

GROWERTALKS

Features

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New Greenhouse Supplies You Can't Live Without

Compiled Jennifer Zurko



HV-100—Harvest Automation

Those who attended last year's Short Course may remember seeing this robot cruising down the aisles of the trade show. The HV-100—or "Harvey," as it was affectionately called by its creators at Harvest Automation—is their flagship product that was designed to move plant material around the greenhouse—so it can space and re-space, plus collect and consolidate.

Lest you think they're only for woody ornamentals, Metrolina tested them out on large poinsettias, with pretty good success, spacing 40,000 pots in four days with almost no human intervention. Abe VanWingerden said the test went well enough that they're actually buying two of the robots in order to do further testing this spring in Metrolina's outdoor growing bays.

Abe did say that a number of employees were worried that the four-robot test was a precursor to a fully robotized, employee-free Metrolina. He reassured the concerned workers by pointing out that every time they add a transplanter or other machine, they hire MORE people, not fewer.

Harvey works safely alongside humans and requires minimal training to operate, while reducing production costs and improving productivity. It also reduces the amount of direct labor needed and helps to manage inventory control.

Harvey's main features include:

- Can be used in any greenhouse, hoop house or nursery environment
- Has a high placement accuracy
- Handles most common container sizes
- Has a quick swap rechargeable battery
- Requires minimal training and setup
- No programming is required

- All weather, 24-hour operation

www.harvestai.com

New Heating Technology—TrueLeaf Technologies

TrueLeaf has introduced several new products and technologies that the company is showcasing in a unique project just completed in Fukushima Prefecture, Japan. The project is a demonstration greenhouse to show that produce can be grown in the tsunami-impacted region. The greenhouse is optimized for tomato and strawberry production and boasts several new technologies and advancements of existing methods, explained TrueLeaf's Jim Reardon.

The new products and technologies are:

- A Raypak low-mass condensing boiler
- CO2 extraction and delivery to the plant zone
- Heat storage
- Cart rail heat pipes supplemented by new Duofin LT Grow-Pipe
- High-output Starfin perimeter and gutter heating



The use of these new technologies in a small greenhouse is unusual and gives the operators a very high heating efficiency and optimized production temperatures supplemented with growth-enriching CO2. Plus, the entire system is easy to install and maintain, said Jim.

“These technologies are appropriate for any market, climate, etc.,” explained Jim. “The big advancement is that we have democratized the elements to make things like CO2 supplementation from boiler systems available to even smaller growers to self-install. Also, our

Duofin LT grow pipe does not require special tools or welding to install, nor does it even require surface maintenance like painting.

The timing for this particular project was perfect, as when the greenhouse manufacturer approached us, we had already been developing these scalable solutions for our North American ‘localvore’ growers.”

www.trueleaf.net



The Hot Spotter—Shur Farms

The Hot Spotter is a new concept from Shur Farms Frost Protection that manages cold air accumulation, eliminating the need for expensive, full-size frost protection in small areas.

Plus, it's easy to use—all you have to do is locate your hot spot, place the Hot Spotter in a convenient location, plug it in and turn it on.

Shur Farms says The Hot Spotter offers a precise targeted method to protect small areas in a convenient, economical manner previously unavailable with any of the conventional frost protection systems currently available. Areas that are naturally frost-free are that way because they have no obstruction to cold air drainage, and thus have no “micro-climates.” Shur Farms Frost Protection identifies and provides an analysis

of the different microclimates within a growing area, determining the cause and ultimate solution. Measurements and calculations detailing the difference between the colder microclimates and the regional climates can determine the likelihood, location and severity of frost problems you may encounter.

www.shurfarms.com



Autofog Nozzle—Dramm

Dramm now offers a stainless steel nozzle for all versions of the Autofog chemical applicator. The Autofog is a great tool to apply various greenhouse chemicals effectively. Unfortunately, corrosive oxidizers would damage the nozzle quickly, preventing certain chemicals from being used in the Autofog.

Dramm's new nozzles allow for products such as ZeroTol and other oxidizers to be applied through the Autofog without damage to the nozzle. The new nozzle is available as an option on all sizes of the Autofog and is sold as a spare part for

existing units in the field.

www.dramm.com



OxiPhos—BioSafe

BioSafe Systems has introduced OxiPhos, a new contact and systemic broad-spectrum bactericide/fungicide. OxiPhos' combination chemistry works systemically and on contact to control and destroy plant diseases like Downy Mildew, Phytophthora and Pythium, all of which may cause root rots and blights.

The phosphorous acid and activated peroxide combination provides growers with an environmentally responsible solution to diseases and pathogens. Labeled for horticultural applications in greenhouses and nurseries, as well as on commercial turf and landscapes, OxiPhos can be applied to a wide variety of ornamental and bedding crops.

This dual mode of action is unique in that it facilitates the active ingredient of phosacid to have a broader effect on target organisms. This makes OxiPhos a great compliment in a tank mix with ZeroTol 2.0, a contact broad-spectrum bactericide/fungicide and also BioSafe Systems' flagship product. OxiPhos is available in 2.5, 5, 30, 55, and 275 gal.

www.biosafesystems.com

Light Care—P.L. Light Systems

P.L. Light Systems has introduced a new maintenance service program called Light Care for growers throughout North America, which includes:

- All service and repairs on the continent
- Lamp and reflector testing to ensure optimized μmol light output levels
- Customized greenhouse mapping services for larger installations that have a variety of lighting fixtures
- Customized replacement parts specific to a greenhouse operations' fixture install map



- Onsite light measurement and advice to optimize plant growth
- All replacement parts for light fixtures including capacitors, ballasts, lamps, reflectors and other components, which are shipped from their facility in Beamsville, Canada, for quick delivery anywhere in North America
- Automated on-site reflector cleaning services with a custom mobile wash unit

Once all of the testing is completed, P.L. Light Systems provides a comprehensive report of their findings that gives you all of the information about the efficiency and performance of your lighting system.

www.plight.com