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## PLANT TISSUE SAMPLING GUIDELINES

### 1. Purpose

1.1. To specify procedures to be followed by trained personnel during sampling of plant tissue. This procedure addresses the factors that need to be controlled during sampling to ensure the validity of subsequent test results.

### 2. Scope and application

2.1. This procedure applies to all plant tissue samples which are received by Analytical Laboratory Services (Pty) Ltd, Windhoek.

### 3. Equipment and consumables

3.1. Paper bag or envelope

3.2. Clean water

### 4. Procedure

#### 4.1. Field Sampling Procedure

Samples of plant material should be taken from 20-25 positions in a 'W' pattern across a field and placed in a clean paper bag to form a bulked sample for analysis.

Samples should not be taken from areas that are not unrepresentative of the field.

For micronutrient analysis, it is best to sample the youngest fully expanded leaves.

Sample size: 100g

#### 4.2. Suspected Nutrient-Deficient Plant Tissue Sampling Procedure

When sampling suspected nutrient-deficient plants or if specific sufficiency ranges are unavailable for your plant, take two separate samples if possible; one from the normal tissue of a healthy plant and one from the abnormal/poor plant tissue of the suspected plant.

The comparison of laboratory results for good and poor plant tissue can be much more useful for diagnosis than the results for the poor material only.

Sample size: 100g

**Note:**

- It is essential that the plant material is not contaminated by soil. If all the tissue available is dusty, wash the material gently in flowing, clean water – and allow to air dry before placing the sample into a paper bag.
- Roots must not be included in the sample.
- Do not place the sample(s) in a plastic bag.

The customers shall take full responsibility to ensure that correct sampling procedures are always followed for samples collected under their care. Samplers should be conversant with the relevant sampling procedures, to ensure that sample quality and integrity are not compromised.

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## **5. Transportation and delivery of samples to the laboratory**

- 5.1.** Handle all samples with care to prevent any possible contamination and avoid conditions that can compromise the quality of the sample.
- 5.2.** Ensure that the sample submittal form is completed and that the description of the sample(s) align with those on the sampling bag.
- 5.3.** Fresh plant tissue should be delivered within 48 hours of sampling and kept cool to prevent decomposing of the material.

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