

Front & Center

How Cultivars, Terpenes, Amazonian Medicinal Plants, and Bio Harmonic Tonic Are Changing the Cannabis Industry

According to “Amazon” John Easterling and Olivia Newton-John

During the Cannabis Science Conference—held in Portland, Oregon, September 4 – 6, 2019—industry experts, research scientists, medical practitioners, policy makers, and more, gathered together to network and educate.

During the conference, “Amazon” John Easterling—founder of the Amazon Herb Company and Happy Tree Microbes—and Olivia Newton-John—popstar, actress, and founder of the Olivia Newton-John Cancer and Wellness Centre (ONJCWC) in Melbourne, Australia—gave the plenary address “Plant Medicine: A Personal Healing Journey.” The couple shared their personal experiences with plant medicine that spans 30 years of medicinal botanicals, with a focus on Amazonian herbs and cannabis.

Cannabis Science and Technology sat down with Easterling and Newton-John to discuss their start in the cannabis industry, their cultivation facility, Bio Harmonic Tonic, and more.

How did you each get started in the cannabis industry?

Olivia Newton-John: I eat the herbs that John grows for me, but I can't say that I'm really in the industry.

John Easterling: I've always had an interest in plants. I grew cannabis for the

first time in 1970, and professionally for last 35 years, I've been involved in plant medicine with medicinal plants out of the Amazon rainforest. Since selling the Amazon Herb Company, my focus for the last seven years has been specifically with cannabis—I have a research grow in California where we live at the ranch, and we have a licensed recreational commercial farm, Laughing Dog Farms in Canby, Oregon.

Olivia, why did you decide to share your story of using medical cannabis?

Olivia Newton-John: Because I want everyone to experience the benefits that I have had from it; and it's a safe plant. While in the hospital last year, I had to take morphine for a broken sacrum, and I was able to wean myself off the morphine with cannabis. It's really helped me extraordinarily with pain, sleep, and inflammation, and I believe it's helping heal me. So, I want to make that available to everyone, and I don't see why it shouldn't be. In America, we seem to be on our way, thank goodness, but in Australia, we're a little further behind.

John, can you tell us about your cultivation facility and Bio Harmonic Tonic?

John Easterling: We do research in my greenhouse in southern California, where we grow a variety of different cultivars and make extracts. The vari-

ety of cultivars I grow are based on the profiles of cannabinoids and terpenes because we know I'm a big believer in the entourage effect—that the terpenes actually facilitate and modulate the expression of the cannabinoids.

So, I like to grow high THC plants, high CBD plants, and high CBC plants, and in addition, high-terpene plants—plants that have a variety of different terpenes. You end up with 26 different cultivars. I bred 11 new genetics [in my greenhouse in Southern California], and several of the new genetics are now growing in Oregon as well.

What do you each hope to see in the cannabis industry in terms of cultivation and medical use?

John Easterling: I see an explosion of wonderful things happening with our understanding of this plant, and how we can take the biology of it and integrate that into our physiology for therapeutic value. The way the plant expresses itself—its medicinal value—we can enhance that as well.

From a cultivation standpoint, people are beginning to be more conscious about their cultivation techniques, and that's why we introduced the Bio Harmonic Tonic, which is essentially a group of microbial mix that originates as lactating cow manure. We take it through some processes to remove the

**John Easterling***Founder*Amazon Herb Company and
Happy Tree Microbes**Olivia Newton-John***Founder*Olivia Newton-John Cancer and
Wellness Centre

smell; [and you're left with] a diversity of microbes that are critical in the rhizosphere of the plant, around the roots of the plant. These microbes determine the uptake of nutrients in the plant. They actually mobilize nutrients—phosphorus, nitrogen and other nutrients—in the soil that would otherwise not be available to the plant.

Once you're using a product like that, you can use less fertilizer. We recommend that people do not use pesticides or chemicals or non-natural things in their garden, because after all, we're growing medicine: someone's going to consume that.

We went a step further with the Bio Harmonic Tonic, where we introduced three Amazonian botanicals to inoculate it with plant intelligence from the Amazon rainforest, where there is the highest concentration of life energy on Earth. We want the microbes to help understand that, and there's certain polyphenols and other things in these three specific plants that we chose to be in there. We also used gemstones with that to create a harmonic field, because now we understand that these bacteria in the soil use a chemical signaling to communicate with each other, just like the microbes in our microbiome.

Probiotics are a huge thing now and people really want to know about the healthy bacteria in our gut—with good reason, because that controls the chemical signaling pathways to the heart, spleen, lungs, liver—all of our organs. It's the same way in the soil—it's going to come down to the health of the microbe biological environment that's going to dictate the uptake of nutrients, the health of your plant, and the expression of the terpenes and cannabinoids.

We've been fortunate to see about a 7% increase in yield and about a 10-14% increase in cannabinoid content from plants grown that way.

Olivia Newton-John: I want to make it available to anyone that needs it and take the voodoo off it and educate people into the real healing value of cannabis rather than this Cheech-and-Chong image that a lot of people have, so that it can be taken seriously and [they can understand] that it's safe.

I learned so much from my husband who taught me that we have an endocannabinoid system in our body. The fact that I weaned myself off of morphine with cannabis is huge, and I'd like people to know that it's possible, and it should be happening in rehab facilities. There's a lot of controversy around that,

of course, but I think people need more education on the subject.

John Easterling: From a medicinal standpoint, you're seeing effects because of the endocannabinoid system. And that creates a homeostasis and a balance in our body, physiology, and neurology. Cannabis and these cannabinoids and terpenes have a multiplicity of effect, which is why it's effective for Parkinson's, Alzheimer's, dementia, seizures, pain, inflammation, and cancer. In cancer, we're seeing some cultivars creating an apoptosis, an actual cell cancer death, and others that could prevent or slow down the migration of cancer cells in the body. That's a pretty broad range of activity for one plant.

As we get into the research, and as we develop a better understanding, we're going to see benefits that we can't hardly imagine right now. We just started a study at the Olivia Newton John Cancer Wellness Cancer with cannabis and cancer, looking at the quality of life measures—sleep, pain, and so on—and we're following that up with other cannabis studies.

For more information on the Cannabis Science Conference, visit cannabis-scienceconference.com.