
Soil DNA Sampling Protocol

Sampling Overview

Collect bulk soil samples from designated field blocks for microbiome analysis. Use clean gloves and disinfected tools between sample locations. Place each sample into a labeled soil bag.

Samples should represent the average condition of each field zone. Avoid abnormal or compacted areas unless sampling specifically for comparison.

Collection Instructions

Equipment Needed

- Clean, rust-free soil probe, spade, or shovel
- Disposable gloves
- Isopropyl alcohol or bleach solution for tool disinfection
- Soil bags
- Sharpie or permanent marker

Collection Method

1) Prepare the Area

- a. Remove surface residue or vegetation before sampling
- b. Avoid using any lubricants (e.g., WD-40) on tools.

2) Select Representative Locations

- a. Combine at least ten (10) cores from the area of interest.
- b. Sample in proportion to dominant soil types or topographies.
- c. Ideal soil temperature at collection: 50°F or higher.

3) Take the Sample

- a. Insert the probe vertically (90° angle) to a depth of 6 inches (15 cm).
- b. If using a shovel, cut a furrow slice and take a vertical section from the center.
- c. If compacted, re-sample the area.
- d. Combine all cores into a clean bucket and mix thoroughly.

4) Bag the Sample

- a. Fill a soil bag with at least 5 grams of homogenized soil.
- b. Do not include roots or plant debris.
- c. Label the bag clearly with:
 - i. Field ID
 - ii. Sample reference
 - iii. Depth
 - iv. Collection Date

Documentation

Complete the Rhize Submittal Form or digital metadata sheet. Required fields include:

- Field ID
- Sample Reference
- Collection Date
- Crop Type
- Coordinates

Additional metadata (soil type, irrigation practices, previous inputs) improves analysis.

Storage & Shipping

Time Before Shipping	Storage Recommendation
<3 days	Store at room temperature or refrigerate
3 - 5 days	Refrigerate at 0-6°C (32-48°F)
>5 days	Use frozen ice packs to ship cool

Ship the soil sample bags along with the completed Rhize Submittal Form immediately after collection, allowing up to 5 days at room temperature from sampling to reaching the RhizeBio's Lab.

Ship Samples To:

RhizeBio, Inc.

235 Tuckasee Road, Suite A

Mount Holly, NC 28120

Contact:

[Support@rhizebio.com](mailto:support@rhizebio.com)

919-351-2038