, I think it's just about time that we all got together and forced our governments to repeal these absurd laws, which are still causing so much suffering and death worldwide. It's time for us all to realize that if left to their own devices, our corrupted governments would never willingly help anyone but themselves. So, if the changes needed are to come about, it will be we the people who will make this come to pass. Indeed, it is our duty to coming generations to bring this about as quickly as possible.

For More Information, visit
PhoenixTears.ca and SimpsonRamaDur.com



LANDRACE STRAINS

KILIMANJARO CHERRY

Exploring the Ancient Strains that Flourish Today

M. COLLAMER

“

One hit and the strain's ancient origins come into evidence. When Cleopatra was seducing Caesar, when Harriet Tubman was navigating ex-slaves through the underground railroad, when my forebears were stressing their Ellis Island entrance, someone, somewhere was enjoying these flowers.

”

During prohibition, our farm grew mostly one strain for the past 16 years — *OG*. As per black market demands, we suffered through the occasional weird bud structure and a propensity to powdery mildew that are the hallmark of the desirable “fuel” strains.

Late in the spring one of our workers from Redding showed up with some clones he found to bolster our crop, called *Kilimanjaro Cherry*. At first, we were hesitant to deviate from our formula for success, but we had extra room to fill. My imagination was immediately sparked, picturing myself smoking a dube in the equatorial snows with highland tribesmen.

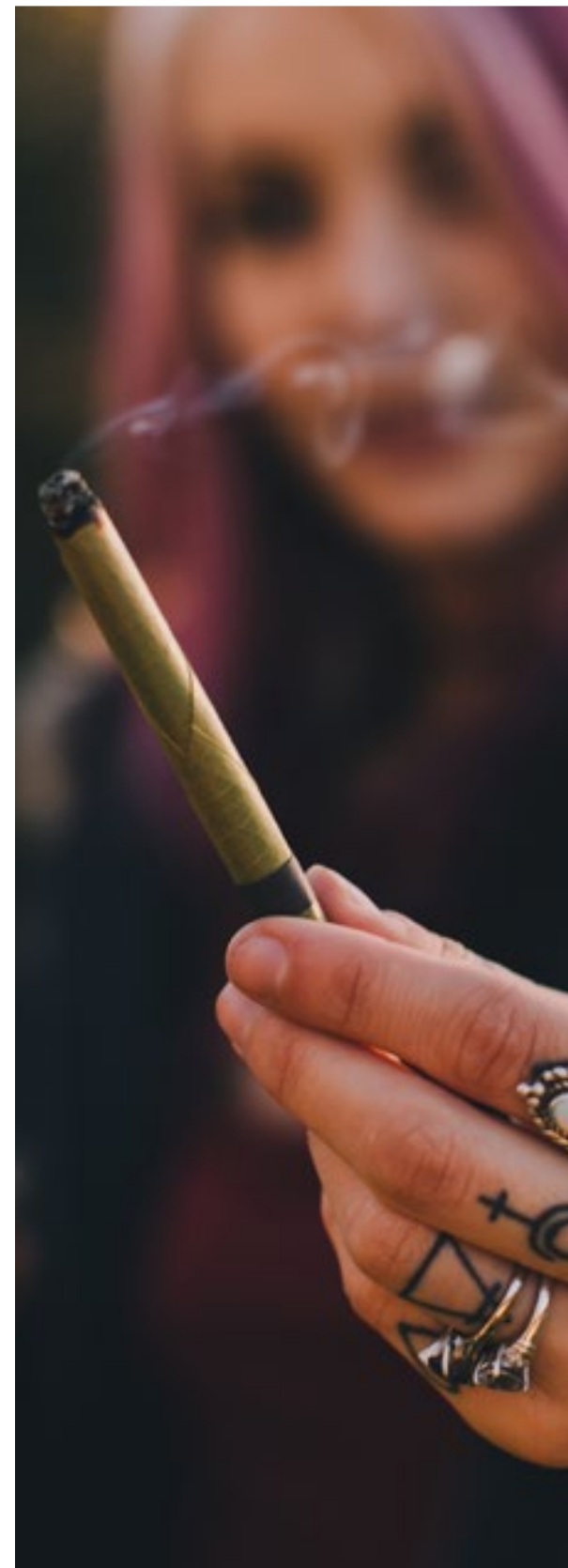
From the jump, these ladies looked way taller than their cousins. As the grass grew, so did the legal climate of cannabis. By the time they were chin high, they were starting to look startling, and it was starting to look like cannabis might finally be legal. So, I was finally free to explore these freak strains that aren't mentioned in rap songs.

A google search told me that my *Kilimanjaro Cherry* was something special. Landrace strains are the oldest, purest wild strains that have adapted over thousands of years to flourish in the specific climates that they originated from.

Flower size, timing, leaf color and even potency can stem from adaptations the plants made on their own to excel in their specific environment. The cradle of cannabis happens to be Central Asia (2900 BC is when scientists estimate that cannabis began to be cultivated for food, fiber, medicine and religion), but it was slowly spread throughout Asia, Africa, Europe, the Middle East and Russia. My crazy clones with the exotic name were what Jesus smoked!

Heirloom strains are the result of the cultivation and crossbreeding, especially in the “New World” by humans, and are the basis of all those *OGs* that SoCal can't get enough of. I began to look at these ancient genetics differently.

The wild irises that spring up around the ranch gained new significance. They are definitely skinnier than their more civilized cousins, but they can be healthy, abundant and beautiful. So was my *Kilimanjaro Cherry*; they were fecund and feminine, towering over everyone in the garden. Queens of the greenhouse, they clustered in their corner demanding accolades. As they lengthened, brilliant magenta streaks ran up and down their thick bows and stems. The web warned me about a potentially smaller yield.



EMERALD TRIANGLE

In September, magenta turned to maroon and purple with the cold. They put on a lot of weight, swelled, and turned solid. I pictured my gorgeous pink girls planted between the coffee beans on a Tanzanian coffee plantation, amongst gazelles and monkeys. Oh, the terpenes! As the sun warmed their leaves at dawn, they off gassed the most intoxicating terpene aroma of cherry blossoms and oak. They always retained their darkest heart of Africa appeal, though, with spiky leaves and hearty stems.

Since we didn't have enough room to dry all the maidens, some had to be made into oil and *Kilimanjaro Cherry* was the perfect candidate. There seemed to be giant nuggets and teeny bong-hit sized nuggets in between. So, we cut and cured the top third, giving ourselves just a few outstanding pounds, all the better to compete in the new dispensary market. After all, in this brave new world, we wanted to put our best selves forward. The remaining leaves and lesser buds were terped and re-introduced to make the most amazing oil.

One hit and the strain's ancient origins come into evidence. When Cleopatra was seducing Caesar, when Harriet Tubman was navigating ex-slaves through the underground railroad, when my forebears were stressing their Ellis Island entrance, someone, somewhere was enjoying these flowers. Even when we were growing “for the market” while I was trimming mountains of *Sour D* and *Headband*, someone was quietly keeping our heritage. No wonder it makes my cannabinoids explode — my genetic make-up demands it, they were embedded centuries ago.

The flowers cured in front of the wood stove for almost two weeks while a wretched storm raged outside. They dried up huge (being only tops!) like seed stock, giant, the pounds contained huge velvety nuggets. *Kilimanjaro Cherry* contained no mold, or no prolific bud rot. I was proud of the test results — organic, sun grown and featuring competitive potency not inferior to those urban favorites, the *OGs*. And those terpenes were to die for.

What is it about these ancient strains that have lasted for centuries? Why is it that I can still smoke the same strains as Neolithic Chinese peasants? How have these old genetics stayed around since the Egyptians were building pyramids?

Because those antique cannabinoids continue to speak to a wild, nihilistic part of our souls, year after changing year, harvest after harvest. 🌿

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HUMBOLDT MARIJUANA CO.

STORY & PHOTOS BY GOOEY RABINSKI

The emerging legal cannabis industry in states like Oregon, Colorado, and Washington has spawned many inspiring startup companies and brands. Nowhere, however is the focus on sun-grown organic products more profound than in the Emerald Triangle of Northern California.

A great example is a particular Humboldt-based company that embraces the sun-grown organic approach to the cultivation of this medicinal, resinous herb. The Humboldt Marijuana Company was founded in 2015 by Jodi and Chad. Together, these NorCal cannabis entrepreneurs bring more than 30 years of growing experience to their start-up.

Humboldt Marijuana Co. specializes in cannabis extracts and organically grown flower. Their target audience includes patients and adult users who desire to consume only the purest, most potent cannabis possible.

In 2015, Humboldt Marijuana Co. had the fifth most potent strain at the Emerald Cup for its standout *Outlaw OG*, which tested at nearly 28 percent THC. The company sells through dispensaries across Northern California and Los Angeles and is “dedicated to creating a pure smoking and dabbing experience for all lovers of cannabis.”

Chad began growing as an undergraduate student in Boulder, Colorado in 1992. He used the proceeds from his harvest to pay for his first semester of college.

“You watch your friends get in trouble for something you feel is completely safe and shouldn’t be illegal,” Chad said during an interview from picturesque Moonstone Beach in Humboldt County, California. “And you know that there’s no way these people deserve to be in prison,” he said.



“This is something we believe in. We’ve put our lives on the line to make this legal,” said Chad. “This is a dream. This is what I want to do. I want to continue doing what I do without the fear of going to prison.”

Compliance Headaches

Other than maybe russet mites and nitrogen deficiencies, dealing with regulatory hurdles and compliance issues is arguably the biggest challenge facing cannabis cultivators and processors in California.

“I saw compliance coming. Deep down, I knew there would be times that I’d be frustrated and wonder why I pursued this route,” said Chad.

He noted how high taxes and large non-refundable permit application fees not only hurt family farmers and small businesses who participate in the emerging cannabis industry, but that they also maintain and encourage the black market.



PHOTO BY CANNAGRAPHICS

Tens of thousands of farmers in the Emerald Triangle are faced with a difficult decision: Operating on the black market -- and risk legal prosecution -- or go legal and deal with the challenges of regulatory compliance. This includes licensing, permitting, and inspections -- all accompanied by waiting periods and heavy fees.

Humboldt Marijuana Co. promotes a sincere and honest reverence for the cannabis plant that is expressed in its pesticide-free organic products. While the company sells small batch artisanal flowers, its focus is on shatter and concentrates.

Emerald Magazine: Who do you want to reach with your sun-grown organic flower products and concentrates?

Jodi : We want to appeal to everybody. We definitely have a vintage surfer look. It’s colorful and bright and appeals to both men and women.

Emerald: How is Humboldt Marijuana Co. evolving and currently dealing with the dynamic changes in the expanding market?

Jodi: We’re not trying to sell out. Big business is going to come in. We just want our little piece.

Chad: We want to continue to do what we do: craft cannabis.

Emerald: If you can monetize your passion, you’re a lucky human.

Jodi: This is the best job I’ve ever had. It’s definitely the most fulfilling. I don’t smoke that much, but I use it medicinally in other ways.



