Vegetable Growers in the Suwannee Basin Use BMPs

By Mace Bauer, BMP Implementation Team, North Florida - REC- Suwannee Valley

The Water Quality/Water Quantity Best Management Practices (BMP) Manual for Florida Vegetable and Agronomic Crops was rolled out this year throughout Florida. IFAS extension and the BMP Implementation Team have worked in the Suwannee Basin to inform farmers of the significance of the BMP Notice of Intent and the importance of using BMPs to reduce agriculture’s contribution to water quality impairment.

In North Florida, the water quality impairment of greatest concern is nitrates in the groundwater, and therefore a priority is being placed on BMPs that address those problems. The BMPs of primary importance in the region therefore are irrigation and nutrient management related. This season, we worked with farmers in the region to demonstrate these BMPs. This included a demonstration at the Gwinn Brothers Watermelon Farm in McAlpin, FL.

The farm was outfitted with a few tools to assist their BMP implementation. These included a portable time domain reflectometer (TDR) for measuring soil moisture in random field areas, and a multi-depth capacitance probe for measuring soil moisture by depth in one location. These were used to verify the effectiveness of the irrigation schedule. A Cardy Meter was used by the farmer for sap testing at frequent intervals. Previously the farmer relied on the extension agent for sap testing at less frequent intervals. The farmer was trained in the use of each of these tools and enjoyed the certainty that came with having additional information about soil moisture and crop nutrient status. Benefits were also seen in reduced nitrogen use and more appropriate irrigation frequency and amounts. The farmer also realized yields that were better than the farm average.
The success of this demonstration program led to the development of a BMP Tools Cost Share program sponsored by the Department of Agriculture and Consumer Services, Suwannee River Water Management District, Suwannee River Partnership, and Soil and Water Conservation Districts in the region. While these agencies can fund equipment and devices, IFAS has an educational role in BMP Implementation, including proper use of these tools and interpretation of data obtained from these devices. The BMP Implementation Team and IFAS Extension remain committed to assisting area farmers with their BMP education needs. For more information about the BMP program in the Suwannee Basin, contact Mace Bauer at the NFREC-Suwannee Valley, 386-362-1725.

The author downloading soil moisture data from a datalogger.