# Post-Doctoral Research Associate in Greenhouse Pesticide Spray Application Technology

## **Position Summary:**

The Department of Food, Agricultural and Biological Engineering (FABE) at the Ohio Agricultural Research and Development Center, The Ohio State University (OARDC/OSU) invites applications for a Post-Doctoral Research Associate position in the area of greenhouse pesticide spray application technology. The position is located at Wooster, OH

The primary research responsibility is to develop/use advanced laser/imaging/multispectral sensors to quantify canopy structure, detect pest stresses, write computer programs to analyze sensor signals, develop a real-time electro-mechanical control system for variable rate applications, and conduct laboratory and greenhouse experiments to achieve precise and accurate applications of pest and disease control agents to intended targets. Major duties and percent of time the incumbents will be working on are as follows:

- 60% Develop advanced sensors and control systems.
- Test new spray systems and analyze spray samples collected from laboratory and greenhouse tests.
- 10% Write summaries and manuscripts to report the project progress.

The successful candidates will be a member of a research team and will closely work with scientists of US Department of Agriculture, Agriculture Research Service (USDA)/ARS), Application Technology Research Unit (ATRU) (<a href="http://www.ars.usda.gov/mwa/wooster/atru">http://www.ars.usda.gov/mwa/wooster/atru</a>) at Wooster, OH. ATRU is the only USDA-ARS multidisciplinary team in the United States that studies ground spray application technology in field crops, nurseries, greenhouses, orchards and other horticultural crops.

#### **Oualifications:**

Recent Ph.D. or an equivalent degree in Agricultural/Mechanical/Electrical and Computer Engineering, or closely related field. Applicant should have practical and theoretical knowledge in sensors, automation, robotics, computer programming, and working knowledge of various computer programming languages such as C++, LabView, and Matlab. A good understanding of the engineering sciences and techniques and their applications to pesticide spray application is highly desirable.

### **Salary and Benefits:**

This is a two-year appointment which can be potentially extended to three years. Salary will be commensurate with experience.

**Starting Date**: January, 2016 (open until filled)

## **To Apply Please Contact:**

Peter Ling, Ph.D. Associate Professor Department of Food, Agricultural and Biological Engineering 1680 Madison Avenue, Wooster, OH 44691

Phone: (330) 263-3857; Fax: (330) 263-3670; Email: ling.23@osu.edu