



“Solvita gave me a way to measure improvements in my field”

**Kay McGirt, farmer
Robeson County, NC**

Winner of the Robeson County
Farmer of the Year 2015 Award

The Challenge

In 2013, Kay McGirt realized that excessive moisture was going to be a problem. Torrential spring rains allowed him to plant only 15% of his intended double-cropped soybean acres. He decided that it was time to change the way he was managing his soils.



Cover-crop litter layer

to his fields could improve soil structure, water holding capacity, and increase the ability of the soil to deal with excessive rain as well. In addition, he learned that it would improve the soil’s biology and fertility with increased organic matter.

SOLVITA SOIL TESTING

Kay used Solvita CO₂ respiration analysis following the field moist process. After speaking with staff at Woods End Lab and looking at his nutrient requirements he realized that his improved soil biology was also supplying additional nutrients to his crop.

Results

“Solvita gave me a way to measure improvements in my field”, says Kay. He has seen reductions in fuel and labor costs when moving to no-till and adding cover crops. He was pleasantly surprised that his cover crop addition and resulting Solvita soil test indicated he could reduce the amount of Nitrogen he applies to his field by 15 gallons an acre (approximately 45 lbs N/acre or \$21.00/acre savings).



Flourishing life in the soil

Discovery

Buz Kloot of the University of South Carolina and Ray Archuleta of NRCS convinced Kay that adding cover crops

Kay McGirt began farming at a young age with family and neighbors, eventually acquiring his own land, Cornerstone Farms. He and his father work this diversified row crop farm of 200 acres of soybeans, corn, wheat, and oats.