



## works to control pests

### ***Research program facilitates EPA GLP compliance using QSI's TMSWeb***

The National IR-4 Project makes no joke about “pests” – pest management and crop protection are serious business.

IR-4, an acronym for Inter-Regional Research Project Number 4, is headquartered at Rutgers University in New Jersey. For over 50 years, IR-4 has conducted research to assist crop growers with the promulgation and registration of conventional pesticides and biopesticides for specialty crops and minor uses. Specialty crops include food crops such as fruits, vegetables, nuts, herbs, spices and ornamental horticultural crops including greenhouse, nursery, and landscape plants.

The IR-4 Project is funded primarily by the U.S. Department of Agriculture (USDA) and State Agricultural Experiment Stations (SAES). The project links land-grant universities including: Rutgers, the State University of New Jersey, the University of California-Davis, Cornell University, Michigan State University, and the University of Florida-Gainesville. These IR-4 management Units coordinate a partnership of scientists and consultants in every state; the Environmental Protection Agency (EPA); the agriculture chemical industry; specialty crop growers and commodity groups.

The responsibility of Quality Assurance (QA) monitoring for a project of this size is no easy undertaking. Envision managing the vast amount of records generated from quality assurance reports and sharing, reporting and validating responses from researchers to ensure compliance with IR-4 protocol and Good Laboratory Practice Standard (GLP) requirements. How can those ongoing tasks be streamlined to enhance processes, improve regulatory efficiencies and significantly reduce paper waste when monitoring over 500 trials and 50 different chemistries?

Such was the task given to Tammy White Barkalow, Assistant Director of Quality Assurance for IR-4. “Dr. Jerry

Baron, our Executive Director, has always looked for systems that would increase QA efficiencies,” White Barkalow said. “He also had the ultimate goal of going from paper-based reporting to an automated electronic system. In 2011, he gave me the challenge to use our own resources efficiently while continuing our performance and maintaining compliance with the EPA.”

After a year of scrutinizing automated information management solutions, White Barkalow narrowed her search to three companies. Next, she observed product demonstrations. It ended up being a “Goldilocks scenario.” One system was too big – there was too much; one system was too different; but when she looked at TMSWeb by Quality Systems Integrators (QSI) and all of its built in capabilities, it was just right.

In 2012, the decision was made by IR-4 Management to purchase QSI's TMSWeb System and Forms Module to create audits, manage workflows, and provide feedback. “It had to be a web-based system which everyone could easily access, including the various universities and USDA agricultural research scientists. For regulatory purposes, it had to be compliant within the realm of GLP regulations.”

Once the agreement was in place, IR-4 began preparation for deployment. Several development and preparation teams from various entities including quality assurance, system users and analysts went through the mechanism of creating custom forms and workflows for their specific needs. QSI provided training and support for all aspects of implementation and TMSWeb was rolled-out. “All of us were surprised at how quickly and smoothly things happened,” White Barkalow exclaimed, praising QSI's customer support.

TMSWeb has provided many proven benefits for the project. “The degree of

paper reduction is astronomical,” White Barkalow revealed. She cites that in one particular case, 40 percent of an administrative assistant's job was reduced. For one report alone, paper reduction (with numbers in the thousands) is due to the fact that it's now available via TMSWeb.

“Individuals with access to information can respond to findings and activities so much more quickly. Reaction time is much faster – what used to take three to five days is now done immediately and we get results instantaneously.” She also highly values the TMSWeb audit trail which tracks complete information and “captures who's doing what, and when.”

White Barkalow appreciates all the options available from the TMSWeb system. “I'm amazed at how our researchers and users around the country are reacting. It's provided some unique ideas in terms of how we're going to adapt it,” she mused. They definitely see potential growth for using TMSWeb to foster continuous quality improvements for the IR-4 Project.

“What I can tell you is that I do know that it has streamlined our processes. I do know that it's made information more available. I do know that we have more privacy protection.” The inefficiency, paper waste and privacy “pests” are all under control.

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*~ Tammy White Barkalow,  
Assistant Director of Quality Assurance  
The IR-4 Project*