

Collecting and Sending Soil Samples for Analysis

1 Send your soil samples to

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Vancouver, BC
V5S 4A1

2 Please note the following

- It is ideal that samples are received by our lab within three - five days after collection.
- We require a **minimum volume of three cups per sample**.
- Do not include ice packs with your sample.

3 Supplies needed for sampling

- Resealable sandwich bag
- A soil sampler probe is best; if not available, use a garden spade or shovel (sharpshooter or drain spade style)
- Permanent marker/pen
- Small, clean bucket

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4 Biological Soil Sampling Principles ¹

4.1 Field sampling design

- What questions do you have about your site?
- Clearly define your [sampling goals](#) and determine the [number of necessary samples](#).

4.2 Examples of questions around your sampling goals

- Do you want to assess the overall biological community of a management unit² (zone)?
- Do you want to compare the biological community between different areas on your farm?
 - At least one sample will represent a distinct area on your farm.
- Do you want to identify and troubleshoot problem areas on the farm?
 - For instance, crops in a specific area are exhibiting nutrient deficiencies. At least one sample will represent a distinct problem area.

4.3 Determine the number of necessary samples

- Divide fields into sampling units based on management practices, historical crop performance, soil type, terrain, etc.
- For further clarification, please do not hesitate to email jo@rootshootdesign.com

¹ Adopted from: Comprehensive Assessment of Soil Health - The Cornell Framework

² Management unit: an area in a field that is soil sampled separately for biological diversity because of unique management practices implemented against that area.

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5 Steps for sampling

5.1 Sampling Depths:

For cultivated crops, gardens, lawns and pastures: sample at **8 – 15 cm** depth.

For tree and fruit crops, refer to [Sampling Larger Shrubs/Trees](#) section for further instructions.

1. Remove surface debris.
 - a) Make sure to take samples below the plant residue.
2. The best place to take samples from is near the plant's root zone.
3. Push the sampler probe into the soil to the sampling depth and slowly pull up. This will take a sample of the soil (subsample) at several layers which will allow you to see and feel the moisture levels.
 - a) Observe the amount of force needed to push the probe down. If it's very difficult to push down, the soil is likely compacted.
4. Place the subsample in a clean bucket.
5. Repeat **steps 1 - 4** in at least *five to ten different locations* throughout the *management unit*.
 - a) The number of locations will depend on the size of the management unit. The larger the management unit (ex. 1/2-acre vs 3-acres), the more subsamples will need to be collected.
6. Gently mix the subsamples in the bucket to obtain a *representative* composite sample.
7. Transfer three cups of mixed soil into a sandwich bag. Seal the bag but *do not* let the air out of the bag.
8. Label the bag (on the outside) with your own Sample ID using indelible ink (refer to [Labelling your Samples](#) section).
9. If possible, send the samples on the *same day* they are collected. It is ideal that samples are received by our lab within three - five days after collection.
10. If you have a liquid sample (compost extract or compost tea), place your sample in a plastic water bottle leaving 1/3 of the bottle empty and ship overnight so it arrives before noon the following day.

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5.1.1 Sampling Large Shrubs/Trees

This type of sampling is useful when evaluating the biological community below larger shrubs or trees.

Two samples should be submitted, one taken at 0 – 8” depth, the other at 8 – 16” (subsoil layer).

1. Collect around the dripline of the plant. Refer to **D** on the diagrams.
2. Place the soil into a resealable sandwich bag.
3. Repeat **steps 1-2** for the area between the dripline of the plant and trunk/stem. Refer to **X** and **R** on the diagram.

** The number of subsamples will vary depending on the size of the plant. The larger the plant, the more subsamples will be collected from the area.

4. Repeat sampling process with *at least* three trees to obtain a representative composite sample.



Figure A1: Side view of tree

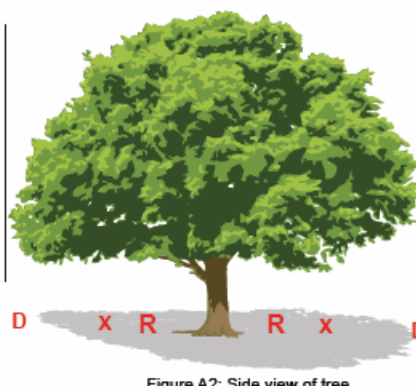


Figure A2: Side view of tree

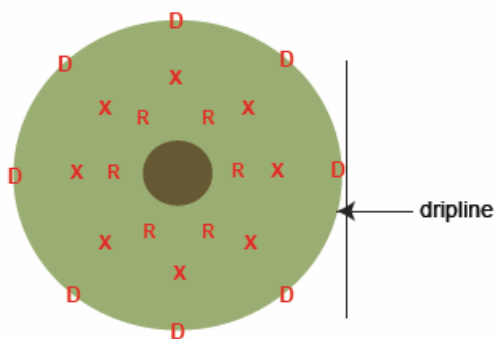


Figure B: Bird's eye view of a tree

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6 Labelling your Samples

1. Label each sample (outside the bag) with your own *Sample ID* using indelible ink.
2. Print the [Sample Label and Contact Information Form](#) on the following page.
3. Reference your own Sample ID and provide as much information about the sample as possible.
4. Complete the [Contact Information](#) section on the form.
5. Include the form with your samples in the mail.

Biological Test Results will be sent via email. A physical copy can be mailed upon request for an extra fee.

Sample Submission Form

***** Please fill and print out this submission form before sending us your samples. *****

Label and Contact Information Form

Send your soil samples to

Jo Tobias
 c/o RootShoot Soils
 7207 Celista Drive Vancouver, BC
 V5S 4A1

We currently only accept cash, cheque or e-transfer as our method of payment.

Contact Information

Contact Name:	Organization:
City, Province:	Postal Code:
Email:	Phone:

Sample Information

Sample ID	Date Collected	Sample Type <input type="checkbox"/> Soil <input type="checkbox"/> Compost <input type="checkbox"/> Other: _____	Other Notes
Select your testing package <input type="checkbox"/> Core Package <input type="checkbox"/> Comprehensive Nematode Package <input type="checkbox"/> Total Bacteria-to-Fungi Ratio <i>only</i> (µg/g)		Plants Present	Plants Desired

Sample ID	Date Collected	Sample Type <input type="checkbox"/> Soil <input type="checkbox"/> Compost <input type="checkbox"/> Other: _____	Other Notes
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Sample Submission Form

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Sample Information

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