



## HOW TO TAKE GOOD SOIL SAMPLES

To obtain a good soil sample, please follow these instructions:

**WHEN?** Soil samples taken in late summer and fall are better than those taken in winter through early spring because they come closer to representing the nutrient status in the soil as it affects crops. Avoid taking samples when soil is wet or frozen because of the difficulties encountered in handling and mixing. Do not take soil samples immediately after applying lime or fertilizer; wait several months, or even longer if dry weather prevails. Don't sample if you recently treated your soil; just a pinch of fertilizer or lime in a sample will give misleading results.

Send samples well in advance of the need for recommendations. Allow about three weeks for processing the samples and returning the information to you. Samples sent to the laboratory between March and June may take longer to process. Avoid delays by sending samples between July and December.

**WHERE?** To adequately assess the average fertilizer which plant roots encounter in soil, a minimum of 15-20 randomly selected soil borings should comprise the composite sample submitted to the laboratory. If the field is large, subdivide it in 10-acre sections and take at least 30 borings from each 10 acres. Seven to 10 borings will suffice for small areas such as lawns and gardens.

Exclude or take separate samples from areas not characteristic of the field, lawn, or garden: wet spots, eroded areas, bare spots, back furrows, field edges. If your field has several different soil types or crop conditions, send a separate sample for each. No single sample should represent an area larger than 10 acres.

**HOW?** Using an auger, shovel, or spade, and a CLEAN PLASTIC pail or container, take small uniform cores or thin slices from the soil surface to recommended depth (as given in the following paragraph). Gently crush the soil and mix it thoroughly, discarding any roots or stones. Wet soil must be AIR-DRIED in a shady spot and on a clean surface before mailing. DO NOT HEAT THE SAMPLE. Send at least 1/2 pound of the DRY soil to the laboratory in the special plastic bag which is in the envelope of the soil test mailer and enclose inside the cloth bag. Do not send wet soil as it costs more to mail and will delay your results. Fill out the information sheet completely, including your name and address written legibly.

**HOW DEEP?** Sample the soil layer in which your crop roots will be (or are) growing. PERMANENT PASTURES—Remove organic debris from soil surface, then sample top 2 inches. MEADOWS—Sample top 4-6 inches after removing surface organic debris. ROW CROPS—Sample soil to depth of tillage. NO-TILL CROPS—Sample two depths: a) top inch; b) from 1-6 inches. VEGETABLE GARDENS & PLANTING BEDS—Sample the soil to tillage depth. LAWNS & TURF—Sample top 2 inches in established lawns and turf, top 4 to 6 inches in soil in which a lawn or turf is to be established. Remove organic debris from soil surface prior to sampling. If you are preparing a new lawn or turf as recommended in WVU Misc. Pub. 405 "New Lawns" the subsoil should be tested separately at a depth of 6 to 12 inches.

**HOW OFTEN?** ROW CROPS & MEADOWS—every one to two years or whenever crops are rotated. PERMANENT PASTURE—at establishment and every three to four years. VEGETABLE GARDENS—at establishment and in fall of each year. LAWNS & TURF—at establishment and every three to five years.

This soil test mailer is good for having ONE soil sample analyzed for pH, lime requirement, and tests for available phosphorus, potassium, calcium and magnesium. Upon request and for a nominal fee, tests for other elements can be made. Contact your WVU County Extension Agent for details, or write WVU Soil Testing Lab., Morgantown, 26506-6108. You can make inquiries on lab results by calling 293-6023 x4312.