

## **Improving soil moisture capacity with cover crops**

Cover crops reduce runoff losses, increase water infiltration, and can reduce nutrient loss. Soil moisture sensors were used to study cover crops impact on soil moisture and water extraction by cash crop roots. Research was conducted in two cotton fields, one field with cereal rye as a cover crop since 2016 and zero to minimum tillage, when tillage was conducted it was as minimum disturbance to the soil, only to rehip beds and clear furrows. The other field did not have a cover crop. Irrigation and rainfall inputs as well as irrigation and runoff losses and tailwater nutrient losses were measured from each field with automated edge-of-field monitoring equipment. Soil moisture sensors were placed at depths of 6, 12, 18, and 30 inches. Telemetry from soil moisture sensors showed more water available and less moisture variability at all depths in the field with cover crops vs. the non-cover.

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