

Synthetic compostables in organic? Plus super-boosting microgreens



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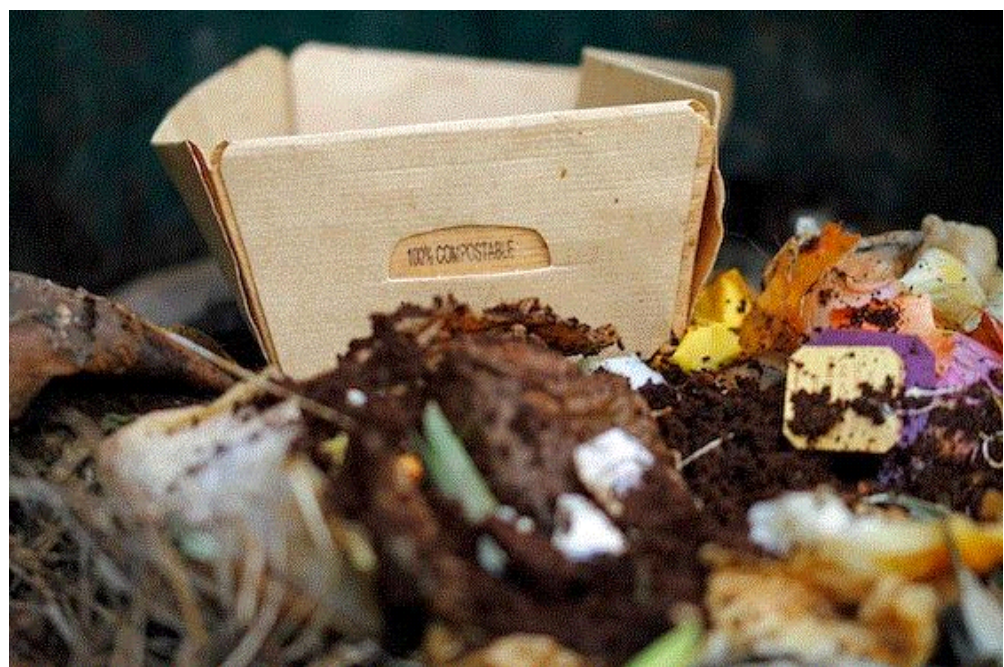
Compostables Debate
Fertilizer from Urine
Super-Boosting Microgreens
GMG's Trends for 2026
Report from the Outpost

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Organic Board to Debate Synthetic Compostables

The U.S. [National Organic Standards Board](#) (NOSB) will hold its semi-annual meeting November 4-6 in Omaha, Nebraska, where they'll tackle a number of topics, including organic policies and substances that may be added or deleted from the National List of Allowed and Prohibited Substances. That list dictates what USDA Organic certified growers can and can't use in production.



One of the topics up for debate is whether or not to allow the addition of synthetic compost feedstocks in compost used on organic farms (as long as they meet the requirements of three ASTM standards). In 2023, the Biodegradable Products Institute petitioned the USDA to amend the definition to allow for these synthetic compost feedstocks, and the NOSB then ordered a report to look at the issue. In the [meeting materials](#) (starting on page 111, if you want to dig in), the NOSB outlines a few key findings:

- 1) Undisclosed additives, including plasticizers and PFAS, are common in compostables and may persist through composting.
- 2) Proprietary formulations, evolving materials and variable field performance make comprehensive assessment extremely challenging. Some products disintegrate but do not fully biodegrade or mineralize, creating microplastics.
- 3) There are limitations to the ASTM standards, which are voluntary, updated independently of regulations, and focus on labeling and lab-simulated composting—not contaminant control or field performance.
- 4) The operational reality is that it's hard to distinguish a compostable synthetic from a non-compostable item, and many composters are screening out all plastics to avoid contamination.

The NOSB subcommittee position on this is that a case-by-case review would be preferred over the broad allowance of synthetic feedstock.

So what's the meeting all about? It gives stakeholders, including organic growers, a chance to speak up and offer their opinions. You can do it in person, virtually, or in written comments—but you do need to sign up for oral comments or submit written comments by October 8.

Full details [HERE](#).



Wastewater to Fertilizer? Harvesting Urine

There's no lack of inventive ideas out there, but turning them into scalable solutions is another story altogether. The internet is getting excited about a project out of Stanford University that developed a prototype device that can recover nutrients from urine in wastewater for use as fertilizer, while using solar power that can also provide power for other uses.

The prototype is able to separate out ammonia (made up of nitrogen and hydrogen) and uses the solar electricity to drive ions across and eventually trap ammonia as the common fertilizer form of ammonium sulfate. There's also some fancy capturing of waste heat in the process that improves the solar panel efficiency.

