

High-tech growing systems bring joy of gardening indoors

April 2 2020, by Katherine Roth



This undated photo provided by AeroGarden shows one of the company's indoor growing systems, the AeroGarden Bounty Elite. High-tech growing systems are bringing the joy of gardening even to those without light, know-how or outdoor space. And that's a nice thing in the age of the coronavirus. (AeroGarden via AP)

Traditionally, growing your own herbs and veggies was reserved for those with the luxury of outdoor space and abundant light.

Now there are a number of new, high-tech indoor gardening systems that allow apartment dwellers with limited light, or those aching to garden before the season starts, a chance to grow their own greens.

For many households sheltering in place, with limited access to perishable foods, the devices can also provide a source of fresh herbs and vegetables, as well as a chance to enjoy growing something.

And novices needn't worry: These automated growing systems are relatively foolproof, with pre-planted "seed pods," auto-timed lights, even smartphone apps and Alexa interfaces to help you through the process.

"It's sort of like the K-cup model for growing," explains Paul Rabaut, marketing director at AeroGarden, which makes a range of indoor growing systems that use seed pods, which are inserted into the electronic growing machine, not unlike inserting a capsule into a [coffee machine](#).

"Our mission is to allow people access to freshly grown herbs and veggies all year round, even without a yard or much light. It's easy to be successful and there are no messy bags of soil to lug," explains Rabaut.



This undated photo provided by AeroGarden shows one of the company's indoor growing systems, the AeroGarden Farm Plus. High-tech growing systems are bringing the joy of gardening even to those without light, know-how or outdoor space. And that's a nice thing in the age of the coronavirus. (AeroGarden via AP)

Like a number of these systems, AeroGarden uses hydroponics, a method of growing that uses only water and liquid nutrients, not the soil used in traditional gardening. Seeds come embedded in a plug of peat, nestled inside a tidy capsule pre-labeled with the name of the plant, how tall it's expected to grow and in how many days.

All that's required is to add water and nutrients periodically, and the rest is automated.

Indoor gardeners can expect their first harvest in a matter of weeks.

After two or three months, the seed pod needs to be replaced—or planted in traditional soil to continue growing—and another pod can be inserted in the system. As with coffee capsules, the plastic [seed pods](#) are recyclable, Rabaut says, adding that AeroGarden pod trays can be swapped out for a seedling tray that lets people start many more [plants](#) at once.

Another popular growing system is Click and Grow. And big names like Samsung, LG and IKEA have also worked on developing automated indoor growing systems.



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"We have a new competitor coming on the market every week or two

somewhere in the world," says Martin Laidla, public relations manager for the Estonia-based Click and Grow, whose biggest market is North America.

"We call this 'hyper-local gardening' since you can do the growing right in your kitchen, but some systems are definitely better than others. It's easy to put together a plastic base and light, but it's the quality of the growing medium and the growing technology, and of course the light, that's really the trick," says Laidla.

Marc Hachadourian, director of glass house horticulture at the New York Botanical Garden, says, "Technology has invaded every aspect of our lives, so it was only a matter of time until technology entered into gardening."

"LED [light](#) technology was really the game changer, with better quality plant lights available in all different sizes," he says. "Now you can even buy tiny clip-on plant lights for your African Violet, or plant lights that are the size of desk lamps. They used to be enormous things."

But just as coffee capsules aren't for everyone, neither are these growing systems, which can seem sterile to those used to gardening the old-fashioned way.



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"I've seen novices grow wonderful plants using these systems," says Hachadourian. But he adds, "There's still something for getting your hands in the dirt. If you just plug it in and watch it grow, there's no interaction there."

He says that with good-quality modern plant lights, people can also grow plants in soil indoors without a high-tech system, while getting hands-on enjoyment. "It's like cooking. Sometimes it's good to get your hands dirty," he says.

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