



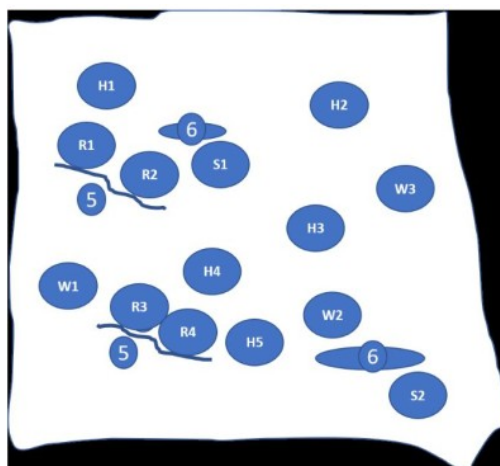
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SOIL TRANSFORMATIONS

Compost or Soil Collection Instructions for Microbe Assessments

Supplies Needed

- An apple corer, soil core sampler, or trowel
 - Resealable plastic sandwich bag (i.e. sample bag)
 - Permanent marker
 - Paper and pen to sketch a map (for soil samples)
1. Contact us to schedule your assessment(s) so we can assess your sample(s) in a timely manner since it (hopefully) contains live organisms.
 2. Collect material- Minimum soil/ compost temperature should be 50° and material freshly collected to ensure the biology is active. Using an apple corer, soil core sampler, or trowel, take approximately 1 tsp from different areas based on your scenario below:
 - **For compost**- take approximately 1 tsp from a minimum of 5 different areas from a small compost pile or 20 different areas from a large windrow, and mix in a sample bag. Take the teaspoons from various locations and depths within the pile to ensure that the sample is representative of the entire pile.
 - **For a bare field** (no plants growing)- Sketch a map of the field. Take at least 3-4 **random** core samples from each of 5-6 areas per acre (more if the field is larger) ensuring that they are well distributed over the area of the field you are working on. Avoid areas that are not representative of the field (e.g. boundary edge, ridge line, or a depression). Mark the areas you are sampling on the map, as this information may be useful later, particularly if you get some unexpected results.
 - **For a field that has varying conditions** (e.g. Weedy Patches, Healthy Plants, Sick Plants, Bare Patches) within the same field- Sketch a map of the field indicating the different conditions. Create an index and label the different areas as shown here:



Description	Index
Weedy Patches	W
Healthy Plants Patches	H
Sick Plants Patches	S
Bare Soil Patches	4
Ridge	5
Depression	6

Take at least 3 core samples from a *single* weedy patch and place the core samples in the sample bag. Follow steps 3-5. Move to another Weedy Patch and take another 3 core samples and place in a *separate* sample bag. Follow steps 3-5 for this sample.

Continue this process until you have collected samples from a representative number of weedy patches, approximately 40%, of the total number of weedy patches in the field being assessed.

Repeat the steps above for Healthy Plants *using a different reference* e.g. H1, H2, etc. Then repeat the process for Sick Plants and so on. Comparing results will offer you an insight into the overall state of the land you are working on.

3. Do not fill a sample bag more than half-way with material. (Note: to reduce the amount of sample material, you may combine and thoroughly mix the sample material separately, in a sterile container, and then place a smaller amount of the mixture in the sample bag).
4. Seal the bag with the air left inside it – do not expel the air from the bag, as this will limit the oxygen available to the biology in the sample which may result in anaerobic conditions being formed.
5. Label the **outside** of the sample bag. Using a permanent marker, write the following information: your name, the date, and the sample name (e.g. field 1 “before,” squash patch w/ weeds, Weedy Patch 1, or something else to identify it.) Do **not** put any paper inside the sample bag, as this will become food for microbes and distort the results.
6. Deliver sample to the lab at the above address unless other arrangements have been made.

Liquid Sample Collection Protocol (e.g. Compost Extract or Tea)

1. Pour liquid into a clean, not-breakable 4 to 8 oz container with a sealable opening (e.g. plastic water bottle with screw cap).
2. Fill the container $\frac{1}{3}$ full with the liquid you want to have assessed. Leave the remainder of the container empty to maximize head space for air exchange.
3. Once the screw cap is tightly sealed, cover it with duct tape and place it in a sealed plastic bag.
4. Using a permanent marker or affixed label, label the outside of the container with your name, the date, and the the sample name.
5. Deliver the sample to the lab at the above address unless other arrangements have been made.

These are general guidelines, but we know there are different circumstances. So, please contact us if you have questions about collecting samples. We are here to help you cultivate a healthier soil community so you can grow healthier plants!