Ball Tech On Demand Tips: Alkalinity Testing

Water quality, and more specifically alkalinity, is an important factor in determining your plant quality. Too high of alkalinity can lead to high pH and yellowing of a crop. Too low of alkalinity can lead to wild swings in your media pH. Additionally, alkalinity can affect the efficacy of some PGRs and pesticides. Regular alkalinity testing of your water source is a critical process for any greenhouse.

Sending samples to a lab can be expensive and slow results, often leading to testing less often than you should do each year.

Water alkalinity can change drastically in short periods of time. Especially if using well water, or surface water such as a pond. Spring rains can drop alkalinity quickly and summer droughts can raise it.

For this reason an in-house alkalinity test kit is a useful tool. The alkalinity test kit pictured to the right and the first one linked below is inexpensive and easy to use. The second link below uses a syringe and liquid reagent, which some growers find easier to use.

HACH Alkalinity Test Kit, Model AL-AP, gpg
https://www.hach.com/alkalinity-test-kit-model-al-apgpg/product?id=7640220950

Hanna Instruments Alkalinity Chemical Test Kit
https://www.hannainst.com/hi3811-alkalinity-test-kit.html

"In my growing experience, our water source was a pond and we used sulfuric acid to lower the alkalinity. With spring rains, the alkalinity of the pond could fluctuate by more than 100ppm, greatly affecting the amount of acid needed to reach our ideal alkalinity. It was not uncommon for us to test alkalinity 2 to 3 times per week during these times. Otherwise, a weekly alkalinity test was standard."

Chris Fifo, Ball Tech Team