PHOTO BY CANNAGRAPHICS

Emerald: Some of the most seasoned, old-school master cultivators seem to have a Buddhist thing going on. They believe that their plants can perceive a positive vibe and, resultingly, are healthier and yield more.
Chad: I absolutely believe that. I talk to them and play music. My favorite part of the job is hand watering every plant and being in the garden every day. I get to see what the plant is doing. You can tell when it isn’t completely healthy. You just pick up on little things when you’re in there every day.

Emerald: Is it pleasing for you to witness a plant go from seed to sale?
Chad: One of the most satisfying parts of this job is seeing a seedling grow to 15 feet tall and five people holding hands around it. That’s the best part.

Emerald: Five, eh?
Chad: Maybe more.... [laughs]

Emerald: With what company are you conducting your testing?
Chad: We’re doing it with CW Analytical. We believe in testing. Patients deserve that. If they’re using it as medicine, I don’t want to give them product that could be contaminated. We’ve used Leaf Detective locally and try to support local companies. I would like to support more local people in the testing industry, but we love CW. They do a great job. They have the three-day turnaround, which is amazing compared to a lot of companies.

Emerald: What is the future path of Humboldt Marijuana Co.?
Jodi: We’re going to sell to Monsanto....[silence, then laughter]
Chad: It’s a running joke. But to be serious, I think an acre permit is going to be a small farm after they let the big boys come [in 2023]. If you’re growing only 5,000

or 10,000 square feet, you’re going to struggle. Like the dairy industry did when commercial agriculture came in and took over the farms.

Emerald: As a small, artisanal farmer, how do you deal with this market dynamic and survive as a business?

Chad: We want to make the brand popular so we can do things like sell apparel and more flowers. We want to have a recognized brand and to work for ourselves and make a decent living. I’ve never really worked for anybody else....

Jodi: Corporate America is not fun.
Chad: We’re not trying to become big. We’re just trying to survive in our own lane, doing our own thing and giving it our best shot to succeed. And to do it with integrity and respect for nature and other people.

Emerald: Worldwide, there’s a perception that growers in the Emerald Triangle are trashing the land. What is Humboldt Marijuana Co.’s approach to environmental stewardship?

Chad: It’s like everything else, it’s a propaganda campaign by law enforcement, the prison lobby, and people who wanna keep marijuana illegal because they’re making money off of it being illegal.

Jodi: Some farmers are trashing the land. Chad took a Soils Food Web Class from Dr. Elaine Ingham and learned about soil food webs, compost and compost teas. We don’t use any pesticides. It’s tea, earthworms and compost. That’s it. 🌱

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W

hen is a strain not a strain? When it's the wrong word in the right place, placed to spawn panic! This is exactly what's happened in the UK, where "skunk" has become a byword for super-strength, crazy-making weed, despite not actually referring to anything with a specific botanical or taxonomical definition.

The power of names is at the foundation of human psychology. From myth, and folk to religious literature, there are thousands of allegories that illustrate the mystical properties of words including, spells, spell-breakers, incantations, chants, prayers, mantras, and rhymes. As both an acolyte entering a Buddhist monastery and a fairytale character trying to outwit Rumpelstiltskin would agree, names matter.

The history of cannabis prohibition provides a powerful demonstration of the negative power of names. Jack Herer's 1973 book, "The Emperor Wears No Clothes: Hemp and the Marijuana Conspiracy," made the case that efforts to demonize the smoking of cannabis in 1930s America were really directed at its non-psychoactive cousin -- industrial hemp -- then poised to wipe out less sustainable cash crops, like cotton and timber. Harry Anslinger, Secretary of the newly formed Federal Bureau of Narcotics and Dangerous Drugs, created hysteria around a plant that was unfortunately already very well known; hard to pull off if hemp were to continue to be referred to by its common name. The sinister solution was to lump it in with its psychoactive cousins, and have them collectively referred to by unfamiliar, and deliberately "foreign," derogatory slang terms such as marihuana. Cannabis prohibition was successful in part due to deliberate acts of linguistic sabotage.

Tabloid tales of "hopheads" gone mad and propaganda films like "Reefer Madness" (1936) fueled the ensuing prohibition with their images of rapacious maniacs, transformed by a single puff of the "devil's harvest." Those efforts make us laugh today; they're such obvious, and dated efforts at disinformation. Yet something nearly identical to the "yellow journalism" of 1930s America, is happening today in the UK.

I was born in England, but began my pot-smoking days as a California teenager and remember the word "skunky" from the 1980s. It referred to any cannabis that was extremely smelly, especially if it had a pungent scent with an odd resemblance to the spray of a skunk. "Skunky" was an adjective that didn't refer to a strain, but rather a property. (It's true that there is a strain called *Skunk #1* that claims to have been developed back in the 1970s, but no one is referring to that in any of these studies or in the popular vernacular.)

When I returned to London in the mid-2000s, I was baffled by the alarmist headlines warning of "skunk," a new form of super-strength cannabis that researchers were claiming could cause psychosis.

"Skunk Overtakes Cannabis Resin in British Drug Market," blared one headline from the Daily Mail by James Slack in a February 2008 article warning of the latest threat to public safety, quoting statistics that police were now confiscating 70-80 percent "skunk" cannabis while "resin" seizures had plummeted.

It's true that in the 80s and 90s, it had been depressingly difficult to find anything other than hashish or seedy brick weed to smoke in London. But now, I was seeing green bud around, like I knew from California. Is this what they



UK SKUNK PSYCHOSIS!

An Investigation into the Term "Skunk"

meant by “skunk?” If so, the term covered practically every puff I’d had since my teens, not to mention everything available at a medical cannabis dispensary. A lot more people should be demonstrably going off the rails if that were true.

Icons of liberalism, like the Guardian, were also repeating claims about this new breed of psychosis-inducing cannabis, i.e. “skunk.” Even Nick Clegg, leader of the pro-decriminalization Liberal Democrats, condemned it, referring to it as “a particularly toxic form of cannabis.”

“Smoking skunk cannabis triples risk of serious psychotic episode, says research” trumpeted the Guardian’s science correspondent, Hanna Devlin in a February 2015 article that immediately upped the hyperbole with a claim that a study of South London patients found that those who smoked “skunk” every day had “five times the normal risk of psychosis.”

I traced most of these recent claims to a March, 2016 study, funded in part by King’s College, entitled “Effect of High-Potency Cannabis on Corpus Callosum Microstructure.” It claimed to prove a causal link between smoking “skunk” and changes in brain structure of users who had psychotic episodes.

The problems with the study lies, in part, with the definition of “skunk,” first explained as “high potency” which is loosely defined as being 16-22 percent THC to < 0.1 percent CBD. But there are certainly very “potent” strains of cannabis that do not conform to those percentages or ratios. An equivalent term for skunk was then given as “sinsemilla.”

“Sinsemilla” simply means “without seeds” (the clue is in the name). It has nothing to do with potency, except by default: if growing high quality pot, it’s desired that it be seedless. It’s a basic logical fallacy to state that because strong weed is seedless therefore seedless weed is strong, but this appears to be exactly what the researchers are saying.

This wouldn’t matter if the researchers used their own lab-tested “skunk” with THC and CBD levels as defined. Incredibly, this was not the case in the oft-cited study: the only data was the subjects’ own self-reporting of whether they thought they had taken “skunk” or not.

The lack of a defined object of research should invalidate the study, but it gets worse. Bazian, the renowned team of doctors, epidemiologists, librarians, and scientists that upholds high standards for research-based evidence, roundly criticized the research in an analysis surprisingly published on the UK’s NHS website: the study was not only flawed in its methodology and by its small sample size, but the authors had published conclusions that went far beyond their actual findings.

Shamefully, the media outlets ignored a significant part of the study; although researchers did detect some changes in the corpus callosum of those who smoked ANY kind of cannabis DAILY as compared to non-daily users of “less powerful” cannabis, the study did not examine whether those observed changes had any bearing on negative mental health effects. In fact, the corpus callosum of those who’d had psychotic episodes wasn’t noticeably different from those who hadn’t.

Bazian concluded that: “This study [...] was exploratory research and so cannot provide concrete cause and effect conclusions.” To recap: a causal effect has not been established in any scientific study between smoking cannabis and psychosis.



I asked NORML what they thought of the use of the word “skunk” in the UK and received this reply from Paul Armentano:

“...the term ‘skunk’ is devoid of any meaning or clarity and has no place being used in scientific journals or in mainstream media/news coverage. Most problematically, the term ‘skunk’ has never been explicitly defined and there exists no consensus as to what strains or potency qualify as ‘skunk’ in the UK -- facts that essentially make the term meaningless.”

I wrote to the authors of the corpus callosum study and to a UK “drugs awareness” (pro-prohibition) organization called “Skunk Sense.” I contacted Robin Murray, a frequently quoted representative of King’s College and skunk alarmist. I tweeted to Conor Woodman, maker of an ITV “Exposure” documentary which featured “drugs expert,” Ian Oxley, who believes “sinsemilla” and “skunk” to be synonyms. I even tried to reach Oxley himself. I asked them all variants of the same questions: is there a taxonomical/botanical definition of the type of cannabis you are referring to as “skunk;” how can it be differentiated from other cannabis by the lay-person; why are you using slang instead of standard botanical nomenclature? No one replied.

The result of my quest to find a scientific definition for skunk as used in the UK may thus be surmised as follows: Skunk = Strong Pot, a term that remains subjective.

In the last 15 years or so, UK cannabis users started to get more sophisticated about cannabis genetics and were no longer satisfied with the over-priced, mostly low-grade imports from the Caribbean and Africa. They wanted the nice green bud like that found in Amsterdam. The legal loophole that allows grow shops to operate unabated, plus the ease of purchasing certified seeds online, created an obvious opportunity in a country with a cold climate and bad drug laws.

The emergence of more green bud on the UK scene coincided with the Trans-Atlantic misappropriation of the term “skunky,” to refer to good cannabis. Without an olfactory reference point in a land where there are no skunks, the slang term for “strong smelly green bud” must’ve become generalized and popularized.

The science of studying cannabis terpenes, the source of the aromatic qualities, may give us a way out of this mess as we can now isolate exactly what chemicals are responsible for the “skunky” quality. I found a helpful article entitled “The chemistry of skunk spray” by William Wood (an organic chemistry professor at Humboldt State University in Arcata, California), that defines the odor as “composed of thiols and thioacetate derivatives of these thiols” or mercaptoacetic acid.

I propose that we definitively identify all cannabis strains which have mercaptoacetic acids in their terpene profiles as “skunk.” My second proposal, is that *any* substance being scientifically researched must first be clearly defined by laboratory testing; and that subsequently, research subjects must use that exact tested substance and not something they bought outside the Brixton tube station. 🍀

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ALLISON EDRINGTON

Friends have come over for dinner, and it's been ages since you've seen them. When was the last time you got together like this? You're hoping they linger after dinner for a drink, so you can catch up on each other's lives.

