WINE ANALYTICS REPORT

April 2019: Cannabis

April 2019

US Wine Sales +4%

Off-Premise +2%

DTC Shipments +10%

Winery Jobs +1%

Cannabis as a Beverage

Some entrepreneurs are exploring the intersection of wine and cannabis.

Innovations in water soluble cannabis compounds have led to a flurry of beverage development.

Infused products can be both therapeutic and intoxicating.

The next wave of cannabis-infused products is hitting shelves, and they're coming in wine form. These new recreationally available beverages potentially pose the largest threat to the wine industry, offering an alternative experience that mimics a traditional one.

But weed-wine isn't like the rosé craze or canned wine — it's its own unique product — and whether "mimicking" tradition or not, cannabis-infused wine provides its own experience.

The idea of infusing wine with cannabis is not a new concept. Bob Lindquist, former owner and winemaker of Qupé winery in Santa Maria, Calif., said he's been experimenting with the process for at least 25 years. (And, according to the veteran winemaker, colleagues of his have been making cannabis-infused wines since the 1960s.) "A friend of mine who grows in Humboldt partnered with me. I provide the juice to him, and he ferments," said Lindquist, explaining that because a winery is under a federal bond, he's never infused wines at a wine-production facility.

Legally, cannabis and alcohol can neither be combined within the same product, nor can products containing alcohol or cannabinoids be produced in the same building.

An old-fashioned infusion

Lindquist's wines are, in fact, alcoholic, but do not contain THC. Lindquist said he's protective of the actual process used to infuse his wine but was able to say that he does not heat the cannabis plant during the fermentation process. "That's what extracts the THC, and our preference is to extract the CBD," he said. The method he uses, according to Lindquist, also makes it a lot easier to control doses. "For me ... I don't enjoy being overly high. A little high is OK, but not so much you get a hangover effect," Lindquist said. He added that if one were to drink "quite a bit" of his wine, he or she would feel more effects from the alcohol than the cannabis. But with one or two glasses the effects of the wine coupled with the non-psychoactive effects of the CBD to produce what Lindquist called "a nice body hug."

Lindquist said he makes his cannabis-infused wines from high-quality grapes. "The wine has to be good. The quality of the juice and the winemaking have to be spot-on," he said.

Many products attempt to either mask or eliminate the aromas associated with cannabis, Lindquist said, but one of the aspects about infused wine he enjoys is how certain cannabis strains provide aromas that blend well with a wine's aromatics.

Working with his Humboldt County-based friend, Lindquist has never produced more than one barrel a year, and the experiment has never been intended as a commercial venture. The veteran winemaker isn't worried about the upstart cannabis business disrupting the wine industry. "To me they're completely different types of relaxation," Lindquist said. "They offer very different effects."

Lindquist's wife, Louisa Sawyer Lindquist, is working with a Santa Cruz, Calif.-based dispensary, sourcing unfermented wine-grape juice that the business owner then turns into a cannabis-infused wine.

The business, previously operating under the name Greenway, is owned by Lisa Molyneux. The brick-and-mortar dispensary is now closed, but Molyneux still operates her business as a mobile service, delivering cannabis products to her clientele.

According to Molyneux, the consumers of the products, which are classified as wine tinctures, are all medical patients with medicinal marijuana cards. "The rule around recreational usage is still iffy. ... As we figure it out, we may release it recreationally," Molyneux said.

"Whole plant extraction"

Like Lindquist's, Molyneux's wines are fully fermented and do contain alcohol. "It's a whole plant extraction," Molyneux said, explaining that this kind of extraction is made from the resinous flowers and smaller leaves of the cannabis plant. "There are only a few things that allow for a whole plant extraction to work. Alcohol is one of them," she said.

Molyneux said that what the whole plant extraction provides is a therapeutic, total body relaxation without any kind of high. According to Molyneux, one 2- to 3-ounce glass is "sufficient for a good night's sleep."

Molyneux works with several grape varieties, both red and white, sourced by Sawyer Lindquist, including Syrah, Tempranillo and Cabernet for her red wines and Marsanne, Albariño and Viognier for her white wines. According to Molyneux, the primary flavors are typical to the wine variety; the cannabis aromas are secondary, "background" flavors.

Rebel Coast Winery



Rebel Coast Wines founder Chip Forsythe.

The first cannabis-infused wine to enter the California market was Rebel Coast Wine's cannabis-infused Sauvignon Blanc. Owner and winemaker Chip Forsythe had been experimenting with combining the two substances for some time. But when he decided to take his product public, the challenge came with the regulations against alcohol and THC being in the same product, or even the same building.

