PLANT SAMPLE COLLECTION GUIDE

Introduction

During the growing season there are a myriad of issues that can affect crop quality and yield. Aside from plant disease, the most important aspect to monitor is the nutrient status or the flow of nutrients throughout the plant during the growing seasons. Nutrient deficiencies and imbalances usually go unseen during the earlier stages when they can be quickly rectified. However, these deficiencies typically go unchecked until they are severe enough to cause visual symptoms in the plant. Laboratory determination of plant nutrients offers a precise method for monitoring plant health during the most crucial time.

Plant tissue analysis can detect the unseen issues like nutrient deficiency, soil toxicity and confirm visual symptoms. Combining plant tissue analysis with a soil analysis can be used as tool for determining nutrient requirements for a crop, that can allow for corrective action earlier in the season.

A complete plant tissue analysis from PPB Analytical Incorporated will identify the nutrient status of the following elements:

- Nitrogen
- Phosphorus
- Magnesium
- Sodium
- Iron
- Manganese
- Copper
- Molybdenum
- Sulphur
- Potassium
- Calcium
- Aluminum
- Boron
- Zinc

Collection and Preparation of the sample

Collect the most recently matured leaves or the most recently expanded leaf. These leaves are generally the third to fifth leaf down from the growing point. A good sample size is 1-2 leaves from a few plants growing in the same conditions (same field or room with the same nutrients applied). Aim to send 10 to 20 leaves per grow area. Gentle brush away any soil on the leaves prior to sampling with a clean tissue or napkin, these particles could elevate iron and aluminium values.

Be sure to use a clean paper bag or similar container. Never use a metal container as the metal may contaminate the sample. Avoid zip loc bags if possible. Keep the sample in cool conditions but do not freeze.

It is also a good idea to send a soil sample for analysis as well, since issues with the nutrient levels can be traced back to the soil. Monitoring the soil throughout the season is also a good plan for ensuring plant quality.