FIELD SOIL SAMPLING - A STARTER GUIDE

WHY SHOULD I SAMPLE MY SOIL?

If you are looking to **optimise production** of your land, or simply want to **ensure that it remains in good health, then soil testing is a key step.** But how do you go about sampling soil, and what should you test for?

First, you need to identify the **purpose** of your sampling. Is there a particular problem that you are trying to resolve or are you just trying to get a general sense of you soil's health? For targeted issues, you need site specific samples from all problem areas. For general insight, a composite sample from across the paddock is often sufficient.

WHAT DO I NEED?

- PVC pipe (see p.2)
- Mallet & screwdriver
- Clean plastic bucket
- Scale to weigh soil
- Plastic bags
- Permanent marker
- Esky
- Icepacks
- Plastic gloves (for biology testing)

WHERE DO I SEND SOIL?

Choose a lab with NATA and/or ASPAC accreditation to ensure quality and reliability. **For consistent results, use the same lab each time.**
Agvita Analytical is a local option in Tasmania.

MAKING MY 'TAP' PLAN

Once you have decided the purpose of your sampling, you need to consider:

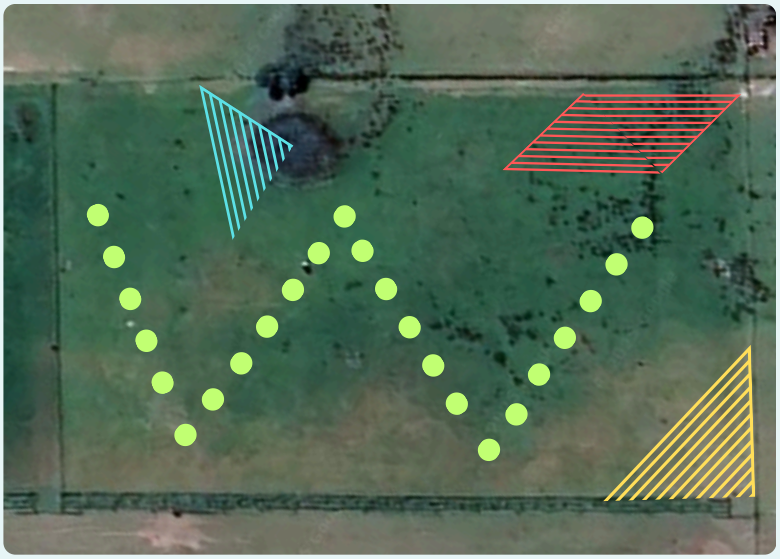
T - Timing. To allow comparable soil tests, it is best to sample at the same time of year, ideally with similar soil moisture too. Wait 2 - 3 months to sample if any composts or fertilisers have been applied. Avoid sampling during climatic extremes *(Agvita Analytical)*.

A - Area. Choose an area with similar soil type, crop, and land management practices. Avoid taking samples from areas that don't truly represent the area, such as gate ways, fence lines, poorly drained areas, stock camps, urine patches or unusually poor/good plant growth.

P - Pattern. Take your samples from a 'W' or zig-zag pattern to represent your chosen area. Optional: sketch a map of your sampling pattern for future reference (see example below).

SOIL SAMPLING EXAMPLE

✔ Sample a representative area of your paddock to get a general insight into your soil



Avoid compacted area near dam access.

Avoid overly wet areas

Avoid stock camps

Collect soil cores at each dot, in a zig-zag/W pattern

STEP-BY-STEP GUIDE TO SOIL SAMPLING

1. Plan your sampling
Follow your 'TAP' method to create a fit-for-purpose soil sampling plan.
Note: Use plastic gloves for biology testing to avoid any contamination.

2. Insert PVC pipe
At each point, tap the PVC pipe into the soil using a mallet
(alternatively, use a digging trowel to remove the soil in small wedges).

3. Collect your soil cores
Remove soil core, making sure you have collected a sufficient depth, commonly **0-10cm** for pasture, and place the core in your bucket. Remove obvious plant material, rocks, or debris.

4. Mix subsamples thoroughly
Once you have collected **30 or more soil cores**, thoroughly mix the subsamples in the bucket.

5. Label and record keeping
Label your sample bag clearly (check laboratory requirements). Record the paddock/area name, sampling depth, date, and conditions (e.g. soil moisture) when you sampled.

6. Bag your sample
Transfer 500g (check laboratory requirements) from your mixed soil into your labelled plastic bag. Double bag to keep the sample more secure.

7. Keep cool, out of direct sunlight, and away from contamination
This is best achieved by placing your sample in an Esky with icepacks.

8. Send ASAP
Send your sample as soon as possible to your selected laboratory, so your sample represents the field conditions. *Make sure to follow all instructions for packaging and submission from the laboratory, and ensure you follow all relevant biosecurity protocols if sending interstate.*

9. Store if immediate delivery is not an option
If you cannot send your sample immediately, you can store your samples for a brief period at 3-5°C prior to dispatch. *Avoid mailing at the end of the week.*

For more information, refer to the Fertcare Soil Sample Guide (1) and NRM South Property Management Planning Guide (2)

1. 2.


15cm PVC pipe, with 2 small holes


PVC pipe tapped into the ground


Removing PVC pipe using screwdriver


10cm soil cores ready to be mixed together

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