

IMPORTANT: Once a soil sample is collected for biological analysis, it needs to reach the lab at Trace Genomics as soon as possible (see shipping instructions below).

To maintain sample integrity:

Collect early in the week

Prevent sample overheating prior to shipping

Labeling Sample Bags

Sample bags should be labeled with the sample name and field written on the order form.

For example:

Sample name on order form: #1

Write on bag: Soil #1, [Field Name]

Selecting Sample Locations

ANNUALS

- Follow grid, zone or composite approach.
- Collect samples from within rows and between plants.
- Collect at the same depth as for nutrient analysis when soil is not wet or frozen.

PERENNIALS

- Sample within the plant row, not in between rows. The goal is to sample around the roots and root hairs.
- Cores should be collected from the irrigation wetting zone, but we advise not to sample directly below an emitter and aim ideally between the trunk or vine and emitter.

Size of Probe

$\frac{3}{4}$ inch or 1 inch

Depth and Quantity of Cores

Collect and place cores directly into the sample bag until the bag is $\frac{3}{4}$ full.

If sampling at 0-6"

This is about 8-10 cores per sample

If sampling at 0-8"

This is about 6-8 cores per sample

If sampling at 0-12"

This is about 4-6 cores per sample

Carbon sampling: 0-12" or 0-30cm

Amount in Bag

500-700 grams

1 lb or 1.5-2 cups or $\frac{3}{4}$ of our sampling bag

Area

Select at least 3 locations to sample per field. Record GPS coordinates for each sample.

GRID—go to the center point and go 30 ft radius and sample in a circle around center point.

ZONE—zigzag through the zone and collect cores quantity needed.

Soil Moisture

Moisture levels of 4-25% are ideal. Samples that are too dry can be difficult for biological analysis. Also avoid sampling soils that are waterlogged or above field capacity; wet samples are difficult for the lab to process.

Cleaning Probe

We recommend cleaning your equipment with an alcohol solution after each field if possible.

Probe Lubricants

Please avoid lubricants. Lubricants can impact the microbial communities and biological analysis.

Shipping Instructions

To maintain sample integrity, we ask for the following shipping/sampling protocol:

- Domestic prepaid FedEx labels are pre-filled with our shipping address: **615 S Bell Ave, Ames, IA 50010**
- Include your TraceVIEW submittal form with your order number in your package*.
- Avoid shipping on Thursdays/Fridays as FedEx will not ship over the weekend.
- If you need to maintain samples over the weekend, place samples in refrigerated conditions to avoid prolific microbial growth or contamination.
- If possible, it is helpful to place samples in a cooler while sampling and transporting samples to minimize temperature change.

***Failure to include order number in your package may result in a delay of results delivery.**

NOTE: As samples are collected, keep in mind that the following information is required to start an order in TraceVIEW:

- Sample Name
- Sampling Date
- Current Crop
- Latitude/Longitude
- Minimum/Maximum Depth (with Units)
- Core Diameter (with Units)

Customer Support

Do you have a question that wasn't answered in this guide? We're here to help!

Additional supporting documentation regarding sampling practices can be found on TraceVIEW's Help Center, which is accessible through your TraceVIEW account.