TekWear *, Georgia Universities Team Up on USDA Grant Evaluating New Crop Monitoring Technologies

Research to measure use, effectiveness of Internet-based devices in growing pecans

BUFORD, Georgia (October 2, 2014) – The United States Department of Agriculture (USDA) has awarded a grant to TekWear, LLC, Georgia Institute of Technology and the University of Georgia to evaluate the effectiveness of innovative wireless, web-connected technologies for monitoring and growing specialty crops such as pecans.

Team leaders for the one-year collaborative research project include Peter Presti with the Interactive Media Technology Center, Georgia Institute of Technology; Dr. Lenny Wells**, College of Agriculture and Environmental Sciences, University of Georgia; and Bruce Rasa, CEO and founder of TekWear, LLC. The USDA announced the awarding of the research grant today at an event in Atlanta.

According to Bruce Rasa with TekWear, LLC, a leading developer of apps for wearable devices used in agriculture, the grant is the first of its kind to evaluate how the latest web-connected technologies can be used by farmers and crop consultants to improve production of important specialty crops, such as pecans. With nearly 100 million bushels produced annually, Georgia is the No. 1 pecan-producing state, and the crop generates more than $250 million in revenues.

"Our goal is to see how producers can most effectively utilize hands-free wearable devices such as Google Glass, as well as smartphones, unmanned aerial systems (drones) and other Internet-enabled technologies to monitor for pests, scout their fields and better manage their crops," Rasa explains. "Because pecans are an economically important crop in Georgia and other areas of the U.S., it makes sense to evaluate the use of these

technologies on pecans, then see how we can apply them to other high-value and field crops in the future."

By looking at how different technologies can be used on the farm, the research team hopes the information will help farmers scout for insects, disease and other pests; make more precise and timely applications of crop inputs; and provide additional agronomic information that results in significant economic and environmental benefits, adds Dr. Lenny Wells, College of Agriculture and Environmental Sciences, University of Georgia.

"For the first time, we are connecting together many of the advanced mobile and wearable technologies that are currently available to modern agriculture and putting them into practical use on large-scale farming operations," Wells says. "From wireless-connected insect traps in the field, to unmanned aerial systems to wearable devices, we'll be able to objectively evaluate how to make these smart technologies easier to use by farmers of different ages and skill levels to produce food more efficiently, economically and responsibly."

The project overview will be shared at the Georgia Pecan Growers annual meeting next spring. The summary findings of the USDA-funded collaborative research project will be published in September 2015 by Georgia Tech. Additional research articles may be published by team members in other professional journals.

For more information on TekWear and how wearable, wireless Internet-enabled technologies can be used in agriculture, as well as regular updates on the USDA project, visit the TekWear website at www.TekWearAg.com.

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*Based in Buford, Georgia, TekWear, LLC, is an agricultural technology company focused on developing wearable technology solutions that provide value to farmers and their trusted partners around the world. These solutions encompass crop scouting for multiple crops in fields, remote animal monitoring, machinery support and a range of essential farming and agribusiness tasks.

**Dr. Lenny Wells, College of Agriculture and Environmental Sciences, University of Georgia, uses Google Glass as one of the new wireless, web-connected technologies to monitor and record the health of pecans in the field.