



Vocabulary Words: pH, Acid, Alkaline

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pH: An abbreviation for “**p**ower of **H**ydrogen,” which is the hydrogen ion concentration of a solution. pH is measured on a scale from 1-14 and expresses the relative acidity or alkalinity of water in the soil. A pH of 7 is net neutral; values below 7 are net acidic; and values above 7 are net alkaline. Soil pH affects the physical, chemical, and biological properties and processes of both soil and plants.

Acid compounds usually have a sour taste. That’s why we say that applying lime “sweetens” the soil. Acids (low pH) can be very useful to us when not in excess. One of their common benefits is dissolving nutrients out of a soil’s mineral fraction for use by the plant.

Alkaline or Base compounds are slippery and astringent. A soil that is alkaline or basic (high pH) needs modification by either plants or inputs to be productive. Like acids, bases can be useful when not in excess. Bases neutralize overly acidic soils and also help convert relatively inert organic matter into more active carbon forms.

Base Saturation is the extractable percentage of each of five major soil cations that occupy the soil’s cation exchange sites. Those are: potassium (K), calcium (Ca), magnesium (Mg), hydrogen (H), and sodium (Na).

Next week, we’ll explore **CEC** (Cation Exchange Capacity) and related terms. In the meantime, we offer several resources to help you figure out your soil’s pH. Contact your AgriEnergy Resources rep to get started!