Three Ways Industrial Hemp Farmers Produce Low THC Crops to Bank On

Many industrial hemp farmers learned a hard lesson in 2019. Taking chances with a high THC varietal isn't worth it.

But how can hemp farmers mitigate the risk of a potentially hot crop? By understanding the hemp breeding basics that are the foundation for high CBD or CBG-producing varietals with a low THC profile.

#1 – Start with Industrial Hemp Genetics, Not Marijuana

Let's call a spade a spade. Marijuana and hemp might be the same cannabis plant genetically, but they have been bred for very different purposes. When the *Cannabis sativa* plant was legalized with the "under .3 percent THC caveat' and the CBD gold

rush ignited, many hemp breeders started with marijuana strains and bred them for lower THC content.

The idea was, keep the legal cannabinoid percentages high while lowering the THC content. But basic plant genetics are hard to change. And when stressed — by inclement weather, pests, weeds, delayed harvest, or any of the common occurrences in outdoor production — plants tend to revert to what they know. In the case of hemp, if it originated from high THC parents, it's the first tendency when stressed is to spike in THC.

A much safer bet is starting from actual fiber and grain hemp genetics. These varietals have expressed stable and low THC levels (typically below .2 percent) for decades. From their select and breed 'up' for new strains that express higher CBD or CBG, while retaining that basic low THC threshold.

#2 – Stable Hemp Seed Genetics Can't Be Rushed

The other thing the hemp industry hasn't had is time. It doesn't matter how much money is on the table; plant breeding can't be rushed. It takes time to breed out each new generation, carefully trial and collect field data. Then the best of that crop must be bred back again, decreasing variability in genetics in favor of a homogenous gene pool.

Other crops have had the luxury of decades of breeding, selection, data collection and trusted certifying procedures to make sure seeds are everything they are advertised. The hemp industry started with almost none of that. Other than fiber and grain varietals grown for European conditions.

New hemp varietals should be cross-backed and bred out for at least five generations — with the data to prove their low-THC reliability — before being released to the marketplace.

#3 – Don't Get Greedy — High Cannabinoid Percentages Risk Going Hot

Even starting with really low THC genetics, hemp seed breeders can't avoid the basics. If you breed for higher cannabinoid content, you're going to get higher percentages of ALL the cannabinoids — including THC. What are you willing to risk with your farm? A 20 percent CBD crop that ends up going hot? Or, a reliably low THC, 10 percent CBD crop you can bank on?

And keep in mind, outdoor production will always be riskier— with more potential for stress and a subsequent high THC spike — than indoor production where extremes can be monitored. Ten percent CBD is the industry 'threshold' because 25 pounds at biomass at 10 percent creates one kilo of oil and streamlined lab efficiencies.

But too many growers have been tempted by a potential windfall of a high CBD crop without considering the significantly increased risk PLUS increased expenses. High CBD crops really are for the small, boutique grower willing to invest extra. For larger growers, in particular, a much wiser play is to concentrate on a reliable 10 percent CBD harvest grown with the cheapest production methods.

Remember, profit is based on your expenses versus revenue, not JUST potential revenue.

Here at Colorado Breeders Depot, we're all about offering reliable, low THC hemp genetics with the field studies and data to prove it.

For more information on hemp seeds available for 2020 — including our extensive field trial data — check out the Colorado Breeder's Depot website at https://coloradobreedersdepot.com. Or feel free to email us at info@coseedcbd.com or call us at (719) 275-7770.