

Soil Sampling Instructive - Forestry Crops

Correct Soil Sampling Benefits

A soil test is essential to determine soil fertility levels and make good nutrient management decisions to optimize crop yield.

For the analytical data reported by the laboratory to be useful, it is essential to carry out adequate soil sampling, since it is at this stage that the accuracy of the soil analysis results is defined.

Correctly identify the lots to sample

Divide the farm into uniform lots taking into account:

- Topography of the area
- Soil depth
- Soil texture and color
- Age of the crop
- Fertilized and unfertilized lots

If the terrain is very uniform, a lot can represent up to an area of 5 ha.

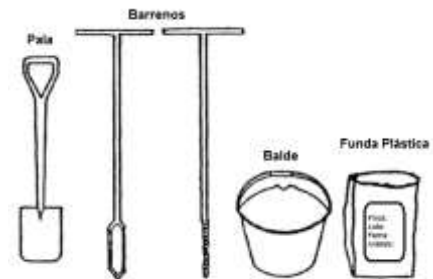
When to collect the Sample?

The samples must be taken 2 to 4 weeks before sowing or applying fertilizers; the time necessary to determine the amount of product to use or the soil amendments that we must carry out.

Sampling Tools

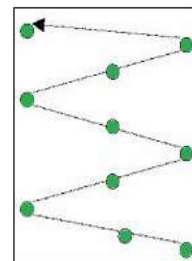
For a correct soil sampling we need:

- Soil probe or Tube open on one side or a shovel
- Bucket
- Plastic container or plastic bags



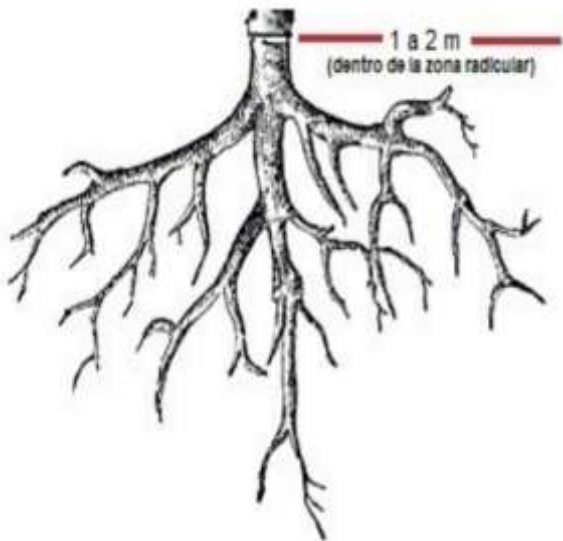
How to collect the sample in a lot?

Go through the lot and sample in a zigzag pattern at 15 to 20 locations.



Where and how to collect the sample?

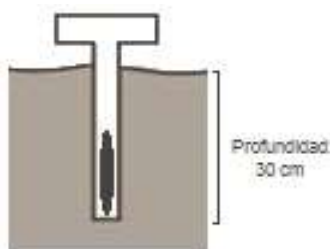
The sample must be collected in the root area at a distance of 1 to 2 meters from the trunk of the plant.



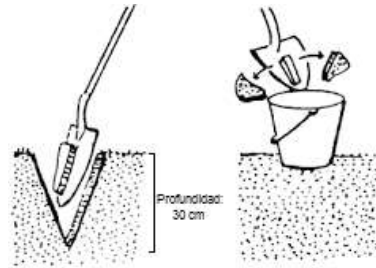
In each plant to be sampled, remove the upper 5 cm of the soil surface to eliminate traces of chemical fertilizers, plant material, stones, etc.

Samples should be taken with a soil probe or shovel at a depth of 30 cm from the ground and placed in a bucket.

The probe must enter in a vertical position down to the indicated depth (30 cm).



If a shovel is used, make a hole in the shape of a "V" and take a 1.5 cm slice of soil (discarding the edges).



Sample Handling

After sampling the 15 to 20 plants per lot, mix the subsamples thoroughly in the bucket. In a plastic bag, place approximately 2 pounds of sample to be shipped to the laboratory for chemical analysis.



Sample Shipment

Before shipping the sample to the laboratory, the following information must be correctly identified on the label:

- Name of the farm and owner
- Area where the farm is located
- Lot (number or name)
- Person who collected the sample
- Date of sample collection
- Contact phone and email
- Type of analysis required