SOIL REGENERATION
7 NEW WESTWOOD
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Thank you for choosing to analyse your soil and discover the wonderfully helpful world of microbes!

General Sampling Guidelines

• Only take samples when it is possible to post them on the same day.
• Samples should ideally be posted with next day delivery between Monday to Friday. Two days may still work, but results will be less accurate as the biology changes over time.
• Before posting, try to keep samples cool.
• All sample bags should be labelled with the Sample ID (created by you), Farm Name and date collected on the outside using a permanent marker or an affixed label. Please do not put any identifying information on a piece of paper and place it inside the container with the sample. The paper will disintegrate, become food for microbes, and potentially change the biology of your sample.
• Samples should be packed snuggly in a sturdy packing box or padded envelope to avoid spillage and damage along the way.
• Solid samples (compost or soil) should be sampled under naturally moist conditions. This is especially the case with bare ground lacking any mulch or plant cover.
• Sample ID's are created by you to keep track of what was sampled, where and why.

SOIL SAMPLES EQUIPMENT REQUIRED:

- Coring tool (an apple corer works just fine).
- Clean, sealable sandwich bag
- Permanent marker
- Packing box

How to take a soil sample:

1. Clear off surface organic material from sampling spot.
2. Twist coring tool straight down about 7cm/ 3 inches deep halfway between the drip line and stem/trunk. The drip line is the edge of the canopy of the plant.

3. Typically, at least 3 random cores are required for a representative sample for any given soil condition, you can take more but make sure you don't fill the bag more than ⅓. Place all the cores from your chosen spot in the same bag.
4. Leave the cores un-mixed until because mixing does cause some damage and changes the environmental conditions. It is important to leave them as undisturbed as possible until it is time to assess the sample. Seal bag with at least 50% air space.
5. Make sure to clearly label the bag on the outside, including date, location, type of sample (soil, kind of plant sampled), the person who sampled, and any other information relevant to the sample. Use a permanent marker to prevent the label from being washed or rubbed off.

COMPOST SAMPLES

Collect samples with a teaspoon from a minimum of 5 different areas and depths in the compost pile avoiding any dry areas. For windrows or larger compost pile sizes, collect a minimum of 20 teaspoon samples from different areas and depths. Add all collected sample material to the same bag. Clearly label the bag on the outside, including date, location, type of sample, the person who sampled, and any other relevant information. Use a permanent marker to prevent the label from being washed or rubbed off. Do not fill the bag more than ⅓ full, and make sure to leave air inside before sealing it, so microorganisms have oxygen.

Post in packaging which will keep the sample protected and have it delivered within 1-3 days Monday-Friday.

COMPOST TEA/ EXTRACT SAMPLES

When you extract solid compost, you need to assess the extract for the concentration of the organism groups in that extract. When you make compost tea, you again need to know the biological components in the tea.

1. Avoid immersing your hand or arm into the liquid for liquid samples to prevent contamination. For extracts or teas, take the samples from the top 1-2" (2.5-5 cm) while being aerated. Take about 10 mL each time, placing the liquid in a clean container. Wait 10-15 seconds and take more liquid, putting it in the same container as the first subsample. Repeat a total of 3 times. The combined liquid is your sample.

