

SUGARCANE TISSUE CULTURE

01

Lab: sugarcane
shoot tops to
start tissue
culture.



02

Lab: shoot tips
growing in
Petri dishes.



03

Lab:
multiplying
shoots.



04

Lab: rooting
of shoots.



05

Nursery:
growing
seedlings.



06

Grower:
planting in
the field.



CREATING NEW OPTIONS FOR VARIETY RELEASE AND ADOPTION

Tissue culture is an exciting way to rapidly produce and supply approved seed cane of existing and newly released commercial varieties.

TECHNOLOGY

- Uses meristems to clone mother plants of sugarcane varieties.
- Preserves genetic identity.
- Ensures maintenance of cane and sugar yields similar to conventionally propagated plants.

INDUSTRY BENEFITS

- Rapid, mass production of seed cane. Seedlings produced from tissue culture are DNA tested for genetic purity and certified free from diseases.
- Rapid multiplication and distribution of new high performing varieties and all other released commercial varieties to meet grower's requirements for commercial planting.
- Reduced impact of pests and diseases through the ability to rapidly replace susceptible varieties with resistant varieties.
- Supporting maximum industry productivity by allowing rapid adoption of new varieties and by managing serious diseases that are spread in seed cane like RSD, Leaf scald, Chlorotic streak, Mosaic and Fiji leaf gall.

FURTHER INFORMATION

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RELATED SRA FACT SHEETS

- **Managing your tissue culture plantlets in the field** IS13086
- **How to order sugarcane tissue culture** IS13085

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