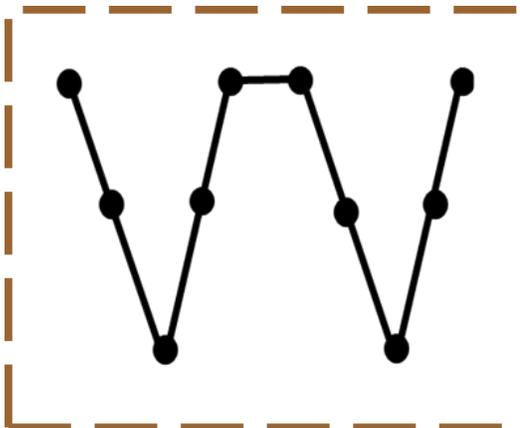


SEMEAR Soil Sampling Protocol by Dr. Canon EN Savala

- ❖ On each demonstration plot or multiplication field, take at least 5-10 soil samples from the representative areas to make a composite sample.
- ❖ Sample the soil at 0-30 cm.
- ❖ Use a W-shaped pattern for selection of sampling locations as shown in the illustration. The main point is to try spreading the sampling to the entire field while avoiding the extreme edges.
- ❖ Once you complete sampling the entire plot/field, thoroughly mix the sample in a container. Break up soil clods to make sure the sample is more or less homogeneous. Once the sample is mixed take a subsample by grabbing soil from several places and depths in the bucket and placing them in a plastic bag. The composite sample should weigh about 400 grams.
- ❖ Label the soil sample by including the following information:
 - a. Name of the farmer
 - b. GPS coordinates of the field
 - c. Date of sampling (DD/MM/YYYY)
 - d. Location
 - e. District
 - f. Previous and current crop



Ensure that the sample is double labeled:

1. on a sheet of paper and placed in the bag, and
2. marked on the outside of the plastic bag with a waterproof marking pen.

IMPORTANT: If possible use double bags to protect the soil from spillage, mixing etc...

Drying samples

Soil samples should be air-dried or taken to a test laboratory as soon as possible. Please dry each composite soil sample separately in a shade. **DO NOT** dry the soil sample in direct sunlight or in an oven because soil chemical properties may be altered. Once the soil samples are dry, please send them to IITA Nampula Office with a respective Excel file list (example below).

Location	Farmer name	Date Sampled	Elevation	South	East	Crop
Moma	Xavier Chalaua	19De16	171	16.2594	39.0733	Cow peas
Moma	Muanaloha Lusi	20De16	91	16.2640	39.0727	Cow peas
Moma	Jaime Raice	27De16	93	16.2789	39.0625	Cow peas
Moma	Perreira Muchali	30De16	108	16.2799	39.0619	Cow peas

Soil Analysis

IITA will be responsible for sending the samples to the Crop Nutrition Laboratory Services Ltd (CROPNUTS) – Nairobi, Kenya for analysis. *SEMEAR will analyze the soils for the following properties; pH, EC (Salts), Phosphorus (Olsen), Potassium, Calcium, Magnesium, Sodium, C.E.C, Total Nitrogen and Soil texture (%Sand, %Silt and %Clay).* For details on the analysis methodology please contact.

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