

# Taking A Good Soil Sample

**Correct Procedure And Handling Of Your Sample Is CRUCIAL To The Accuracy Of Your Results!**

- ◆ **Soil Samples must be representative of the major root zone in the area of interest.**
- ◆ **Soil Tests can only tell you what is in that dab of dirt you send to us!**

◆ **FILL OUT Lab Form, Sample Bag and your return address on Shipping Box FIRST.**

◆ **MAP SAMPLE LOCATIONS with a permanent identification system.** Future samples will be taken from these same locations. If necessary, use a GPS receiver to accurately locate sample sites.

◆ **TAKE AT LEAST FOUR SAMPLES** to make a representative composite lab sample for a **specific area** – even small beds or areas.

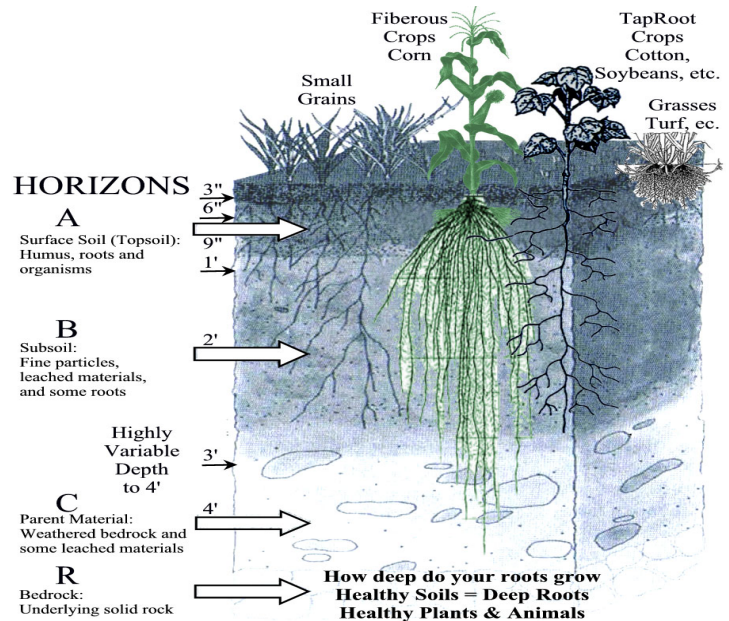
◆ **IF YOU SEE NO SOIL OR PLANT DIFFERENCES OVER THE SPECIFIC AREA OF INTEREST**, take samples over an area of 5 to 20 acres for high value crops or an area of up to 40 to 80 acres for other crops for each lab sample. **THE LARGER THE AREA, THE MORE SAMPLES NEED TO BE TAKEN.**

◆ **IF YOU SEE SIGNIFICANT DIFFERENCES IN PLANT PERFORMANCE OR SOILS**, take samples from these areas and make separate composite lab samples. **DON'T COMBINE SAMPLES FROM WIDELY DIFFERING CONDITIONS INTO ONE LAB SAMPLE!** Submit separate samples from Poor, Average and Best areas.

◆ **PROBLEM AREAS** – Confine samples to the specific area, such as the root zone around dying seedlings, sprouts, etc. These samples should be taken at no more than four foot spacing.

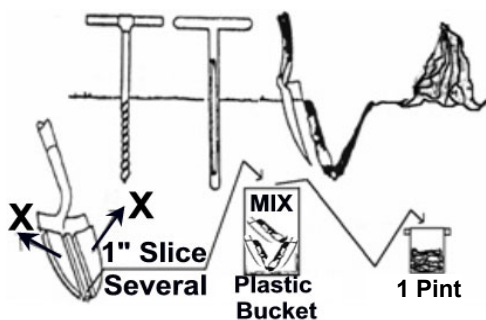
◆ **SAMPLE DEPTHS** should be from the major root zone – **LAWNS - PASTURE - TURF: 0 to 6"**. **FIELD CROPS & BEDS: 0 to 12"**. ALSO – for deep-rooted plants and long-term evaluations, sample the next 12" down from the bottom of the first sample – do not combine samples. **KEEP SUBSOILS SEPARATE.** For **TREES**, sample in 12" separate increments down to three or four feet.

◆ **IF SALTS ARE SUSPECTED** – take separate isolated samples from the same hole from 0 to 6", then in 12" increments to 4 feet or bedrock. Do not combine samples.



## How To Do It -

**THE GOAL IS TO OBTAIN A UNIFORM SAMPLE CROSS-SECTION FROM TOP TO BOTTOM.**



◆ **IF YOU HAVE A SOIL SAMPLE TOOL**, the uniform sample cross section requirement is already handled.

◆ **IF YOU DON'T** – The goal is to obtain a uniform volume of soil from the top of the sample section to the bottom.

◆ **WITH A SPADE OR TROWEL**, make a "working" hole from the top to the bottom of the sample section. Set that soil aside.

◆ **SHAVE THE SIDE OF THE HOLE** with the tool, taking about a 1" thickness of uniform width from top to bottom.

◆ **SCRAPE THE SAMPLE FROM THE BLADE OF THE TOOL** – the desired final width of the sample is about 1".

◆ **IF YOUR SOIL IS LOOSE OR CRUMBLY**, shave short lengths of constant width, taking care to conserve these parts of the sample.

◆ **INCLUDE THE TOP CRUST IN THE SAMPLE.** It can contain fertilizers which will be part of the composite representative sample.

◆ **COLLECT THE SPECIFIC AREA SAMPLES IN A PLASTIC BUCKET AND MIX THOROUGHLY.** Break up clods to insure uniformity of the composite sample.

◆ **IF THE SOIL IS VERY WET**, please pre-dry to remove excess water, as this could leak during handling in shipment. **Dry sample at room temperature. Keep out of the sun and do not use heat!** Heat will alter the chemistry of the sample.

◆ **PLEASE REMOVE FOREIGN MATERIAL** such as twigs, stems, rocks, roots, stalks, trash, etc.

◆ **GENERAL PACKING & SHIPPING** – Place about two cups of each composite sample into plastic zip-lock bags. Securely tape around each bag to prevent them from opening during transit. Use packing to prevent the bag(s) from moving around in the shipping box. **Be sure to clearly mark the bags with sample identifications. Put lab forms in the box with the samples – DO NOT PUT ANY FORMS INTO SAMPLE BAGS.** USPS flat-rate boxes may be used.

◆ **FOR SINGLE-TEST PACKAGES** – fill sample bag to fill line with composite sample – about two cups. Fold top of bag to the front (printed side), once. Wrap ties around rear to secure the bag closed. Slip sample bag and lab form into shipping box – **DO NOT PUT LAB FORM IN SAMPLE BAG!** Fold up one end of the box, inserting the locking tab. Fold up lab form and slip into box. The sample bag snugly fits into the box on purpose – it keeps the bag from excessive movement during expected rough handling in shipment. Fold up the remaining open end, inserting the locking tab. You may tape ends, if convenient, but not required. Apply postage.

◆ **HOW OFTEN TO TEST** – At least once a year or after each crop for optimum management – different crops remove different amounts of nutrients. Subsoil changes slowly but is very important – sample every three to four years.