

## Leaf Tissue Analysis - Sample Collection Instructions

Following the recommended guidelines when you take samples for testing your own plants becomes critical for getting accurate results because the standards used for tissue sample analyses have been derived from samples taken from a specific part of the plant, at a specific stage of growth & development, along with a specified time of day, number of samples per plant, and number of plants to be sampled. In other words, follow the guidelines for taking your samples as closely as possible and you will get the best results!

<u>Here's what to do</u>: Whenever specific sampling instructions are not known and/or are not given, select the upper and most recently matured leaves. For individual plants or small areas, pick a variety of leaves to make one to two full cups of wet leaves. (Younger plants may not have enough leaves to make 2 cups and still have enough to photosynthesize and continue growing correctly, so you would need to sample more young plants to get enough material to make up the needed sample size.

All plant tissue should be delivered to the lab within 24 hours of collection. Fresh plant material should not be placed in plastic bags unless there is a way to cool it. They should be put in paper bags instead. Whenever a plant cannot reach the lab within 24 hours, use a paper bag for shipment OR put it in plastic bags with a way to cool it to 41 degrees Fahrenheit (5 degrees Celsius).

When the crop or variety changes in a new section of field or greenhouse, a new and completely different sample should be collected only consisting of that particular crop or variety.

There are few additional things to avoid for proper sampling technique. Keep the following in mind while taking samples:

## What NOT to do:

- Do **not** select materials that have been under stress for a long time (environmentally or nutritionally).

- Do **not** select materials that are damaged physically by insects or other means or ones that are infested with disease; no dead, dying, damaged or diseased samples.

- Do **not** select materials that are dirty with soil or dust or have had foliar sprays that have been recently applied.

- Do **not** select leaves under a canopy and do not select border row plant leaves.

- Do **not** allow your sample to freeze. Freezing will burst the cells and spill the nutrients & the cell's water content, which will alter your results.

When sampling large areas, use a pattern to ensure diversity of your sample like these:



**Please Note:** If you want to receive accurate nitrogen readings, please keep sample cooled until it reaches the lab. Use a cold pack or similar cooling methods in with the sample.

**Don't forget** to fill out your Lab Testing Information Sheet and include it with your sample before mailing or shipping.

## Please ship or deliver prepared samples, along with a Completed Lab Testing Information Sheet, to:

KALIX Commercial Plant Nutrition 1574 Sky Park Dr. Medford, OR 97504