

# How to Take Soil Samples

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1. Select a sampling method:
  - a. 15 random samples per field (20 for larger fields, > 80 acres)
  - b. Management zones within fields (10-15 random cores per zone)
  - c. Grid (select a grid size and method to file sample locations)

Sampling areas should represent a uniform area which could include the whole field or the reason for choosing management zones. Crop and soil properties that might influence sampling areas choices include:

Historic yield differences, variable crop growth, slope differences, soil texture, soil color, drainage, and past management that might include cropping and fertilizing differences.

2. Select a sampling tool:
  - a. Hand-held soil probe (small diameter core with open tube and T handle)
  - b. Truck mounted hydraulic soil probe.
  - c. Spade or garden trowel (for shallower depths)
3. Try to avoid taking samples from areas un-representable to the main area sampled such as animal feeding areas, hay and straw storage areas, waterways, terraces, old fence rows, and areas already fertilized.
4. Soil sample depth. Surface soil sampling depth is usually from 0-6 inches. For lower rainfall areas a subsurface (6-24 inch) sample can be useful for residual nitrate nitrogen, sulfate sulfur and chloride.
5. The amount of sample obtained from gathering 10-20 hand probe cores is more than enough for submission to the lab. Use only a plastic pale or other container to hold composite samples. Do not use galvanized metal or rubber containers. Thoroughly mix the cores by hand or with some automated method and fill soil testing bag to indicated mark.
6. Sample shipment and storage:
  - a. If samples are to be stored, freeze immediately.
  - b. Moist samples should be kept cool and shipped to lab quickly as possible.
  - c. Samples can be air dried and stored prior to shipment if freezer space is limited.
  - d. Do not store moist samples without freezing.
  - e. Do not use extensive heat for drying (< 95 degrees Fahrenheit)
7. Mail soil samples to AgLab Express, 3600 South Minnesota Ave. Suite 200, Sioux Falls, SD 57105, or drop them off at the lab located at I-229 and Minnesota Ave. Exit 3, or call for possible sample pickup 605-271-9237 or email: [anthonybly@aglabexpress.com](mailto:anthonybly@aglabexpress.com)