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## A New Sustainable Substrate for CEA

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Proterra Ag is made up of biologists, chemists, engineers and, of course, farmers, whose focus is creating sustainable products and production methods for CEA growing, as well as floriculture and cannabis. CEO and Chairman Erik Caso notes that the work they're doing is dedicated to solving growers' problems while creating environmentally sustainable solutions.

The company's first product, HYPERroots, is a substrate made up of 98% water and 2% organic materials (that part's proprietary, but Erik says it's naturally occurring material that you could eat—but don't eat it). They're waiting on USDA certification and there are multiple patents filed for HYPERroots. It's essentially a gel-like polymer designed to create uniformity, reduce the amount of water needed, and speed up germination by 25% to 30% for CEA crops of all types, including leafy greens, herbs, tomatoes, cucumbers, peppers, eggplants and more.

Another benefit Erik talks about is the absence of pest and pathogens in the substrate, which means no interventions are needed. There's also no preparations needed, he adds, like rinsing or for pH.

"It represents the right amount of moisture availability in the volume of gel to make sure we have something predictable for the grower," he says. "Once you've adapted using this to your process, it will perform the exact same every single time, there will not be variability."

Because of its gel-like nature, it can be formed into any shape needed, as seen in the photo. The company can work with growers, too, to adapt a nutrient profile for specific outcomes or specific plants. The substrate can be transplanted into larger containers, or, once finished, HYPERroots will compost completely with no leftover residue in 45 to 60 days. You can request a sample by emailing [sales@proterra.ag](mailto:sales@proterra.ag). **IG**