

Soil Testing Hay Fields & Pastures

A few weeks ago, I outlined some soil testing procedures that you might want to consider if you are pulling soil samples this fall. If you want to check them out, you can find them Under Weekly News Articles on the Crops & Soils page of our Meadowlark Extension District at:

<https://www.meadowlark.k-state.edu/crops-soils/index.html> . This week, I want to focus on some of the reason why fall sampling might have some advantages for forage producers.

First, it gives us some time to plan applications. Soil sampling is recommended on an every three to four-year basis. After you've completed that sampling cycle a couple of times, you can start to fine tune your application rates even further. It allows us to better apply what we need to so that we can produce forage economically. Remember: for a good test, take at least 15-20 cores or subsamples from various locations in the stand and combine them for a composite sample. Samples should be pulled from a zero to six-inch depth.

Lime is one of the nutrients we need to be tracking, due to its importance in our forage crop system, particularly if legumes are involved. Optimum pH level is between six and seven, depending on the forage species. Brome/fescue can do well at lower pH's, but legumes typically prefer pH levels closer to seven (to maintain nodulation). If pH levels are plenty high, adding lime is only going to raise levels further, potentially reducing uptake of macro- and micronutrients. Whenever possible, apply lime as far in advance of the growing season as possible. For a more rapid response to lime, use fine-ground liming materials with a high effective calcium carbonate (ECC).