

Banana

Propagation

Vegetative Method

Commercial bananas are seedless and propagated exclusively by vegetative means. The banana has a reduced underground stem, called the rhizome, which bears several buds. Each of these buds sprouts and forms its own pseudostem and a new bulbous rhizome. These daughter plants are called suckers. Banana is mostly propagated by rhizomes and suckers viz. sword suckers and water suckers. Sword suckers have a well-developed base with narrow sword-shaped leaf blades at the early stages. Water sucker possess broad leaves, which do not produce healthy banana clumps. Suckers of 2-4 months age are selected.

Other planting materials are whole or bits of rhizomes. Basrai variety in Jalgaon (Maharashtra) is as a rule propagated by dormant rhizomes. After cutting the parent plant, the rhizomes are removed from the soil, stored in cool, dry place for about 2 months. During the resting period the remaining part of pseudostem at the bottom falls off, leaving prominent heart bud. Conical rhizome should be selected while flat rhizomes to be rejected. The weight of the rhizomes should be 500 g-750 g. It should be 3-4 months age at planting. Very small rhizomes will give bigger size fruits with late flowering while bigger size rhizomes flower early but bear small size fruit/bunches.

Since banana is highly unstable in genetic constitution, the suckers/rhizomes should be selected from plants, which are healthy, having all the desirable bunch qualities and high yielding ability possessing at least 10 hands in a bunch.

Tissue Culture

Now-a-days banana plants are also propagated through tissue culture. Varieties like Shrimanti, Gross Michael and Grand Naine are commonly produced using tissue culture technique. Normally disease free plantlets with 3 - 4 leaves are generally supplied in pots for raising secondary nursery. Plants are initially kept in shade [50%] and as they harden, shade is reduced gradually. After 6 weeks, plants do not require any shade. Normally two months of secondary nursery is good enough before the plants to be planted in the field pits.