



**Sierra
Environmental
Monitoring, Inc.**

Determining the soil characteristics and nutrients can be a very useful tool for gardeners, landscapers and commercial growers. When it comes to getting accurate information from the analysis of the soils, it is very important to obtain a representative sample of the soil. So here are a few tips to get the best soil sample possible so that the analytical results are meaningful and your plants will get the best growth conditions:

1. Sampling can be done at anytime but it should not be done immediately after fertilization or the application of manure. You should wait for 6 to 8 weeks after the application of fertilizer or 8 to 10 weeks after the application of manure before taking a sample.
2. Samples may either be moist or dry when submitted. Note though that moist samples may take longer for analysis due to the samples having to be dried at the laboratory.
3. Sample within the planting beds not in areas that will not be or are not currently planted.
4. If you know that the planting areas are substantially different, such as they are located in different drainage's or have a different soil type, then you should submit separate samples for each location and/or soil type.
5. Avoid areas that you know to be atypical for the soil type such as compost or manure beds. Remember you want to test only the soil that will be or already is planted to determine what amendments should be added to the soil to make it as productive as possible.
6. Avoid contaminating the sample. Be sure that the implements used to take the soil sample are all clean. A very small amount of fertilizer can have a dramatic affect on the results of the soil analysis.
7. The best technique for soil sampling requires taking multiple sub-samples for the planting area and compositing them into one well mixed sample for submittal to the laboratory. The number of sub-samples taken is dependent upon the area of the planting bed. The more the sub-samples taken the better, that is, within reason. Smaller areas (plot sizes less than 50 sq. ft.) 5 to 10 sub-samples should be taken and composited while for larger areas (plot sizes greater than 50 sq. ft. and less than 100 sq. ft.) 10 to 20 sub-samples should be taken.
8. For most annuals and perennials the roots grow in the top 6 to 9 inches of the soil. So when you are taking samples it is desirable to take the sample down to at least 9 inches of depth from the soil surface. If there is leaf litter on the soil surface you should remove the litter before sampling.
9. Samples can be taken with soil-sample probe, auger, a spade or a shovel. If a shovel or spade is used, dig a V-shaped hole to about 9 inches and then take a slice of the wall of the hole with the spade of the shovel. Use this slice for the sub-sample.
10. Place all sub-samples in a clean plastic bucket and mix well. From that bucket take a sufficient amount of the composited sample to fill the soil bag or zip-lock style bag (quart size). Be sure to label the bag using a writing utensil with permanent ink.
11. Fill out the appropriate paper work and submit the samples to the lab for analysis.

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