

Banana tissue-cultured plants v/s conventional suckers

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Today, most people of the world are familiar with banana fruit. Edible clones of bananas and plantains, based on landraces, are derived from hybrids of the wild sub-species of *Musa acuminata* (A genome) and *M. balbisiana* (B genome). Bananas are traditionally propagated using suckers which are known to perpetuate the spread of banana diseases and pests. Tissue culture technique in banana propagation eliminates most of these pests and reduce infestation in new plantation thus contributes to higher yields and production. Tissue cultured plants had higher total number of leaves, functional leaves, stem circumference and height at three months interval than conventional suckers. They also flowers and yields bigger bunches than conventional suckers. Conventionally, one banana plant produces only five to ten suckers in a year depending on the variety. Through tissue culture large quantities of clean banana plantlets are produced within a short period. Tissue-cultured banana include high field establishment rate, uniformity in growth ensuring synchronised harvesting, and high production. Tissue cultured plants have more functional green leaves at planting and therefore this enables them to manufacture their own food, while conventional suckers use the food stored in the corm to start the initial growth. The fast vegetative growth of tissue cultured plants was reflected in their early flowering in the plant crop and the more number of leaves at flowering. Bunch weight of conventional suckers started to decrease from the fifth cycle, it increased with tissue-cultured plants. Hence, using of tissue cultured plants is most income generative and easy adoptive technology than the conventional suckers.

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