What would stimulate that dinner conversation into an invigorating discussion that lasts into the early hours of the morning? Revive Organics! The company has, thankfully, crafted its wine tincture to strike that balance of relaxation and stimulation for such an occasion, said Revive Organics Founder, Jacob Carlson.

"We've been researching this wine for four years, and this is the first wine that we could launch [in] the commercial world," Carlson said. The 1:1 ratio of CBD and THC gives it anti-inflammatory properties, and the "relaxation stimulates conversation until 3 a.m. about the future, on a night where the chemistry is right."

Revive Organics found 1:1 to be the preferred ratio to evoke a social atmosphere. "If you were to open a bottle of wine at a dinner party with THC, they would get so comfortable that they don't want to talk. The other one we did was a hot extract of the CBD:THC extract -- it made you want to go to bed immediately. Time for bed after five sips."

Their cold water extract method uses high-grade cannabis flowers and is then infused into grape alcohol to create their signature wine tinctures. All of Revive Organic's ingredients are organic, and are devoid of the sulfites that many traditional wines use.

"I strive to have the highest quality and it's just a lifestyle I've always led. I couldn't imagine trying to make a product that wasn't all organic," he added, "Some people want me to lower the cost and not go organic with all of the ingredients. There has to be some kind of renewable resource that we could be dealing with." That line of thinking inspired Jade Judd, Public Relations Manager for Revive Organics, to present the wine tincture with Revive Organic's in a package that reflected those same ideals.

The birch box is tied with a thin strap. Inside, the *Harlequin* Red California Wine is paired with a bar of infused dark chocolate and a jar of salve. The wine bottle has 200 mg of CBD and THC, and you can pour about three-to-four glasses from the 500 mL bottle.



[Top Left]
Harlequin Wine Tincture

Revive Organics infused red wine,
200 mg CBD, 1:1 THC

[Top Right]
Skin Salve

Revive Organics 50 mg infused
cannabis salve.

[Bottom Left]
Dark Chocolate Bar

Revive Organics 200 mg medicinal
dark chocolate.

[Bottom Right]
Complete Package

Revive Organics complete packaging
comprised of infused wine, chocolate
and skin slave.

Before talking with Carlson about the story behind Revive Organics, my husband Thomas Edrington and I, shared a glass of the *Harlequin* Wine Tincture together after unwrapping the wooden package. Upon first sip, the familiar notes of a California red round out it's dry feel on the tongue.

Despite the higher alcohol content of 14.8 percent by volume, the wine tincture didn't produce the typical drowsy side effects, but instead proved more stimulating. Steps around the house were lighter than usual.

Red wine isn't the only kind in their repertoire -- they're getting ready to launch a limited run of 15 cases of Sauvignon Blanc this season.

While we were most excited to try the wine tincture from this trio, Revive Organic's dark chocolate with 66 percent cocoa was surprisingly smooth and satisfying. The bar contains 200 mg of cannabinoid content, and only a hint of cannabis could be tasted with each square. That familiar, bitter flavor of cannabis is subtle, and it plays perfectly into the flavor of organic cocoa beans and butter.

Carlson is a trained chocolatier. He's infused cannabis in various chocolates and other delights for many years. The Revive Organics team tasted choc-

olates from all over the world before settling on their current, certified organic ingredients for this product line. The high quality extract used minimizes the cannabis flavor, and "with that dark organic chocolate, it's seems like it's a match made in heaven. It's the finest chocolate in the Bay Area and the best we could possibly afford. I don't even know how we lucked out to find something like that on a commercial scale."

Each square of dark chocolate is dosed with a combination of THC and CBD that, like the wine, is designed to relax and stimulate. "That's the response we get from all of our customers. We've maybe spent 18 years experimenting and hiding the flavor, and with this new CBD technology, it's been able to up the game to change the doses and make people more engaged in trying an edible."

The Revive Organics wine tincture, chocolate and salve, brought together in an elegant birch package, can provide an uplifting, engaging experience that would be right at home on the table at your next dinner party. 🍷

To learn more about Revive Organics, go to ReviveRevive.com or see what they're sharing on Instagram @revive_organics.



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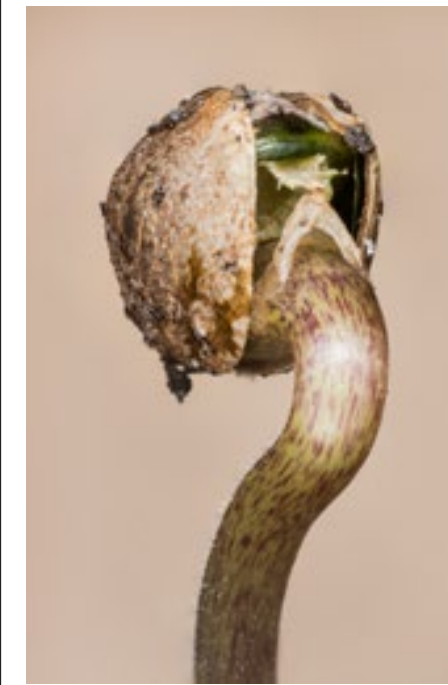
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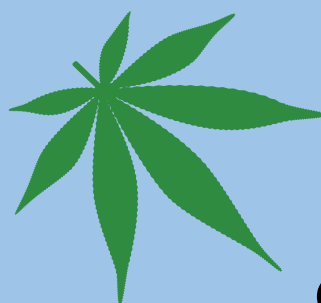
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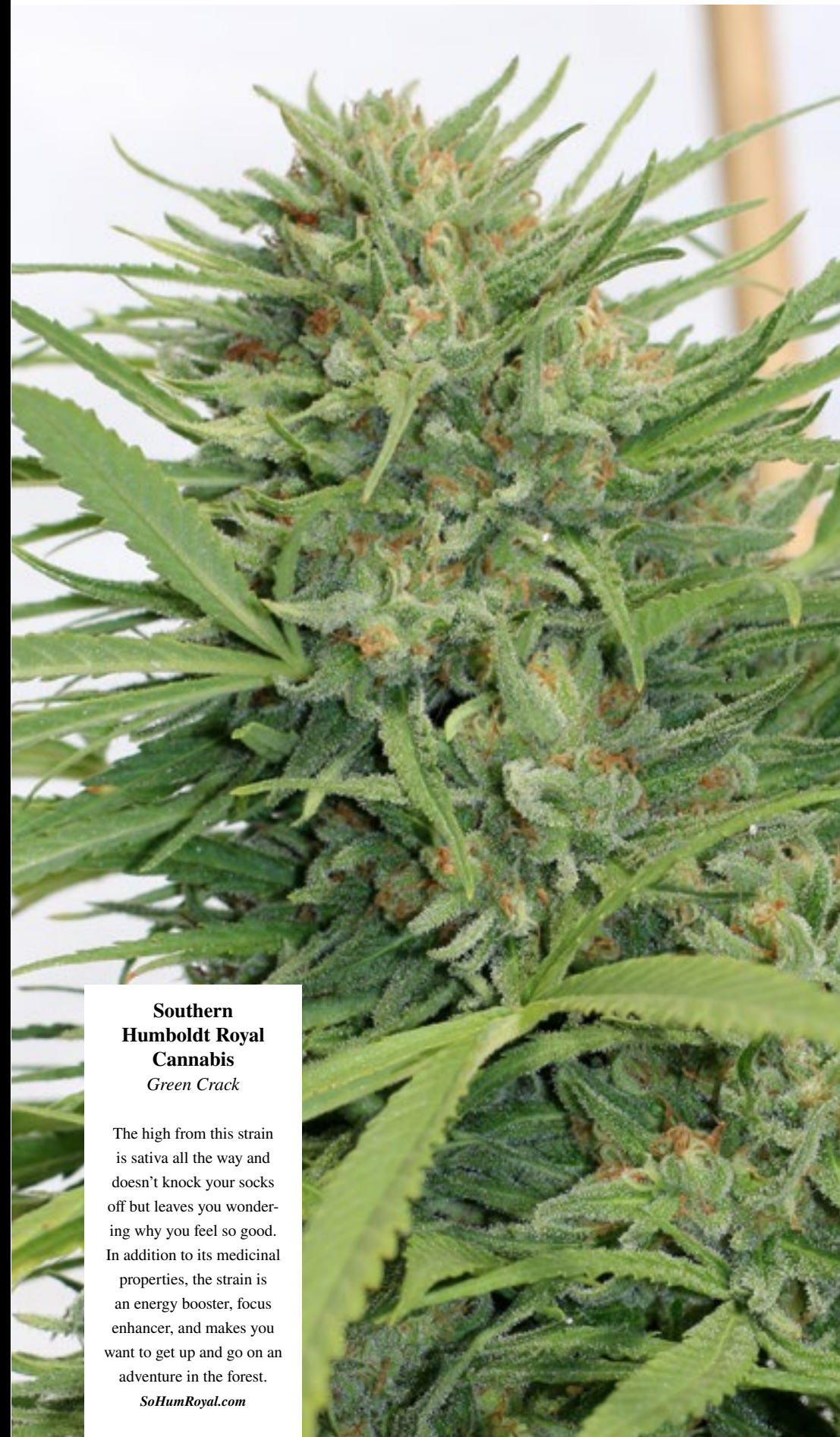




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LAWRENCE RINGO

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SHARON LETTS

Charlotte's Web was first introduced to the world via a television documentary; what the world didn't know is, that strain actually began in Southern Humboldt.

When CNN aired Dr. Sanjay Gupta's first documentary "Weed" in 2013, *Charlotte's Web* seemed like a miracle plant, with little to no psychoactive properties.

The strain was named after the then four year old Charlotte Figi, who suffers from Dravet Syndrome, and endured up to 300 grand mal seizures per week. Figi benefited greatly from oil derived from the strain, and her story was told on national television via Gupta's documentary.

Due to the legalities of prohibition, the story of the strain's lineage was left untold. *Charlotte's Web* came from a combination of seeds and starts purchased from the Southern Humboldt Seed Collective after being painstakingly hybridized by Lawrence Ringo.

Another little known fact, is that a group of some 40 children with seizures were already being helped in Northern California with Ringo's CBD strains, long before Figi's story made headlines. Due to the covert nature of the region, combined with a fear of Child Protective Services, the story was kept under wraps.

Historic Horticulture

Historically speaking, it was the cannabis farmers in Northern California who first focused on hybridizing the psychoactive properties of the plant. Lawrence Ringo – who had been growing weed since he was 15, and then farmed in Southern Humboldt for 35 years – hybridized the THC (tetrahydrocannabinol) back down on some of his plants, while raising the CBD (cannabinoid) compounds up to new heights.

As with many medicine makers, his intent was personal. He'd suffered from severe back pain since childhood. Missing a disk between his third and fourth vertebrae, his bone on bone pain required something more than the pharmaceuticals could offer.

His widow, Kat Hart, said he also developed strains to enhance his guitar playing – demonstrating the versatility of the plant as a crossover from recreational to medicinal in one strum, so to speak.

