Fungi that can recycle plastic, plus apply now for specialty crop assistance



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# green Talks sustainability e-news

COMING UP THIS WEEK:
Plastic-Eating Fungi
Specialty Crop Assistance
Limestone & CO2
CEA Awards: Sign Up Quick!
Report from the MT Outpost



# **Plastic-Eating Fungi**

Could fungi be the solution to the mounting pile of plastic we consume? There's a new startup company in Austin, Texas, called HIRO Technologies (pronounced "hero") that has developed plastic-eating fungi that they can deliver in a package. They launched a Kickstarter campaign yesterday, hoping to fund more research projects to get their products out into the world. Right now, the company is planning to debut their MycoDigestible diapers in early 2025.

Fifteen years ago, researchers identified plastic-eating fungi in the Amazon, and while the fungi have thrived in research labs, this appears to be the first company to commercialize the fungi. They claim to have a shelf-stable commercial solution that makes fungi-powered recycling safe, scalable and accessible for both consumers and manufacturers.





Hiro's Kickstarter supporters can sign up to get a clever little "Breakdown Kit" (pictured above)—a mini terrarium that houses a tube with a see-through window—allowing the viewer to watch fungi break down a piece of plastic in real time. As the fungi secrete enzymes, they break apart carbon chains in plastic and transform them into soil and mycelium.

It will be interesting to see if this company can thrive past the startup phase. Their aim is to work with manufacturers, consumer brands and waste management companies. In a press release, Hiro cofounder Miki Agrawal said, "Imagine a world where harmful plastics are turned into nourishing soil."



# Specialty Crop Assistance Program: Apply by January 8

In the last *GreenTalks*, I mentioned that a new marketing assistance program would be made available to specialty crop producers in the US. As of that writing, the application information was not available. The update is that this week, folks can start applying for the \$2 billion in Marketing Assistance for Specialty Crops (MASC) program. This includes fruits, floriculture, nursery crops and herbs.

If you fall into one of those categories, take a look! But don't delay—because this is a VERY short turnaround. Applications are due January 8, 2025. Payments will be calculated based on the producer's total specialty crop sales for 2023 or 2024.

Learn more HERE.



# See what you might have missed!

#### **Research Brief: Limestone Potential**

Researchers at Northwestern University in Illinois are about to embark on a fascinating study. The theory: sprinkling crushed limestone on farmland could trap billions of tons of CO2 from the atmosphere. This method is classified as enhanced weathering, and is an evolving strategy that could potentially help with decarbonization.

Researchers hope to determine if it's truly a viable option. The study, which is funded through a \$5.1 million grant from the U.S. Department of Energy, will collect and analyze data from water and soil over two growing seasons. They'll focus on limestone but will also test other rock types. If viable, farmers may be able to generate additional income with this method by selling carbon offset credits.



Just how does it work? It's based on the natural carbon cycle that allows carbon to be converted into a mineral form that scientists say is stable in both water and over geologic time. Grinding up the limestone accelerates the natural process by increasing the surface area that's available for a chemical reaction. This rock weathering turns CO2 into bicarbonate, which then filters through the soil and is eventually washed into waterways. Once it reaches the ocean, it forms solid calcium carbonate.

The lead researcher on the project, Andrew Jacobson, also has another research project currently running testing the efficacy of basalt to remove CO2. That project is running inside a greenhouse at the Chicago Botanic Garden.

Learn more about the limestone project HERE.



#### Last Chance to Be a CEA Winner!

ICYMI (that's "in case you missed it," for those of you over the age of internet slang), *Inside Grower* and Indoor Ag-Con have teamed up to offer a brand new slate of awards called the CEAs, or Cultivating Excellence Awards. Our deadline for nomination forms is this Friday, December 13, so if you have a strong, successful CEA business and you'd like to be considered, finalize your nomination form this week!

What are the CEAs, you ask? There are three awards; two are grower-focused and one is a product-focused award for vendors and allied trade:

- Operational Excellence Award
- Good Stewardship Award
- Product Innovation Award

A quick note, we've received numerous nominations in the Operational Excellence category, but not as many in Good Stewardship. If you are focused on sustainability or have a great program giving back to your community, consider filling out the Good Stewardship nomination form!

Don't miss your chance to be recognized for all the hard work your operation puts in on the daily. Three finalists will be selected for each grower award, and the finalists will receive one All-Access pass for their organization to Indoor Ag-Con. We will recognize all the finalists and announce our winners during the luncheon awards gala on the first day of Indoor Ag-Con, which runs March 11-12, 2025 at the Westgate Las Vegas.

Learn more at the CEAs website and fill out your nomination form (or finish the one you started!) by Friday, December 13 to be considered.



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## Report from the MT Outpost



The darkest month of the year has a different feel at 6,000 ft. in the mountains of Montana. We already have winter: 9 inches of snow on Monday while today snow flurries are drifting against a gray sky, circling more than they are falling. The freezer is full and the dutch oven and crockpot are suddenly more frequent tools in the kitchen. It's the season of craving a fire in the wood stove even when it's warm out, purely for the light and ambience. I realize now that I decorate not for Christmas, but for the entire winter season. Every light holds dual purpose for the next few months.

As I build a marketing plan to promote a rental cabin way up here on a backroad, I've thought a lot about what makes this life up here, and how, in the off-season I may need to teach potential guests what I already intuitively do each year to seek and create that "cozy" vibe. I discovered, in my research, a whole little corner of the interwebs dedicated to cozy living, hygge, and yes, whole Instagram accounts that romanticize only the cloudy, rainy/snowy days. I also am convinced that whether you're talking winter cabins, winter season in the garden center, or summer landscaping, it still all boils down to an invitation to slow down, be present, and enjoy your surroundings. Now, is that a marketing strategy? I'm going to try it.

Until next time,

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Jennifer

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