

UA Ag Water app-language expansion and practical grower-inspired improvements

SUMMARY

This project builds on the current body of knowledge related to agricultural water and its evaluation for the protection of public health. The project specifically addresses stakeholder needs in an immediate way to help provide needed information to comply with FDA FSMA regulations to the broadest stakeholder group possible. Whether the Ag Water app is used as a training tool to help growers and food safety managers better understand water quality, or as a resource to meet the FDA FSMA regulations, updates are required to meet grower needs as well as reach the broadest stakeholder group possible (including Spanish speakers). This project focuses on improving the functionality of the Ag Water app based on real-world grower feedback as well as deploying a fully functioning Spanish version of the app and associated on-line tools developed by the University of Arizona.

OBJECTIVES

The Produce Safety Rule (PSR) requires growers establish a Microbial Water Quality Profile (MWQP) for each agricultural water source. Several tools have been developed over the past few years designed to assist with making food safety management decisions if water does not meet the standards, including calculation of die-off requirements. While extremely useful, the initial development of these tools was restricted to English and had not been broadly evaluated by a diversity of grower/users attempting to implement the FSMA PSR.

- The main objective of this proposal is to improve functionality of the Ag Water app based on real-world grower feedback as well as deploy a fully functioning Spanish version of the app and associated on-line tools developed by the University of Arizona.

METHODS

The University of Arizona team is currently improving the functionality of the Ag Water app based on grower feedback. To achieve these goals, the University of Arizona has contracted with Spanish speakers that work with the fresh produce industry and the Arizona Department of Agriculture. These translators are currently finalizing Spanish translation(s).

The next phase of the project will consist of implementing grower suggestions on the overall functionality of the app as well as the need for improved data importing and report printing functions. Improvements include the following:

- Improve help pages
- Add links to FSMA PSR official documents
- Fix bug resulting in an incorrect PSR compliance result (rounding error)
- Add a ground water option for MWQP: Initial and Annual verification
- Add a municipal water option
- Add lab information: acceptable testing methods and listing of local labs
- Add recommendations for mitigation steps when result exceeds the PSR

RESULTS TO DATE

To date, draft Spanish translations are completed, and the project team is currently working with local grower stakeholders in Arizona, California, and Mexico to review and revise the translations to ensure appropriate word usage and word meaning. Additionally, the research and extension team are collating information related to official FSMA PSR documentation and resource links, acceptable laboratory testing methods and potential certified laboratories search function, and validated recommendations for mitigation pathways when results exceed the PSR values for the Geometric Mean (GM) and Statistical Threshold Value (STV).

BENEFITS TO THE INDUSTRY

To date, the project team has conducted 7 formal trainings and has reached over 400 individual growers and industry members directly. The developed tools (mentioned above) have also been distributed through numerous industry trade groups, and tools are currently being used in the Produce Safety Alliance FDA grower and Train-the-trainer certified trainings across the country—this indicates the usefulness of these grower-focused tools to industry. The Ag Water app and Online Calculator have collectively received 4,385 page views and 1,186 active sessions, demonstrating the usefulness of the developed tools and the benefits to industry.

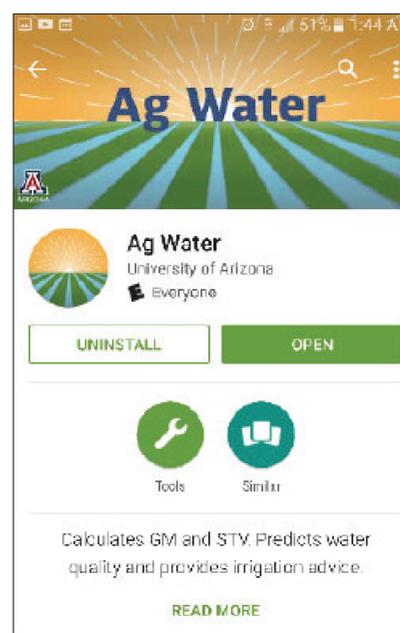


Figure 1. Ag Water App Download Page

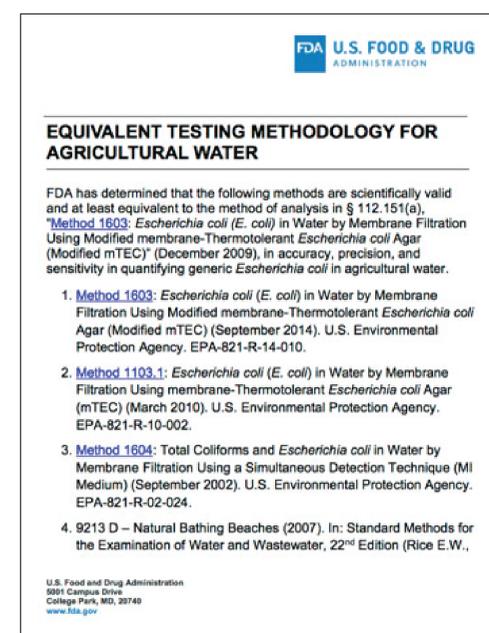


Figure 2. FDA official grower resource to be linked on app



Figure 3. Sprinkler irrigated leafy greens in Yuma, AZ



Figure 4. University of Arizona Cooperative Extension PSR training in Willcox, AZ



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