



Lime

A&L Technical Brief

Every season there are environmental differences that affect the soil and thus the manner plants take up nutrients. Our tissues program identified a potash deficiency, which developed this past spring and continued throughout the season. This deficiency was a result of the cool wet weather we experienced.

Another issue identified late in the season was unusually high pH levels in fields we had history of. This elevated pH was likely due to higher levels of rainfall.

I often refer to the fact that we should not put too much emphasis on soil pH, as it is only an indicator that pH may be a problem. This year we saw that pH will move during the growing season depending on the crop that is grown, the amount of rainfall (too much or too little), fertilizer application and tillage practices.

Buffer pH is much more stable and does not move around like pH does. For this reason one should pay more attention to buffer pH and the percent saturation of Ca to determine the true calcium level of a field. These two indicators are much more reliable indicators of the soils true buffering capability and Ca supply.

This year, for example, we saw a soil with a C.E.C. of 8, pH of 6.4 with a buffer pH of 6.7 and a percent Ca of 55%. The soil Ph is more likely about 6.0, but due to circumstances it is reading higher.

The elevated pH we saw this year was an unusual event. This note is to advise you to consider looking beyond pH itself to fine tune lime requirements for fields that had unusually poor performance this past season. Look closely at % Ca and buffer Ph to determine if lime is needed.

If you have any further questions or concerns please call.

Greg

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