

**Special Analysis Interpretation Sheet**  
**Organic Matter**  
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The organic matter content of soil is expressed as a percentage. Generally, there is no rating system for organic matter because it is relatively stable under normal cropping and fertility practices and cannot be easily changed. Organic materials are decomposed into humus, one of the end products of organic decomposition. The test is measuring the resistant state of organic matter in soils.

The organic matter soil test can be used to more or less estimate potential nitrogen release to a crop throughout the cropping season. The test also provides a basis for determining proper herbicide rates.

An acre of soil measured to a depth of 6 inches weighs approximately 2,000,000 pounds, which means that 1 percent organic matter in the soil would weigh about 20,000 pounds per acre. It takes about 10 pounds of organic material to decompose to 1 pound of organic matter, so it takes at least 200,000 pounds ( 100 tons ) of organic material applied to the soil to add 1 percent stable organic matter under favorable conditions.

Adequate levels of organic matter benefit soils in many ways:

- 1) Improves soil physical conditions
- 2) Increases water infiltration
- 3) Improves soil tilth
- 4) Decreases erosion losses
- 5) Supplies plant nutrients