



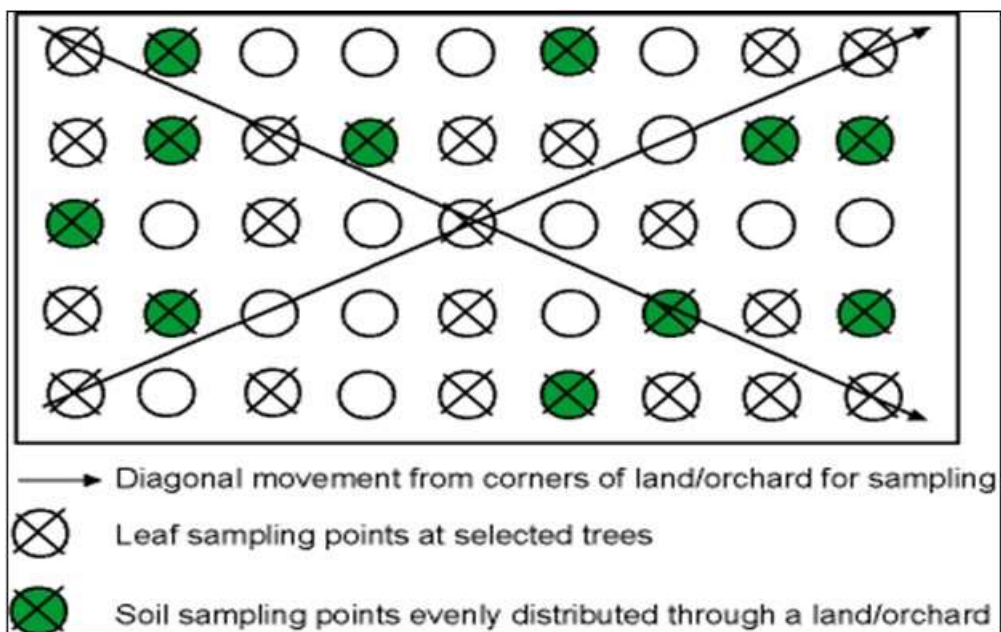
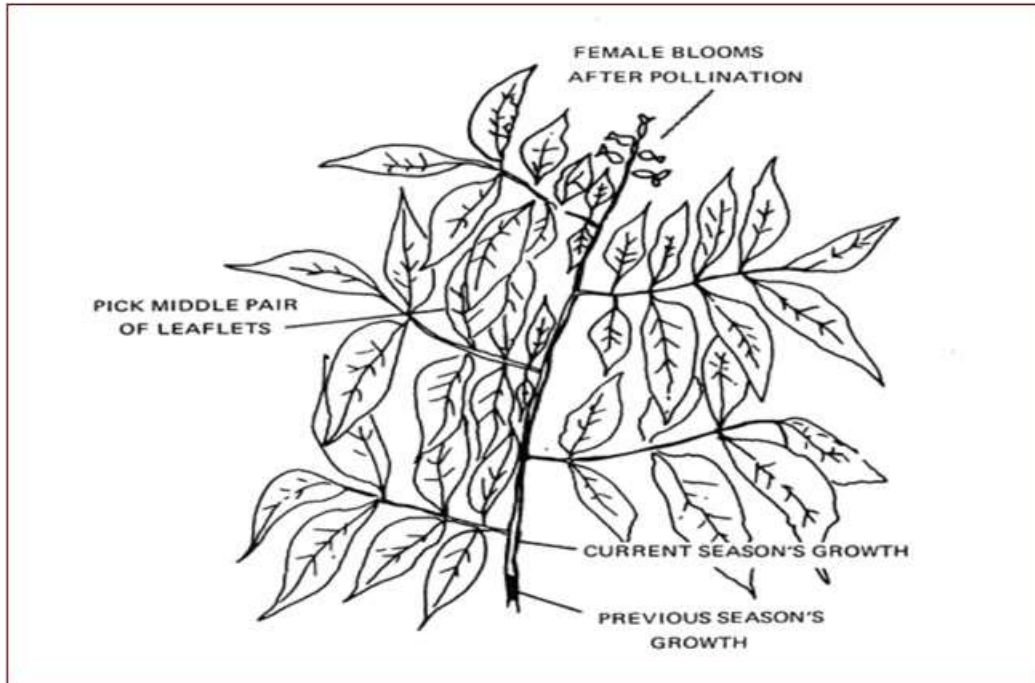
Grow the Crop

Handout 25

Leave Sampling Methodology

LEAF SAMPLING

A single leaf or soil sample should be representative of an area not greater than 3 ha, but this can depend on the crop size planted. However, if there is soil variations separate leaf and soil samples must be taken and the orchard management adapted accordingly.



Taking representative soil and leaf samples from orchards as per example:

- The time of leaf sampling as well as leaf position is very important and is shown in the figure. Leaf analysis is only applicable for producing mango trees (normally a tree age of 5 years and older).
- Select about 20 healthy trees by walking diagonally from the corners through the orchard (see figure). The trees should be homogeneous in appearance and representative of the orchard.
- Exceptionally good or poor trees must not be sampled.
- The 20 selected trees must be clearly marked, for example with paint, so that both the soil and leaf samples can be taken from the same trees every year.
- Where possible, pick 4 leaves from alternate sides of the tree at about shoulder height. Eighty leaves per sample should be sufficient.
- Different cultivars should be sampled separately.
- Leaves sampled must be free of sunburn, disease and insect damage.
- Leaf samples should be collected in the morning, after the dew has dried off.
- Leaf samples should not be taken if trees are under stress, i.e. drought or high temperatures. After a heavy downpour, wait at least 2 weeks before taking samples.
- After sampling, leaves should be placed in clean, perforated or open plastic bags.
- If samples cannot be delivered immediately (within 48 hours), they can be stored in a refrigerator and should be transported in a cooler bag. The sample must be accompanied by the relevant orchard information including previous production figures, tree age and fertiliser programs of the past. Any problems concerning the specific orchard, such as small fruit, should be mentioned.