# **Endless Biotech:**

A Story of Growth and Innovation





Endless Biotech started with a simple but ambitious goal: to revolutionize cannabis cultivation through precision and science. What began as a researchdriven operation has grown into a trusted leader in cannabis production, providing commercial growers with high-quality, consistent genetics for the cannabis market. Based in Oklahoma, the company built its reputation on tissue culture, ready-to-flower plants, and an unwavering commitment to clean genetics. However, as their operation expanded, they encountered challenges that threatened their efficiency-substrate inconsistencies, persistent pest pressure, and laborintensive processes. The variability of coco coir required frequent adjustments, while pest issues demanded constant oversight, making it difficult to maintain the precision they needed for a scalable, high-performance cultivation operation.

"We needed something more precise—something that could keep up with our ambition," recalls Gary Holland, Director of Operations and Cultivation. "Coco coir just wasn't cutting it. Every batch was different, and pests were a constant battle. We knew there had to be a better way."

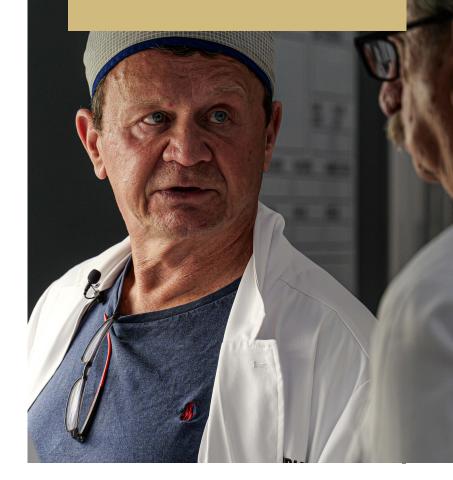
While some growers continue to use coco coir, its limitations have led many top cultivators—like Endless Biotech—to transition to stone wool for a more predictable and controlled growing environment. Organic substrates often introduce variability in water retention and aeration, requiring constant adjustments to irrigation and nutrient delivery. Additionally, pest infestations—

such as fungus gnats and root aphids—remain an ongoing challenge, demanding additional labor and increasing the risk of crop loss.

Seeking a more consistent and efficient solution, Endless Biotech turned to Grodan stone wool—an inert, high-performance growing media designed for consistency, cleanliness, and precise water and nutrient management from propagation through harvest.

> "It's not just about growing more plants—it's about growing them better. Everything we do is about precision, efficiency, and making sure every plant reaches its full potential."

 Gary Holland, Director of Operations and Cultivation at Endless Biotech





### **Transition to Grodan Stone Wool**

The impact was immediate. "We saw the difference right away," Gary explains. "The cleanliness, the consistency—it changed everything. No more surprises, no more wasted time dealing with variability."

By incorporating Grodan Starter Plugs, 4-inch Gro-Blocks on multi-slabs, and 6-inch Gro-Blocks on Uni-Slabs for mother plants, Endless Biotech refined their substrate configuration and crop steering strategy, gaining greater control over irrigation and nutrient delivery. This transition not only improved uniformity but also accelerated root development, leading to stronger, more resilient plants at every stage of growth.

"The level of precision we now have is a gamechanger," Gary adds. "It's allowed us to finetune our process and maximize plant health like never before."

With a more controlled and predictable growing environment, Endless Biotech saw

immediate improvements in plant uniformity and vigor, setting the stage for higher yields and enhanced quality across all cultivars. As Endless Biotech continues its research into genetic stability and CRISPR technology, the controlled environment provided by Grodan stone wool ensures their trials are consistent and repeatable–key factors in cutting-edge cannabis breeding.

"With stone wool, we're not guessing anymore. We have complete control over irrigation, dry-backs, and nutrient uptake—our plants respond exactly how we want them to."

- Gary Holland



# Yield, Quality, and Efficiency

Switching to Grodan didn't just streamline workflows-it transformed output and quality.

"Before, we were at about 80 to 85g per square foot," Gary reveals. "Now? We're consistently hitting 115 to 135g, sometimes even 147."

Beyond yield improvements, the terpene profiles of their cultivars skyrocketed, increasing from 2.5% to between 4% and 6%. With enhanced oxygenation and precise irrigation control, their plants expressed their full genetic potential, producing more aromatic and potent flowers.

Labor efficiency also saw a major boost, reducing the time spent on daily substrate adjustments and allowing the team to focus on higher-value cultivation strategies. By reducing time spent on substrate management and plant variability, Endless Biotech saw not just labor savings, but a streamlined operation that freed their team to focus on plant health and genetic innovation. "The labor savings alone have been significant," Gary notes. "Our team can now focus on finetuning plant health and optimizing strains rather than constantly managing substrate inconsistencies."





# Sharing Knowledge with the Industry

With their production optimized, Endless Biotech turned their attention outward, sharing their success and knowledge with the broader cannabis community. From the start, their goal was to not only to improve their own operation but elevate industry standards, ensuring more growers benefit from their data-driven cultivation techniques. They host regular crop steering seminars, where they share insights into their cultivation techniques, highlighting key strategies that contribute to their success-including the role of Grodan stone wool in achieving precision and efficiency.



"We're not just growing plants; we're growing an industry," Gary says. "We invite people in, show them what we've learned, and help them implement it in their own facilities."

By fostering a culture of transparency and innovation, Endless Biotech is helping shape the future of commercial cannabis cultivation, proving that collaboration and data-driven strategies are key to industry-wide success.

# Innovation, Genetics, and Industry Leadership

Endless Biotech continues to expand, scaling their tissue culture operations to 150,000 clones per month, with a long-term goal of surpassing one million. They are investing in genetic research, using CRISPR technology to develop custom strains tailored for superior

"Endless Biotech's approach changed how we think about cultivation. Their willingness to share their process gave us the confidence to make improvements we never would have tried otherwise."

- Seminar Attendee

performance, disease resistance, and enhanced cannabinoid and terpene expression.

Through it all, their commitment to precision, efficiency, and education remains at the core of their philosophy. By incorporating Grodan solutions into their learning sessions, they demonstrate firsthand how controlled substrates can drive consistency and efficiency in commercial cultivation.

"We're constantly improving our methodologies, and we don't just keep that knowledge to ourselves," Gary emphasizes. "Our doors are open to anyone looking to grow better, cleaner, and smarter."

The impact of this philosophy is evident in their partnerships with industry leaders like Grodan, Athena, and Pipp Horticulture, as well as large-scale growers, many of whom have implemented Endless Biotech's strategies after witnessing their success firsthand. "The data speaks for itself," Gary notes. "Grodan's consistency and the ability to dial in our methodology is giving growers results they never thought possible."





## **Elevate Your Cultivation with Grodan**

Endless Biotech's story and success is one of relentless improvement, fueled by innovation and a deep understanding of their craft. By leveraging Grodan stone wool as a key part of their system, Endless Biotech is driving innovation and setting new standards for the future of cannabis cultivation.

#### **Endless Biotech's Products & Equipment**

#### **GROWING MEDIA:**

- Grodan Starter Plugs
- Grodan 4" Blocks on Multi-Slabs
- Grodan 6" Blocks on Uni-Slabs

#### LIGHTING:

• Fohse A3i Pro LED Grow Lights

#### **IRRIGATION:**

• Pressure Compensated Drip

#### **NUTRIENTS:**

Athena Nutrients

#### **VERTICAL RACKING:**

• Pipp Horticulture Vertical Racking

To learn more about the benefits of Grodan's stone wool products and GroSens Suite, contact us or request a trial at *info@grodan101.com*, or visit our contact page at *Grodan101.com*.











