

SAMPLING PROCEDURE

Soil Tests Can Be No Better Than The Sample Itself

1. USE ANY OF THE TOOLS SHOWN BELOW TO TAKE SAMPLES. TAKE SAMPLE TO THE PLOW DEPTH (USUALLY 8-12").

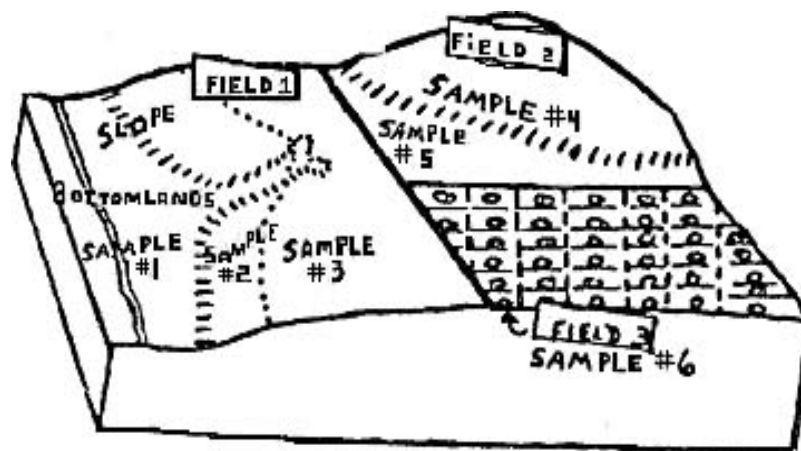
SOIL TUBE



SOIL AUGER



SPADE



2. EACH SAMPLE SHOULD REPRESENT A UNIFORM AREA. SIZE UP THE AREA AND OBSERVE THESE VARIATIONS.
Differences in texture (Sand, Silt, Clay), Color, Slope, Degree of Erosion, Drainage, Past Management (Fertilization, Rotation, ETC.)
3. Take 20 to 30 samples from each uniform area in a systematic manner as shown for field 3 above. Mix thoroughly in a plastic container and fill soil sample bag at least two-thirds full. This is the composite sample that represents the field or area. Label each container with your name, address and the number of sample corresponding to the number on the information sheet.
4. Avoid (or sample separately if of interest) such areas as dead or back furrows, old straw piles, waterways, terraces, fence rows, and unusual spots.
5. Repeat the sampling procedure outlined on each uniform area you want tested.
6. **Air Dry The Sample Before Mailing.** Do Not Use Heat For Drying.

IMPORTANT

Your sample will be tested for available zinc and iron; rusty tools will contaminate the sample with iron, and galvanized or brass containers will contaminate it with zinc. The resultant soil analysis could indicate a sufficiency of these elements when actually a deficiency exists.

ALL EQUIPMENT MUST BE ABSOLUTELY CLEAN

SOIL TESTS AVAILABLE

Test	COMMENTS
Routine- pH, soluble salts, organic matter, nitrate-nitrogen, phosphorus, potassium, zinc, iron, lime (estimate), texture (estimate), copper and manganese.	Basic evaluation for characterizing the soil fertility status for growing crops. A fertilizer suggestion is given. Normally this test is sufficient unless a special problem is suspected.
Subsoil Nitrate	Evaluation of nitrate supply below soil surface. Fertilizer nitrogen suggestion based on routine soil test of surface soil is adjusted if subsoil nitrate is unusually high.
Subsoil Salinity	It is important to determine the salt content of subsoil for crop management.
Sodium Evaluation - sodium adsorption ratio (ratio of sodium to calcium and magnesium), gypsum, and % lime.	Some Colorado soils contain excess sodium. This test determines whether or not chemical amendments such as gypsum or sulfur will be effective and the amounts of these materials needed.
Routine plus Sodium Evaluation	See above explanations. A suggestion for fertilizer and/or amendments for sodium reclamation is given.
Sulfate	Colorado soils usually have sufficient quantities of this nutrient.
Boron, Molybdenum, Cadmium, and Lead	In some situations, such as near mining sites boron, molybdenum, cadmium, and lead may be found at toxic levels.

Information on additional tests (soil, mine soil, mine spoil, water and plant) is available from you local CSU extension agent or the Soil, Water and Plant Testing Laboratory.