



Analytical Services

The unit focuses on the various procedures to analyze and determine the properties of soil, water and associated materials, mainly for agricultural purposes. The laboratory operates a range of equipment and participates in various quality control schemes, both local and international. The water analysis for anions is SANAS-accredited and other accreditations are underway.

Analyses and Services

Soil Physical Analysis

- Texture (sand, silt and clay content)
- Water-holding capacity
- Soil moisture content
- Bulk density
- Shrink-swell capacity

Soil Chemical Analysis

- pH
- Exchangeable and extractable cations
- Acidity
- Soil Organic Carbon
- Nitrogen content and C/N ratio
- Phosphorous
- Micronutrients

Soil Fertility

- Analysis package for farmers & gardeners
- Fertilizer recommendations for specific crops

Water Analysis

- pH, EC, anions, cations
- Water quality

ICP Scan

- Semi-quantitative scan for a range of elements (Li, Be, Ti, V, Cr, Mn, Co, Ni, Cu, Zn, As, Se, Rb, Sr, Mo, Cd, Sn, Sb, Te, Cs, Ba, La, W, Pt, Hg, Tl, Pb, Bi, U), can be done on soil, water and plant

Plant Material Analysis

For example: leaves, roots, growth media, etc. – drying, milling, pH, EC, C, N, nutrients and toxic elements

Special Sample Analysis

For example: sludges, compost, fertilizers – composition and other properties

For more information or to obtain prices or quotation, contact the Laboratory Manager: Ms. Zanele Hlam
Tel: 012 310 2531 • E-mail: HlamZ@arc.agric.za

In addition, various microbiological analyses can be carried out on request. Contact Person: Dr Ashira Roopnarain
Tel: 012 310 2650 • E-mail: RoopnarainA@arc.agric.za

ARC-Soil, Climate and Water

600 Belvedere Street, Arcadia, 0083
Private Bag X79, Pretoria 0001
Tel: 012 310 2500 • Fax: 012 323 1157
Website: www.arc.agric.za

For more information contact:
Adri Laas - Public Relations Officer
E-mail: adril@arc.agric.za

