## **Soil Test to Determine Lime Needs**

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Through the years, I have seen a number of catchy phrases designed to encourage farmers and sportsmen to make sure soil lime needs are met. Some of these include "Ag Lime-Don't put if off...put it on", "For Land's Sake, Use Aglime", "It's Time to Lime" and "Lime doesn't cost...It pays".

## *"Lime increases the soil pH and plant nutrient uptake is directly tied to soil pH."*

Why is lime so important? Lime increases the soil pH and plant nutrient uptake is directly tied to soil pH.(See graph below) Most of the major nutrients including nitrogen, phosphorus, potassium, magnesium and calcium are more available to the plant as the soil pH rises (5.8 to 6.5). On the other hand, several minor nutrients like iron, aluminum, manganese and zinc become more available as the pH moves lower (5.5 and lower). With a low soil pH, minor elements can be released in large quantities and become toxic to plants while at higher pH's, these elements may not be available in sufficient quantities for optimum plant growth.



When soil tests determine the soil pH is low, agricultural limestone is recommended. Here are a few facts about lime to consider:

- Many soils are natively acid and must have lime applied.
- For best results, lime should be mechanically incorporated into the soil. However, lime applied to the soil surface on established areas

such as pastures and food plots will eventually work its way into the soil and neutralize it.

- Lime dissolves slowly; therefore, it needs to be applied well in advance (2-6 months) of planting the desired plant or crop.
- While late summer or early fall is the best time to apply lime, it can be applied anytime during the year.
- If available, use dolomitic lime. Dolomitic lime not only reduces soil acidity, but supplies much needed calcium and magnesium to the soil.
- Finally, lime doesn't take the place of fertilizer, nor can fertilizer replace lime. Each has its own important function in the soil.

Your local feed & seed dealer or County Extension office can assist with the details of taking a soil sample for lime and nutrient needs.