

SEED AND ITS IMPORTANCE

What is a Seed? – A seed is a matured ovule which contains an embryo and nutritive tissue and it's enclosed in protective layers of tissue (Seed coat).

Importance of Seed

1. The seed is the most practical, economical and commonly used planting material for propagation.
2. The production of seedlings for planting in afforestation, reforestation, agroforestry projects, forest plantation activities is largely dependent upon the germination of available seeds. Seed is of vital importance in silviculture since both artificial and natural regeneration programmes start with it. The need for forest tree seeds has continued to increase with the expanding afforestation and reforestation programmes in the tropics.
3. The use of good quality seed in any planting endeavour is imperative for its success. To raise high quality forest plantations, foresters require healthy seeds capable of producing plants which have ability to grow well on the chosen forest sites when given sound silvicultural treatments.
4. The seed is a very important element in the quality of seedlings produced in the nursery since the quality of the seedling is determined by the genotype of the seed from which it originates. Hence, to produce high quality trees one has to sow high quality seeds. All these underline the importance of seed in silviculture and the need to procure the right quality and quantity well in advance of any plantation scheme.
5. The quality of seed can only be maintained through appropriate seed technologies.

What is Seed Technology?

Seed technology refers to methods or techniques used to maintain the quality of seed from harvest till it is germinated.

Scope of Seed Technology

1. Seed technology encompasses all activities carried out to enhance storability, germinability, vigour and health of the seed.
2. Activities include harvesting, transporting, handling, storage, testing, grading, documentation, processing of seeds and germination of seeds.

SEED COLLECTION AND PROCUREMENT

Seed collection began as an art during the stone age. Later, it became a science when the need for improved seeds arose. The aim of seed collection is to obtain large quantities of seed of the best genetic quality. To minimize seedling variation, seeds should be collected from suitable sources. Thus seeds may be obtained from:

- a) Professional seed collectors or dealers,
- b) Through personal collection or supervision from
 - i) Native forests or plantation,
 - ii) Seed orchards.

To ensure a more certain collection as against the uncertainty of obtaining it from collectors or dealers and to minimize cost which should have been high if imported; it is advisable to collect for oneself or to supervise the collection.

One of the pre-requisites of any seed collector (be he a seed dealer or forestry labourer) should be the ability to identify the particular species of tree from which the seed is to be collected and to know when it should be harvested.

The general procedure, therefore, involves:

1. Determining the location of seed trees,
2. Determining the proper stage of maturity for harvesting the seed,
3. Harvesting or collecting the seed,
4. Extracting the seed from the fruit or plant,
5. Storage until required.