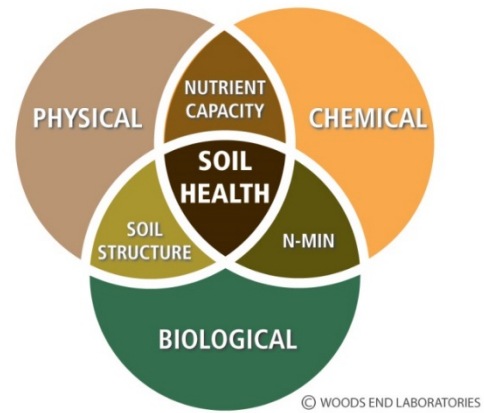


# PERFORM YOUR OWN SOIL HEALTH SUITE

Growers and crop advisors are learning about soil health and are adopting and recommending practices to improve it. Companies are marketing biological products for soil biology. Yet, with all the interest and information on soil health, there is little guidance on how and where to measure defining traits of soil health.

Based on long experience Woods End Soil Labs has carefully developed simple test protocols to enable reliable soil health monitoring. These tests are based on the well-known "functional triangle" which uses physical, chemical and biological aspects to examine fertility. The new soil procedures can be done outside the laboratory environment.



By committing to the *Solvita Soil Health Suite* program you gain the capability to run your own soil health tests to benefit your own farm, your customers and clients. Through this program Woods End Laboratories will help get you started with a basic field laboratory and provide training and on-going support.

Whether you are a CCA, a consulting agronomist, a farmer or a regular soil lab, you can join the Solvita® Soil Health Suite Program and implement a stand-alone soil health validation process and significantly enhance your nutrient testing.

## THE SOIL HEALTH TEST ROSTER INCLUDES:

- 1 Microbial CO<sub>2</sub> respiration (CO<sub>2</sub>-Burst)
- 2 Amino-Nitrogen Storage (SLAN)
- 3 Aggregate Stability (VAST)
- 4 Optional\*: Organic matter (OM)
- 5 Optional\*: Active Carbon, Humus and Soluble-N

You enter into a Suite agreement with Woods End Labs and obtain the basic equipment and supplies to run biological respiration, storage amino-N and aggregate stability. Additional useful equipment and supplies are identified for add-on features to enhance the robustness of the validation. Software includes a standardized calculation of a soil health index.



Healthy soil is the foundation on long-term sustainability. Woods End has designed simple tests that evaluate traits not normally included in commercial soil labs tests.

\* Optional tests include those easily performed by a regular lab. Woods End is developing new protocols for active humus and Solvita total available NH<sub>4</sub>+NO<sub>3</sub>

# GETTING STARTED: THE *SOLVITA*<sup>®</sup> *SUITE TOOLS* TO ENABLE SOIL HEALTH MONITORING



**1 2 3**  
**SOLVITA SOIL HEALTH SUITE** (item #2675) includes all 3 Solvita<sup>®</sup> Tests in quantities of 100 packs (w/o 1-time VAST technology fee: item #VAST-TF)



**1 2 3**  
**Woods End Soil Roller** (item #soilroller) used for NON-DESTRUCTIVE sample preparation after drying soil.



**1 2**  
**Digital Color Reader** (item #DCR) reads CO<sub>2</sub>-Burst and SLAN results and also field tests.



**1** **30cc Scoop** (item #scoop 30cc) used for STANDARDIZING sample SIZE for CO<sub>2</sub>-Burst test.



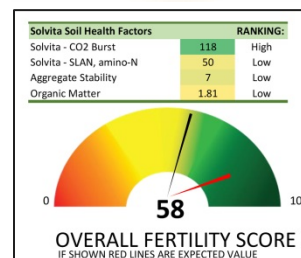
**1 2**  
**Glass Jars** (item #2954 6-pack) for CO<sub>2</sub>-Burst and SLAN Tests; plastic jars available for field tests



**1 2 3**  
**QAQC** (item #QAQC) Woods End Annual Proficiency Program with 2 reference samples



**3** **Volumetric Aggregate Stability** (item #VAST-TF) The annual VAST-license fee is included in Solvita<sup>®</sup> Suite #2675



**1 2 3 4 5**  
**Report Format:** A spreadsheet for easy calculation of soil health score. Your logo can be added.

Use our Report Format to present results to your customer: Since soil health is not a single trait it is best evaluated using multiple indicators. The Woods End Labs **Soil Health Calculator** is a spreadsheet using matrix analysis to present a Soil Health Score based on the Solvita<sup>®</sup> Suite of CO<sub>2</sub>, SLAN + VAST, and additional parameters, by choice. For more info read our [tech memo #10](#)

Additional pieces of equipment you would need to run the Solvita<sup>®</sup> Suite (supplier list available from [solvita@woodsend.com](mailto:solvita@woodsend.com)):

- Examples are a basic drying oven, a simple incubator to standardize biology temperature
- Pipettes with a range of 5 - 15cc for adding DI water (CO<sub>2</sub>-Burst) and NaOH solution (SLAN) to sample (see instruction manuals)
- Sodium Hydroxide (NaOH) - NaOH extracts soil amines and is a laboratory reagent that must be handled carefully, see [MSDS Sheet](#)
- 2mm sieve for sample prep after soil rolling; also field 6 mm sieve for fresh soil sampling plus soil knife