WHEN FOLKS FIRST NOTICED THESE CONCENTRATES SEPARATING OUT IN SUCH A WAY, THEY FIGURED THEY WERE DEFECTIVE AND BREAKING DOWN. NOW WE CELEBRATE THIS SORT OF CONSISTENCY, KNOWING THE CRYSTALS ARE CONCENTRATED THC-A FLOATING IN A SYRUPY STEW OF TERPENES.

The State of Cannabis Extracts—page 44

44 THE STATE OF EXTRACTS
Cannabis concentrates have come a long way in a short time. Get an insider’s view on the state of concentrates as well as the most popular extraction methods currently on the market. By Dave Malone

54 TIPS ON ORGANIC GROW MEDIUMS
Healthy roots lead to stronger plants and the medium you choose can improve essential oil production. We reveal the best clean and green options. By Stoney Tark

64 MOB RULES
Learn the intoxicating secrets of growing and smoking a powerful indica cannabis strain from legendary bud breeders T.H. Seeds called MOB or Mother of Berries. By Green Born Identity

76 Reefer Madness Comics
We examine how cannabis was depicted in comics from the early days of prohibition in this excerpt that collected the best illustrated pot propaganda from the 1930s through the 60s. By Craig Yoe

86 Midwest Cannabis Cup
High Times returns to Michigan to host an epic Midwest Cup. Check out all the highlights as well as the winning pot, hash, edibles and more! By Ab Hanna

96 An Interview with Richard Prince
Renowned artist Richard Prince has a new collection of drawings titled “High Times.” Learn about his creative process and his new cannabis venture. By Bill Powers
THE STATE OF CANNABIS EXTRACTS

WE EXAMINE THE HISTORY OF CANNABIS CONCENTRATES AND TAKE A CLOSER LOOK AT THE MOST POPULAR EXTRACTS CURRENTLY ON THE MARKET, LIKE FULL SPECTRUM, LIVE BADDER AND LIVE ROSIN.

BY DAVE MALONE
PHOTOS COURTESY OF GREEN DOT LABS

I’LL NEVER FORGET the first time I tried shatter, back in 2008. As the mind-shatteringly potent high took hold, I felt certain we had reached the final destination of cannabis. Here was the ultimate expression of the plant that consumers had been relishing for years. Shatter was the holy grail, it seemed. For cannabis, there was nowhere else to go. I was wrong.

Instead of an end point, the emergence of cannabis concentrates has triggered a technological and creative upheaval the likes of which has never been experienced in the marijuana scene, legal or otherwise. In an incredibly short order, dabs have evolved from a dubious fringe concept to a refined mainstream product. Concentrate producers have achieved one breakthrough after another, refining their machinery and expertise as extracts capture ever more shelf space in dispensaries all over the country.
For those not in the know, the resulting variety of concentrates can be overwhelming, to put it mildly. What's the difference between live resin and rosin? Shatter versus badder? As someone who's been involved in the legal concentrate business since the very beginning, I thought it would be helpful for novices and concentrate connoisseurs alike to offer up an insider's view of the current extract scene—detailing recent milestones, highlighting the top varieties of concentrates available today and pondering where we go from here.

For starters, it didn't take long for extract artists to improve upon that first shatter I sampled a decade ago, finding ways to remove ever more impurities during the extraction process so the resulting concentrates became increasingly lighter in color and progressively flavorful. But the big breakthrough came in 2013, when celebrated hashmaker William “Kind Bill” Fenger derived butane hash oil (BHO) from whole plants that had been freshly harvested and frozen—creating what we now know as live resin.

The luminescent, vibrantly flavorful live-resin extracts didn't just become hot sellers; they helped shift the very idea of concentrates. Up to that point, it was all about potency—creating extracts with massive amounts of THC and very little of anything else. Dab aficionados would heat the nails on their rigs as hot as they could so they could get as high as possible. But suddenly, with the emergence of live resin, flavors and aromas came back into play. Now it was all about crafting concentrates with the perfect balance of THC and terpenes. Aficionados learned to turn the temperature down on their nails to maximize taste without overwhelming psychoactive effects.

Now we've come full circle with extracts, once again prioritizing the pungent aromas and flavors we'd learned to love from old-fashioned cannabis flower. Concentrate technologies and procedures are so dialed-in that there's very little difference in potency and potency from one high-end extract maker to the next. Everyone is fast approaching maximum potential concentrate purity levels, and everyone is zeroing in on the ideal balance of potency and taste (roughly 70 percent THC and 30 percent terpenes). Now the best way to differentiate yourself is through your raw materials (i.e., the diversity of your genetics library and the quality of the cannabis flower you use in your concentrates).

