

MILLE LACS SOIL SERVICE



MONTHLY NEWSLETTER

NOVEMBER 2022

HOW LONG DOES IT TAKE FOR LIME TO WORK?

Since water is required for lime to react with the soil, effects of a lime application will be slower in a dry soil. It often takes a year or more before a response can be measured even under perfect conditions. However, a response may be observed within weeks of the application when soil pH is extremely low. It is important to apply lime immediately after the growing season or crop removal to allow lime to react, correcting soil pH before the next growing season. The reactivity time also depends on the type of lime used. Liming materials differ widely in their neutralizing powers due to variations in the percentage of calcium and/or magnesium. Usually, liming materials with a high calcium carbonate equivalent (CCE) tend to neutralize soil acidity faster than those with a low CCE. The coarseness of the liming material will also influence how fast the lime will react. In other words, the finer the liming material, the greater the surface area, resulting in faster reactivity.

HOW LITTLE OR HOW MUCH LIME CAN BE APPLIED AT ONE TIME?

The amount of lime needed depends on the type of crop being grown. If growing continuous wheat or bermudagrass, it is only necessary to raise the soil pH above 5.5. Therefore, one-half ton or 25 percent of the soil test deficiency amount required to raise the soil pH to 6.8 is recommended. If growing legumes, the soil pH needs to be raised to 6.8. If surface applying lime, apply no more than two and one-half tons per acre per year. Up to four tons per acre may be applied if the lime is worked into the soil. In situations where soil pH is extremely low and a large amount of lime is recommended, it may be a good idea to spread the cost over two to three years by annually applying one-third or half of the lime needed.

FSA DATES & REMINDERS

- November 1: FSA have multiple Student Intern positions open for the summer of 2023 which include the Foley, Little Falls, and Waite Park offices. The application period is open from October 18 - November 1st. All applicants must apply at www.usajobs.gov.
- November 15: Final date to certify all fall-seeded crops (rye, winter wheat, etc.)
- December 5: COC election ballots will be mailed the beginning of November and all ballots must be returned by December 5th.
- December 9: 2023 DMC registration is now open and ends December 9th

SHOULD LIME BE WORKED INTO THE SOIL OR PLACED ON THE SURFACE?

Whenever possible, tillage should be used as a tool to incorporate lime into the soil. When lime is worked into the soil, a larger portion of its surface area is exposed to the soil allowing for faster reactivity.

Lime applied on the soil surface does not react as fast as lime incorporated by tillage, but what other option is there in perennial pasture systems? Surface-applied lime moves into the soil at a slow rate.

It is similar to non-mobile nutrients in its movement in the soil. However, there are a few crops that have roots that feed close to the soil surface, such as bermudagrass and alfalfa. It has been documented that correcting pH in the top two to three inches of the soil has a positive effect on forage production. Even though it is best to incorporate lime whenever possible, it is still important to surface-apply lime to correct the soil acidity problem in established pastureland and no-till cropping systems.

JOKE OF THE MONTH

A Farmer and the Interviewer

Interviewer: How much amount of milk does your cow produce?

Farmer: Which one, black one or white one?

Interviewer: Black one

Farmer: 2 liters per day.

Interviewer: And the white one?

Farmer: 2 liters per day.

Interviewer: Where do they sleep?

Farmer: The black one or the White one?

Interviewer: The black one

Farmer: In the Barn

Interviewer: And the white one?

Farmer: In the Barn

Interviewer: Your cows look healthy...What do you feed them?

Farmer: Which one? black one or the white one?

Interviewer: Black one

Farmer: Grass

Interviewer: And the white one

Farmer: Grass

Interviewer: (Annoyed) but why do you keep on asking if black one or white one when answers are just the same??

Farmer: Because the black one is mine

Interviewer: And the white one?

Farmer: It's also mine.

DOES LIMING HAVE AN EFFECT ON HERBICIDE ACTIVITY?

There are several herbicide families that are soil pH dependent. For example, low soil pH levels may reduce the activity or residual time of triazine (atrazine, Sencor) and sulfonyleurea (Peak) herbicides. High soil pH levels (>6.8) tend to increase herbicide activity that increases the risk of crop injury and/or carryover potential.

We are currently taking orders for Lime and are ready spread as the crops come off the field. Call us today to schedule 320-294-5511

DRY SOIL AND FALL TILLAGE

As the soybean harvest comes to an end and combines start being switched to take off the corn, one thing that should be taken into consideration after the dry year we had is what to do with the residue in the fields this fall. With the rain being very spotty over the last two growing seasons and the soil in parts of the state holding less than half of the normal moisture amounts, working in or baling the crop residue may be doing more harm than good. Fall tillage can increase evaporation thus reducing the moisture in the surface layer of the soil. In scenarios where leaving the residue is not possible and the fall tillage is necessary, consider a shallower tillage pass, somewhere around four inches deep. This shallower tillage will help to slow the movement of water across the soil compared to deep tillage and large soil clods. The shallower tillage will help to pool up any water that is flowing across the soil, whether that be late fall rains or the winter snow. Similarly, to leaving alfalfa stands tall to increase the amount of snow captured from the winds to help keep the ground insulated, taller corn stalks and residue will help to stop the movement of windblown snows into ditches and waterways, allowing more snow in the spring to be absorbed into the soil.

Thank You All For Your Patronage!