The soil and water testing laboratory at the Scone Research Centre is part of the Land and Property Management Authority’s Soil Conservation Service (SCS). Laboratory analysis was first conducted at Scone to assist research, extension and education activities with the treatment of erosion. Commercial laboratory services are available to land managers for the assessment of effluent re-use, urban development and rehabilitation of degraded sites. Reliable soil and water data provided by a government department is of increasing value to satisfy the increasing regulatory environment.

Knowledge for land management

Successful land management depends upon informed use of soil and water resources. Soil and water analysis helps land managers to understand the characteristics and capabilities of their soil and water resources. Soil and water analysis is essential groundwork for effective planning and management, whether considering activities such as agriculture, effluent re-use or rehabilitation of degraded sites.

Revegetation

Soil acidity, alkalinity, sodicity and salinity, as well as erosion can inhibit plant growth. Laboratory analysis can provide an understanding of the factors affecting plant growth and treatment options. Ameliorants such as agricultural lime and gypsum may be used to treat poor soil conditions.

Effluent re-use

With water shortages, effluent can be a valuable resource and re-use can be used to supplement fresh water supply. However, the irrigation of effluent may have environmental risks. Therefore, a good understanding of the environment, including the soil, is critical.

Farm dam construction

Use soil testing to identify the risks of failure for the construction of a dam and create an asset for your property not a liability.

Urban land management

The management of soil and water resources is also a consideration for urban land managers. A small investment in soil testing may be used to develop cost effective treatments for acid sulfate soils, salinity and erosion, thereby minimising land degradation.

Helpful advice

Our friendly staff can provide more than soil testing. We are able to provide assistance with sample collection as well as interpretation of the test results and management recommendations.

Quality assured

The Soil Conservation Service Laboratory is accredited by the National Association of Testing Authorities (NATA) in the field of Construction Materials Testing (Accreditation Number 2323).
Services

The laboratory analysis available includes:

Revegetation
- Available phosphorus
- Cation exchange capacity and exchangeable cations
- Electrical conductivity
- Emerson aggregate test
- pH
- Texture

Effluent re-use
- Cation exchange capacity and exchangeable cations
- Electrical conductivity
- Emerson aggregate test
- pH
- Phosphorous sorption capacity
- Texture

Earthworks
- Dispersion percentage
- Electrical conductivity and pH
- Emerson aggregate test
- Particle size analysis
- Unified soil classification system
- Volume expansion

Erosion and sediment control
- Dispersion percentage
- Emerson aggregate test
- Organic carbon
- Particle size analysis
- Particle size analysis – mechanical dispersion
- Soil erodibility factor (K factor)

Acid sulfate soil analysis (SPOCAS)
- Peroxide pH
- Peroxide sulfur
- Potassium chloride extractable sulfur
- pHKCI
- Titratable actual acidity
- Titratable peroxide acidity

More information

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