



Field Notes for The Week Of

4-25-2022

Sweetening The Soil

Here we are, the final full week of April and I am by far ready for it to be recorded and put in the books. April 2022 has been by far a strange and challenging month for Ohio producers, from snow showers to 80°F heat waves. According to Arron Wilson Climatologist with Ohio State University, Southern Ohio has been 4°F lower than normal for the month of April. Looking ahead it looks like April will end on a cooler note too, with a cool front bringing in some rain and cooler days and nights. With this cool wet weather many plants are running a little behind on growth compared to previous growing seasons. Pastures and forage fields have less growth than normal and the fear of cooler than normal temperatures triggering premature reproduction are on the minds of many forage growers. This past week I was able to get out and do some field scouting and farm visits. I have been helping many producers collect soil samples and evaluate results. Producers are trying to be more efficient with nutrients that are already available in the soil rather than spending large amounts of money on commercial fertilizer. For proper plant growth nutrients such as nitrogen phosphorus potassium, calcium, and Magnesium are needed in large amounts. These nutrients are often referred as primary Macronutrients. Soil Alkalinity and Acidity plays a critical role in how plant take up and utilize both macro and micronutrients. Taking soil samples can tell producers what the soil PH level is. It will also inform producers how much phosphorus, potassium, calcium, and Magnesium are already in the soil ready for plants to use. The soil test will also tell the producer what the soil buffer Ph is. The buffer Ph is a reference number given to establish the amount of limestone needed to raise the soil Ph. Buffer PH is very dependent on soil texture, heavy clay, high organic matter, and high cation exchange capacity soils with have more resistance to change in PH levels. Higher Buffer capacities means more Limestone will be needed to change the soil PH levels. As producers evaluate their soil test results many might look at PH level a lot closer than ever before and for good reason, proper soil PH can allow plant to take up nutrients more efficiently.

Other consideration for lime applications is to evaluate the lime quality, this is referred to as Lime neutralizing power (ENP). The ENP value allows producers to compare quality among lime sources if the ENP is 2000 that means the ENP pure and that when you apply a ton of lime you are utilizing the complete ton of lime. If the ENP is 1500 you will need to apply 500 lbs more to get a ton value from the lime. ENP is required to be given to purchasers for lime being used for agriculture use.

