

GROWERTALKS

GT in Brief

11/1/2018

Intelligent Spray Control System Commercialization Approved

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What's an intelligent sprayer? It's a way to bring more precision to the spraying of outdoor nursery crops using lasers and computing technology. Developed by Dr. Heping Zhu, an Ohio State adjunct professor and USDA agricultural engineer, the Intelligent Spray Control System can reduce chemical use by 47% to 73% and airborne drift reduction of up to 87%. The system is being licensed to Smart Guided Systems, Inc.

The project was initially funded by the Horticultural Research Institute (HRI), the research affiliate of AmericanHort.

Nursery owners are often using the same technology their grandfather used: Start up the sprayer at the beginning of the row and run it to the end. Dr. Zhu's improved design is pretty simple: A laser on the sprayer detects the plant canopy; that information triggers spray nozzles to activate only where plant material is present.

"Concerns about application efficiency motivated our research," said Dr. Zhu in the press release. "Our studies have shown that only 30% of spray volume in conventional nursery applications is deposited on target trees, and 34% of total spray volume is lost on the ground. The Intelligent Sprayer gives growers a targeted application with improved spray coverage."

The system adapts to your existing spray rig, which is convenient. Cost ranges from \$27,000 to \$32,000, depending upon nozzle count. Availability is expected by February 2019. Learn more at www.smartguided.com.

As for you greenhouse owners, keep your shirts on, as Dr. Zhu is currently working to adapt this technology to greenhouse operations.

HRI has provided more than \$7.5 million in scholarships and research grants since 1962. For more information about HRI, its grant-funded research, scholarships, or programming, visit hriresearch.org. **GT**