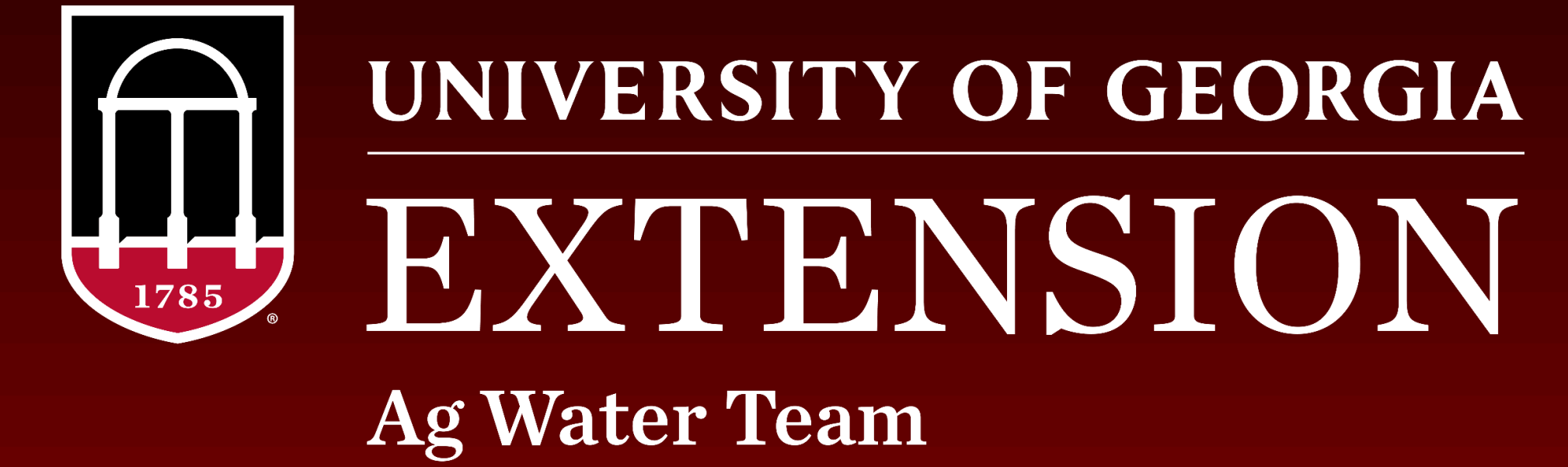


UGA Extension's AgWET Programming Promotes Irrigation Efficiency While Providing Education Opportunities for Ag Producers

Tanner, S.*¹, Barwick, S.¹, Black, A., Bennett, J.¹, Cloud, C.¹, Carter, B.¹, Carter, S.¹, Crews, B.¹, Crosson, L.¹, Curry, S.¹, Edwards, P.^{6,5}, Grubbs, H.², Hall, D.³, Hayes, B.¹, Jacobs, J.¹, Joyce, R.¹, Kichler, J.¹, Lyon, D.⁴, Smith, A.¹, Shealy, J.¹, Luke, M.¹, Mallard, J. McAlister, S.¹, McDaniel, T.¹, Porter, J.¹, Porter, W.⁷, Powell, C.¹, Price J.¹, Price T.¹, Sapp, P.¹, Tanner, S.¹, Tyson, B.¹



¹ UGA Extension Agent, UGA Cooperative Extension ² SW District UGA Summer Intern, Tifton, GA 31793
³ SE District Area Educator, Cochran, Georgia 31014 ⁴ SW District Area Educator, Tifton, Georgia 31793 ⁵ SE District Extension Area Agent, UGA Cooperative Extension, Statesboro, Georgia 30460 ⁶ SW District Extension Area Agent, UGA Cooperative Extension, Tifton, Georgia 31793 ⁷ Associate Professor UGA Cooperative Extension Tifton, Georgia 31793



