

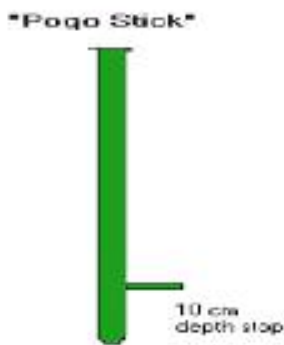
Soil Sampling Instructions

Sampling. This is the most important part of the whole procedure of soil analysis and the one where most error can occur. It is critical that the samples are taken accurately.

A poor sample will give a poor result.

Things to Watch!

1) **Take the correct depth core (10cm).** The easiest way



to do this is to use a “pogo stick” – a commercially available corer with a footpeg/depth stop, which will allow control.

The reason for this is that the research done over many years has calibrated the yield of crops and pastures against the analysis from this depth.

Taking samples from shallower depth will result in a higher level of nutrient in the sample and a lower fertilizer recommendation, which may lead to reduced yield.

Conversely a deeper sample may lead to wasted fertilizer and extra expense as the analysis may be lower than normal.

Deep samples. Samples from lower in the profile do have some advantages when considering soil fertility as a whole. Soil pH, salt levels and some nutrient levels (Potassium and Sulphur) may be markedly different at depth than on the surface. When planning liming strategies or crop rotations these factors should be considered. The best way to measure sub soil conditions is to take normal surface samples, and separate samples in 10 to 15cm increments to the depth you require. This can be done with a spade or a piece of exhaust tube with depth markers on the outside. (This can be driven into the ground with a small SledgeHammer or Gympie).

2) **Sampling a Paddock.**

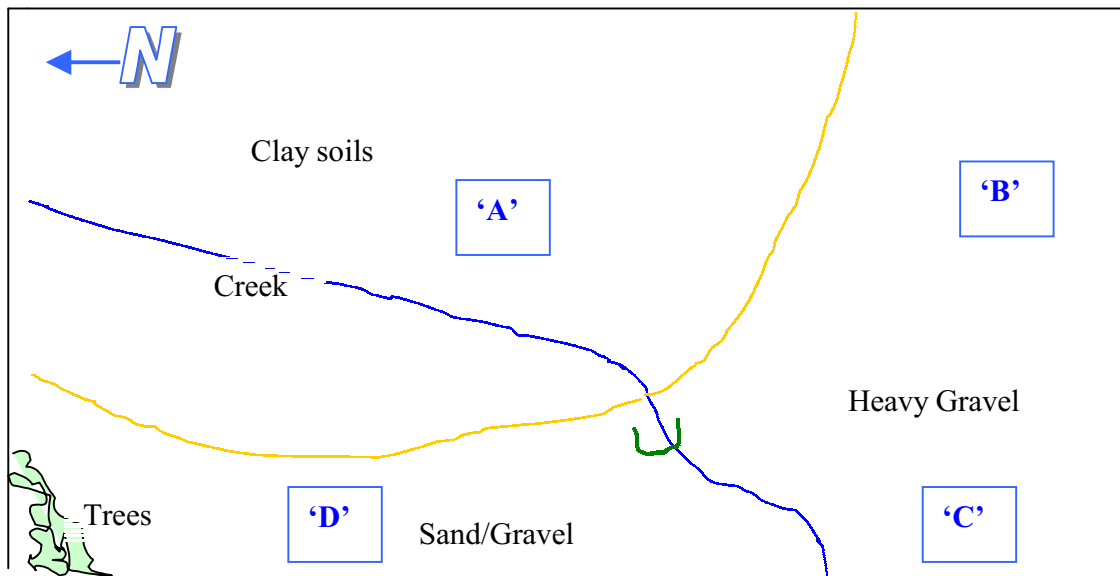
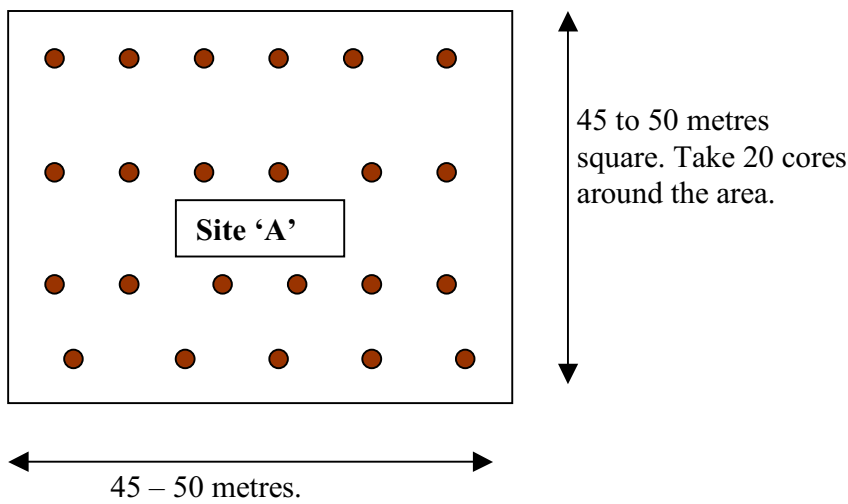
a) The number of samples per paddock is dependent upon the size of the paddock and the variation in soil types. The Summit Fertilizers kit contains material for 4 samples, and in general this should be enough to do one paddock up to about 150 – 200 hectares in size. The more samples taken the better the information for the paddock when considering changes to fertilizer applications.

b) Plan the sampling of the paddock before sampling. Each sample should consist of multiple cores with the “pogo stick”. Again, the more cores, the better the sample. Care should be taken not to cover too large an area for one sample, and not to take cores across soil types.

c) Avoid unrepresentative areas within the paddock. Eg waterlogged sites, headlands and sowing overlaps, stock camps and sheep trails, trees and old fence lines. Don't sample in the first sowing lap of the paddock.

- d) Do not handle the soil sample.
- e) Remove the litter, plant remains etc from the surface before sampling – without moving soil.
- f) Do not sample wet soil. If the soil is damp, sample early in the week and dispatch to the laboratory immediately.
- g) Wait at least 24hours after irrigation.
- h) Do not sample within a month of previous fertilizer application.

Paddock Sampling:



Geo Locating Your Soil Samples.

Precisely locating your soil samples is the best way to track changes in soil fertility across your paddocks.

Contractors, using GPS and mechanical samplers, are available to take samples for you. At the same time you can get paddock mapping done with an accuracy unavailable previously.

Contact details for the contractors are available through Summit Fertilizers.