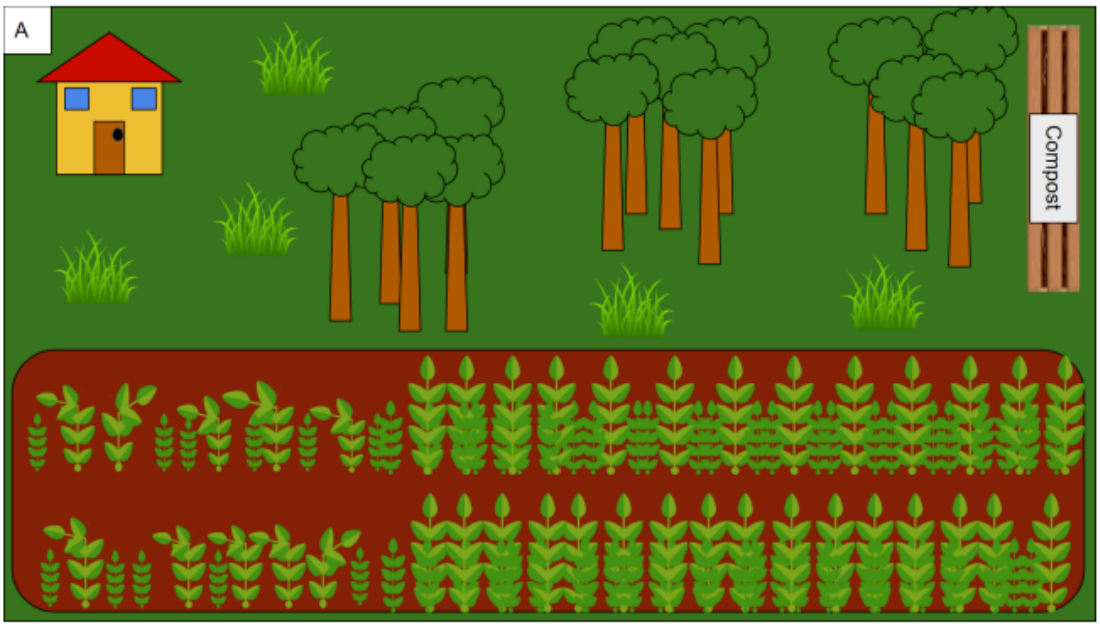
2. Don't fill your container more than one-third full to allow enough oxygen exchange

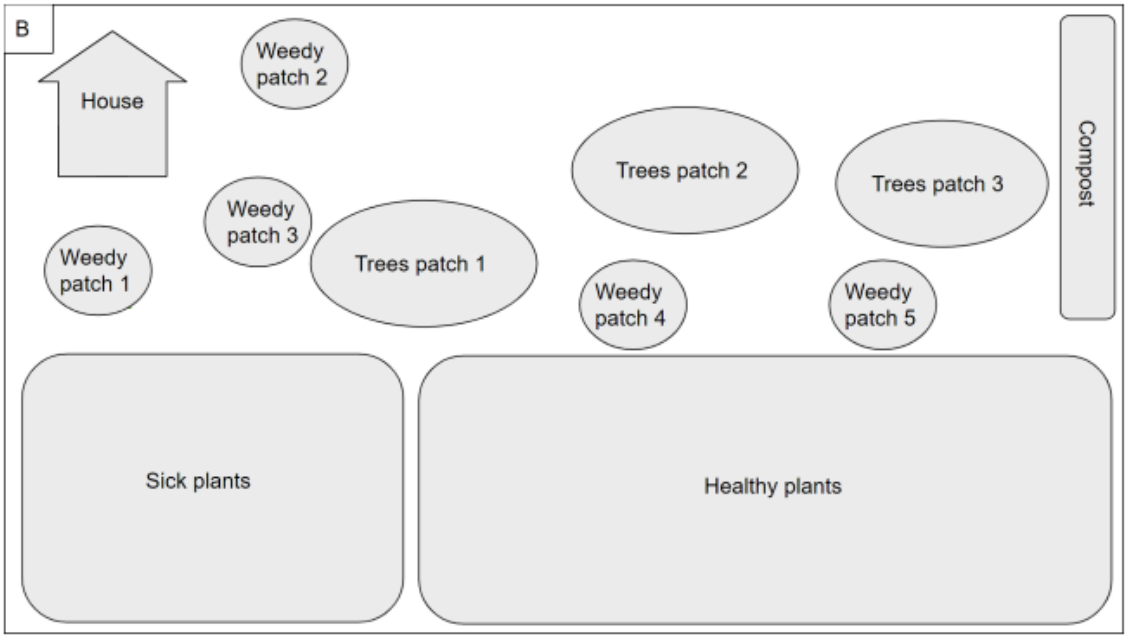
3. Once the screw cap is tightly sealed, label the outside with sample ID and date.