"So we thought, what would happen if we made wine, got rid of the alcohol and infused THC?" Forsythe said. And that's exactly what he did.

Forsythe would not describe the de-alcoholization method he uses for his wines, only saying he's partnered with a third party and that the process is "proprietary and insanely difficult."

As with his mainstream winemaking (which takes place in its own dedicated facility under the label Reckless Love), Forsythe works with bulk wine. "When I started my first winery in 2009, I had no money, so I bought bulk and went virtual," he said, referring to his 100% direct-to-consumer marketing conducted exclusively online. "When I started Rebel Coast (infused wine) it was the same thing: blend, bottle, sell."

To infuse the THC, Rebel Coast partnered with Colorado-based cannabinoid technology company ebbu, producers of a tasteless, water-soluble cannabis solution. In November, Canopy Growth, which is a Canadian firm and one of the largest publicly traded cannabis companies, acquired ebbu for \$25 million in cash and stock in a deal worth \$450 million. Constellation Brands invested \$4 billion in Canopy in 2018 as part of a move to be a leader in the infused beverages sector.

"THC is an oil. Oil and water, or wine, don't mix," Forsythe said. "But this nano-emulsification is the 'secret sauce': The THC stays in suspension, and it doesn't taste or smell like cannabis."

But having the right recipe in place wasn't the only hurdle Forsythe and his team had to overcome. Receiving the proper licenses and permits to make and sell the product took a lot more time than any of them had anticipated, and the Rebel Coast Sauvignon Blanc didn't hit dispensary or online shelves until the fall of 2018.

The first "proof of concept" batch yielded 400 cases, and the company sold out very quickly. Though the original recipe included 5 milligrams (mg) of THC per serving, 20 mg per bottle, Forsythe said consumer feedback dictated that the wine wasn't strong enough. The second batch of Rebel Coast Sauvignon Blanc, scheduled for release later this month, will include 10 mg of THC per serving, 40 mg per bottle. The company also plans to release a rosé at the same time, which will be the company's lower-dose option at 5 mg of THC per serving.

Rebel Coast can be purchased at select dispensaries throughout California. (Forsythe said his goal is to have his product in every dispensary within the state.) The wine can also be purchased online and delivered, via a third-party delivery service, to California residents.

The average retail price is about \$40 per 750-ml bottle.

When asked who his target audience for this product is, Forsythe admitted he's still figuring this part out. "But you know, yoga moms really love it," he said, adding that at just 35 to 40 calories per serving, the non-alcoholic wine appeals to the fitness- and health-minded consumer.

Forsythe said his goal with his product is not just to make something that smells and tastes like wine, but also to "mimic the ritual of wine." "I want people to enjoy the wine as they would any white wine. It tastes good so long as you serve it cold and you're having a good time."

House of Saka

Also using the ebbu nano-emulsification technology is Cynthia Salarizadeh, founder and chief security officer of House of Saka. Salarizadeh calls her company the "first cannabis luxury brand."

Like Rebel Coast's, House of Saka's rosé and sparkling rosé are de-alcoholized and, like Forsythe, Salarizadeh declined to discuss the technology behind the process, or where she sources her grapes. "We work with one of the most recognized and best Pinot Noir programs in Napa and work with a group in Sonoma to get the alcohol down to something like 0.003%," she said.

The two products, which Salarizadeh said they simply refer to as "pink" and "sparkling pink" ("We actually don't market them as wines," she said.), were created with a specific market in mind. "Our target is the sophisticated female user between 21 and 65. Right now one of the trendiest wines for that category is rosé," she said.

Unlike Rebel Coast, House of Saka plans to decrease the THC level as its product becomes more popular. Each bottle of "pink" currently includes 5 mg of THC per serving, or 20 mg per 750 ml bottle, but Salarizadeh said the company plans to drop that to 2.5 mg per serving, or 10 mg per bottle. "As the consumer becomes more evolved, they'll want less and less (THC) so they can drink more and more," she said.

The "sparkling pink" is considered a "special occasion" drink, and thus will maintain the higher THC level at 5 mg per serving. House of Saka is launching its line of cannabis-infused products this month.

Sorse Technology

Diana Eberlein, vice president of marketing for Washington-based Sorse Technology, said her company's product has been on the market for two to three years (sold as Tarukino), but recently underwent a rebranding "for B2B purposes," focusing on the company's technology to produce tasteless, water-soluble solutions from oil-based compounds, such

as cannabinoids. Sorse Technology produces its own line of cannabis-infused beverages and licenses the technology to other companies interested in incorporating cannabis into their products.

