

Soil-Water-Plant Analysis & Consulting

Never have reliable soil tests been more needed or valuable!

PROCEDURE FOR TAKING GOOD SOIL SAMPLES

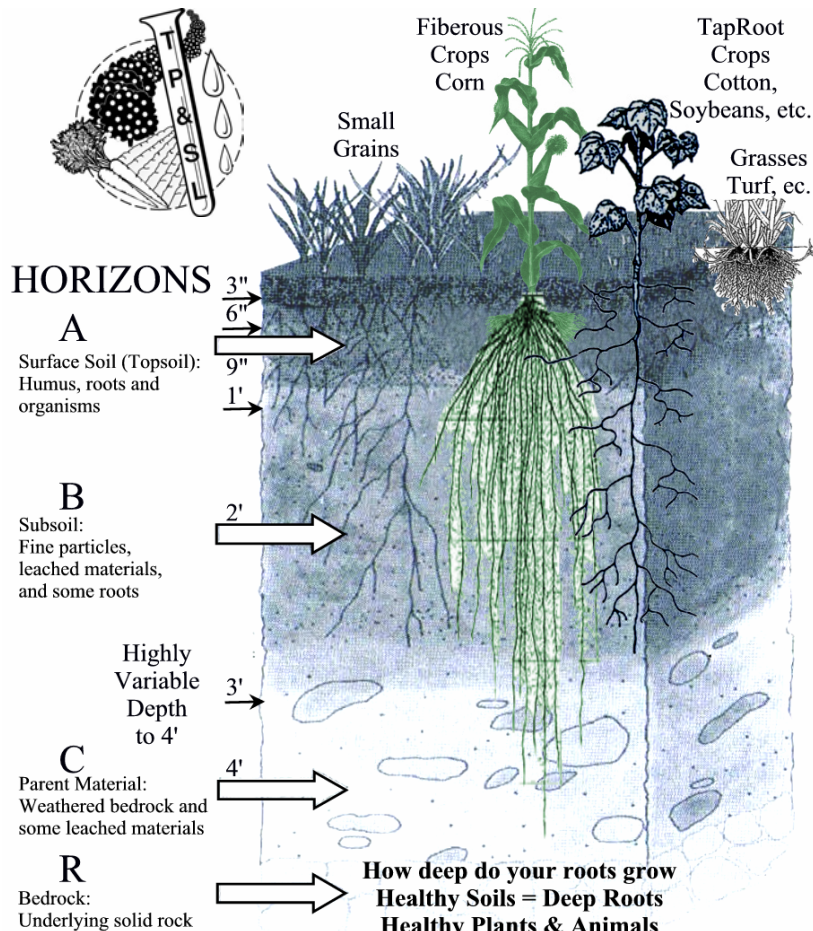
Soil Tests Samples must be representative of the major root zone.

Soil tests can only tell you what is in that hand full of soil you send in!

MAP AREAS with a permanent numbering system. Make one **composite sample** that is representative of a uniform area for each unit sampled. For high value crops sample in 5 to 20 acre units. Up to 40 to 80 acres can be effective for uniform soils. **IF YOU CAN SEE A DIFFERENCE**, it will test differently. **TAKE SPECIFIC SAMPLES** so the ranges of difference is known to use judgment in varying treatments. **DO NOT AVERAGE WIDE DIFFERENCES IN A SINGLE SAMPLE.** Confine problem samples to the specific area such as the one inch of soil next to a dying seedling. If salts are suspected always take separate specific samples from the same hole, of the top 0-6" and then separate 12" increments through the soil profile; to 4' depth or bedrock. **Sample poor, best & average portions of field separately.**

TAKE several slices or cores of soil at random over the area. The larger the area the more cores needed. Always take at least 4 to have a mixed **representative-composite sample**, even on small areas or beds. **HOW DEEP?** Through the major root zone, **Lawns-Pasture 0-4" to 6"**. **Beds or fields 0-12"**. Also for long term evaluations and deep rooted plants, sample the next 12" down from the bottom of the first sample, **keep subsoils separate**. For pecans, fruit, citrus, etc. sample in 12" increments through 3' or 4' depth.

OPEN a hole with a shovel, spade, trowel, etc. from the surface through the root zone. Lay that soil aside. WITH SHOVEL remove a 1" thick slice from the smooth side of the open hole that goes from the surface (do not scrape off crust) through the root zone. With the slice on the blade of the shovel, rake the sides off with a knife, trowel or hands so a ribbon of the root zone soil 1 inch wide and 1 inch thick can be placed in a clean container, plastic is best. Repeat at random across area.



Fill Out Lab Submittal Form

MIX THOROUGHLY - the several representative slices, remove all foreign matter; roots, stalks, rocks, etc. Be sure the **surface crusts are mixed into this sample** as they can contain soluble fertilizer salts that will affect plants, this makes a composite-representative sample. Place in a plastic bag (zip-lock) - identify each sample.

HOW MUCH? Send the lab **at least a full cup(8 oz), but not over 2 cups (1 pt).** **Do not place paper with wet soil** - paper decomposes rapidly. **HOW OFTEN?** After each crop for optimum management of top & subsoil. Subsoils 3-4 years for sustainability and salt control. **FOR COMPOST** or other **organic material samples**, send **4 to 8 quarts of 20+ hand grab samples** taken at random around and in pile, to be a representative composite sample. SOIL SUITABILITY TEST or problem areas should be sampled to 4 feet or parent material in one foot increments - Keep each separate. For long term evaluations repeat every 3 to 4 years. Subsoils change slowly but are very important. **SEND INFORMATION for each sample.** Sample depth. HISTORY of crops, fertilizers, results, problems. CROPS TO BE grown and yield goals. IRRIGATION method. TYPE OF TEST desired:(comprehensive, micros, special, subsoil, etc.) SEND payment with sample to help keep costs low. (Fill in the information side of this sheet) **International Samples** must be thoroughly dried - Ask for import permit.