4. Send it overnight or same-day delivery as microbial life in liquids can change rapidly so needs to be assessed urgently.

Defining Where to Sample

When taking samples, you need to define where the system you care about begins and ends.
What is it that you want to know?
Mark the boundaries such that any samples you take within the boundary will be representative.
If different kinds of plants are present, you could use those plant communities to define your areas. Mark all the different management practices (treatments) previously used on the property. Examples of treatments are consistent use of particular pesticides, inorganic fertilisers, tillage practices, or irrigation.
Examples of a property map. A) map of the property. B) categorisation of the areas within the property.



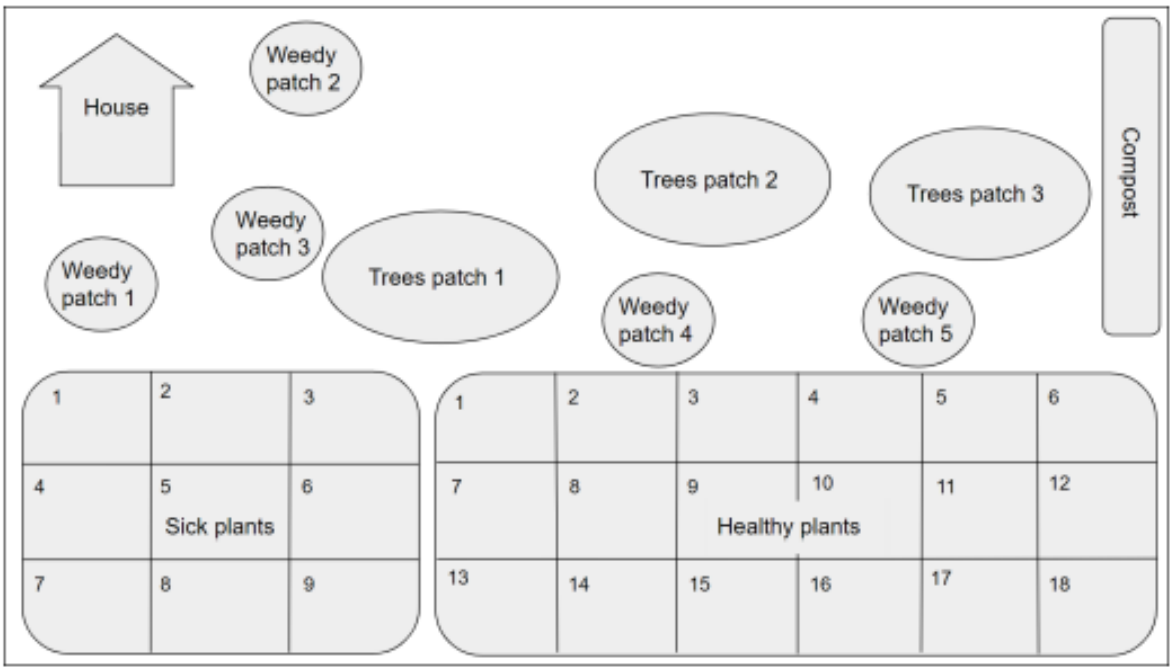


In most cases, the question you need to ask is:

What is out of balance or missing from the soil food web around the root system of desired plants?

Now that you have a map, including additional details like agricultural crop-family boundaries, overlay a numbered grid on each area you want to sample.

Example of a sampling-grid map of a property.

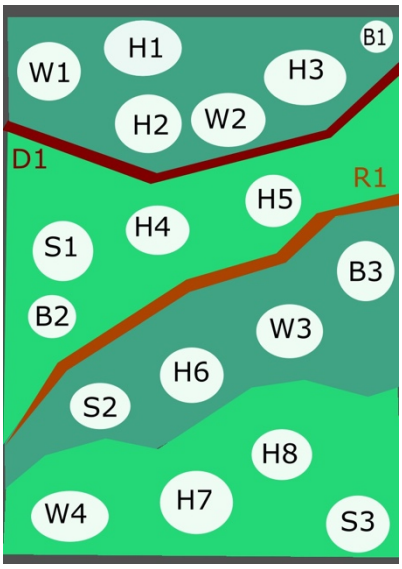


Randomly select 3 to 5 grids from the total set of grids in each area (eg. Sick plants). Go to the centre of the first grid, and look for the closest individual plant you are interested in testing. Go to that plant, and take a sample of 3 cores, all halfway between the stem and dripline. Place all three cores in a single sample bag. Remember to label the sample number and position or any other key information on the outside of the bag using a permanent marker.

