# RESEARCH AND TECHNOLOGY DEVELOPMENT

## SUB-DIRECTORATE: ANALYTICAL SERVICES

**Components within Sub-Directorate:**
**Soil Analytical Services**
**Soil Fertility Research**
**Biochemistry**
**Biometry**

The Sub-Directorate delivers an accurate, reliable and cost effective laboratory service.

The nominal amounts charged for laboratory services are highly subsidized by the Department.

## Soil Fertility Laboratory

This lab has a major impact on agricultural production as the soil test results that are generated, are correlated to fertilizer and lime requirements. It analyzes over 27 000 samples per annum.

## Plant Nutrition Laboratory

Plant analysis is a good management tool for crop production. The results of which, give an indication of any toxicities or deficiencies.





## Feed Laboratory

This lab analyzes for the quality of finished feeds as well as to measure parameters of raw materials, which will then be used for balanced rations. Pasture samples are also measured for feed quality. A quantity of over 2500 samples is analyzed in this laboratory per annum.





## Salinity Laboratory

This laboratory analyzes for borehole and irrigation water quality. In addition to this, soil samples are analyzed for texture and salinity. Lime is analyzed for quality. The Salinity Laboratory analyzes over 1600 samples per annum.

An increase in samples submitted by the emerging and small-scale farming sector has been observed.

Special emphasis is given to the Lime and Mechanization initiatives with an end to assisting small-scale farmers and communities to improve agricultural production.







The Soil Fertility Research Directorate carries out research in the field of No Till and Cover cropping, as well as fine-tuning of soil Nitrogen levels held within the soil.

This Research feeds back into the fertilizer and lime recommendations generated.

Biochemistry is carrying out valuable work in the Essential Oil Industry and is making inroads in providing a way for emerging farmers to produce high quality essential oils.
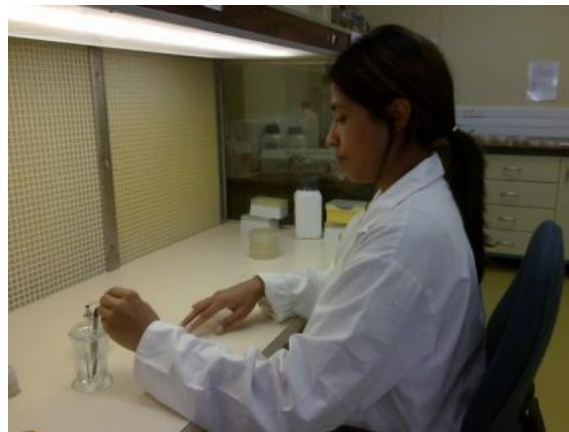






Biometry services are an invaluable tool for the researchers as they design and undertake statistical analyses on research data.  This ensures that the published data is accurate and credible.