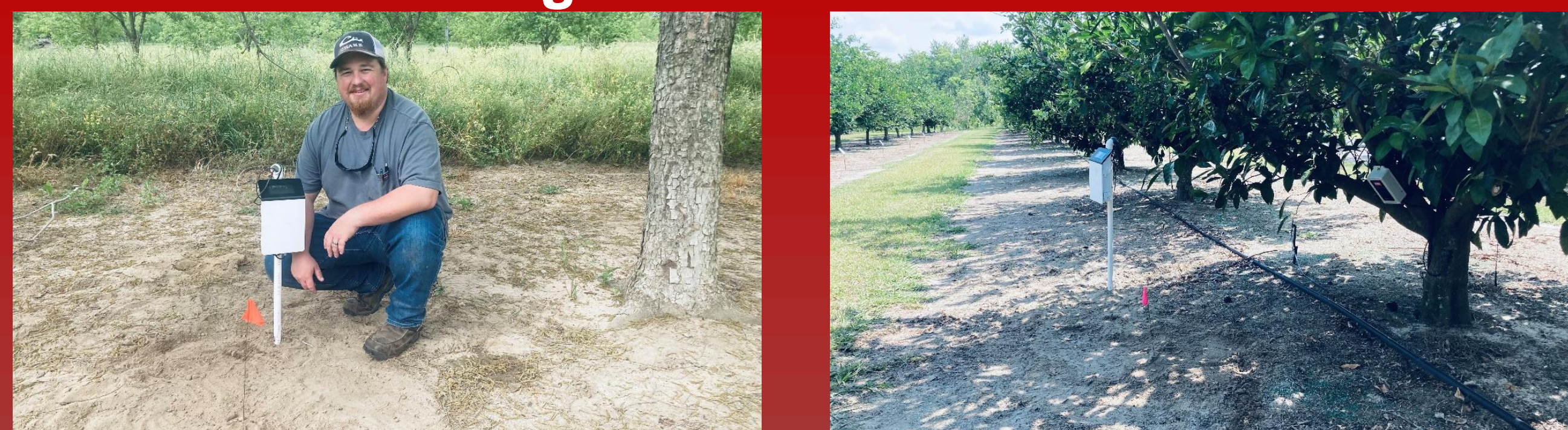
OVERVIEW

Water is one of the most valuable resources in the State of Georgia. Our efforts are to promote irrigation scheduling and efficiency as well as water conservation. The AgWET project uses soil moisture sensing technology and presents information at several meetings in efforts to make an impact on the agricultural community throughout South Georgia.

RESPONSE AND ACTIVITIES

UGA Extension, through a team of agents, specialists, educators, and interns, worked together with agricultural producers on irrigation water management and the use of available technologies in an effort to promote the efficient use of water resources in 35 producers fields across 27 counties. This impacted over 2713 acres of row crops in the state of Georgia which included 316 acres of corn, 668 acres of cotton, 1577 acres of peanuts, and over 200 acres of fruits, vegetables and pecans.

