»Sugarcane Seed Production | Sugarcane Planting Methods | Sugarcane Farming / Sugarcane Cultivation«

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Non availability or limited availability of quality seed of improved sugarcane varieties to sugarcane growers is a huge drawback in improving production and productivity levels of a country.
Setts are the seed used in commercial sugarcane planting. Each sett may contain 1,2, or 3 buds. The quality and quantity of the seed used determines the performance of the crop, keeping all production conditions constant. Establishing seed nurseries adjacent to planting locations and producing quality sugarcane seed is key to realizing potential productivity. Three tier nursery program is a must for every sugar factory in order to maintain constant flow of good quality seed material of improved sugarcane varieties. In 3 tier program, heat treated setts are planted for multiplication.

Seed production

The three stages or tiers in seed production process involve the primary, secondary and commercial. In primary tier, seed cane of varieties revealed from research stations as breeder seed or belonging to a healthy crop of suitable age is used to raise the primary nursery.
In secondary stage, seed material collected from primary nursery is distributed to selected progressive farmers to raise secondary nursery. Commercial nurseries are raised from secondary seeds.

Seed cane treatment

Heat treatment will render the seeds free from disease for about five years. Therefore a well planned scheme to replace the seed every five years must be devised. Seed cane material should be reasonably clean and undamaged. Seed cane material should be free from incidences of pest and diseases.
Heat treatment is done at a temperature that kills the sett bone pathogens and impairs their vital functions while causing no detriment to the setts. It involves hot water, moist hot air and steam.

Fertilizer application and tissue culture

For nursery apply NPK fertilizer in the ratio 275:62.5:113.5. Seedlings can be uprooted and transplanted in the main field at a spacing of 90 by 90 cm.
Tissue culture method is highly suitable for the rapid seed multiplication of new varieties.