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Liming Acid Soils

The application of lime to correct acid soil conditions can have a significant impact on crop yields. This is especially true the more acidic soil becomes, particularly for crops like alfalfa. Nutrient availability declines and yields suffer when pH levels are out of balance.

Because responses aren't typically immediate, we have to plan ahead a little more when applying lime than we do with other fertilizer products. Since the exact amount of time is a function of lime particle size and soil moisture, knowing what particle size we have is quite advantageous to our purchase and application decision making process. Smaller particles have more surface area, and react faster in the soil. So when time is of the essence, using finely ground liming materials (those smaller than 60 mesh will usually react within 30 days) will result in a quicker pH increase. As surface area increases, reaction rate slows as surface area decreases. Particles between 30 and 60 mesh size may take as long as 1-2 years to react, while those between 8 and 30 mesh may take as long as 5 years or more.

In our area, lime isn't always readily available and nearby, resulting at times in cases where the trucking and spreading cost are greater than the cost of the lime itself! Quality also varies widely, making 'fine tuning' our lime application plan even more difficult.

How do we put what we need where we need it in an efficient and economical manner? That is probably best explained if you know how a lime recommendation is made. Over the next couple of weeks, I'll share some thoughts from two of our KSU Nutrient Management Specialists, Dr. Dave Mengel and Dr. Dorivar Ruiz-Diaz to help shed some light on what product you need and when you need to apply it.

Dividing Iris

It's time to move your iris! The ideal time to divide iris to prevent vigor loss from clumping is late July through August. Division should occur every three to five years to help rejuvenate them and increase flowering.

To do so, dig up the entire clump of thick rhizomes and smaller feeder roots. Use a sharp knife to cut the rhizomes apart so each division consists of a fan of leaves and a section of rhizome. The best divisions are made from a double fan that consists of two small rhizomes attached to a larger one, which forms a Y-shaped division. Each of these small rhizomes has a fan of leaves. The rhizomes that do not split produce single fans. The double fans are preferred because they produce more flowers the first year after planting. Single fans take a year to build up strength. Rhizomes that show signs of damage due to iris borers or soft rot may be discarded, but you may want to physically remove borers from rhizomes and replant if the damage is not severe. Mild cases of soft rot can be treated by scraping out the affected tissue, drying it in the sun, and dipping it in a 10 percent solution of household bleach. Rinse the treated rhizomes with water and allow them to dry before replanting.

Cut the leaves back by two-thirds before replanting. Remove weeds from the site and fertilize to a six inch depth according to soil test recommendations or with a complete fertilizer, such as a 10-10-10, at the rate of 1 pound per 100 square feet.