



Taking a Leaf Sample: Field Crops, Vegetables & Hops

Collecting a Sample

Accurate sampling is needed to provide an accurate assessment of a crop's nutritional status. This requires specific parts of a plant are collected at the specified stage of plant development. Refer to Table 1 for crop specific sampling guidelines.

Select plant parts that are representative of the variety and growing area tested (take separate samples from healthy areas and problem areas if trying to diagnose a possible nutrient imbalance). Document species, variety, crop growth stage, plant height, soil characteristics and any other information that may be helpful when interpreting results. In general, it is best to sample leaves which have recently reached maturity.

Avoid extremely young, extremely old, dead, diseased, or insect damaged leaves. Cold, heat, or moisture stressed should also not be used. Avoid seeds since they do not accurately reflect the nutritional status of the whole plant

Sample preparation guidelines

Send at least 50 grams (~ 2 ounces) fresh weight or about 2 cups of lightly packed (softball sized) sample of air-dried plant tissue in a paper bag (not plastic). Boron free stamped bags are available upon request. Gently rinse dirty samples using distilled water. Shake to remove excess water and spread out on clean paper towel to dry.

Submission Form

Fill out the submission form completely. Keep a copy for your own records to aid in interpretation at a later date. Be sure that the leaf sample bag and the information sheet are marked with the same ID#.

At this time, reports for plant tissue samples from field crops, vegetables and hops will show results only. No interpretations or nutrient guidelines will be provided.

Stage of growth	Plant part to sample	# of plants to sample
Field Crops		
Alfalfa		
Prior to are at 10% bloom stage	Mature leaf blades taken from top 6" or upper 1/3 of the plant	40-50
Corn		
Seedling less than 12"	Entire above ground portion	20 – 30
Pre-Tassel	Entire fully developed leave below the whorl	15-25
Tassel to silking	Entire leaf at ear node	15-25
Sampling after silking is not recommended		
Soybeans		
Less than 12" seedling stage	Entire above ground portion	20-30
Pre-bloom	2 or 3 fully developed leaves at top of plant	20-30
Early bloom	2 or 3 fully developed leaves at top of plant	20-30
Pre-pod	2 or 3 fully developed leaves at top of plant	20-30
Sampling after pod set is not recommended		
Wheat		
F1-5 Seedling to tillering less than 12"	Entire above ground portion	50 – 100
F6-10 Stem extension prior to heading	4 uppermost leaves	40 – 50
Sampling after heading is not recommended		
Vegetable Crops & Hops		
Tomatoes, peppers, eggplant (Field)		
Prior to or during early bloom stage	3rd or 4th leaf from growing tip	15-20
Sweet Corn		
Up to 6 leaves	Whole plant (not roots)	5 – 10
Prior to tasseling	1st fully mature leave below whorl	10 – 15
At tasseling	Entire leaf at ear node	10 – 15
Cucumber, muskmelon, pumpkin, squash, watermelon		
Early growth stage	Newest expanded leaf	15-20
Hops		
Min 100 petioles from mature plants from 5-6' height		15-20 of each variety