As if Ringo's history in weed isn't colorful enough, he was taught to grow cannabis by the head of a neighborhood Hell's Angels, after finding and returning a snub-nosed .38, a sapphire gold ring, and a film can of cocaine. He threw the cocaine away, returned the ring and gun, and noted the rather large sativa plant in the man's yard. When the man asked what he wanted for returning the items, he quickly replied he wanted to learn how to grow weed.



"I've been to every doctor and chiropractor. No one can really help. When my back really hurts I do the high-CBD kief. Two pipe loads and I can go out and do anything – ride a motorcycle, work in the garden."



It took [Ringo] years to develop the strains that would help his own back pain, while also enabling him to maintain productivity throughout the day. His goal was not to get as high as possible, but rather, to be as pain-free as possible.



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It took him years to develop the strains that would help his own back pain, while also enabling him to maintain productivity throughout the day. His goal was not to get as high as possible, but rather, to be as pain-free as possible. He saved the seeds of the plants that offered the most relief, and eventually hybridized them to get the strains we are familiar with today.

For instance, the plants grown from *New York City Diesel* seeds, purchased from Canadian Marc Emery, were crossed with *Sour Tsunami* starts to get the *Sour Diesel* we know today. The irony of the lineage of *Charlotte's Web* continues, as Emery would spend time in prison for selling seeds across borders.

He relied solely on the strains he developed to control his pain. In an O'Shaughnessy's Journal article published in 2011, Ringo stated, "I've been to every doctor and chiropractor. No one can really help. When my back really hurts I do the high-CBD kief. Two pipe loads and I can go out and do anything – ride a motorcycle, work in the garden."

From Farmer to Innovator

Though Ringo is known for his hybrids, one of his biggest achievements is discovering Light Deprivation in 1980 – a technique commonly used today, tricking plants into thinking it's time to flower.

According to Ringo's bio, found on KingofCBDGenetics.com, Ringo covered his greenhouse, blocking out all sunlight. This encouraged early sexing, enabled females to be planted in early May, and ensured that large plants would harvest earlier. This ensures fresh medicine through the summer months when there is typically a void of plant material until a fall harvest. Because the CBD strains are not trimmed, allowing for whole plant compounds, there is no excess.

On his 40 acres in Blocksburg, California, Ringo honed his skills as a farmer and breeder. He worked with landrace strains from around the world, including Mexico, Thailand, and Afghanistan. These are the strains that helped to create the high THC strains we have in today's cannabis market.

Ringo left Humboldt County for Santa Cruz to raise his boys, but ended up back in Blocksburg, purchasing seeds from Emery's Seed Company. With eight initial strains, Ringo developed 20 new ones, starting Kush Seeds, then the Southern Humboldt Seed Collective.

The day Samantha Miller of Pure Analytics called to let the team know his *Sour Tsunami* measured in upwards of 11.3 percent CBD, while retaining six-to-seven percent THC, Kat said everyone cheered. This was the first time Miller had come into contact with high CBD strains, and the findings were not lost on her. The bigger news, was Miller advised he had eight other strains that also had the potential of testing high in CBD.

"At that point we knew very little about CBD, but Samantha conveyed its importance," Hart shared. "It was really the defining moment for So Hum Seeds as we know it now."

As Hart explains, *Sour Tsunami* was the first strain to test dominant for CBD, then came *Harle-Tsu*, *Canna-Tsu*, and *Swiss-Tsu*. Current strains available in its catalog include *ACDC* (see "Strain Detectives," Page 51), *Canna Tsu*, *Cheesel O*, *Harle Tsu*, *Hula Buddha*, *Kona*, *Pineapple Tsunami*, *Purple Diesel*, *Sour Tsunami*, *Swiss Tsu*, and *OG Cheese Dog*.

Ringo's *Harle Tsu* is an excellent example, as it stands alone in the Phyllos Galaxy with a 20:1 ratio of CBD testing upwards of 22 percent CBD.

Breaking Down the Plant

Ironically, legalization in Colorado allowed the Figi story to be told, which has helped change public perception of the plant altogether.

Hart said it stung when a version of Ringo's CBD strains took center stage in the CNN documentary, laughingly referred to as a "Hippie's Disappointment," for lack of THC. Its Humboldt lineage went unmentioned due to the legalities of crossing state lines with the seeds and starts.

Records provided by Hart reveal that *Charlotte's Webs'* ancestry may stem from a combination of *Harlequin* and *Sour Tsunami*, but Hart said the profiling shows a grab bag of varieties, albeit, with Ringo's strains predominantly in the mix.

"Phylos Bioscience genetically tested *Charlotte's Web* and it does show a connection, but it also shows that we were not the first to work with high CBD strains," Hart shared.





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What Phyllos discovered, is that while Ringo was honing his CBD in Humboldt, breeders in Spain were working on the same exact process. If the universe really is aligned, then cannabis was a conduit in this instance.

Where *Charlotte's Web* is concerned, Hart said Ringo remembered selling *Harle Tsu* seeds to the proprietors of *Charlotte's Web* during a High Times Cannabis Cup. If *Charlotte's Web* came from those seeds, then its lineage would be unique. But the plot thickens, as Ringo's assistant at the time shared that the party visited the farm later, purchasing *Harlequin* and *Sour Tsunami* starts, complicating the issue.

The point is moot, as *Charlotte's Web* is now said to be derived from hemp, with the name not considered a stable strain, but a brand.

Continuing Tradition

Ringo passed away in 2014 from lung cancer. With little warning, he was diagnosed with Stage 4 cancer and given just two months to live.

Though Hart said they consulted with some of the top experts in cannabis medicine, they were encouraged to do a round of radiation due to the severity and the location of the tumor.

"He immediately began eating the oil," Hart shared. "He was ingesting his own CO2 high THC oil, with a 3:1 CBD. He never regained any strength after the radiation to even be able to try the chemo." The severe diagnosis and subsequent radiation treatment were too much to handle in the end.

The genetics he left behind are his legacy, carried on by his children, who were raised farming in Humboldt. His method of light deprivation is practiced around the world.

His eldest son, Levi and his wife Danielle, now run the Southern Humboldt Seed Collective, and are the keepers of the strains. "The cooperative was formed to help support local farmers and [to] be able to provide enough CBD medicine to meet supply and demand," Hart added. "We provide clones of our genetics, the farmers grow it, and the cooperative purchases it. We have a couple CO2 extractors, and have applications pending for a dispensary and a manufacturing facility."

"I'm not the farmer, Ringo was. But, I'll never be far away from the magic he made. It's everywhere now, and we as a cooperative are very proud of Ringo's legacy," she added. "He was extremely generous, which is why the strains he created are so widespread. He believed in helping others for the greater good."

Author's Note: The demand for quality CBD only medicine from cannabis is great, but Hart said they have had some trouble connecting to product makers in California and are sitting on a reserve. 🌿

To learn more about Lawrence Ringo, visit the Southern Humboldt Seed Collective at KingOfCBDGenetics.com

Loopy Fruit from Sunboldt Farms



A LOOK BACK AT STANDOUT STRAINS

PHOTOGRAPHY BY EMILY HOBELMANN

The first edition Pot Talk ran back in May of 2015, which means we're coming up on my two year anniversary of writing for the *Emerald Magazine*! In honor of both this personal landmark and the fact that this is the strain Issue, this edition of Pot Talk is a look back at some of my favorite strains featured in the column over the past two years.

A bit more about the column: Pot Talk is a regular feature where I review cannabis flowers and extracts. I make it a point to feature some background info in each column -- ideally, a bit about the farmers, their philosophies, gardening practices and extraction methods (if applicable). Plus, I try to get a bit of background on the strain(s).

Thanks to the *Emerald Magazine* crew for providing such a great forum to showcase so many of the talented folks and excellent products in our cannabis community. And thanks to all the farmers and extracts artists that have put themselves out there over the past two years for Pot Talk. I have to say, I can't get enough of meeting farmers and experiencing their products first-hand.

First Up: *Overlord* from Loompa Farms (Featured in May 2015) (Pictured Left)

Loompa Farms is a group of boutique growers located in rural Northern California, near the Humboldt-Trinity county line. This Emerald Triangle brand was established by a community-oriented and massively experienced group of "mom and pop" farmers that have been involved in the cannabis industry from the get-go.

Overlord is the hydroponic version of Loompa's Underdog, their prime *OG Kush* strain. It's super *OG* in appearance and smell, and it's a knockout -- a full-figured indica super model with a fresh, rich and spicy smell -- diesel fuel with a hint of ginger and citrus, a sharp and zesty shot of grapefruit with peppery overtones, akin to fresh bay leaves.



(above) *Overlord* from Loompa Farms

The chunky, pyramid-shaped *Overlord* nugs sparkle like precious gemstones. The color is a lime to pale sage-silver green, like the piercing eyes of the *Yeti* as seen through a snowstorm in the Trinity Alps. The flavor is rich and musky with hints of mustard and berry. The aftertaste is rich and chocolatey. The effect is a quick and powerful body high. It's exemplary, if you are down with a brawny hydro *OG*.

Loompa Farms is online at LoompaFarms.com and on Instagram: @Official_LoompaFarms.

Next Up: *Sour Tsunami* from Lost Coast Botanicals (Featured in September 2015)

To this day, I rave about that *Sour Tsunami* sample from Lost Coast Botanicals because it's a profoundly CBD-rich strain. The ratio of CBD:THC is 20:1, so it doesn't really get you high. Ginger Anderson from LCB calls it "one of those *unicorn* strains" because of its epic high CBD content.

Oh, how I love the *Sour Tsu*. That particular sample was gorgeous. The flowers were a rich emerald green that looked wet with trichomes, although the aroma was somewhat unremarkable -- citrusy and reminiscent of Pine-Sol with a hint of vanilla. Regardless, a joint of this beautiful, organic cannabis was smooth as silk. That citrusy aroma carried over to a nice flavor, and yeah, it didn't get me high!

The *Sour Tsu* brings more of a warm and fuzzy feeling, with no paranoia, excessive tiredness or intense psychoactive effect. I believe it's a perfect daytime/productive cannabis, the polar opposite of a one-hit-rock-your-world strain. It makes you more present, more calm. In this era of super powerful, mind-altering weed, that is a unicorn trait indeed. LCB is online LostCoastBotanical.com.



Yet Another Gem: *Loopy Fruit* from Sunboldt (Featured in October 2015) (Pictured Left)

Loopy Fruit (*Blackberry Kush X Willie's Wonder*) is a proprietary strain from the Sunboldt Grown Cooperative, a Humboldt County farm based in Holmes. It's glamorous cannabis, bright green and frosty with tufts of hairs ranging in color from rich tawny orange to a bright crimson. The flowers are well-formed, the calyxes almost look braided, there is a symmetry there. The nugs are firm and snappy with the right amount of give.

It smells sharply of fruity blackberry, citrus and pungent kush aromas. The taste is reminiscent of sweet raisin and apple, like a bread pudding. The effect is loopy to the max -- an instantaneous lucid inebriation. It gives me a sense of bravery, a desire to go out and behold the world and its natural beauty. It's creative, happy cannabis -- a mind-altering kush blend that does not bring you to foginess. You gotta try this strain...

