

What's in your compost?

It's necessary and important to get the details on the nutrient source present in the compost before using it. The nutrient content will differ from the original organic material source. During the compost process, the carbon content breaks down and water evaporates from the pile, the total volume of the organic material will decrease by up to 60%, which results into nutrients to become more concentrated.

For example, ammonium nitrogen is lost during the compost process, on the other hand organic nitrogen converts to a more slowly released form.

How to sample compost

Equipment required

- Clean, residue-free plastic container
- Spade or pitchfork
- Plastic bags or containers
- Permanent marking pen
- Front-end loader or compost turner if compost piles are large
- General sample submission form

*Submission forms can be obtained online at <https://www.greenterraalliance.com/> and click Analytical Lab.

Taking a compost sample

- Collect 10–15 subsamples throughout the compost pile.
- Use a bucket loader for large quantities of compost. This will help cut the compost into sections for easier sampling.
- Take samples from different depths within the pile.
- Don't take samples from areas that are wet or from the surface of the pile.
- Use a large plastic container to mix the subsamples together thoroughly into one final sample. The final mixed sample should be about one litre in size. This is the sample that is sent to Laboratory Services.
- Don't use glass containers that can break during the freezing process or during transportation to Laboratory Services.

Taking samples from different composting operations

Depending on how compost is stored and processed, follow these additional tips to take the best sample possible.

Compost Bin

- Remove the cover and sides of the bin.
- Mix the compost well before taking subsamples. You can use spade or a pitchfork.

Windrows

- Turn the windrow with a loader or compost turner until the compost is well-mixed.
- Dig cross-sections throughout the windrow and take the samples about 30 centimetres deep.

Compost pile

- Remove any covers.
- Mix the pile if possible.
- Dig samples from several depths and from the sides and top if the pile can't be mixed.

Enclosed container

- Take the container apart to take samples if possible.
- Take samples from the door openings or discharge end if the container can't be taken apart.
- Take samples from several depths.

Bagged

- Take subsamples from several different bags.
- Mix samples together to make a single final sample.

A good compost sample

- has the container lid taped closed
- has a label on each container identifying your name or the farm name
- comes from a compost pile that is well-mixed the same day it's sampled
- is taken from several depths within the pile, not at the surface
- isn't stored in a glass container
- is sent fresh to Laboratory Services as soon as possible, or is frozen if there's a delay