



Soil Analysis Service

Soil Sampling Instructions

Summit Fertilizers provides you with the highest level of nutrition information. We utilize a fully independent, ASPAC accredited laboratory and test for all major nutrients, trace elements and critical soil physical characteristics (pH, EC and texture, along with optional CEC and exchangeable cations).

We now also include the nationally recognized PBI (phosphorus buffering index).



Collecting Samples for Analysis

The quality of the sample is vital to the accuracy of the test and the interpretation of the results. Samples must be clean, uncontaminated and representative of an area large enough to make management decisions.

To help you to take samples of the highest quality please read the following instructions carefully.

Hazards when Sampling

Summit Fertilizers recommends that prior to entering an area for sampling you should check for hazards such as:

1. High voltage / gas lines- show caution when sampling near these, and beware of any potential below ground hazards
2. Dangerous livestock
3. Sampling areas recently treated with pesticides- be aware of any pesticide or herbicide applications in the previous two weeks
4. Personal hygiene- all soils can contain contaminants and residues which may be harmful. Always wash your hands well before touching or consuming food or drink

As well as this you should be aware of the potential hazards of extended sun exposure and the need for protective clothing including hats and sun-cream.

When to sample?

Cropping and pasture paddocks should be sampled close to the time of final preparations, which in Western Australia usually means November to May. The closer to seeding or reestablishment, the more relevant the results will be, especially for more mobile nutrients, however always ensure you leave time to allow for postage, laboratory analysis and the return of your results (three weeks will usually be sufficient).

Perennial crops are best sampled after harvest, but prior to dormancy.

How to sample?

Tools required

Summit Fertilizers recommends the use of a stainless steel soil testing probe. What ever tool is used it cannot be made of material that could contaminate the sample (eg Aluminium, Galvanised Zinc etc). For topsoil sampling the tool should sample to a depth of exactly 10cm, as this is the depth for which all nutrient response models have been calibrated under Western Australian conditions.

Where long term monitoring is the aim Summit recommends the use of GPS technology, and where subsoil sampling is intended we recommend the use of contracting service with automated sampling. To access these services please contact Summit Fertilizers or your local Summit Fertilizers Agent.

Where to sample

Soils vary greatly within a paddock and soil nutrients can be highly variable due to fertiliser history, crop or pasture history and other management practices.

To ensure the sample is representative of the area carefully examine the paddock or plot to identify any areas of obvious difference (stock camps, headlands, different soil textures etc) and avoid these areas when sampling.

To ensure valid results make sure you-

- Sample high and low yielding areas separately
- Don't mix samples from different production systems or areas that have been farmed separately
- Avoid small areas of exceedingly poor or exceedingly good growth within that zone

At least one representative composite sample from each selected area should be taken. In the case of top soil this should be comprised of at least 25 cores. Research has shown that any less than 25 cores may not correctly represent the sampled area. Collect all cores, then mix thoroughly to obtain your sample.

Subsoil samples may be comprised of 8-10 samples as the subsoil is typically less variable.

General Advice

Ensure that each composite sample is clearly identified and all labels are completed. Fill in all relevant sections of the paddock information form, including a sketch map if GPS coordinates are not being used.

Ensure that samples submitted are of dry soil, as damp soil stored in sealed bags while mailed may return different results. Remember that speed is critical and all samples should be sent to the laboratory without delay.

Important Notes on sampling

- Each composite sample should include 100-250g of dry soil.
- Remove plants and litter from the soil surface before sampling
- All cores should be uniform in size and weight- watch for differences, especially on gravelly or heavy soils
- Ensure there is no contamination with recently applied fertiliser granules (ideally do not sample less than three to four months after the most recent fertiliser application).
- Seal the bag immediately and ensure no contaminants come in contact with the soil