USING EXTENSION TO INCREASE ADOPTION OF WATER-SAVING TECHNOLOGIES ON FARMS

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Multiple efforts exist to improve water use efficiency in agriculture. Alachua County's Commercial Horticulture Agent joined these efforts by starting a program in 2018 to demonstrate the use and potential benefits of using soil moisture sensors (SMS) in horticultural crops. The goals were to increase awareness of Best Management Practices (BMPs) and adoption of water-saving technologies and practices to improve water use in farms. Through the UF/IFAS Minigrant program as well as with support from NFREC-Suwannee Valley, the agent was able to acquire and maintain support on two All-in-one Sentek Soil Moisture Probes. The probes were rotated on six farms with crops such as peppers, cabbage, peaches, strawberry, sweet potatoes, and beans. The agent worked with each grower during the demonstration period to improve irrigation and nutrient management. Two farms were selected to host a field day to display the use of the sensors, and to make attendees aware of cost-share programs available through water management districts and the Florida Department of Agriculture and Consumer Services.

Forty-two people attended the two field days. Attendees included growers, master gardeners and, university personnel. Exit surveys for each day indicated that participants intend to adopt SMS (16% n=26 and 57% n=16), use irrigation scheduling (50%, n=16) and, self-evaluate water use (50% n=26, 57% n=16). Knowledge gain for these events ranged from 18% to 36%. Out of six farmers that tried the technology, three applied for a cost-share program to acquire the sensors. For the remaining three growers, two were indifferent and one was in disagreement with the adoption of SMS on small, diversified farms. Three farmers adjusted their irrigation practices while using the sensors and all of them reported water savings. Additional efforts are needed to educate farmers on tools available for water conservation and increase the adoption of best management practices.

<u>PRESENTER BIO</u>: Dr. Sanchez is the Commercial Horticulture Agent in Alachua County since 2016. Through her extension programs, she has educated hundreds of agriculture and green industry professionals in the adoption of best management practices for the responsible use of water resources.