AgWET Sensors Utilized



Meter Company – Pecan, Satsuma



AquaSpy – Corn, Cotton, Peanuts, Blueberry



Trellis – Watermelon, Cotton

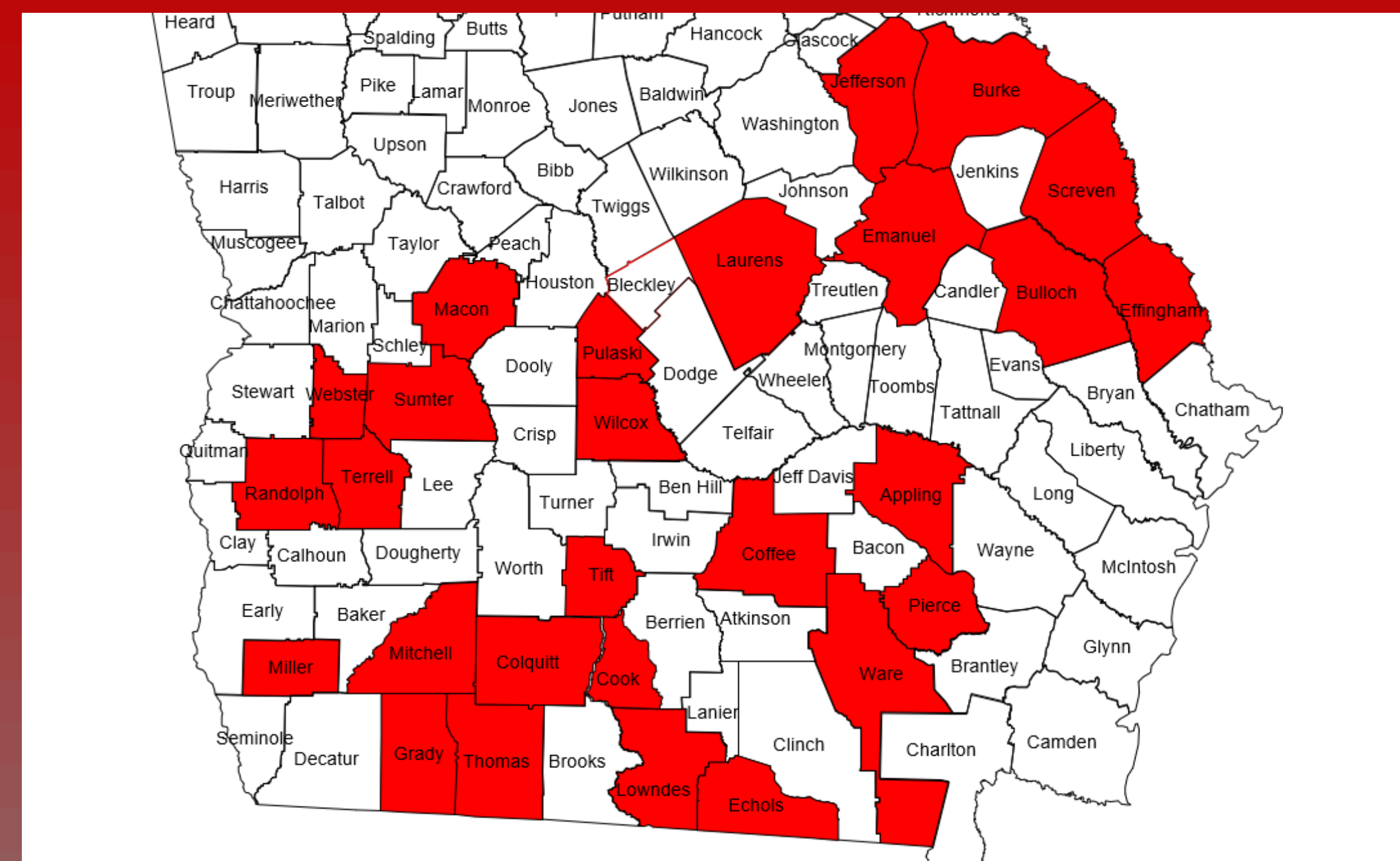


CropX – Peanuts, Vegetables, Pecan, Cotton

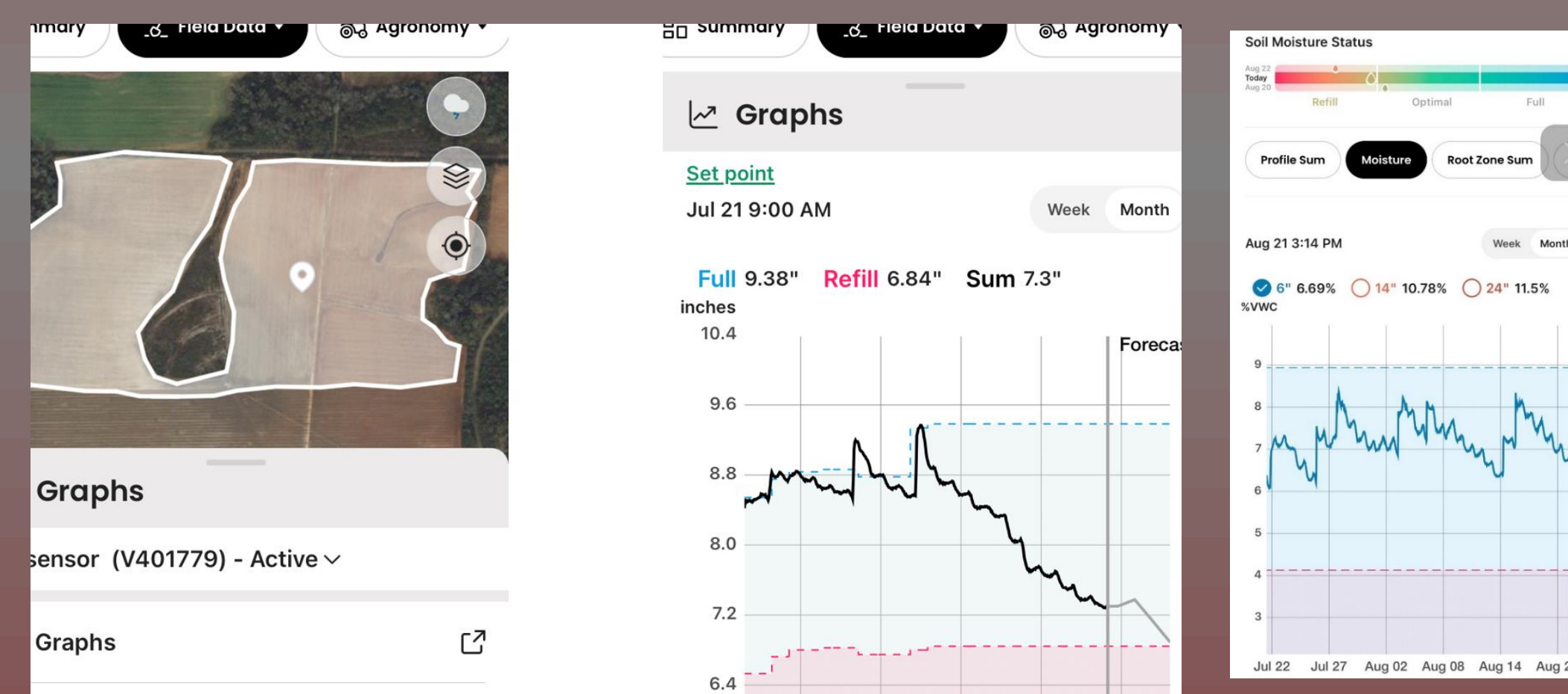


AgWET efforts provide opportunities for collaboration

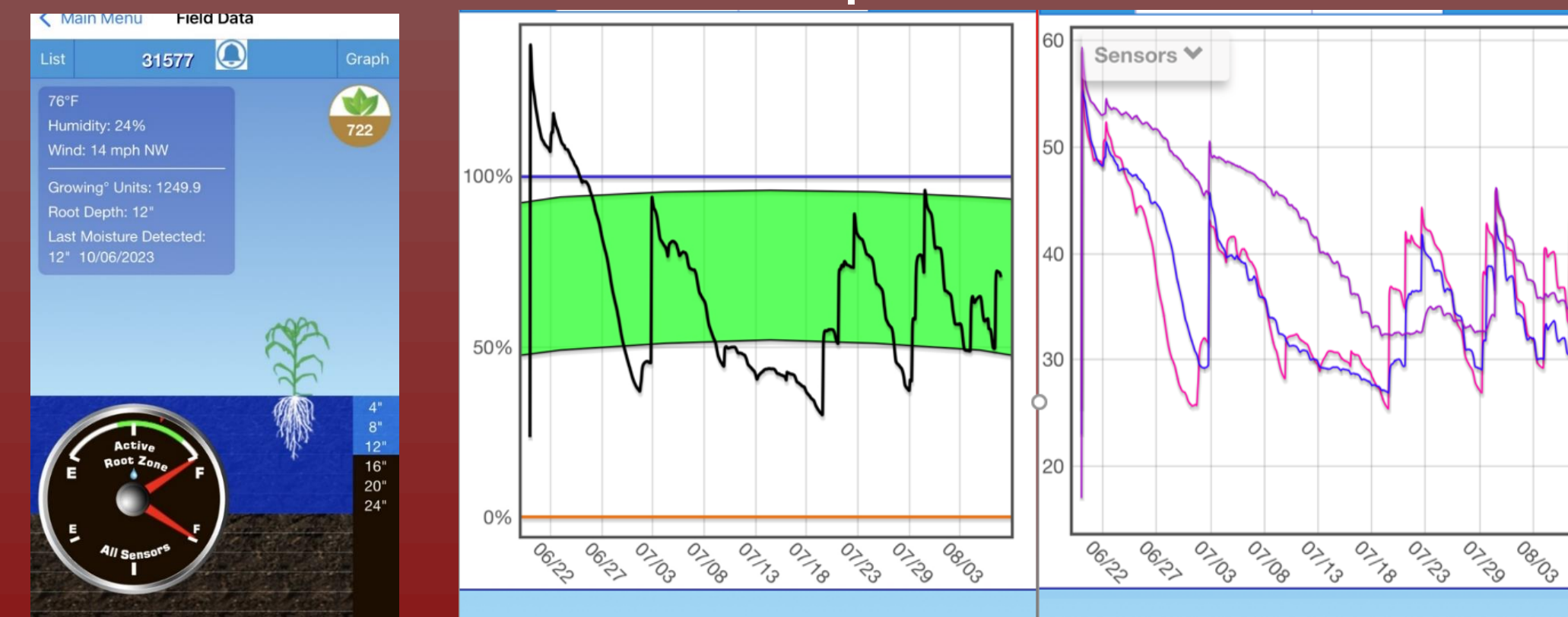
AgWET Sensors Installed in 27 Counties



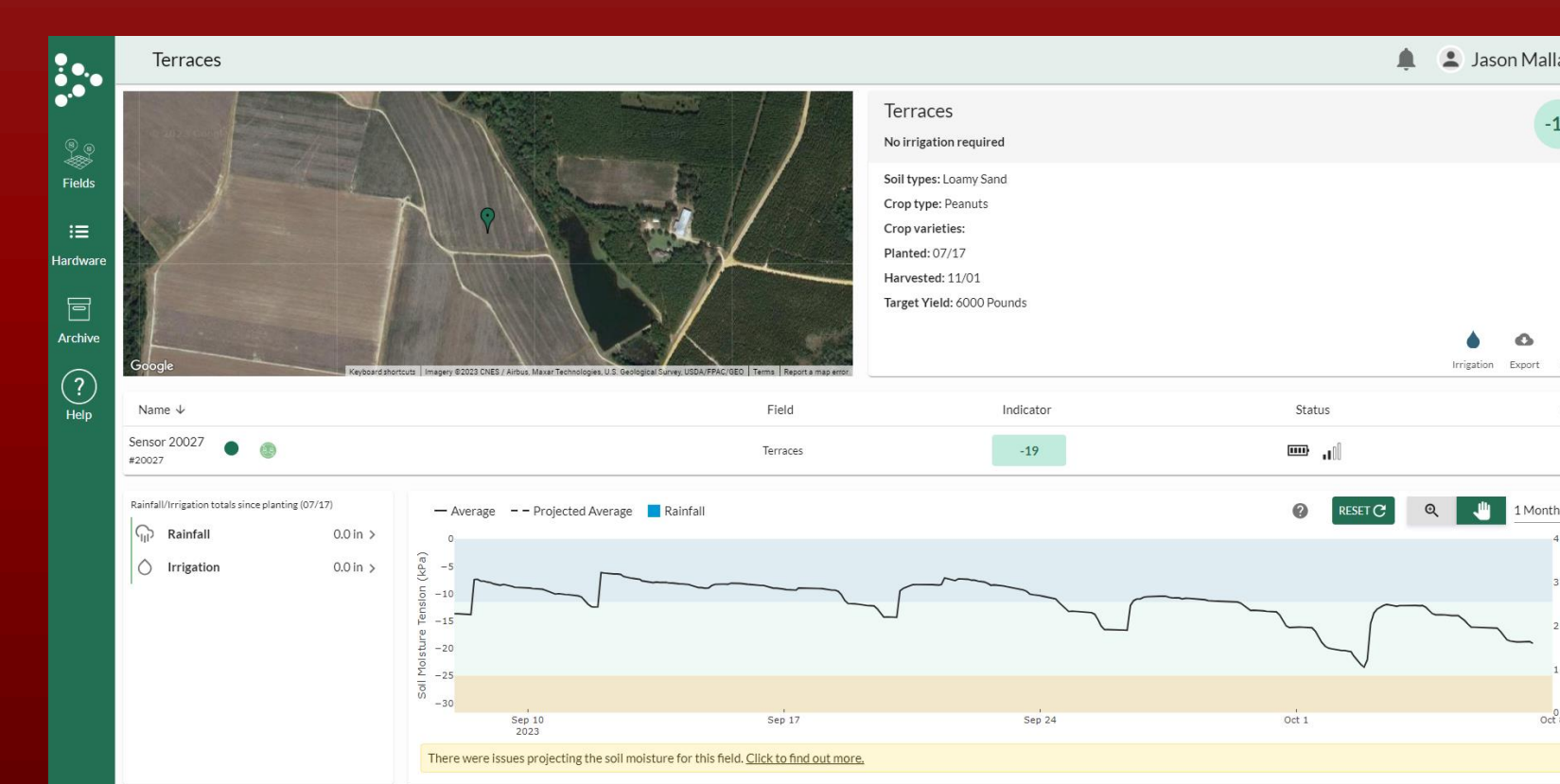
