

Instructions for Taking Horticulture Samples

Soil tests are only as accurate as the samples submitted for analysis. Therefore, proper collection of soil samples is extremely important. Special bags for submitting soil samples can be obtained free from your Iowa State University Extension County office.

1. Obtain at least one separate composite sample for each acre, or less if conditions vary. For lawns, one composite sample is sufficient, or at most one each from front and back lawn. A composite (representative) sample consists of up to 15 cores.
2. Obtain a separate composite sample for each different soil type. Difference in soil type can be noted by texture, color, drainage, and slope.
3. For each composite sample use a soil probe, soil auger, spade, or garden trowel and obtain a small core of soil from at least 10 to 15 different places in the same area. Place the cores in a clean bucket and mix well. Take about one cup to one and a half cups of the soil and place in sample bag to submit for testing.
4. To obtain the core, scrape away the surface litter. With one of the tools mentioned above, take a small core from the plow layer (0 to 6 inches deep) for vegetables, flowers, and fruits, and place in the bucket. In case of row crops, take the cores between the rows.
5. For ornamental trees and shrubs, take the soil cores to a depth of 12 inches.
6. In lawns and other established turfgrass areas, take the cores to a depth of 3 inches below the sod. Do not include the "sod" plug or cap in the sample.
7. Label each sample bag with a number and your name. Number the samples in consecutive order as 1, 2, 3, etc. Keep a record of these numbers.
8. Samples should be sent to the Soil and Plant Analysis Laboratory in a field moist condition. Do not dry the samples before mailing.
9. Mail the samples to the Soil and Plant Analysis Laboratory within 24 hours after they are taken. If this is impossible, put the samples in the refrigerator or deep freeze until they can be mailed.
10. Be sure to keep a record for yourself of the area from which the samples were taken. This sheet will not be returned to you.
11. Magnesium analysis is only available for vineyards. Interpretation for magnesium will not be made by the lab for any other crops.
12. SMU are soil map units. Use the soil survey map for your county to determine soil types in the areas to be sampled before collecting sample cores. The soil survey for a particular county is available at most ISU Extension County offices.
13. Visit [http://www.agron.iastate.edu/soiltesting/howto\(hortcrops\).htm](http://www.agron.iastate.edu/soiltesting/howto(hortcrops).htm) for additional instructions on how to take samples for tree fruits and grapes.

Remember: Overuse of chemical fertilizer may lead to ground and surface water contamination in homes, farms, and communities.

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