Sunboldt Grown is online at sunboldt.com and on Instagram @SunboldtGrown.

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Photo by Terravida Farms

Finally: *Kaluptos Kush* from Terravida Farms (Featured in May 2016)

Terravida Farms is based in the Mattole Valley of Southern Humboldt, between Petrolia and Honeydew. They grew their *Kaluptos Kush* outdoors from seed right next to a beautiful Eucalyptus grove. Indeed, “*Kaluptos*” is the Latin name for the little cap that grows over every eucalyptus flower to protect it from the elements. Farmer Jessi B. Rockenbach says, “We think the Eucalyptus smell comes through in this plant, so we named it that to give it that piece of place.”

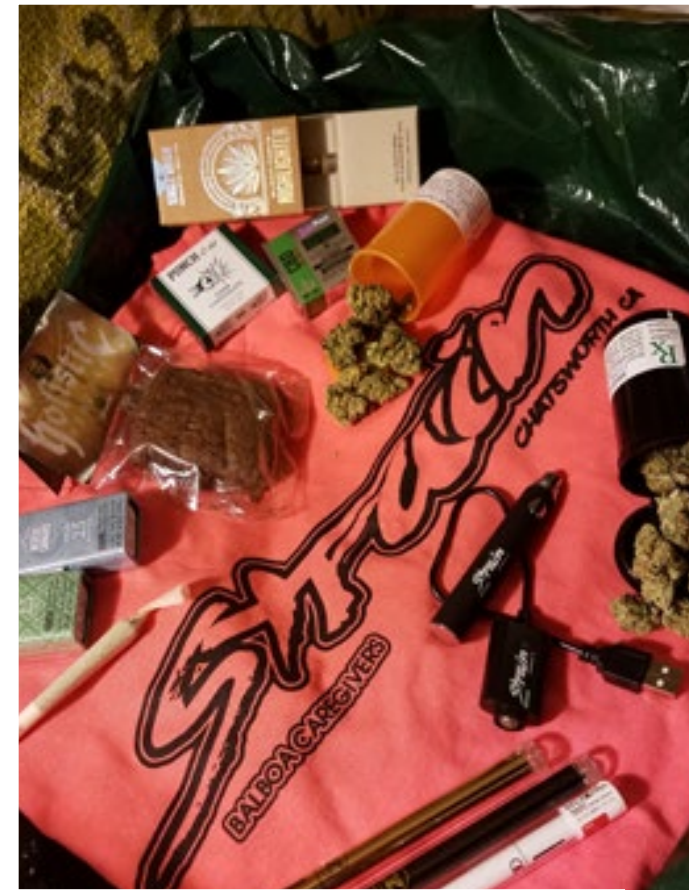
Kaluptos Kush is *Jack Herer* crossed with *OG*, then crossed with *Petrolia Headstash*. It’s dominant terpenes are Terpinolene, Carophyllene, Myrcene, Limonene and Humulene. The flowers are a light asparagus-to-yellow green in color with lots of sparkle and sparsely distributed brown-orange hairs. It smells like bubblegum and vanilla with an earthy-mint base note, yes, like eucalyptus. The flavor is powerful on the uptake too. A healthy hit of *Kaluptos Kush* cleared my lungs and left me with a delicious, resinous aftertaste.

The immediate effect made me feel charged and thirsty, then I found myself getting totally sucked into whatever caught my fancy throughout the afternoon and evening. Ultimately, I felt relaxed and carefree.

Terravida Farms is on Instagram @Terravida.farms.



(below) Photo by Shannon Perkins



If only I had more space to revisit the slew of great strains featured in Pot Talk over the past couple years, like *XJ-13* from Sunnabis (January 2017), *Nigerian* from Shine On Farms (March 2016), *Purple Dogbud* from Little Hill Cultivators (September 2016) and *Blue Ogre* from Happy Day Farms (June 2015).

Thanks again to everyone that’s helped produce this column each month. Here’s looking forward to many more!



XJ-13 from Sunnabis



Nigerian from Shine On Farms



Purple Dogbud from Little Hill Cultivators



Blue Ogre from Happy Day Farms

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Cannabis strain *King Louie*
Photo by Strain Balboa Caregivers

STRAIN BALBOA CAREGIVERS: IT'S WORTH IT IN CHATSWORTH

SHANNON PERKINS

For cannabis consumers in Southern California, a dispensary called Strain Balboa Caregivers offers over 60 different strains in Chatsworth, California; the drive is worth it.

Roughly 30-40 miles north of downtown Los Angeles, south of Ventura, east of Santa Monica, or west from Palmdale, Strain Balboa Caregivers awaits you with a diverse variety of flowers, concentrates, edibles, and topicals. Questions are encouraged. Budtenders are educated on a weekly basis about strains, new products, and cultivation and extraction methods. They are a pre-ICO (Interim Control Ordinance) collective and Prop D compliant. Strain Balboa takes pride in giving personalized attention to each and every patient, and providing products that are always fresh.

Upon entering the bud room, a chorus of “hello” and “welcome” rings out, and one of the budtenders immediately lets me know she’ll be right over to help.

Picture rows upon rows of jars filled with greens, purples, and crystalline flowers surrounding the room. I counted over 60 strains of bud alone, including some signature strains like *Chatsworth OG* and *Saturn OG*.

PRODUCT DISPLAYS LOOK AS INVITING AND FRIENDLY AS THE BUDTENDERS’ ATTITUDES.

Product displays look as inviting and friendly as the budtenders’ attitudes. Waxes, rosins, crumbles, oils, and other concentrates fill the shelves in case after case, glistening like gold. Strain Balboa Caregivers works with multiple vendors like Legion of Bloom, Tin Man Oils, and Sierra Extracts, which allow patients even more options.

When it comes to edibles, if you can think it, they probably have it. Some of the highlights are: classic baked goods, infused waters and juices, candies, chocolates, honey, and infused sauces like teriyaki glaze, tabasco, BBQ, and a mild wing sauce. Topicals like salves, lip balm, massage oils, and transdermal patches are also available. Many of their products, like *Kushy Punch*’s CBD and sativa gummies, are also strain specific.

During my visit, I talked with Michelle, who was in her first week with Strain Balboa Caregivers, and Denise, a floor manager who has been with the company for over a year. I had a lot of questions. Answers led to more questions, but that did not phase them. So, Michelle brought Denise over to assist, making sure that every concern I had was addressed. All of my questions were answered with patience, knowledge, and friendliness, making Strain Balboa Caregivers a great place for first-timers and old-school experts.

Denise said her best advice for anyone visiting Strain Balboa Caregivers is to ask questions. “This helps us find out what type of cannabis product you are looking for, and what products we have that will help,” she confirmed with a smile.

The vape pen selection at Strain Balboa Caregivers is extensive, with both disposable pens as well as changeable cartridges, and options for indica, sativa, and CBD. Vaping is a popular and effective form of cannabis consumption, and can

be a viable option to treat pain. A 2013 study by Barth Wilsey, M.D., was published by the Center for Medicinal Cannabis Research (CMCR) about the effects of vaping cannabis for pain relief, "... cannabis has analgesic efficacy with the low dose being as effective a pain reliever as the medium dose. Psychoactive effects were minimal and well tolerated, and neuropsychological effects were of limited duration and readily reversible within one to two hours. Vaporized cannabis, even at low doses, may present an effective option for patients with treatment-resistant neuropathic pain."

Denise and Michelle walked me through the process of using exchangeable vape cartridges and gave me tips on how to use them. Bloom Farms' vape cartridges, highlighters, are on the menu. They have cartridges for ACDC, a sativa dominant strain known for its high CBD content. Another is 22K vape pen line at Strain, with cartridges and disposable vape pens. Choose from sativa, indica, and hybrid strains like *Durban Poison*, *King Louie XIII*, and *Girl Scout Cookies*.

When I spoke to Josh, the Operating Manager at Strain Balboa Caregivers, I found out why the budtenders are so confident and comfortable discussing products with patients. "We train our staff here to be more than just budtenders, we aim for them to be [advisors]. So rather than 'this one is super dank,' it's 'this one will give you an uplifting feeling that's great for combatting depression,' or 'this *Bubba Kush* cut has high levels of CBD, CBN, and beta-carophyllene, which makes it great for helping you fall asleep."



Tangie Cookies BHO Extract
Photo by Strain Balboa Caregivers

He added that weekly classes are mandatory for all staff so they're up to date on this type of information. This element takes their high class customer service to a whole new level with the power of information. Budtenders can offer educated advice to patients regarding what strains work best to treat specific symptoms.

Denise recommended one of Strain Balboa Caregivers' signature strains, *Saturn OG*, for my interest in an indica. I wanted something to help me sleep, but would not knock me out too fast or too hard. She listened to my concerns, and narrowed down the indica choices until settling on *Saturn OG*. Nailed it. There is a burst of euphoria at the onset, then relaxation sets in, creating a balanced high fit for winding down from the day. I would describe this one as a gentle indica, good for anyone who needs help sleeping, but must rise early the next morning for work or other activities.



Sour Banana Sherbert
Photo by Strain Balboa Caregivers

Another unique flower at Strain Balboa Caregivers is *Tropicanna*, a sativa dominant hybrid grown and distributed exclusively by Cannabiotix. *Tropicanna* is the result of crossing (*Pineapple x Kali Mist*) and (*Northern Lights #5 x Haze*), and has a sweet, fruity flavor. This strain tested high in beta-myrcene terpenoid content. According to Ethan B. Russo's article in the British Journal of Pharmacology, titled "Taming THC: Potential Cannabis Synergy and Phytocannabinoid-Terpenoid Entourage Effects," beta-myrcene (β -Myrcene), also commonly found in hops and mangos, blocks inflammation and provides pain relief. "Combined with THC, [β -Myrcene] may produce the 'couch-lock' phenomenon of certain chemotypes that is alternatively decried or appreciated by recreational cannabis consumers," Russo wrote.

A highly awarded strain, *Tropicanna* took home 2nd Place for sativa flowers in the 2015 Jamaica High Times World Cup and 2nd place for sativa flowers in the 2015 Michigan Medical High Times Cannabis Cup.

Tangie Cookies, a BHO extract by Alternative Oils, is pictured here in golden glory with a strain sticker behind it. There is no residual solvent in this highly stable extract, allowing the spicy-orange flavor from *Tangie* and *Cookies* to shine. Expect calming effects, despite the presence of a sativa.

Check out their giant menu online at Leafly.com, which is updated regularly, but the best way to get an idea of Strain Balboa Caregivers in Chatsworth, is to visit. It's worth it! 🌿

Learn more about Strain Balboa Caregivers:
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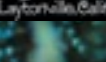
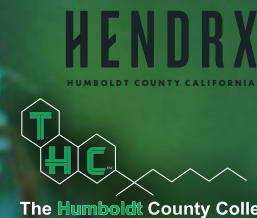
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SHANNON PERKINS

You may have heard of the Three Amigos. Get ready for the Triple Alliance of Seeds in Maconha Seeds Bank. Spain, Brazil, and Chile are serving up genes with bragging rights. No need to separate the boys and the girls when using their feminized seeds, and you can snooze through your early morning alarm clock by choosing an autoflowering seed.

