

A CLEAN Approach

Take steps toward a greener greenhouse.

BY RILEY HAMMONDS

As many of you greenhouse dwellers may know, growing beneath a canopy is somewhat different than traditional, outdoor gardening. While the sun provides some heat and light, it's up to you to ensure your plants have everything else they need.

There are several benefits offered when you have control of the growing environment. For example, you can provide the precise amount of nutrients and moisture needed. Also, unlike when you grow items outside, you can control (at a minimum influence) the temperature.

However, there are challenges to greenhouse growing, too. One of these is the ability to



have a clean growing process indoors. Some of the products and methods offered to greenhouse growers today are not eco-friendly, leaving it up to you to take steps to ensure your methods are.

If you are ready to turn your greenhouse greener, keep reading. Here you can find some helpful tips to develop a clean approach to this old industry.

AUTOMATION

With automation, you have environmental control of your greenhouse. It's important to know, at all times, what is going on, regardless of where you are. It's dangerous for your plants and anything inside the greenhouse to assume and use traditional farming methods.

With the proper sensors, installed in the proper manner, you can remain aware of various environmental factors inside your greenhouse including the relative humidity, light intensity, temperature, and have continuous root zone monitoring to track pH and electrical conductivity.

As a modern cultivator, you should have machines in place to monitor all these factors, allowing you to better manage the environment and make adjustments as needed.

CLEANING TOOLS NEAR PLANTS

It's essential to ensure that your tools are clean. This minimizes the likelihood of plant-to-plant spread of issues in the greenhouse.

Basic hand washing is a good first step and can help, but it's also necessary to find an effective way to clean equipment and tools in the greenhouse, near the plants, without causing harm. With green methods, you can



feel confident the cleaning methods can come in contact with the plants, without any concern related to oxidation.

FERTIGATION SYSTEM MAINTENANCE AND CLEAN OUT

To maintain the cleanliness and performance of your systems, regular cleaning must be done. One of the main reasons these systems become clogged and/or dirty is due to poor water quality. Adding a water filtration system to the greenhouse is one way to minimize issues and keep the system clean while remaining eco-friendly.

However, biological issues may also be present. For example, if your water source is rich in nutrients, there's a higher likelihood that you will have clogging in the irrigation system.

In addition to the filtration system, acidifying irrigation water is also beneficial. There are different acids, however, so caution must be used. Combining the wrong acids and fertilizers can cause serious problems, so avoid this and know what works together before proceeding.

CLEAN PLANTS AND FACILITIES

One company focused on helping to keep your plants clean and you healthy is Plant

PLANT HEALTH

Aid. Plant Aid specializes in the development and distribution of non-toxic, eco-friendly cleaning solutions that leave zero toxic chemical residue. The company currently offer solutions for the cleaning of plants as well as facilities.

Plant Aid's Plant Cultivator & Cleanser can be applied to clones, plants and seeds to ensure they remain clean. A clean plant is healthier and achieves stronger photosynthesis. You can also use this solution for cleaning the root zones for better nutrient

intake. Even when dried, there's zero toxic residue left on the plant's leaves.

Dubbed the "Horticleaner," this is Plant Aid's facility cleaner. This product can be used to clean high-contact surface areas and tools, as well as irrigation

lines and emitters. Similar to the Plant Cultivator & Cleanser, this product also offers the same "green" benefits.

Bill Artwohl, horticulturist and founder of West Coast Green Thumbs and co-founder of Sonoran Canyon Seed Co., had this to say about the use of Plant Aid, "I have had tremendous success with [Plant Aid] in regards to cleaning out irrigation systems that have seen organic supplementation. Increased time in between cleanings with no adverse effects on system components (eating away on system components like pump seals, solenoid valves, emitters etc)."

A PRE- AND POST-HARVEST WASH

According to studies, there are certain crops that respond well to an application of hypochlorous acid (HOCl) 24 hours before and after they are harvested. When applied properly, this substance can help maintain the health of the plant during processing (for example, cut flowers).

Supported by HOCl, the cut or harvested product has shown to last longer and isn't as vulnerable relative to plants that aren't treated with HOCl.

KEEP PLANTS HEALTHY WITH GREEN CARE AND MAINTENANCE

Regardless of what you grow, knowing how to ensure the health of your plants is a top priority. Healthy plants can stand up to an array of pests, minimizing the possibility of damage to the leaves, root structure and more.

A common mistake made by new greenhouse growers is assuming the same methods used outside can be used in the greenhouse; this just isn't the case. By using the tips and techniques mentioned here, it's possible to improve your greenhouse growing efforts, prevent serious problems, and have a large and healthy crop of plants at the end of the season. [gpn](#)

Riley Hammonds is a freelance author based in Alabama. For additional information, visit www.plantaid.com.

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