Advisory Factsheets (No. 5)

SOIL TESTING & SOIL TRANSECTS

SOIL TESTING

Soil testing is the only way to accurately determine the soil fertility status of soil. Knowing your soil fertility status can save you considerable money because it allows you to :

- Decide the appropriate application rates for soil ameliorants and fertilisers.
- Identify nutrient deficiencies or imbalances
- Select the most appropriate fertiliser/soil ameliorant for addressing nutrient deficiencies or chemical imbalances.

Anyone can do their own sampling for soil testing provide they understand a few concepts and follow a couple of basic rules.

Different soils and different paddocks are sampled separately. Be conscious of different colour/texture/depth and fertiliser, land use/ management histories.

Use a stainless steel tube sampler. Cores should be taken to a depth 0-10cm for pastures. Each sample should contain soil cores from at least 20 different spots. These are collected and mixed together in a bucket before being put in a sample bag.

Soil should be sampled from average growth areas, avoid taking samples from areas where stock congregate or from areas which are uncharacteristic.

You can test areas of very good or very poor growth but you must only take samples from this area. Avoid sampling when soil conditions are extreme i.e. very wet or very dry.
Each sample should not represent more than 20-30ha .
Use a reputable and accredited laboratory

SOIL TRANSECTS

Soil testing is only a snapshot of the soil on the particular day of sampling. A series of tests from the same area over time is more useful as it provides a trend in soil fertility over time. For this reason a soil transect should be set up in each area to be sampled. This transect can then be revisited each time you soil test and the results can be compared. Soil sampling should be conducted at the same time of year to avoid seasonal variations due to soil temperature, moisture etc.

A transect is simply a fixed line between two fixed points and should be 1-200m in length. Soil cores can be taken approximately every 10m either along the line or in a zig-zag pattern across the transect line.