According to Eberlein, Sorse is available in liquid form (and will soon be available in powder form as well) and maintains its potency up to 300° F so it can be baked into edibles. In these forms, Eberlein said, dosages are easy to control depending on product or desired use.

The company's product line is filled with beverages, from the "La Croix-like" Utopia, an infused sparkling water; to Vertus, an infused "champagne-like" beverage; and the company's biggest seller, according to Eberlein, Happy Apple, a "cider-inspired" infused beverage.

Unlike products from House of Saka or Rebel Coast, none of Sorse's products are fermented. Instead, Vertus is made using a less-sweet sparkling apple cider; the company's beer product, Reebs, is made using a barley soda. "At Sorse, we create the product and then dose each one individually. We adjust the formula to be complementary to the flavor and the occasion the beverage is meant to mimic," Eberlein said.

Saka

House of Saka's rosé infused beverage contains 20 milligrams of THC per bottle or 5 mg per serving. The company plans to reduce the cannabis content to around 2.5 mg per serving.

Having a broad portfolio of products, the company is able to target a wide range of customers within Washington state. "We think, 'What is the lifestyle and how can we complement this with a beverage," Eberlein said. "We look at ourselves as the future of cannabis consumption. You can get a consistent, low-dose high or dose of CBD, and it doesn't disrupt your everyday life. You can replace normal beverages with these."

Eberlein sees the introduction of the cannabis into the existing beverage alcohol market as an opportunity for the two industries to work together. "We've had a lot of brands approach us about putting CBD in their beverages — the water-soluble emulsion allows for even dispersion."

She added that those consumers who are already spending a lot of money on wine will continue to do so, and that this is an opportunity for wine brands to expand or enhance their product lines.

Those producing cannabis-infused beverages view them as complementary to wine and not competing.

"Some people only smoke, some only drink and some do both," Forsythe said. "You're never going to win over someone who is against cannabis, but for people who like to enjoy both, it doesn't have to be one or the other."

"It's not a competition, because they deliver different experiences," Eberlein said.

"Personally, I will consume a cannabis beverage before I go out on the weekend, and then I

don't have to consume as much alcohol. But at the same time, I love my wine, and that won't go away. There's room for both to play together."

Food and canna-wine pairing

Jamie Evans launched The Herb Somm in March 2017, a business with a heavy focus on the culinary side of cannabis — providing cannabis-infused recipes and partnering with chefs to host cannabis culinary experiences.

Evans also has more than 11 years of experience in the wine industry and studied viticulture at California Polytechnic State University, San Luis Obispo. "I remember taking sensory evaluation classes and then later going home and noticing that my cannabis had very similar aromas and flavors to the wines that I was tasting earlier that day," she said.



Based in Washington state, Sorse produces an infused beverage similar to cider.

Evans said she didn't really start researching cannabis until she launched The Herb Somm, and since then she's been able to find more and more similarities between wine and weed. "Terroir is expressed through cannabis just like it's expressed through wine," she said. Having visited several cannabis farmers, Evans said she's been able to learn how they work with their growing region, plant the proper strains suitable to the environment and express their terroir.

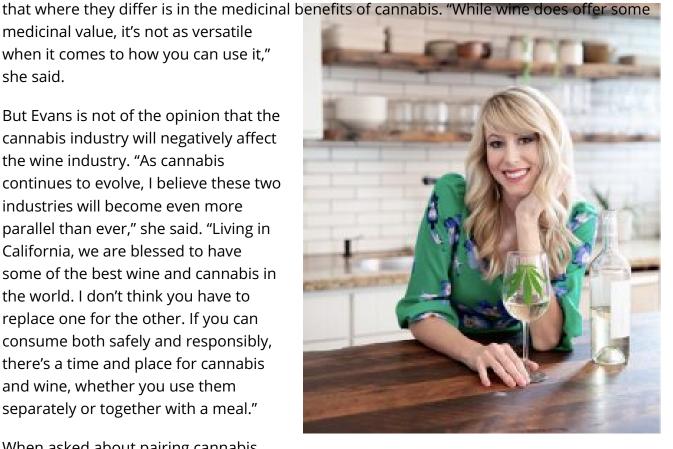
From a culinary perspective, Evans said that for modern chefs, cannabis is a new, unexplored ingredient that "not only enhances a meal by adding euphoric effects, but also adds flavors, aromas and textures that create an entirely new dining experience."

Though she considers cannabis a gourmet product comparable to wine, Evans also noted

medicinal value, it's not as versatile when it comes to how you can use it," she said.