Sensor Data Interpretation



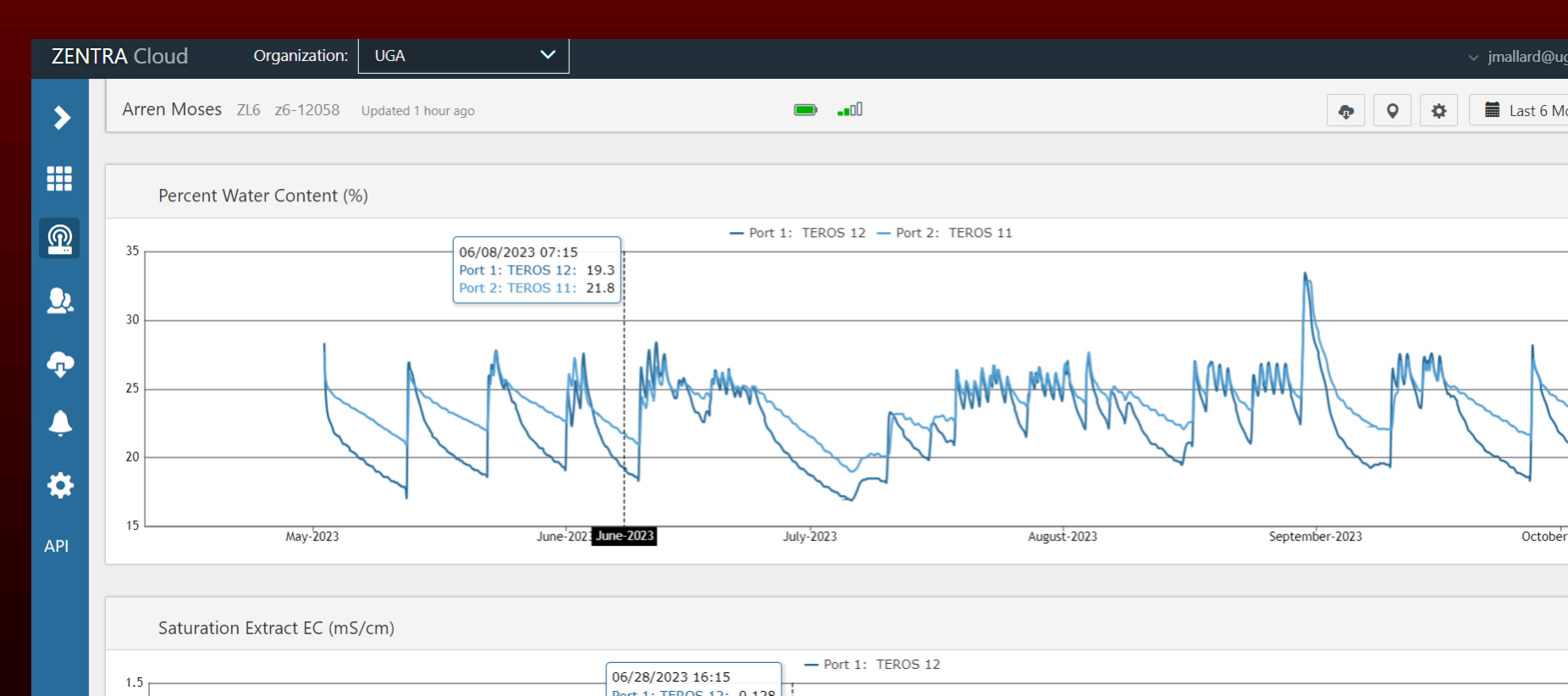
CropX



AquaSpy



Trellis



Meter Company

Teaching Agents and Sharing Information



Viewing sensor data



SWREC



Farmer and agent visits



Stripling Irrigation Park



SE Pecan Field Day



APRES Tour SEREC



SWREC



Ben Hill County Field Day



SEREC

IMPACT/RESULTS

According to research done in 2018 and 2019 on peanut irrigation, correcting over irrigation can generate a reduction of between 1.5 inches and 6 inches of irrigation applied, or an average of 3.75 inches. Similar research on cotton in 2020 and corn in 2022 yielded a reduction of 2.25 inches and 11 inches of irrigation, respectively. Using the average of 3.75 inches over 1577 acres of peanuts, 2.25 inches over 668 acres of cotton and 11 inches on 316 acres of corn, this project yielded a water savings of over 295 million gallons of water.

SITUATION/CONCERNS

The availability of water in the state of Georgia is very important to the overall state economy, and especially in agriculture. In recent years there have been multiple disputes between the Georgia and its neighboring states over water use rights. Although the most recent Supreme Court case ruled in favor of Georgia, the ruling “emphasized that Georgia has an obligation to make reasonable use of basin waters in order to help conserve that increasingly scarce resource.”