## **Breakout IIID Hemp Successes and Failures**



## Kim Shukla, Canadian Hemp Alliance and Ryan Quarles, Kentucky Commissioner of Agriculture

The Canadian Hemp Alliance was founded in 2003 by entrepreneurs who recognized that for Canada to have any sort of a grain crop that had any recognition from government, it needed an organizational structure behind it.

Last year Canada had about 120,000 acres in hemp. Why aren't there more? We've been ham-strung by regulation. In July 2018 a new cannabis law will ease regulations on hemp. It is then realistic that the crop could be in the billion dollar range from value-added products.

Hemp exports are valued at \$135 million. CHA is looking at market diversification, specifically in Australia and the Pacific Rim.

Hemp is not exported as a whole grain. Use of the whole plant is currently prohibited. Only the bare stalks and seed can be used. All the other parts of the plant have to be destroyed or returned to the soil. After the new regulations in July the whole plant can be used.

Alberta is the number one producer followed by Saskatchewan and Manitoba where the CHA office is located.

Hemp products are in major retailers in the US. *Eighty percent of Canada's hemp is exported to the US.* There are four market sectors for hemp: food products, fiber, feed and natural products.

Food products, typically sold as hemp protein powder, are not just for body builders. It is in breakfast protein smoothies. It is the most complete plant protein on the planet. Hemp food oil is in salad dressings and topical treatment. Hemp has historically been grown for making rope. The varieties that are grown for fiber production are different than those grown for food production. The focus is currently on food type varieties. Hemp chips are used for animal bedding and in the building trade. It is antibacterial and antimicrobial. Rodents don't like it. The Chinese military uses hemp for uniforms and tents. Application is currently in process for use in chicken feed.

Elements for success in Canada include the entrepreneurial spirit of younger folks as well as some government ag departments. In two provinces efforts at the grassroots level have championed the concept with farmers. Manitoba, on a national level, has elevated the crop by looking at what it could do for Canada.

Hemp is an agricultural crop period; .3 percent cannabis or less makes it hemp. That it gets mixed up with cannabis marijuana is a shame and is detrimental unless we start with the ag sector to have the right dialogue about it. This is the 20<sup>th</sup> anniversary of legalization. We've had no public safety issues with hemp.

The Canadian plant breeding program assures that growers are not of out of scope and only plant seed cultivars that are below the .3 percent THC level. Shukla recommends contracting with processors so growers have a guaranteed market and also with seed producers so they have certified seed. Put controls in at the plant breeding level. Growers should contract with seed producers.

Canada has a <u>Hemp Production Guide</u> on-line manual for farmers. *"It's rope and not dope."* <u>Industrial Hemp Facts</u>

Industrial hemp has a lot of misconceptions and bad advocates that are using it for other purposes. In Kentucky, Ryan Quarles, Commissioner of Agriculture, said "we view it as a commodity and are trying to change the paradigm on what it isn't and to change perceptions on what it is". Hemp flourished for almost 200 years in Kentucky before it was classified as a schedule one narcotic. Henry Clay, the Great Compromiser, was the largest hemp producer in Kentucky. When he

was Secretary of War, he advocated that the US only buy hemp for the US Navy from Kentucky. Hemp was grown in Kentucky through WWII.

Quarles wrote an essay in high school on hemp as an alternative to tobacco. As a legislator he helped author a bill in 2013 that, if Congress or another federal agency would give Kentucky the framework to grow hemp, provided the legal framework for how the state would regulate it. In 2014 section 7606 was added to the federal farm bill which would allow industrial hemp to be grown legally in the US through a state department of ag or through a research institution.

Kentucky had enabling legislation in place that allowed it to happen. Kentucky planted hemp seeds in 2014 for the first time on 32 acres. That acreage has increased to 12,000 this year.

Kentucky does not view other states as competitors. It views hemp as just one crop; it is also looking at other crops such as hops and corn for bourbon. It is very deliberate in not telling farmers this is a replacement crop for tobacco. Industrial hemp, like any other crop, has to have an agronomic analysis.

There are a lot of bad advocates who misinformed legislators that gave law enforcement fodder to defeat bills. Quarles advises getting folks who represent hemp as an agricultural product, not for recreational or medicinal use.

Ryan also encouraged having a conversation with regulatory enforcement on day one to set up a binary process whereby growers are or are not in the industrial hemp production program. He noted that because Kentucky is a hemp only state, people are moving from Colorado and other states because they don't want to be co-mingled with marijuana. Kentucky has gone from an MOU with growers and processors to a licensing agreement. It is approaching Tesla regarding incorporating hemp fiber into its auto parts.

The 2014 Farm Bill was silent about what part of the plant can be experimented with. Cannabidiol (CBD) oil, an extract from the floral top of the plant, appears to be beneficial as a nutraceutical. In August 2016 three federal departments filed a joint non-binding and non-enforceable opinion that it is illegal. Quarles office has filed for clarification but has had zero response.

Another impediment to research and innovation is that a lot of land grants and ag schools are unable to take hemp research to full potential due to marijuana laws. The medical community is afraid to conduct clinical studies of CBC oils that might incur loss of NIH funding for other projects due to potential violations of controlled substances acts. Another impediment is prohibition of pesticides on industrial hemp plants.

Every grower and processor has to acknowledge in several signed statements that this is an experimental crop and the KY Department of Agriculture will be held harmless if there is a lawsuit between the grower/processor and another entity. Hemp is an experimental crop that could, at any moment, be determined illegal in the US.

Before growers can plant industrial hemp they have to pass a background test, can have no past drug-related offenses and have to submit two test coordinated plots for where they plan to grow hemp. Every hemp field is sampled and randomly tested at the state diagnostics lab. The licensing fee for the grower covers the cost of the first test.

What should states be lobbying for? States should show a good state effort that industrial hemp is being grown responsibly and view it as no different from other crops. We are anticipating two pieces of federal legislation that would commercialize the crop and concerning banks accepting loans regarding industrial hemp. The next farm bill should have a provision that instructs federal agencies to give clearance on these issues.