But Evans is not of the opinion that the cannabis industry will negatively affect the wine industry. "As cannabis continues to evolve, I believe these two industries will become even more parallel than ever," she said. "Living in California, we are blessed to have some of the best wine and cannabis in the world. I don't think you have to replace one for the other. If you can consume both safely and responsibly, there's a time and place for cannabis and wine, whether you use them separately or together with a meal."

When asked about pairing cannabis within a food-and-wine dining experience, Evans stressed the "low and slow rule." During her infused dining experiences, Evans said, she



Jaime Evans studied viticulture at Cal Poly and worked in wine for 10 years before founding a company focused on pairing cannabis infused foods with wine. (Photo Credit: Heather Tafolla)

works with a chef to create a menu that does not exceed 5 mg of THC throughout the entire meal. She also advises starting with the low dose early in the meal, as with an infused appetizer, then enjoying the non-intoxicating compounds, such as CBD, during the following courses. "That way, effects will kick in early, and by the end of the meal, you will feel rounded out by the other cannabinoids that you've consumed," she said. "There is an art to orchestrating the experience."

Regarding wine pairing with these meals, Evans said it's important not to drink in excess. "Think of wine as an accent piece that adds color, aromas, flavors and complexity to the dining experience," she said.

Evans finds the emerging cannabis-infused wine category an interesting one and one to "keep an eye on" as the infused beverage category, in general, is expected to grow. "Personally, I am more a fan of pairing wine and cannabis together rather than combining them in one product; however, I do appreciate the craft of what it takes to create a cannabis-infused wine."

Insights on the Cannabis Market

In March, Nielsen announced a partnership with Headset to provide insights on the U.S. cannabis market, including real-time point-of-sale data, consumer demographics and purchase dynamics. Headset's Insights Data Platform covers the legal cannabis markets of California, Nevada, Washington and Colorado.

Just a month into the partnership, Nielsen already has statistics to share — data of potential interest to the wine industry, as there are now nearly 1,000 cannabis-infused beverages sold across 114 brands, reaching \$41 million in sales in 2018.

Nielsen's senior vice president for beverage alcohol, Danny Brager, spoke with the *Wine Analytics Report* about these new insights and the impact of cannabis on the wine market.

Q: What are some of the challenges or "threats" cannabis sales pose to the wine industry?

Brager: While cannabis is not new, its entry into the legal recreational space in several states is newer, and that will continue to evolve. And the fast expansion to non-inhalable product formats is also new. As a result, there is an entry of "newer to cannabis" consumers, and a tremendous expansion of cannabis brands well branded and packaged.

Some consumers may choose to substitute a wine occasion for a cannabis occasion, and there are a variety of different cannabis product formats to choose from, including infused edibles and including some that are styled and flavored like wine.

The cannabis industry — depending upon the product format — is also touting some other benefits: low to no calories; headache- and/or hangover-free; less filling when in non-edible/drinkable formats. Particularly in states associated with social enablement/experience enhancement that also characterize many wine occasions, cannabis represents another growth headwind to contend with over time. It is another occasion choice for consumers, and another bite out of their wallets.

Q: What are some of the positive impacts the emerging cannabis market will have on the wine industry you hope to report?

Brager: Just like a great bottle of wine can be a great excuse to get some friends together, a special strain or a first-time cannabis experience could facilitate more social interaction. In some instances, those social interactions could organically generate some additional wine occasions, occasions that otherwise may not have occurred. This is especially true since not everyone is comfortable with cannabis, so some hosts should consider having alternatives available to satisfy those guests.

Q: What are some of the impacts of marijuana legalization on consumer packaged goods (CPG) regarding consumer spending and shopping behavior trends that you've already seen? Is there any specific data regarding the impact on consumer spending trends on wine or the beverage alcohol industry as a whole?

Brager: Cannabis interacts with a broad set of categories, inclusive of alcohol but well beyond alcohol. One piece of good news is that our consumer research suggests that cannabis-interested consumers are more likely to drink beer (53%) and spirits (50%) than wine (37%). Said another way, only 35% of current wine drinkers are interested in cannabis than beer drinkers (41%) and spirits drinkers (44%).

Q: Is there anything else about this partnership and the data that Nielsen is able to collect and provide that is of interest to the wine industry?

Brager: Absolutely. The Nielsen-Headset combination leverages the power of Headset's retail dispensary sales and customer data, together with Nielsen's measurement of mainstream retail stores, consumer research assets and analytic capabilities to help our collective clients understand the business challenges or opportunities presented by the legal cannabis market. We are doing more and more research to understand all aspects of the legal cannabis and CBD market.

— Stacy Briscoe