



*Profitable for You.
Right for the Environment.*

The Aglime Council of Indiana

"Your Resource for Aglime Information"

HOMEOWNERS, GARDENERS & PROFESSIONAL LANDSCAPERS

The ABC's of Great Gardens, Lawns and Plants
begin with the letters:
“pH”

Even master gardeners, lawn and landscape professionals sometimes have to be reminded of the most essential building block in soil fertility for optimum plant health.

That is, before the application of fertilizer and other soil management techniques has any bearing on growth and yield, it's absolutely critical that the soil pH is right.

Because, as these professionals inevitably discover in their years of working the ground, if a soil pH is too low (acidic), fertilizers and other plant-health promoters just don't work very well.

6.0 Is Ideal

A soil's pH—or measure of its relative acidity or alkalinity—has everything to do with the keys to robust plant growth.

Soil pH regulates the availability of nutrients, as well as the ability of a plant's roots to absorb such nutrients, and moisture. Soil pH also affects the health of microorganisms that improve the quality of the soil by breaking down certain organic matter.

Fortunately, most lawn and garden soils are naturally in the proper pH range to promote strong plant health. But, if the soil's never been tested, or has been cultivated and fertilized for several years, a new pH test is the wisest decision to make in any fertility management program.

The reason is, soils that have been farmed or used for gardening tend to move into acidity as a result of crop removal of nutrients, leaching, natural decomposition of organic residues and, ironically, the application of fertilizers—the very same input growers expect to enhance plant health and yield.

Fertilizers work hand-in-hand with the soil and, specifically, its pH, requiring a proper balance to perform. If the pH level drops below the ideal 6.0, as determined by the U.S. Department of Agriculture, based on years of research, it can reduce the effectiveness of fertilizers and plant nutrients, including nitrogen, phosphorous and molybdenum by as much as 50 percent.



*Profitable for You.
Right for the Environment.*

The Aglime Council of Indiana

"Your Resource for Aglime Information"

Test and Add Aglime

In the garden, 6.0 is ideal, with a few notable exceptions, such as azaleas and rhododendrons that prefer slightly acidic soils. But regardless of the plant, for optimum health, it's worth knowing and, if necessary, altering the soil pH.

It starts with a simple test, usually available for as low as \$10–\$20 through the cooperative extension services at most universities. For a common-sized home garden, one sample core, taken at a depth of about six inches, should be sufficient. If dealing with a large plot of land, one sample per acre is a good rule.

When tests show a low soil pH, the solution is equally simple.

Like basic chemistry, it requires neutralizing the soil acidity with limestone, often referred to as “aglime” when mined and processed specifically for agricultural applications.

Aglime has a multitude of benefits that stem from balancing the soil pH. Overall, proper aglime applications have proven to:

- Increase the efficiency of applied fertilizer nitrogen, phosphorous and potassium.
- Reduce the availability of potentially toxic soil components, such as aluminum and manganese.
- Increase the activity of soil microbes that break down organic matter.
- Improve the nitrogen fixation in legume crops, such as peas and beans.
- Provide calcium and magnesium for plant growth.
- Improve the physical condition of the soil.

Typically, working the aglime into the same six-inch depth as that of the sample taken will do the trick. The key is identifying how much to apply. Again, quite simple, since results from soil tests will include suggested application rates. They're based on the level of acidity and type of soil, as denser clay soils will require more aglime than lighter sandy soils to achieve the same change in pH balance.



The Aglime Council
11711 North College Avenue, Suite 180
Carmel, Indiana 46032-5601
Tel: (317) 580-9100 Fax: (317) 580-9183
E-mail: staff@indmaa.org

For more information, including locations of aglime sources, see our Aglime Producers Map at www.aglime.org or contact your local county extension office.