In a Stanford [news release](#), the study's lead author, Orisa Coombs, noted, "Each person produces enough nitrogen in their urine to fertilize a garden, but much of the world is reliant on expensive imported fertilizers instead. You don't need a giant chemical plant or even a wall socket. With enough sunshine, you can produce fertilizer right where it's needed, and potentially even store or sell excess electricity."

While the possible fertilizer use and energy generation is promising, the real impact, the authors say, is in delivering more effective sanitation. A staggering statistic is that 80% of wastewater world-wide goes untreated (and we all know how too much nitrogen in the water causes lots of trouble.) A self-powered system could be a gamechanger in many countries.

You can find “Prototyping and Modeling a Photovoltaic/Thermal Electrochemical Stripping System for Distributed Urine Nitrogen Recovery” in [Nature Water](#).



Add Zinc to Super-Boost Microgreens

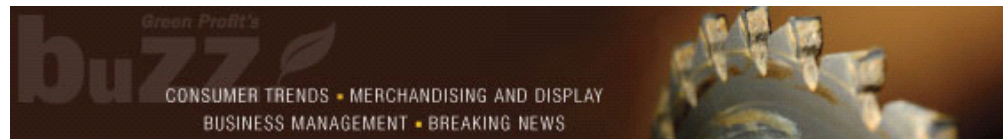
Microgreens already have a reputation for being packed with nutrition, but [new studies](#) out of Penn State University are showing that you can boost that by adding zinc during cultivation and by changing light exposure. The proper term is “agronomic biofortification.”



Some cool findings from five years of fiddling with different crops and scenarios:

- High light intensity increased antioxidants, including vitamin C, in radish microgreens.
- High light intensity also decreased amino acids and glucosinolates (plant defense compounds) in radish microgreens
- Adding zinc led to higher levels of specific antioxidants and more essential amino acids in radish microgreens.
- In pea microgreens, higher light intensity led to more flavonoids and phenolic acids.
- In pea microgreens, adding zinc increased vitamin B1, B6 and C, and sulfur-containing amino acids.

The full news release from Penn State is available [HERE](#).



Lemonading Our Way Out of the Great Exhaustion

Garden Media Group's 2026 Garden Trends Report just launched into the world, and it turns out we're heading into the era of lemonading ... and I didn't even know lemonade could be a verb! But with 25 years of trend spotting under their belt, Garden Media's annual predictions always tune into the consumer psyche and strike a chord.

This year's theme of lemonading is about "transforming setbacks into opportunities through creativity, mindfulness, and a sense of joy." Things might be hard, but there's a way to grow.



The great exhaustion is real, says the report, and people are craving simplicity, authenticity and slowness. "So when we talk about trends like this," they write, "we're not just talking about products ... We're talking about values. About how people want to live, and how gardening is helping getting them there."

That leaves room for incredible opportunities in the garden world. Here are three trends from the report. (I'll return with more next time!):

Purpose-driven gardening: It's not just what people plant, but why. That might be a campaign at a garden center that donates to a local charity, good storytelling about your brand ethos, community programs and more.

Precision gardening: Technology is allowing for site-specific, data-informed gardening. That might be a soil test, ZIP code microclimates and site-specific plants like natives, drought- or flood-adapted, etc.

Bark'itecture: The growing movement of reshaping outdoor spaces and gardens for pets (and 70% of gardeners own pets). That includes cats and dogs, but also the backyard chicken trend, goats, ducks and other birds (Bossman Beytes tells me he has an emu named Yuengling for a neighbor).

If you want a window in some of the things that will likely resonate with your customers in 2026, head over to Garden Media Group's website and [download the report](#).

Report from the MT Outpost



I'm feeling vindicated reading the Garden Media Group's piece about Bark'itecture. When we started talking about our little [Backroad Cabin](#) vacation rental here at the Outpost, people thought I was nuts to think about allowing dogs. It was a gut feeling: I don't travel without my dogs. And I also envisioned that most of our winter guests would be less than a half-day's drive from here—would they even come if they couldn't bring their dog?

I put my head down, designed a dog-friendly house and yard, added lots of canine amenities, and put dogs at the center of my marketing. Along the way, I found the data: 63% of U.S. households own a pet. Up to 73% of pet owners say they'd travel with their pets at least sometimes if they could. I expanded my potential customers dramatically by allowing dogs.

There's an old hotel in this valley that won my heart many years ago when they upgraded our room for free when my old dog couldn't get up the stairs very easily. An employee brought him bites of prime rib. The sign above the lobby desk reminded us: "Dogs are welcome. We never had a dog that smoked in bed and set fire to the blankets. We never had a dog who stole our towels, played the stereo too loud or had a noisy fight with his traveling companion. We never had a dog that got drunk and broke up the furniture. So if your dog can vouch for you, you're welcome, too!"

Until next time,

A handwritten signature in black ink that reads "Jennifer".

Jennifer Duffield White

jwhite@ballpublishing.com

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