



“Using the Solvita results, I can experiment with building cover crops and measure improvements to soil health.”

**Chris Teachout, farmer
Shenandoah, Iowa**

The Challenge

Chris has been no-tilling and planting cover crops on some fields for years but he did not recognize the benefit of covers until noticing that fields without cover crops seemed biologically inert, were lacking in earthworms, had poor water infiltration and excess runoff.



Soil under cereal rye is found to be like “cottage cheese” with roots reaching deep into the soil

Chris is a soil health aficionado and farms 1,800 acres in Shenandoah, southwest Iowa. Teachout has incorporated cover-crops into his no-till operation. He has learned that adopting cover crops is about learning which species and combinations work best to improve soil health.

Discovery

Chris recognized that when practicing planting covers in combination with No-till his soils exhibited better tilth, acting as a sponge absorbing more water resulting in less erosion. He has observed his soils getting darker and has seen organic matter levels jump in a decade from 3 up to 5.6% in recent soil tests.

WHY CHRIS USED SOLVITA SOIL TESTING

Chris wanted to know why his no-till soils planted to cover crops were more biologically active. He attended a number of soil health meetings and learned that Solvita was a way to track soil health and he reached out to Woods End Laboratories to run Solvita and the Haney test.

Results

Chris compared five of his soils in a no-till field, no-till plus cover crops and a grass border in the fence row. “The results are very interesting and I am still learning what they mean. The no-till plus covers was much better than no-till alone and about equal to and slightly better than the undisturbed fence row soil.”

His next step is to build more diversity into his covers and discover which species work best in concert. He plans to chart his progress using Solvita.



**Rolling hills and slopes of the
Shenandoah farmscape**