Maconha Seeds Bank offers a selection of autoflowering seeds and feminized seeds, in both indica and sativa options. Xochitl Medina, Director of Promotion, explained some of the essential concepts to me over a fast-paced phone call in March, a prime planting month. "Our seeds are made by crossing the best of Europe with the best of Brazil," she said. The reason Brazilian strains were selected was simple, "they are always cup winners."

Flowers from autoflowering seeds are completely bloomed in about two-to-three months, no matter how much or how little sunlight is available. Feminized seeds will always grow into female plants, which can be especially helpful for growers dealing with limited legal plant numbers. Maconha Seeds Bank was established in Chile, and the main headquarters are based in the country's capital, Santiago. For over fifteen years, Maconha Seeds Bank has been producing seeds and distributing them in European markets. Now, a branch in Burbank, California is taking root, which is great news for California cannabis farmers.

For many California residents, including those in Mendocino County, the number of plants one can legally grow is limited. Having high-producing plants is crucial. Mendocino County regulations, under Ordinance No. 4302, currently allow only 25 plants per land parcel, though some exemptions exist for medical cannabis. "Medical marijuana growing collectives, individual members thereof, or individual patients who possess a valid doctor's recommendation may be granted an exemption from the limitations... provided they apply for and obtain a permit from the Mendocino County Sheriff's Office," according to the ordinance. In those cases, each parcel of land must be at least ten acres, and no more than 99 plants may exist. If one can only grow 25 plants at a time, ensuring that all plants are female and can produce high quality buds, this is an efficient strategy.

Another tool for cannabis cultivators is the automatic, or autoflowering seed, which is always ready on time, whether winter or summer. The autoflowering seed comes from a cross between ruderalis and an indica or sativa. In crossing these two types of cannabis, characteristics like bud size, flavor, and grow cycle can be showcased.

In his book "Marijuana Botany: An Advanced Study: The Propagation and Breeding of Distinct Cannabis," Robert C. Clarke notes that "ruderalis could prove valuable in breeding rapidly maturing strains for commercial use in temperate latitudes. It flowers when approximately seven weeks old without apparent dependence on daylength." So, regardless of short daylight hours during winter months, for example, plants with this type of characteristic will reliably mature and flower on schedule, at seven weeks.

What is better than being on time and good looking? In Portuguese, one of the romance languages, Maconha means marijuana, and the seeds will have people saying "nice genes" about the plants in the same, sexy, must-have way "nice jeans" can be said of Guess, True Religion, and Levi's.

With a high-standard heritage, the Maconha Seeds Bank is committed to delivering top shelf quality seeds at an affordable price. "Our seeds are always made organically, and are always fresh," Medina said, "we make them, and then sell them immediately." Maconha Seeds Bank stands behind its products, offering a germination guarantee on every seed.

"People say when they smoke the flower from the seeds, there's no burning in their throats, there's no coughing. It's because there are no chemicals. It's pure. Everything is organic," Medina said, supplying another reason to try Maconha Seeds Bank.

They also pride themselves on customer service and offer cultivation advice for first-time and expert growers. The company's website is full of strain specific profiles to give customers an idea of what to expect from cultivation and ingestion.

Here's a look at some of the Maconha Seeds Bank strains:

Cabeca de Preto, roughly translated to Black Hat, is an indica dominant, autoflowering strain with 80 percent indica and 20 percent sativa. It is a cross between *Blueberry Dutch* and *Pink Brazilian Mango*, and offers an aromatic flavor of cranberry and sweet berry. This strain can have colorful tones and a high THC, low CBD profile. Maconha Seeds Bank notes a 50-to-60 day bloom cycle, so plant in September for a November harvest. The high is described as relaxing, happy, euphoric, and encouraging, and can be used to address symptoms of depression, insomnia, and stress.

Another automatic, indica is *Punto Rojo*, or Red Point. This strain is 60 percent indica, 40 percent sativa with a low CBD content. *Punto Rojo* is the result of crossing *Jack Herer* and *Brazilian Pink Sleeve*. For an earthy, pine flavor, pick these seeds.

For a higher CBD content, check out *Remedio Caseiro*, also known as *Homemade Remedy*, the resulting strain from a landish and Brazilian *Transamazonica* cross. This is an indica from the feminized seed category. *Remedio Caseiro* has a light flavor and aroma of lavender and provides a soft state of relaxation ideal to combat anxiety and pain.

Caetano Velozo is a sativa strain with high CBD and THC concentrations, and is available in feminized seeds. It is recommended for glaucoma, loss of appetite, fatigue, and inflammation. Maconha Seeds Bank suggests allowing 65-to-75 days to flower.

One of the most potent THC strains available is *Borrachinha*, an auto-flowering sativa which takes about 70-to-80 days to flower. The sweet and spicy fragrance is marked with citrus and earthy notes. *Borrachinha* buds are usually more resinous, and are said to produce a distinct energy rush. A cross between *Haze* and *Brazilian Pink Sleeve*, *Borrachinha* is great for consumers who want to be physically active.

Interested in buying seeds, visit maconhaseedsbank.com, or call 818-564-9245



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WRITTEN BY SHARON LETTS | STRAIN PHOTOGRAPH BY CHANDRA VOGT

Phylos Bioscience is a laboratory based in Portland, Oregon that’s currently breaking down the lineage of the strains we think we know today.



HUMBOLDT SEED COMPANY
Cookie Monster

the sibling with the better hair and breed it again for those traits – it’s the same with cannabis.”

Ringo eventually crossed *Sour Diesel* from the seeds of a *New York Diesel* plant with a little known strain protected by covert Humboldt farmers, called *Ferrari*. He then crossed that back with *Sour Diesel*. *Tsunami* was what he called the *Double Diesel* that had been crossed back four times to make *Sour Tsunami*.

Ringo’s goal was to get the same “creamy” flavor found in *Ferrari* without the “couch lock,” in a new strain of his own. After this intense hybridization process, he found his *Sour Tsunami* had the same exact creamy taste.

“Finding that creamy taste is a selection process,” Karassik added. “That’s the skill of a great breeder, the ability to pull those traits out in that cross and select from them, then stabilize them.”

Currently, Karassik is seeking out a *Sour Tsunami* cutting to test and the original *Ferrari*, completing the puzzle that are Ringo’s CBD strains.

With breeders and farmers competing for trophies on the best strains, Karassik encourages them to turn in cuttings to map after their win.

“We’d like to encourage farmers to change the strain names back to the varietal name,” Karassik shared. “There have been many cases of strains taken from one region of the country to another, then renamed, such as *YMCA* on the east coast and *ACDC* to the west. The strains are still amazing, but were created from a clone already popular under another name on the other side of the country,” he laughed. “We will enable the farm itself to be highlighted, so people could compare how different farms grow the same variety – the farm and grower are the phenotype after all – and that’s what makes the difference.”

When all’s said and done, there may be an entirely different industry based on findings before and after the *Phylos Galaxy* is fully realized. Until then, the strain you are smoking in that bowl may remain a mystery.

Nishan Karassik, CEO of *Phylos Bioscience*, said the *Phylos Galaxy* collection of strains traces the family lines of each strain back to the original plant, while realizing other strains that may have crossed its genetic path, so to speak.

Karassik compares it to breeding dogs, “It’s just like the offspring of two Labradoodles -- true F1 hybrids -- crossed together, one sibling may have characteristics similar to a Labrador, and another may have more traits from a Poodle,” he added.

This is where selection, then stabilizing that breed, occurs, explained Karassik. “If you want the certain type of hair they have, you would take

As detailed in Lawrence Ringo’s profile on the *King of Genetics* website, the hybridizer spent years working with strains that helped relieve a lifetime of pain, and increase the pleasure he found in playing guitar.

Patients often ask, “What strains do I use for pain, which ones will help me sleep?” While we know the basics of the two families of cannabis - sativa is uplifting, while indica is calming -- is that strain you’re purchasing really from the original strain, with the same beneficial properties?

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For more information on *Phylos Bioscience*, visit PhylosBioScience.com

Sharon Letts has developed “*Strain Detectives*” into a television show, pending review now.

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PREPARE FOR THE FLARE

NEIL DRESSER



In Northern California, wildfire is not a question of “if” but “when”. If you live in or near a natural area, you are at risk. What will be the story of your home or neighborhood following a wildfire?

Here are three key points that made Butler Flat defensible — points that all homeowners should consider:

- Maintain Defensible Space
- Clear all flammable vegetation other than trees, green grass, or ground cover within a 30’ radius of your home and other structures on your property.
- Remove all dead branches from trees next to, or overhanging any building, or within 10’ of a chimney or stovepipe.
- Clear roofs and gutters of needles, leaves, and any other dead vegetation. For the area between 30’ and 100’ feet around structures, consider reducing the volume and continuity of shrubs and trees, as well as keeping grass or ground cover under 4”. Reducing fuels beyond 100’ is appropriate for properties located on slopes, due to the possibility of increased flame lengths and convective heat impacts.
- Make Your Driveway Accessible and Visible

Firefighting vehicles generally need a minimum clearance of 20-feet



In early August 2013, the human-caused Butler Fire raged out of control east of Somes Bar, California. It consumed thousands of acres, and threatened numerous homes. The unforgiving terrain, coupled with the fire’s resistance to control, dictated a defensive strategy, and my Hotshot crew was tasked with protecting the community of Butler Flat.

Upon arriving, it was clear that a deliberate approach had been taken to prepare this tiny community for wildfire. Driveways were clearly visible and allowed multiple points of egress. The area immediately surrounding each structure had been cleared of flammable material, creating ‘defensible space’ for us to work in. Water tanks were accessible to fire apparatus, and the vegetation on the slopes surrounding the area had been kept sparse. As a result, we had time and space to safely do our jobs.

No structures were lost at Butler Flat. Although our efforts as firefighters were significant, the preparedness of the residents is what saved those homes. Will Harling, a resident of Butler Flat and head of the Orleans/ Somes Bar Fire Safe Council, relates the following:

“Butler Flat, had large fires burn very close in 2006 and 2008. A significant investment in fire prevention work from the community, the U.S. Forest Service, and U.S. Fish and Wildlife Service during and after these fire events allowed firefighters to safely defend the 10 structures there during the Butler Fire.”

Butler Flat is a great example of how and why property owners should take responsibility for preparing themselves, their families, gardens and their homes for wildfire. Although success stories like this are numerous, so are the tragedies of loved ones lost, homes destroyed, and lives forever altered by the devastating impact of wildfires.

wide by 15-feet high, as well as an adequate turn-around to safely access your home.

- Make sure that the road and address signs leading to your home are large and highly visible; brightly colored at least 3-inch letters or numbers set against a dark background are recommended. REMEMBER, if your driveway is gated and locked, firefighters will potentially be unable to access your property.

- Have an emergency water supply.

