

Smartphone Apps for Information Dissemination to Corn Producers

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Objective:

The main purpose of the project is to develop and disseminate latest research-based information generated by the University of Arkansas Division of Agriculture to corn and grain sorghum producers, crop consultants, and county extension agents on their mobile devices.

Accomplishments:

Apps for Corn Producers

Progress made during 2014 using funding from CGSB is summarized below:

- A) Corn Advisor:** The Android version of the app has been upgraded to include a module titled “**Irrigation Management**”. Two button based options for making irrigation decisions have been provided:- 1) ET Gage, and 2) UAEX Irrigation Scheduler.
- 1) ETGage based component allows a user to interactively select irrigation type, soils type, and plant growth stage. Outcome is in the form of irrigation recommendation using atmometers. This app is based on the research conducted by Dr. Christopher Henry.
 - 2) UAEX Irrigation Scheduler- This scheduler can be directly accessed from within the app by pressing an appropriate button.

The updated app for Android devices was launched in August 2014.

Initial revisions to iOS version of “Corn Advisor” app have been completed and its undergoing testing. The app has been revised to conform to Apple guidelines for submitting apps to iTunes Store from February 2015 onwards. Irrigation Management module is still under development for integration with the app.

- B) Sorghum Advisor:** Input data preparation for adding Sorghum as a crop of choice to Corn Advisor app is in progress. As soon as input data is finalized by various specialists, integrating this information for developing Sorghum Interface will begin.

- C) CEBudgets app:** First version of the app for iPhone and iPad was launched in July 2014. However, a second version of the app has to be undertaken within the year because of:

- a) Upgrades in the operating system by Apple, launch of newer devices with different screen sizes, and requirements by Apple for hosting only those apps that meet its new design guidelines
- b) Update in the content of app in the way of addition of three more crops and revisions made to cost calculations in the light of 2014 production season.

The revisions are currently been incorporated in the app and would be submitted to iTunes Store sometime in January 2015.

Work on developing Android version of CEBudgets app has to be started.

- D) WeedID app:** A concept paper on the system design related to Weed Advisor app has been accepted for publication in the journal of “Computers and Electronics in Agriculture”. Further progress on the app has been affected due to several unavoidable circumstances.