

Technical sheet n 1: Soil sampling

What is a soil sample?

A soil sample should represent the field structure and composition of the plot to be analyzed. It is made of 10 to 15 soil extracts (800 to 1000 g in total) carefully selected in the sampled area. The sampling area needs to be **homogeneous** to avoid any loss of accuracy. If the field is made of several non homogeneous areas, one soil sample per area should be collected and analyzed.

Homogeneity criteria mainly depend on:

- Field slope
- Soil texture and color
- Previous fertilizer application
- Cropping patterns
- Plantation system (open field or green house)

How to take soil extract?

Step 1: Extract the soil from the roots zone (0 to 30 cm), between two plant and at 10 cm from the dripper line



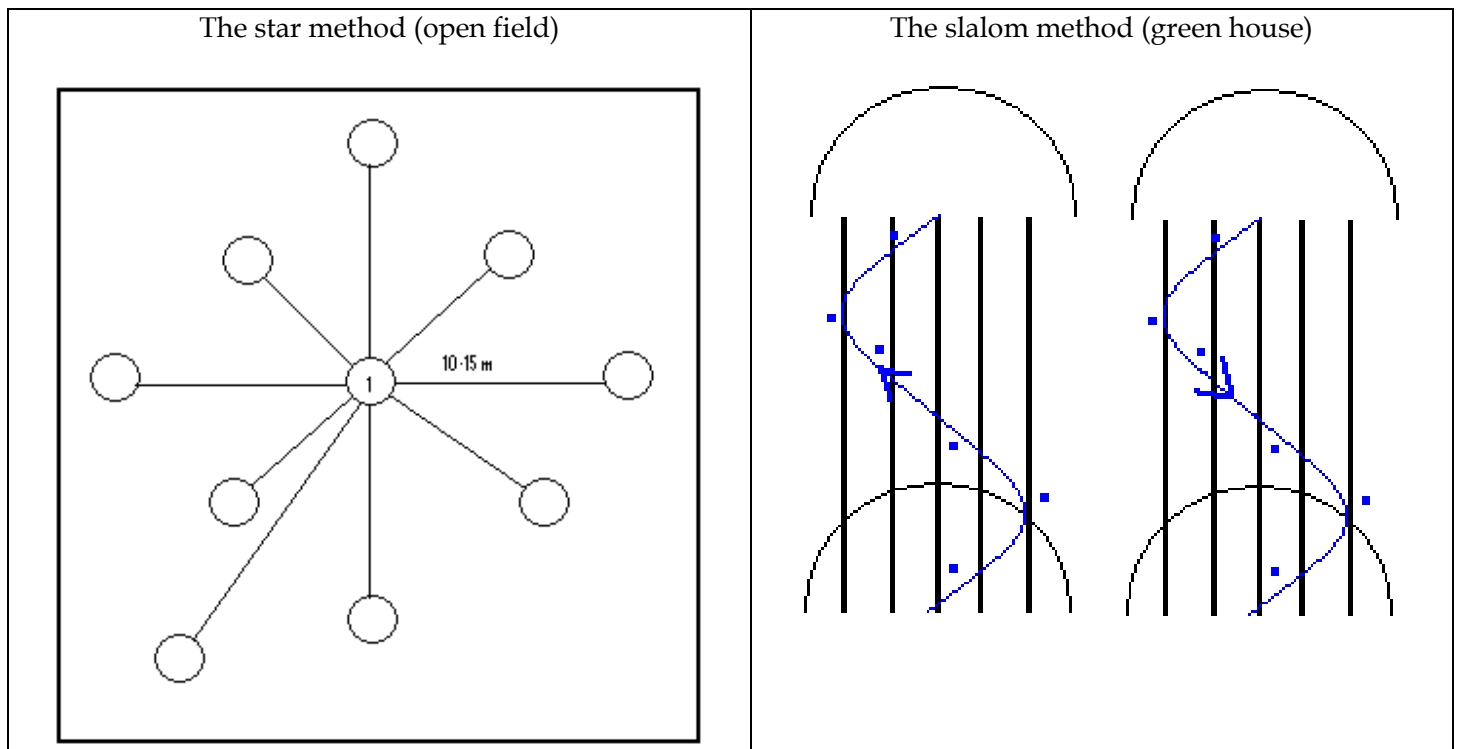
Step 2: Collect the extract in a plastic bag and keep it closed



¹ Sample should be taken between two plants and at 10 cm from the dripper line

The sample should be crushed and kept free of big stones. When the analysis is not done directly on the field, soil sample should be dried before to be sent to the laboratory. Indeed, wet or damp samples stored for only a few days may yield unreliable results. Remove the soil from the plastic bag and spread it in a dry area in thin layers. Do not apply artificial drying by oven, stove or furnace as this may alter the sample result.

How to collect soil samples in the field?



Sample identification

The following information should be written on the plastic bag and if possible on a separated paper kept in the bag with the soil sample:

- Sampling date
- Farmers name and telephone
- Location
- Sample depth
- Number the bag if several samples are taken from the same farm