



Blue Mountain Minerals

Aglime Quarterly

What's Happening

39th Annual CAPCA

Reno

October 20-22

Almond Board

Sacramento

December 3-5



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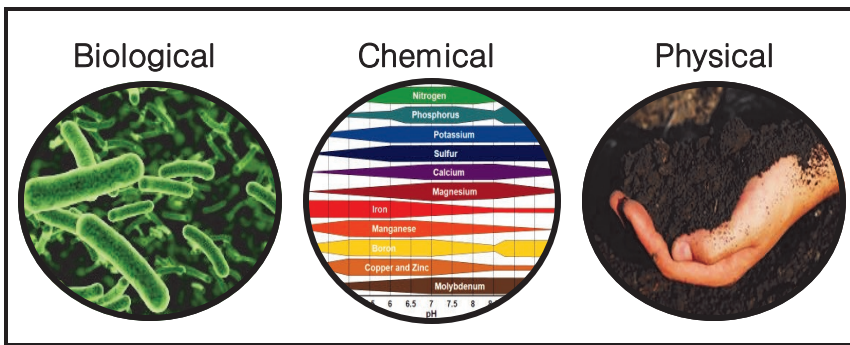
The Importance of soil pH

Soil is made up of Biological, Chemical and Physical properties and pH effects them all. When soil is acidic, typically less than 7 on the pH scale, the nutrition, growth and yields of many crops can suffer.

Biologically, acidic soils will have decreased microorganism activity and populations. Many of these organisms are involved in N, S and P transformations that make these and other nutrients plant available. Soil microorganisms need a lot of calcium to perform nitrification. When soil pH is too low, calcium is not readily available.

Chemically, soil pH influences the solubility of nutrients. In acidic soils, P availability is greatly reduced. Aluminum and manganese become soluble and toxic. If surface soil pH is too low, the efficiency of some herbicides may be effected.

Physically, highly acidic soils are less aggregated and have poor tilth, causing low water infiltration and poor aeration.



Why is your soil acidic?

Many soils are naturally acidic depending on the parent material, high rainfall, and native vegetation. Some soils become acidic due to leaching, erosion, and nutrient uptake. Applications of ammonium nitrogen, urea fertilizers and some animal manures can increase soil acidity.

When soil tests recommend raising the pH with ground limestone, choose a high quality product. Mined limestone and dolomite limestone vary in quality based on the source of material and fineness of grind. A material can be very pure and have a Calcium Carbonate Equivalent, CCE, of 100 or greater, but if it is the size of a grain of rice it will be ineffective at correcting soil acidity. The fineness of the limestone determines how quickly it will react to neutralize soil acidity.

Maintaining a favorable pH is an extremely important step in any soil fertility management plan. Check with your crop advisor and test your soil regularly.

References:

*IPNI Soil Fertility Manual

**Managing Soil pH and Crop Nutrients, F. Fernandez and R. Hoefl, Dept of Crop Sciences, Illinois