

Join us the afternoon of July 20<sup>th</sup> via Zoom to learn what's new in orchard precision spraying technology.

We'll be joined by Dr. Jason Deveau, Dr. Heping Zhu, and Steve Booher.

Jason is the Application Technology Specialist with the Ontario Ministry of Agriculture, Food, and Rural Affairs (OMAFRA). Jason literally "wrote the book" on airblast spraying, and will discuss how to improve spray targeting as well as the benefits of rate controllers.

We will then hear from Dr. Heping Zhu and Steve Booher. Heping is an Agricultural Engineer with the US Department of Agriculture Agricultural Research Service, and has extensively researched intelligent spray application technologies for horticultural crops. Steve is the founder and CEO of <u>Smart Guided Systems</u>, who worked closely with Heping to commercialize their research into the <u>Smart Apply Intelligent Spray Control System</u><sup>TM</sup>. Heping and Steve will discuss the science behind and the commercial application of their system, which utilizes pulsed lasers and advanced computer algorithms to remotely sense the volume of each tree to deliver a precise spray volume in real time.

After their presentations, we will open up the meeting for all three presenters to field questions and comments.

Please register ahead of time at the following link:

https://tinyurl.com/precisionspraying

# July 20, 2020 4pm-5pm

### **Agenda**

### Dr. Jason Deveau, OMAFRA

- The physics of pressure and flow (opening definitions and context).
- The relationship between flow and travel speed on application rate: The plants perspective.
- Rate controllers: Why haven't air-assist sprayers adopted this technology (New since 1985!)
- How rate controllers solve problems (and cause a couple).
- Rate controllers: Three levels of sophistication.
- Rate controllers: The gateway to precision agriculture and traceability.

## Dr. Heping Zhu, USDA ARS, and Steve Booher, Smart Guided Systems

- Basic theory and science behind the smart apply precision spray system
- Results of field tests
- Current Smart Apply commercial products and what growers can do with them

#### Open Q&A

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