- Consider maintaining a large, easily accessible emergency water supply clearly labeled “FIRE”— a 2,500-gallon-minimum capacity is recommended. Equipping your reservoir with a 2 ½ -inch male National Hose pipe thread fitting makes firefighter access much easier. Don’t forget defensible space around your water supply!

While addressing these points is a great start, there are many other ways you can reduce your risk from wildfire, and there is a tremendous amount of resources available to help: READY, SET, GO

The “Ready, Set, Go” campaign describes three simple steps homeowners should take to prepare for a wildfire:

Be “Ready” and prepare your home and property.

Be “Set” and have an evacuation plan.

Be ready to “Go” and evacuate early.

For more information, visit ReadyForWildfire.org.

FIREWISE COMMUNITIES

When neighbors come together and share responsibility for wildfire preparedness, the shared benefits are exponential. The Firewise program focuses on wildfire preparedness at the community level, and promotes grassroots movements to make communities more fire safe. It empowers communities with tools and resources, and encourages neighbors to work together.

Visit FireFise.org for more information on collaborative, community-based fire preparedness.

FIRE SAFE COUNCILS

Fire Safe Councils (FSCs) are non-profit groups that promote community-based fire planning efforts, and incorporate local landowners and residents with local, state, and federal fire management agencies. FSCs are often closely aligned with the Firewise program. Distributing grant money to fund local fire prevention and education programs and hazardous fuels reduction projects is a large part of what they do. As an example, the California Fire Safe Council (which directly funds many local FSC’s) has funded roughly 850 grants worth \$81 million over the past ten years. Contact your local FSC and find out how you can get involved.

KNOW YOUR LOCAL FIRST RESPONDERS

Another way to be prepared is to contact your local, state, and/or federal fire agencies and find out who will respond to a fire on or near your property, and what you can expect in that scenario. 🇺🇸



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ARE YOU COVERED?

Cannabis and Insurance

JUAN CRUZ

With the continuous growth of the Cannabis Industry, more and more businesses find themselves unsure of the insurance requirements in the cannabis world. There is a huge amount of misinformation, and individuals trying to take advantage of businesses who are unsure how to protect their investment. If you are a part of the industry, and find yourself frustrated with the lack of information on insurance, you are not alone.

Cover Cannabis is a part of Inszone Insurance Services. The agency is licensed in all 50 states and has been servicing the cannabis industry since 2007.

Chris Walters, Chief Operating Officer and Humboldt State University alumni, takes us through some of the most common questions he encounters:

What types of cannabis businesses does Cover Cannabis work with?

Our primary focus had been on compliant cultivators and dispensaries. Over the last few years, we've been providing more and more of our services to compliant manufactures, delivery services and processors. There is so much innovation in our industry that the business types or "classifications" are always changing. For instance, we're now working on providing the right scope of coverage for cannabis smoking lounges and tour services.

What type of services and policies are most commonly requested?

General Liability is the most common coverage request. This type of insurance is typically required by your landlord when leasing space. We're licensed nationally and some states have insurance requirements. For instance, Colorado requires a bond and Washington State requires product liability. We help our customers meet those requirements.

We also help Cannabis Business Operations (CBOs) protect their investments with a full line of Property Coverages. Our property policies are designed to insure structures such as buildings and greenhouses, equipment and tools used for grow facilities, finished stock and inventory, cash on hand and even business income loss after a disaster. For our indoor and greenhouse customers, we also insure their live growing crop. Property policies are designed to protect against fire, theft and vandalism type losses.

We want our customers to know that they can be insured just like any other business. Workers Compensation is something every business with employees should have. In most states it's required by law, and is considered to be the only way to pay for injuries when an employee is injured on the job.

Commercial auto coverage is available for company vehicles. We recommend hired and non-owned auto coverage when employees are driving their personal vehicles for business purposes. We even write directors and officers policies. We offer a wide range of solutions.



A licensed electrical contractor of our client's choice will need to complete an inspection and sign off. A product recall plan needs to be in place for customers purchasing product liability. Outside of that, it comes down to the security measures you take. Surveillance systems are typically required. Inventory and harvested stock needs to be secured. Response times in the event of a fire need to be carefully considered.

Training is the most important aspect in preventing and limiting losses. Standard operating procedures need to be in place for everything from handling cash and product, to how you should react in an attempted robbery or fire. Business owners need to be certain their staff will respond correctly under pressure.

Regarding insurance needs, what are some things an entrepreneur should consider before seriously taking on a cannabis business? Are there serious concerns?

Is there special coverage that cannabis businesses should consider?

Most of my clients have employees and have yet to purchase workers compensation insurance. This one is required by law in most states and often overlooked. It's a big step for an old school cannabis farmer to run formal payroll and buy workers comp. We have some great products that make it really easy to get into compliance.

Product liability insurance is the other big one. Without formal standards for product development, testing, packaging and labeling, CBOs are taking big risks to pave the way. It's easy to sue someone and legal defense doesn't come cheap. Legal precedent in a courtroom frequently sets the standard in our country. Manufacturers are especially at risk. A marketing defect such as improper labeling or an inadequate safety warning could easily turn into a class action suit with big dollars at stake. CBOs need to have a recall plan in place and be prepared to take decisive action if faced with this type of lawsuit. Product Liability Insurance is likely to provide your defense.

Because of the quasi-legal atmosphere of the cannabis industry, are there ways for dispensary owners to ensure against catastrophic or unforeseen events? For example, getting busted, robbery, fire (for grow facilities), product liability (if sued by a customer), etc.

It's important to note, getting busted isn't something we can insure against. Robbery, fire and product liability are issues we tackle. When a farmer or dispensary owner buys a policy, they'll need to go through a standard safety inspection at their farm or facility.

Insurance is typically the last thing considered when preparing to open up shop. It would be wise to move your risk control up near the top of the list. You should certainly be meeting with an attorney, CPA, and insurance agent who knows the industry. The legal environment is uncertain and the risks are real.

What are other things important for cannabis businesses/professionals to know about insurance (or the lack of)?

The right policy and coverage is available. Be sure to update your agent as your business plan changes. For instance, if a cultivator decides to start manufacturing, the policy needs to be endorsed and we need to work on that product recall plan. Ask a lot of questions and make informed decisions about potential gaps in coverage.

Are there any unique insurance products that you offer, just for cannabis clientele?

The most unique line we offer is certainly our crop coverage. If a cultivator has crop loss due to fire, theft, vandalism or equipment breakdown, they can recover the wholesale value of their product. Our cultivators are frequently shocked to find out the coverage is more affordable than they thought it would be.

Do you have an office in Humboldt County?

We do not have an office in Humboldt currently. I visit Arcata several times a year. We have many customers in the area, and they typically prefer to do business over the phone or by email. There are solutions for making secure payments to your insurance company, even if today's banking problems require those payments to be made in cash.

If you have questions that have not been answered above, we encourage you to call and talk to one of our knowledgeable agents. Each business is unique and has its own set of needs. Our agents can answer any question you might have and help you structure a policy that will fully cover your investment. Give us a call at 1 (800) 406-9166, or email us at info@covercannabis.com.

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VALHALLA CONFECTIONS

SHANNON PERKINS | PHOTOS BY ANDREA GODARD

There is something about the way a flavor can hit the tongue just right, and how the balance of sharp and subtle strike a harmony. The harmony is loud and perfect, stirring a happiness, a joy, in eating. Sometimes, though, nails screech a chalkboard when the term ‘medicine’ or ‘health food’ drops. Enter Valhalla Confections’ gummies: the candy is so good, it’s actually medicine.

Health foods are extremely important to me. It is not often that the delightful harmony of dank noshing coincides with potent medicine. Valhalla Confections’ gummies are not too sweet to be candy, and not too healthy to taste like straight medicine. It is a gummy for grownups, and Valhalla makes them as ten milligram doses in sativa, indica, and CBD strains.

Almost a year ago, on my first trip to the Sonoma Patient’s Group in Santa Rosa, California, I asked the budtenders for advice on CBD products. Valhalla Confections came highly recommended.

EACH DOSE FEELS THE SAME, AND DELIVERS A RELIABLE EFFECT.

In order to medicate low-key and give my lungs a break, I was interested in this gummy-type cannabis treat. I recently heard about CBD through the cannabis-vine, and the low-dose gummy rectangles seemed like a good starting place. The experience I had was memorable. The mood shift and uplift keeps me looking and asking for this brand by name all the way down in Los Angeles. Out of the pack of five, each dose feels the same, and delivers a reliable effect.

On March 1st, Brian Scott and I chatted over the phone about his company, Valhalla Confections. He and business partner, Drew Bulfer, created Valhalla Confections in September 2014. For nine months, Bulfer and Scott researched and tested recipes. By June 2015, Valhalla Confections had locked down a unique recipe based on strain specific gummies; indica, sativa, and CBD.



Santa Rosa, CA

“Everything is handmade, and lab tested at SC Labs,” Scott explains, “we test the [cannabis] oils used to make the gummies.” Valhalla works with licensed growers who use only organic methods. Their cannabis concentrates are derived from CO2 extraction methods.

The indica strain is *Odin’s Reserve*. Valhalla sources this strain from private, indoor farmers out of the San Francisco area. These indica gummies give a calming, happy high. It is well-balanced.

When deciding what sativa strain to use for their sativa gummies, Scott asked around and Sour Diesel was the most popular pick. Cultivated in Sonoma County, California, their Sour Diesel is grown outdoors in full sun.

For the CBD gummies, Valhalla sources cannabis from what is available on the ebb and flowing market. “We used Cannatonic recently, and Otto is currently in the mix,” Scott told me. Industrial hemp is also used to keep up with the high demand, and a lot of their CBD comes from Australia, especially during our winter due to the opposite seasons. To maintain the 2:1 CBD:THC ratio, some THC is added back.

Scott came to cannabis after 16 years as a firefighter, and 12 years as a paramedic in Indianapolis. Growing up in Eureka, Kansas, he had no exposure to cannabis. What he witnessed during long shifts as a paramedic was “a lot of people overdosing on opiates, narcotics, and other hard drugs. I can’t remember a call about marijuana, though. I saw people have trouble maintaining the use of opiates as prescribed by a doctor... [there was] a lot of drug abuse.” It wasn’t until his brother-in-law, who works at The Apothecarium in San Francisco, introduced him to cannabis that Scott began to study and research it. He saw people using cannabis who were able to eliminate their opiate use, observing that “Cannabis is natural. It’s not as harsh on the body.”



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As a non-smoker himself, Scott set out to provide a product for people who are unable to smoke, or do not want to set fire to the flower. "Edibles are easy to take. They are ingestible and [effects] last a little bit longer than vaping or smoking," he said. On average, the effects of the gummies start about one hour after consumption, and last for about four hours.

The ganja gummy scene was ready for something small and potent. So, Valhalla Confections started with Scott and Bulfer making everything by hand. They now have ten employees including a lead cook.

Here are some new items Scott says to look for from his growing business. In addition to their five pack of gummies at 60 milligrams, a two pack at 20 milligrams is on the way. Pre-roll packs called Valhalla Matchstix are six joints of the same strains available in gummies. A Thai Ginger Spice granola bar is also on the line in sativa and indica.

