

Eco Analitica

The soil and water laboratory for the greenhouse industry

The types of analysis that the laboratory performs can broadly be categorised into five categories

- (1) 1:2 water extract analysis (analysing all water soluble elements in soil),
- (2) 1:1,5 water extract analysis (analysing all water soluble elements in potting mediums),
- (3) ammonium acetate extract analysis (analysing the potentially available elements),
- (4) mechanical analysis (measuring the sand, silt and clay content of the soil) and
- (5) water analysis (the same 17 elements that are being analysed on the 1:2 or 1:1,5 water extract are also analysed on water samples).

Accuracy of analysis

Eco Analitica is equipped with modern facilities and operated by well trained staff. Our analysis are frequently subjected to quality control chemes from Wageningen and Alasa – results are available on request. Of utmost importance is the fact that we also take part in a quality control scheme operated by our clients. All these measurements enable us to compare with the world's best laboratories.



When to do an analysis

The purpose of the analysis is to calculate a new fertiliser recipe and to get the analysis results as close as possible to the target values. The amount of nutrients taken up by plants depends on the growth stage and climate. The consequence is that the fertiliser recipe based on an analysis is only a temporary correction. The validity of the correction is only 4 to 6 weeks. Because of this fact the nutrient status of the soil or growth medium has to be checked regularly.



How to take a sample

Soil

1. Take 25 subsamples from a depth of 0 – 30 cm randomized from the greenhouse.
2. Mix and send 500g to the laboratory.

Water

1. Collect drainage water from the end of the beds.
2. Irrigation water: Collect the sample just before the fertilisers are added.
3. Send 500 ml to the laboratory.
4. Fill the container to the maximum (no air between the lid and the water).
5. Store in dark.



Substrate

1. Take 25 subsamples randomized from a depth of 0 – potdepth.
2. Mix and send 500g to the laboratory.

General:

1. Use clean bags and/or containers.
2. Do not put samples in the sun.
3. Use plastic bottles for water samples.
4. Do not dry out soil and/or substrate samples.
5. Take to the laboratory immediately.
6. Keep away from light.

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How to send a sample to the laboratory

For your convenience we have depots in Potchefstroom and at Multiflora in Johannesburg. Samples are collected on Monday and Wednesday mornings.

You will receive the analysis within 48 hours after we have collected the sample.