

agronomy

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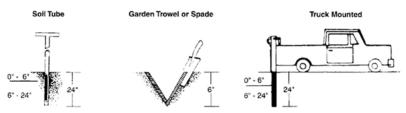
SOUTH DAKOTA STATE UNIVERSITY® AGRONOMY, HORTICULTURE & PLANT SCIENCE DEPARTMENT

Taking an Agricultural Field Soil Sample

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Proper collection of soil samples is extremely important as the accuracy of the soil test depends on the quality of the soil sample provided to the lab. Below are guidelines to obtain a good soil sample.

1. Any of the below soil sampling tools can be used.



- Each soil sample should represent a uniform area of the field.
 Assess your field and divide up soil sampling areas by differences in:
 - a. Texture (Percent sand, silt, and clay)
 - b. Color
 - c. Slope
 - d. Amount of erosion
 - e. Drainage
 - f. Past management (e.g. fertilizer history, cropping system, or land use)



- 3. Avoid or sample separately field areas such as: Dead or back furrows, old straw piles, waterways, terraces, fencerows, fertilized lands, and any unusual spots.
- 4. Take 15 to 20 soil samples from each uniform area. Mix thoroughly and take a pint of this composite (mixed) sample to send to the soil-testing lab. Make sure to find and follow the soil sample labeling requirements of the soil-testing lab you will be sending your samples to.
- 5. Samples taken for the nitrate-nitrogen, sulfur and chloride tests should be taken to a minimum depth of 24 inches. Separate these 24-inch deep soil samples into 0 to 6 and 6 to 24 inch depth increments and keep them separate as you mix, dry, and send them to the soil-testing lab. A 0 to 6-inch deep soil sample is sufficient for phosphorus (P), potassium (K), pH, organic matter, zinc (Zn), iron (Fe), manganese (Mn), copper (Cu), boron (B), and soluble salts.
- 6. Repeat the above sampling procedure for each uniform area of the field you want tested.
- 7. It is best to air dry the sample before mailing and not to use heat for drying. Soil samples that will be tested for nitrate-nitrogen should be air dried as soon as possible.
- 8. Avoid using galvanized or rubber objects when collecting samples for zinc analysis.

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