

Agricultural and Agribusiness Laboratory Services

Soil Sampling Instructive - Corn

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 an area of 3 to 5 ha. If within same lot there are areas with a history of worse crop yield, delimit the area with these anomalies and collect samples separately of the good area and the area with problems and identify them correctly.

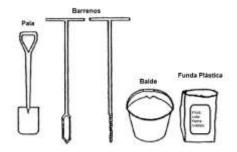
When to collect the Sample?

The samples must be collected 2 to 3 weeks before sowing to determine the need for fertilizers and / or amendments or during the growth of the crop to monitor soil conditions.

Sampling Tools

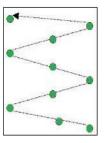
For a correct soil sampling we need:

- 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 points.



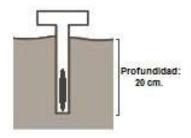
How to collect the sample?

Samples should be collected with a soil probe or a shovel at a depth of 20 cm from the ground (which is the area that the roots of the plant) and place them in a bucket.

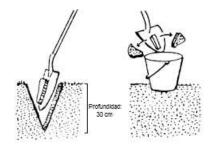
Areas close to the margins should be avoided, water inlets or areas where earth movement jobs were made.

In each subsample remove the first 3 cm of the ground surface to remove traces of chemical fertilizers, plant material, stones, etc.

The probe must enter in a vertical position down to the indicated depth (20 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

The 15 to 20 sub-samples per lot are mixed thoroughly in the bucket until you get a homogeneous soil sample.

In a plastic bag place approximately 2 pounds of the soil 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