Based in Santa Rosa, Valhalla Confections is quickly expanding. Their products can be found in Bay Area dispensaries including The Apothecarium, Cookie Co. 415, Phytologie, Magnolia Wellness, and CBCB. In Southern California, check your area on EAZE delivery service website. Nevada has at least ten locations. To see the complete list, visit the Valhalla Confections website. It never hurts to ask for it at your local dispensary, too. It may lead them to discover the gummies of Valhalla Confections.

These gummies deliver a clean sampling of the strain from which they are derived, be it indica, sativa, or CBD, like a breath of fresh rosin, mixed with a mist of ripe and ready fruit.

"Heal tastefully" is their motto, a harmonious invitation to cannabis, health, and undeniable good taste. Valhalla Confections is a must have, trust me. Trust the labs. Whether dosing for fun, for health, or for all of the above, Valhalla Confections is the best.

Find out more about Valhalla Confections! at Valhallaconfections.com
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Jeff's Light-Tasting MCT CANNA-OIL

by Jeff the 420 Chef



Photo credit: Leela Cyd

I'm excited to see that when it comes to cannabis infused edibles, many reputable edibles brands are finally labeling their products "sativa," "indica" or "hybrid" and letting you know the number of milligrams of THC and/or CBD per serving in the edibles you buy! But what about the strains?

A patient I cook for that suffers from fibromyalgia, and debilitating PMS that involves joint pain and headaches, medicates with *Cannatonic* and *Harlequin*. My friend Tahnee Shah, who is successfully fighting and beating stage four liver cancer, uses *ACDC* and *Blue Dream*. Another friend, suffering from chronic migraines and pain after major knee surgery, swears by *Jack Herer* to help her find relief. For those with illnesses, medicating with specific strains of cannabis is of paramount importance.

Over the years, I have worked with many medical cannabis patients and in my quest to truly help them experience a better quality of

life I became obsessed with learning about how specific strains are purported to help people who suffer from a multitude of ailments. Although the science of cannabis is fairly new, and it's an ongoing learning process, we now know that cannabinoids help alleviate pain, reduce inflammation, lower high blood pressure, strengthen bones, shrink tumors, prevent seizures, promote healing, alleviate many of the side effects of chemotherapy, and even kill cancer cells. We also know that the interaction of the many healing compounds within each cannabis strain is what allows that specific strain to help individuals with their medical challenges. They call this the entourage effect. I call it "medical manna."

So next time you make my Light Tasting Canna-Oil, make sure you are using a strain of cannabis that truly helps you achieve your wellness goals.

Number of servings:

8 1-tablespoon servings

Preparation time:

10 minutes

Cooking time:

3 hours + blanching and decarbing

Idle Time:

24-48 Hours plus overnight

Approximate mg of herbal potency per

Tablespoon:

10%: 23 milligrams

15%: 34 milligrams

20%: 46 milligrams

Ingredients:

¼ ounce (7g) herb

8 oz MCT Oil (or Refined Coconut Oil)

Directions:

Step One – Soak and Blanch Herb

1. Coarsely grind dry herb and soak in distilled water for 48 hours.
2. Change the water every 12 hours. This cleans out a lot of the impurities that cause bad taste.
3. Place "cleaned" herb in a tea strainer. Bring water to a boil in pot. Place tea strainer in boiling water for 5 minutes.
4. Immediately remove tea strainer after 5 minutes then place in bowl of ice water for 1 minute.
5. Remove from ice water. Pour distilled water over the tea strainer to rinse out any residual impurities.
6. Remove herb from strainer and wring out excess water.

7. Step 2 – Dry and Decarb

1. In a large baking pan, spread herb evenly and lay a large piece of aluminum foil loosely on top of it.

2. Let it sit overnight. Your herb should be dry by the next morning. (Skip this step if you use a dehydrator).
3. When dry, preheat oven to 300°F. Crimp down the foil and "bake" for 20 minutes.
4. Remove from oven. Let sit for 5 minutes so the vapors can settle back onto the herb.
5. Remove foil and loosely cover with a couple of paper towels. This creates a dark environment with airflow.
6. Let pan sit, covered with paper towels, on the counter for 1-2 hours to dry out any residual moisture.

Step 3 – Weigh Final Dried and Decarbed Herb

Note: Your final yield will weigh +/-20 to +/-50 percent less than your starting weight, depending on how moist or dry your herb was when you started the process.

Step 4 – Infuse Oil

1. Place oil into a French Press and place standing up in pot of simmering water.
2. Mix in decarbed herb. Cover the French Press and push plunger to just above the oil.
3. Gently simmer for 4 hours. Check the water level every 20 minutes to ensure it is even with the water line.
4. Remove the French Press and push the plunger down to strain cannaoil into a glass jar.

Your final yield should be about 7 ounces of canna-oil. Refrigerate for up to 8 weeks.

Photo credit: Michael Burnham

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Lavender Herb Butter Cookies

by Nora Mounce

Infused with aromatic and relaxing lavender, these butter cookies are as delicious as they are charming. A foolproof recipe that relies on simple ingredients. The light-handed addition of canna-butter makes these cookies a tasteful housewarming gift for cannabis-friendly co-workers or friends. Look for culinary lavender in the tea or bulk section of your natural grocery store.

Makes approximately 3 dozen cookies.

Ingredients:

- 4 ounces (1 stick) unsalted butter, at room temperature
- 2 ounces canna-butter, at room temperature
- ½ cup granulated sugar, extra for sprinkling
- 2 teaspoons culinary lavender
- ½ teaspoon pure vanilla extract
- 1 ¾ cups flour
- 1/8 teaspoon salt

Directions:

1. In a clean coffee grinder, grind the culinary lavender, or finely chop on a wooden cutting board with a large kitchen knife. Take caution though, the small grains of lavender will easily squirt across the room, so chop slowly and deliberately. I found that mashing the lavender in a mortar and pestle, then chopping with a large knife works best.
2. Using the paddle attachment on a standing mixer or electric hand beaters, mix together the butter, canna-butter and sugar. Add vanilla and finely chopped lavender. Mix. Add flour and salt, mixing on low until the dough comes together.
3. Turn dough onto a cutting board and either roll into a cylinder-shaped log for round cookies (pictured) or a long rectangle for square cookies. Wrap tightly in plastic wrap and refrigerate at least 1 hour.
4. Preheat oven to 350 F. Line two baking sheets with parchment paper.
5. Using a sharp knife, slice the log of dough into ¼ inch thick slices. Place slices on baking sheet and bake for 10-12 minutes. Cool before storing.
6. Enjoy with tea and good company.



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Jicama-Citrus Salad with Canna-Olive Oil Vinaigrette

by Nora Mounce

Ingredients:

- 12 mandarin oranges
- 2 tablespoons fresh lime juice
- 1 tablespoon cider vinegar
- 2 tablespoons canna-olive oil
- Pinch of cayenne pepper
- Salt and freshly ground black pepper
- 1 medium jicama* (about 1 pound)
peeled and thinly sliced into
matchsticks
- ¼ cup chopped cilantro
- ½ cup Cotija cheese, crumbled
- ¼ cup chili-spiced pepitas**

**Jicama is a chore to peel. I've found that resting the large vegetable on a cutting board and using a paring knife (work carefully!) to remove the exterior peel is most effective. Then peel entire jicama again using a vegetable peeler to quickly remove the remaining interior layers of peel.*

***If you can't find the delicious pre-seasoned chili pepitas at your local Latin food market, use raw pepitas and do the following:*

Heat 1 teaspoon olive oil in a small skillet.

When lightly smoking, add ¼ cup pepitas, a generous pinch of paprika and a dash of cayenne pepper and salt.

Cook over low-medium heat for about 10 minutes or until pepitas take on a golden hue. Remove from heat and allow to cool before sprinkling on salad.



An eye-catching dish to share at a potluck, this salad is also a wonderfully refreshing side for taco night. The recipe is more of a concept than a strict formula — feel free to experiment with your own twist, such as adding avocado, subbing chunks of grapefruit or using feta cheese. Toss in a simple lime juice and canna-olive oil vinaigrette, the salad comes together quickly after prepping the jicama (see note to the left). Check your local Latin food market to purchase the jicama, Cotija cheese and chili-spiced pepitas in one stop. Garnish with fresh cannabis leaves and enjoy!

Directions:

1. Peel the mandarins, separating each wedge and removing as much pith as possible. Set aside.
2. Peel the jicama, (taking care to remove the entire peel) and cut into matchsticks ¼ inch wide; add to mandarins.
3. Whisk lime juice, apple cider vinegar, olive oil and cayenne together. Toss mandarins, jicama and vinaigrette together. Season with salt and black pepper to taste. Liberally top salad with chopped cilantro, Cotija cheese and pepitas.

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Eat Your Greens

Creamless Asparagus Soup

BY NORA MOUNCE

Our bodies emerge from the stormy, dark months of winter with a healthy craving for colorful vegetables in our diets. But spring can throw us for a loop, as many of our favorite foods are still seasonally out of reach. Try whipping up this soup, featuring green spears of asparagus, the darling of spring, sautéed with fragrant garlic and blended with Yukon Gold potatoes for richness. You won't miss the cream!

Ingredients:

- 2 tablespoons canna-olive oil*
- 1 leek, white and light green parts only, thinly sliced and rinsed
- 1 medium yellow onion, diced
- 3 garlic cloves, minced
- 2 medium Yukon Gold potatoes, peeled and cubed
- 1 quart organic chicken broth
- 1 bay leaf
- 1 pound cleaned asparagus (woody ends trimmed off, sliced about 1 inch thick)
- 2 teaspoons fresh lemon juice
- Freshly ground pepper
- ½ teaspoon kosher salt (additional, to taste)

**Depending on the potency of your oil, consider subbing 1 Tablespoon regular olive oil to play it THC consumption safe.*

Directions:

1. Heat the canna-olive oil in your largest soup pot over medium heat.
2. Using a wooden spoon and stirring often, add minced garlic and cook for 3 minutes or until strong garlic aroma is released.
3. Add leek, onion and ½ teaspoon salt. Cook for five more minutes, stirring often, until the onion and leek have softened. Add the potatoes, chicken broth and bay leaf. Bring to a boil, reduce the heat, cover and simmer 15 minutes.
4. Add the chopped asparagus and simmer 10 minutes more. Remove from the heat and using a fork, take out bay leaf. With your stick blender (I hope you have one!), puree the soup. Alternatively, ladle the soup into a blender in 1½ cup batches. Return soup to pot when blended. This is a delicate process – be sure not to overfill the blender!
5. Add the 2 teaspoons lemon juice, salt and pepper to taste. Serve with garnish of your choice. Young cannabis leaves are a beautiful touch, and we always recommend clearly labeling your cannabis cuisine! Top with toasted crostini, chopped fresh tarragon or steamed asparagus spears.



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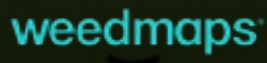

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