The next time a sample is taken from this area, walk to the middle of the grid and choose A DIFFERENT close plant. Do not take cores from the same plant because taking 3 cores from around a plant causes significant disturbance. Repeat this process for each selected location. When the question is regarding plants (not bare soil) the samples taken should be from the root system (all halfway between the stem and dripline.)

How many samples you take depends on what you want to know and how much budget you have.

SAMPLING ARABLE LAND: FOR HEALTHY CROPS, WEEDY PATCHES, SICK PLANTS, BARE PATCHES, ETC., IN THE SAME FIELD.



1. Draw a map of the land you are working on and number each area being sampled on the map. You will need to create an index so you can identify what each numbered area represents. Eg. B1, B2- Bare soil, W1, W2 - Weedy Patch, H1, H2 - Healthy Plants
2. Mark all the different management practices (treatments) previously used on the property. Examples of treatments are consistent use of particular pesticides, inorganic fertilisers, tillage practices, or irrigation.
3. Take 3-5 core-samples from a single weedy patch and place the core samples in a bag. Then label this bag (using a permanent marker) and index it using a clear numbering system (e.g. W1), marking the reference on your map so you know precisely where it came from. Make some notes on any distinguishing features that may be apparent e.g. “This is in a depression” or “This is where 2 tonnes of lime were stored last year” etc.
4. Move to another weedy-patch and take a further 3 core-samples, placing these core-samples in a different bag. Label and index the bag appropriately (e.g. W2) and mark the reference on the map. Make notes as appropriate.
5. Continue this process until you have collected samples from a representative number of weedy-patches, say 40%, of the total number of weedy patches in the field being assessed. You can then mix theses samples together gently in a sterile container and then put in one bag (no more than 50% of the bag with plenty of air left inside)

DESCRIPTION	INDEX
BARE SOIL	B
WEEDY PATCH	W
HEALTHY PLANTS	H
SICK PLANTS	S
RIDGE	R
DEPRESSION	D

6. Repeat steps 1-5 above for Healthy Plants using a different reference e.g. H1, H2 ... etc. Then repeat the process for sick plants and so on.
7. Send in the post with delivery between Monday – Friday and let us know you have sent it via email or text, with tracking number if available.

SCENARIO B: NO PLANTS GROWING, JUST BARE SOIL (E.G. IN A FIELD THAT WAS RECENTLY TILLED AND NOT YET PLANTED)

1. If the soil is relatively uniform, a single set of three core samples may adequately represent a field, because the soil conditions are very similar despite some differences in texture.
2. Place the core samples in the same bag making sure not to fill the bag more than one third and leave 50% air in the bag.
3. Label the bag/s. This will give you an insight into the general conditions across the field you are working on.
4. Send in the post with delivery between Monday – Friday and let us know you have sent it via email or text, with tracking number if available.

COST OF ANALYSIS PER SAMPLE (ONE BAG IS ONE SAMPLE) IS £55. WE OFFER A DISCOUNT FOR MULTIPLE SAMPLES, TWO SAMPLES IS £100, THREE SAMPLES IS £145, FOUR SAMPLES IS £180.

If you have a discount code, please email to quote the code and your sample ID.

Check out our discount available through the Mycelium Composting Network Membership

https://www.oldtreesoil.org/join

We aim to provide the report the day after receiving the samples.

Please post next working day (preferably to arrive Monday to Friday) to

Soil Regeneration
7 New Westwood
Westwood
Nottinghamshire
NG16 5JD

Please notify us via email or text to say the sample has been posted.
Email: hello@soilregeneration.co.uk
Phone: 07934004670