



Man or Machine?

QuantaCann Tests Properties of Cannabis

By Timothy Anderson

An excellent example of the persistent march of progress in cannabis science is Steep Hill's QuantaCann data system. The QuantaCann was introduced in the fall of 2011 and Harborside Health Center was among the first Steep Hill clients to receive one.

Utilizing near-infrared spectroscopy (a common testing method for both agricultural and pharmaceutical quality control), the QuantaCann scans and assays a flower sample for cannabinoid potency and moisture. It works by bouncing a laser across a ground-up sample resting in a quartz-bottomed dish and in just minutes the operator receives an accurate portrait of the THC, THCA and CBD profiles of a given flower. The data taken by the scan is compared against the vast reference library that Steep Hill has assembled of gas chromatography and liquid chromatography data via the internet, assuring the same level of accuracy as those testing methods. At the moment of its unveiling, and still to this day, it seems just short of miraculous.

There's a persistent high volume of cannabis cultivators coming through the doors at Harborside. It's safe to assume that we have run thousands of QuantaCann assays on countless individual types of cannabis flowers, shedding light on the diverse styles in which they were grown. On a busy day, Harborside will run 50 or more tests of individual samples, which help give a sharper intuitive sense of what a particular flower's potency might be.

Purchasing strategies changed with this immediate access to potency data, almost instantly after receiving our QuantaCann. We no longer

had to count on merely our senses and a roll of the metaphorical dice when it came to THC potency of dried cannabis flowers. For better or worse, high potency was the main driving force at our sales counter.

The Harborside vendor waiting room was abuzz for months with talk of this new magic machine. Some of our vendors openly voiced their displeasure with this new tool that would judge their product – dubbing it the “wheel of fortune,” since sample results revealing low potency values could mean rejection of their cannabis. However, the benefits to the patient who receives the medicine in the end is really what matters most. With the QuantaCann, one can zoom in on the “diamonds in the rough” that test unusually high and weed out the “fool's gold” of varieties that might look good but lack potency due to cultivation issues.

Faith in the QuantaCann wasn't easily given nor won, however. We challenged the lab, delivering tea and vaporized cannabis samples, and unsurprisingly received results that showed the correct outcome. At one point, a not-so-amused Steep Hill tech called to tell us to quit trying to trick the machine.

Now, more than three years later, Steep Hill has unveiled the newest iteration of this essential tool and the QuantaCann2 has begun to roll out to locations across the land. Offering more resilient hardware in its NIRS scanning bed that recalibrates with each sample, the new unit is both more accurate and less likely to suffer from minor mechanical failures due



to its lack of moving parts. Promised add-ons for the unit include a wand that can be waved over concentrates and edibles, which seems like strange magic from another era to even a jaded professional like myself.

We can seldom predict the future of technology, but the QuantaCann2 looks to be a signpost directing us forward to a new horizon of cannabis technology. As new data-driven tools like this become more accurate and more available to the populous at large, it's not hard to imagine this technology moving out of the lab and dispensary and into the greenhouse and grow room. Having the ability to immediately judge phenotypes or assay from harvest to harvest will surely offer growers incredible potential to improve and fine-tune their crops — a leap forward that could only push purity and potency levels to still greater heights. ✨

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