Hemp in the Palo Verde Valley? UC ag experts eye spring 2019 for viability research

By Uriel Avendano/Times Editor  20 hrs ago

"If you look at the history of industrial hemp’s evolution, it actually evolved as a desert crop. It is even called a xeric crop, or plant, which means it has some adaptation mechanisms to overcome high temperatures and high evapotranspiration," stated University of California Cooperative Extension (UCCE) Agronomy Advisor (Riverside County) and County Director (Imperial) Oli G. Bachie, pictured at an October 2018 Progressive Farmers meeting in Blythe. (Archived file photo by Uriel Avendano/Palo Verde Valley Times)

With the signage of the 2018 Farm Bill by U.S. President Donald Trump in December of 2018 — which effectively legalized the grow of industrial hemp that meets the defined cannabis THC (Tetrahydrocannabinol) threshold of less than 0.3% — the matter of low desert viability and verifiable data will fall on the expertise of agriculture research teams like that of the regional University of California’s Cooperative Extension (Riverside County).
While the institution has always had an exemption to conduct research with industrial hemp, the 2018 Farm Bill's passage could further imbue confidence and mitigate peripheral trepidation regarding its legality within the college's governing leadership.

“What I am mostly liable to is (what) my university would actually advise; they have got the attorney’s section and would be working with (laws and regulations) outside. Our work is based on what they would actually bring to us regarding restrictions,” stated University of California Cooperative Extension (UCCE) Agronomy Advisor (Riverside County) and County Director (Imperial) Oli G. Bachie, underlining the college leadership’s ultimate discretion on any potential forthcoming low desert industrial hemp research. “I’ve prepared research project proposals at different scales — small scale or large scale — that would include even water use efficiency of industrial hemp in a way that we would be able to write crop production guidelines for industrial hemp in the low desert.”

The research planning for a crop that is coming off of the federal government's prohibitive list is intensive, including finding quality and high-standard seed sources for approved research use.

“We would have to work on only seeds that are certified; there are different kinds of seeds out there, but we would only be allowed to work on certified seed sources,” noted Bachie. “Once this is completed, we will be actually anticipating to do (research) in the spring.”

Though mindful of the current available industrial hemp seeds being specified for cool weather environments — not necessarily ideal for a Southern California desert region with an excess of 120-degrees during the warmer months — the anticipated approach for the University of California's research team may hone-in on harvest adaptation specifics and studying subsequent yielding potential.

“Our weather is not that of those people in the northern (area), where they would have one season of growing. We are anticipating growers to be able to plant, or harvest, twice a year in the low desert environment. We will also anticipate trying if multiple harvests can be made from industrial hemp in the low desert,” said Bachie. “If you look at the history of industrial hemp’s evolution, it actually evolved as a desert crop. It is even called a xeric crop, or plant, which means it has some adaptation mechanisms to overcome high temperatures and high evapotranspiration.”

Along with hemp’s inherit survival mechanisms in low rainfall areas, the plant also has the capability of adapting to arid climates by producing trichomes which reduce loss of water from a grows’ leaves.
According to a University of California Agriculture and Natural Resources presentation at the October 2018 Progressive Farmers meeting in Blythe, hemp also develops deep tap roots which helps the plant find sequestered water in the ground; grows fast; produces high yields; can be grown without the heavy use of pesticides; and could be a substantial revenue and economic driver for growers.

With the intent of UCCE Imperial County to conduct research at the UC Desert Research & Expansion Center, the project will seek to determine inputs (fertilizer, water); evaluate potential seed and fiber yields; and study repeat trials to determine best seasonal timing — with the hope of producing crop production guidelines, systems and protocols for industrial hemp harvests.

“I think it’s a good idea, before growers would actually invest time into seeding and all these things, for us to be able to actually say, ‘Hey, here is what it is,’” said Bachie.

Potential uses for industrial hemp include paper products, textiles (e.g. rope, webbing, fabric, etc.), select livestock feed and/or bedding, molded plastics and more.

To date, there have been no publicly disclosed industrial hemp cultivation projects within Blythe’s city limits; however, any future resident industrial hemp cultivation projects would be allowed for harvest in any according zone approved for agriculture.

Whether the plant can be optimized for maximum productivity in the low desert, while gauging the range of adaptability for the area’s encompassing local ecosystem, remains to be determined — for now.