

### Agricultural and Agribusiness Laboratory Services

### Soil Sampling Instructive - African Oil Palm

#### **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 up to 20 ha.

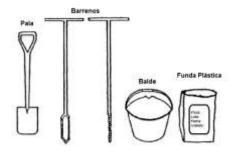
#### When to collect the Sample?

Samples should be collected 2 to 4 weeks before sowing or applying fertilizers, It represents the time needed to determine the amount of product to use or the corrective measures that we must realize.

#### Sampling Tools

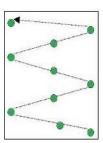
For a correct soil sampling we need:

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



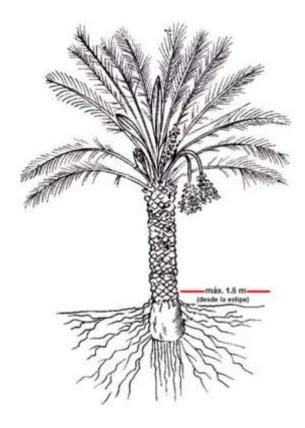
### How to collect the sample in a lot?

Go through the lot and sample in a zigzag pattern at 10 to 15 points.



# Where and How to collect the sample?

The sample must be collected at the site where it is concentrates the largest number of roots, that is between the stipe edge of the palm and no more than 1.0 to 1.5 m distance.

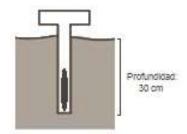


Do not sample at the foot of fences or water drainage canals, or in areas where it is known to have produced an alteration.

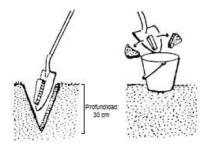
In each plant to be sampled, remove the first 5 cm from the ground surface to remove traces of chemical fertilizers, material vegetable, stones, etc.

Samples should be taken with a soil probe or a shovel at a depth of 30 cm from the ground and place them 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

The 10 to 15 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.





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#### 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