

pH & Nutrient Deficiencies (& Toxicities too!)



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It's that time of year we get questions on nutrient deficiencies. Nutrient deficiencies (and toxicities) are often caused by underlying pH issues. The availability of each nutrient is impacted by the pH of the soil substrate. For example, iron availability to the plant is increased at low pHs and restricted at higher pHs. This is often observed in chlorotic petunias and calibrachos. Iron is less available to the plant at higher soil pHs and since iron is integral in chlorophyll production we see yellowing of foliage.

If you're seeing chlorosis or other foliage symptoms and think you may have nutrient deficiencies having a pH log is incredibly helpful and reduces the time to remedy the crop. No pH log? Not a problem. First, make some notes on what crops seem to be having issues. Then take a look at the Jack's Plants by pH Technical Bulletin. In the bulletin we have crops organized by their pH preferences – high pH (Geranium group), moderate pH (Impatiens group), or low pH (Petunia group). If the symptomatic crops largely fall into one of these groups then you have an indication if you are dealing with a low or high pH issue.

Next step would be testing media and/or tissue to determine what nutrients may be deficient or have become toxic. The JR Peters lab offers water, media, and tissue tests to assist in determining what nutrition issues are plaguing your crops. The JR Peters lab services are available to all growers regardless of your fertilizer use (you don't have to use Jack's Fertilizer to use the lab). Test kits are available from Hummert and through our website. When using Jack's Fertilizer or JR Peters Lab technical support is included in your purchase. Send your sample in and give us a ring when you get the results and we're happy to interpret them.