As the dust settles, certain kinds of elite concentrates are capturing people's attention. Here's some of the most exciting stuff on the market today:

**FULL-SPECTRUM EXTRACTS**

Full-spectrum extracts are exactly like they sound—they feature the same ratio of terpenes and cannabinoids as the raw flower in a concentrated form. It's live resin taken to its logical conclusion—the closest we can get to capturing the full essence of the cannabis plant in concentrate form.

Full-spectrum extracts, sometimes referred to as live-resin sauce or terp sauce, aren't just exceptional due to their bold aromas and flavors. They look extraordinary, too—generally sporting big shiny crystals floating in a translucent sauce. When folks first noticed these concentrates separating out in such a way, they figured they were defective and breaking down. Now we celebrate this sort of consistency, knowing the crystals are concentrated THCA floating in a syrupy stew of terpenes. This arrangement gives consumers an exciting amount of flexibility, allowing them to choose for themselves the right balance of "rocks and sauce" in each dab, much like mixing your own cocktail.
LIVE BADDER
Of course, sometimes you don’t want to bother with mixing your own dab. You want an easy, creamy, perfectly balanced hit each time. That’s the idea with badder, or budder, which is live resin that has been emulsified into a malleable, uniform consistency similar to cake batter. While it might not be as pretty to look at as full-spectrum extracts, badder offers the ideal balance of potency, flavor and smoothness. Every hit is as rich and velvety as the last—what more could you ask for?
LIVE ROSIN
Not to be confused with live resin, live rosins is a modern-day take on age-old hash traditions. These solvent-less extracts are hand-crafted using cold-water hash-making techniques, a demanding and time-intensive process usually resulting in small batches. These concentrates are slightly less purified and terpene-rich than full-spectrum extracts, but they’re impressive in their own right. Filled with the cannabinoids, terpenes and lipids of the original plant, live rosin offers fans a wholly unique flavor, finish and pull.

Grow - Harvest - Concentrate!
Grow the biggest buds, harvest the highest yields and make amazing concentrates

Ed Rosenthal’s MARIJUANA GROWER’S HANDBOOK
Marijuana Harvest
Beyond Buds - Next Generation

Let The Guru of Ganja teach you how to grow, whether you are a beginner or a seasoned professional.

EdRosenthal.com
PENS
Concentrate makers have also been experimenting with delivery methods to allow consumers the ability to experience high-quality extracts without the expertise or equipment usually required for dabs. But perfecting the technology to do so without jeopardizing the integrity and purity of the extract has long been a challenge. Here at Green Dot Labs, for example, we spent years developing a way to inject our full-spectrum BHO into vape-pen cartridges without using thinning agents or fillers. Now, as far as I can tell, we have some of the only pen cartridges on the market filled with uncut, additive-free single-strain live resin. It’s a major step in our personal crusade against vape pens that use cutting agents and other questionable and potentially dangerous additives—or, as I like to call them, “hot-dog-water pens,” since just like hot dogs, you have no idea what’s in the darn things.

After a frenzied period of growth and innovation, as of late the concentrate scene seems to have reached a creative plateau. Over the past year, we’ve seen relatively few earth-shattering innovations. Instead, the name of the game has been to refine and perfect the extracts consumers have come to know and love.

Once again, it seems like we’re reaching the final destination for cannabis concentrates.

But this time, I know that assumption is wrong. With the demand for cannabis concentrates at an all-time high and legalization initiatives taking hold across the country, new discoveries and innovations in the world of extracts are surely just around the corner.

Dave Malone is the co-founder and chief creative officer at Green Dot Labs, the longest-running regulated business anywhere to focus exclusively on genetics and cultivation for cannabis extracts.

Screen Replacement Technology
"Pipe Screens (don't) Suck"

"Zero drag, zero clean up"
-John

www.smokinscrews.com
(720) 763-8700
Wholesale -- Retail -- Consumer

A FILLING SYSTEM THAT IS ESSENTIAL
THE MACHINE THAT ACCURATELY FILLS
1000 CARTRIDGES PER HOUR
WITH THE ABILITY TO FILL ANY CARTRIDGE, POD, OR SYRINGE
ON THE MARKET TO DATE

*ALSO OFFER DEMOS & CONTRACT FILLING

credencefillingsystems.com
Engineered and Developed in the USA