

Beleaf in us!

As the African proverb goes, "Roots do not know what a leaf has in mind". In many cases this is true as a healthy soil does not necessarily reflect what is taken up by the crop.

A South African North Coast grower recently experienced severely stunted growth on patches of his field, with no clear leaf symptoms. FAS soil analysis revealed acidity was not the culprit and most soil nutrient levels were above threshold, with zinc being marginal. The leaf sample, however, confirmed a definite zinc deficiency on the areas of reduced growth.

For as little as R190, this grower had effectively diagnosed his problem and saved thousands of rands on misdirected application of NPK fertilisers or lime - none of which would have improved yields.

Don't leaf me behind

FAS offers a comprehensive leaf sampling package for all crops including macadamias, avocadoes, maize and vegetables. To ensure the most reliable interpretations, the best time to take leaf samples is:

- when the crop is growing vigorously (dependent on crop age and area),
 - there is no water stress, and
 - at least four weeks since the last fertiliser application.

The crop must also be sampled at the correct age, and in the correct month of the year. Ask your local Extension Specialist to assist you with this.

WHY SHOULD I LEAF SAMPLE?

- 1. It provides a snapshot of the crop nutrient balance.
- 2. It's particularly valuable to detect deficiencies of nutrients for which soil tests are not wholly reliable, including nitrogen, sulphur and micronutrients.
- **3. Sampling early in the growth cycle allows for corrective treatment for the current crop.**



HOW TO turn over a new leaf.

When submitting leaf samples to FAS remember to fill in the leaf submission form correctly. If possible use the appropriate FAS leaf labels on the samples.

- Ensure adequate leaf material is supplied to the lab for analysis (typically 200-250 g fresh leaves per sample).
- Leaves with discoloration or from areas of poor/patchy growth must be submitted separately. Do not mix these samples with healthy, green leaves.
- Do not store/submit samples in a sealed plastic bag as they might go mouldy. Also, do not submit your samples in an old fertiliser bag. Fertiliser nutrient contamination could ruin your results.

Leaf sampling is easy to do. Conducted routinely, it can help to obtain maximum possible yields through optimal nutrition. If done as a means of trouble-shooting, leaf sampling can save large sums of money by helping to identify particular nutrient deficiencies.

Kerisha Raghunandan (SASRI Publications Officer)

> For leaf sample costs, _____please email: fas@sugar.org.za

Sass Tel: +27 (31) 508 7474/7 Email: fas@sugar.org.za

Email: fas@sugar.org.za Web: www.sasa.org.za/sasri Address:170 Flanders Drive, Mount Edgecombe Durban