Compost Power Lab

Sampling Protocol

- Please, notify the lab prior to taking and shipping the samples
- Take your samples the same day as you ship them
- Ship your samples to:

Sofya Brown,
Compost Power Lab
2532 NW 223rd Street
Lawtey, FL 32058

Soil Samples

You will need:

- an unused sandwich-size re-sealable plastic bag (one bag per sample)
- an apple corer or a trowel
- a permanent marker
- a sterile container and mixing utensil (optional)

For uniform conditions - for example, no plants growing, just bare soil (e.g. in a field that was recently tilled and not yet planted), or a flat uniform lawn with the same type of grass showing similar health:

1. Randomly choose 3-4 areas per field to take soil cores, ensuring that they are well distributed over the area of the field you are working on. Avoid going right to the boundary of the field and to any areas that are not representative of the field e.g. the ridgeline or a depression.
2. Push aside any mulch or plant residue from the sampling area prior to taking the soil cores. Using an apple corer (or a trowel), take soil cores of 3 inches deep and place all cores in the same bag. Label the bag with the sample name and date.

For any single sample, please ensure that you do not fill the 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 sandwich bag).

For varying conditions – a field with healthy and sick plants, weedy patches, different types of crops, etc.:

1. Sketch 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 (for example, weedy patches – W1, W2, W3…, healthy plants areas – H1, H2, H3…, sick plants – S1, S2, S3…, etc.)

2. For each category, randomly choose three areas to take the samples. Push aside any mulch or plant residue from the sampling area prior to taking the soil cores. For every sampling area, using an apple corer (or a trowel), take three soil cores of 3" deep and place all three cores in the same bag. When sampling around trees or shrubs, take the soil cores from the mid-point between the trunk and the dripline.

3. For example, to sample weedy patches, take at least 3 soil cores from a single weedy-patch and place the cores 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", etc.

   Move to another weedy-patch and take further 3 soil cores, placing these cores in a *different* bag. Label and index the bag appropriately (e.g. W2) and mark the reference on the map. Make notes as appropriate.

   Continue with the third weedy patch and take further 3 cores, placing these cores in a different bag. Label and index the bag appropriately (e.g. W3) and mark the reference on the map. Make notes as appropriate.

   Comparing results should give you a good indication of what is happening across your weedy patches.

   You may find that in most cases the conditions are similar, but that there are some patches that are very

different to the average.

4. Repeat the same steps above for Healthy Plants using a different reference e.g. H1, H2 ... etc.

5. Then repeat the process for Sick Plants, and so on.

   Comparing the results from each of these areas will offer you an insight into the overall state of the land you are working on.

For any single sample, please ensure that you do not fill the 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 sandwich bag).

Seal the bag with the air left inside it – that way the microorganisms have oxygen to breath. Ideally, please package your sample(s) in a small box or padded envelope to protect it from impact, which may break the seal of the bag, resulting in compaction of the sample.

Please print and complete the Microscope Analysis Submission Form and include it in the package containing your samples. Each plastic bag containing a sample should be clearly labeled (using permanent marker or a label on the outside of the bag) with a Sample Name that matches the Sample Name provided on the Microscope Analysis Submission Form.

An overnight shipping is ideal and will provide the most accurate results, but 2-3 day delivery is acceptable for solid samples in cooler months. Please, send us the tracking number when your samples are shipped.

Compost Samples

You will need:

- an unused sandwich-size re-sealable plastic bag (one bag per sample)
- a sterile spoon
- a permanent marker

Using the permanent marker, write the sample name and collection date on the plastic bag.

Take a spoonful from a minimum of 5 different areas from a small compost pile or 20 different areas from a large windrow and mix in a bag. Take the spoons from various locations and depths within the pile and subsequently combine them into a single labeled sandwich-sized plastic bag. Doing this helps ensure that the sample is representative of the entire pile.

For any single sample, please ensure that you do not fill the 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 sandwich bag).

Seal the bag with the air left inside it – that way the microorganisms have oxygen to breath.

An overnight shipping is ideal and will provide the most accurate results, but 2-3 day delivery is acceptable for solid samples in cooler months. Please, send us the tracking number when your samples are shipped.

(904) 482-5985 www.compostpowerlab.com sofya@compostpowerlab.com

Liquid Samples (Compost Extracts and Teas)

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). Clean the inside of the container if you are not certain that the bottle held only water previously.

2. Fill the container ⅓ 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. Be sure that the container is clearly labeled with the name of the sample on the *outside* using a permanent marker or an affixed label.

5. Choose an overnight shipping for liquid samples, as biology in liquids is less stable than in soil, and every hour counts to the accuracy of the results.

   If you live in an area where an overnight shipping cannot be arranged to our lab in Florida, please let us know, and we will do our best to connect you with another Soil Food Web Lab that is closer to you.