

Utilization of Soil Moisture Sensors and Cover Crops to Manage Crop Soil Moisture Availability in Northwest Florida

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Although many producers can manage soil moisture with irrigation, there are still many in dryland production systems with limited options. A lot of benefits of cover cropping take years to become apparent, but improved soil moisture is not one of them.

Keeping the ground mulched during periods of drought during summer production reduces the “evapo-“ part of the evapotranspiration equation, and results in increased soil moisture compared to non-covered ground. Soil sensors help irrigated producers increase the water use efficiency of their crop, and when paired with cover cropping in a dryland system illustrate its benefits to soil moisture.

We’ve deployed soil moisture sensors around NW Florida, where producers killed part of their cover crop so we could have side-by-side comparisons of soil moisture and subsequent crop yield with and without cover cropping.

UF/IFAS Extension activities in the area have demonstrated improved soil moisture status and yield when a persistent cover crop remains on the soil surface during row crop production. We recommend terminating 2-3 weeks prior to planting to replenish soil moisture by rainfall because cover crops can reduce early season moisture needed at planting. Currently, Jackson County has a \$75/acre cost share program in place for cover cropped land in the Jackson Blue Springs Basin. Hopefully, this data can be used to advocate state-wide expansion of eligible cost share acreage in the future.

If you think irrigation is too expensive, you might try looking at cover crops.

