



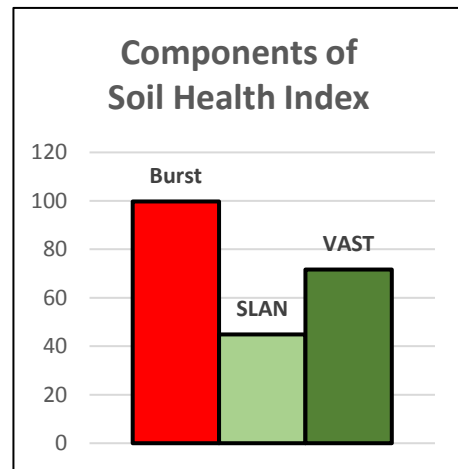
Soil Health Lab

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Name:
Field ID: South
Sample ID: Treated soybeans
Soil type: Moody silty clay loam
Previous crop: Corn
Intended crop: Soybeans

Soil Health Score components

Solvita CO2 Burst	199.5 #/A-day
	150.0 ppm
Solvita SLAN (amino-N)	179.6 #/A
	135.0 ppm
Solvita VAST	43 %
Soil Health Index (out of 100)	77.1



Potential Nitrogen Mineralization 55.0 #/A

Other Soil Properties

Solvita CO2 Basal	64.2 #/A-day
Soil acidity (pH)	6.8
Dry bulk density	
Microbial biomass	3330 #/A
EC (total dissolved salts)	0.37
Nitrate nitrogen	7.0 ppm

POWERED BY:



Sample received
8/29/2019

Results reported
9/6/2019

Explanation of Soil Health Test Components

Solvita CO2 Burst

Microbial activity (like human activity) emits carbon dioxide (CO₂), and higher levels of CO₂ indicate more microbial activity. The Solvita Burst test measures the pounds of carbon from CO₂ released from a soil sample in 24 hours. The reported value is stated as pounds of CO₂-carbon per acre per day, and higher values are better.

Solvita SLAN

Microbial activity generates amino-nitrogen in the soil, which is distinct from the nitrate and ammonium forms of nitrogen commonly reported on traditional soil tests. The SLAN test reports the pounds per acre of amino-N available for future crops, and higher values are better.

Solvita VAST

Healthy soils have stable soil aggregates that leave air spaces between the aggregates for root penetration and water infiltration and storage. The Solvita VAST (volumetric aggregate stability test) measures the percent stable micro-aggregates in the sample, and higher values are preferred.

Solvita CO₂ Basal

CO₂ respiration under field conditions when the soil sample was collected

Soil health index

The Burst, SLAN, and VAST values are ranked relative to all other samples and converted to a 0-100 scale. The soil health index is the average of these three values, and higher index values are better.

Potential nitrogen mineralization

Beneficial microbes release nitrogen from soil organic matter, and the amount of nitrogen released depends on the amount of organic matter and the level of microbial activity. The mineralization estimate is reported as pounds of nitrogen released per acre for the crop season.

Soil acidity

Soil acidity (pH) on a 0-14 scale, and slightly acidic values (less than 7) are best for most crops.

Dry bulk density

Healthy soils have adequate air space for root penetration and water infiltration and storage. Dry bulk density is the grams per cubic centimeter of lab dried soil, and lower values are preferred.

Microbial biomass

An estimate of the microbial population in the top four inches of soil (pounds per acre).





EC (total dissolved salts)

The electrical conductivity test measures the total dissolved salts in the soil sample. Infertile soils have low EC values, and soils with high EC values have excess salts that can hamper water absorption and burn plant tissue. An EC value near 0.3 is optimal for microbial activity.

Nitrate nitrogen

Available nitrate nitrogen measured in parts per million (multiply by 2 to get #/A)

Color scale and qualitative ratings used to report the Solvita test results

Burst	SLAN	VAST	Color scale	Rating
135+	250+	45+		High
90-135	150-250	30-45		Medium high
45-90	50-150	15-30		Medium low
0-45	0-50	0-15		Low