

PENGANTAR KULTUR JARINGAN TUMBUHAN



Tissue culture is a tool for many purposes :

1. Mass propagation and propagation for specific tree
2. Elimination of viruses from plant tissue
3. Plant improvement :
 - a. Production of haploid
 - b. Fusi protoplas
 - c. Selection somaclonal variation
 - d. Genetic modification
4. Preservation of germplasm
5. Production of secondary metabolite

Basic laboratory equipment :

1. Laminar air flow, sterile transfer room, or transfer box (enkas)
2. Culture room
3. Pressure steam sterilizer or autoclave
4. pH meter
5. Analytic balance
6. Culture tube
7. Refrigerator
8. Chemical for culture media



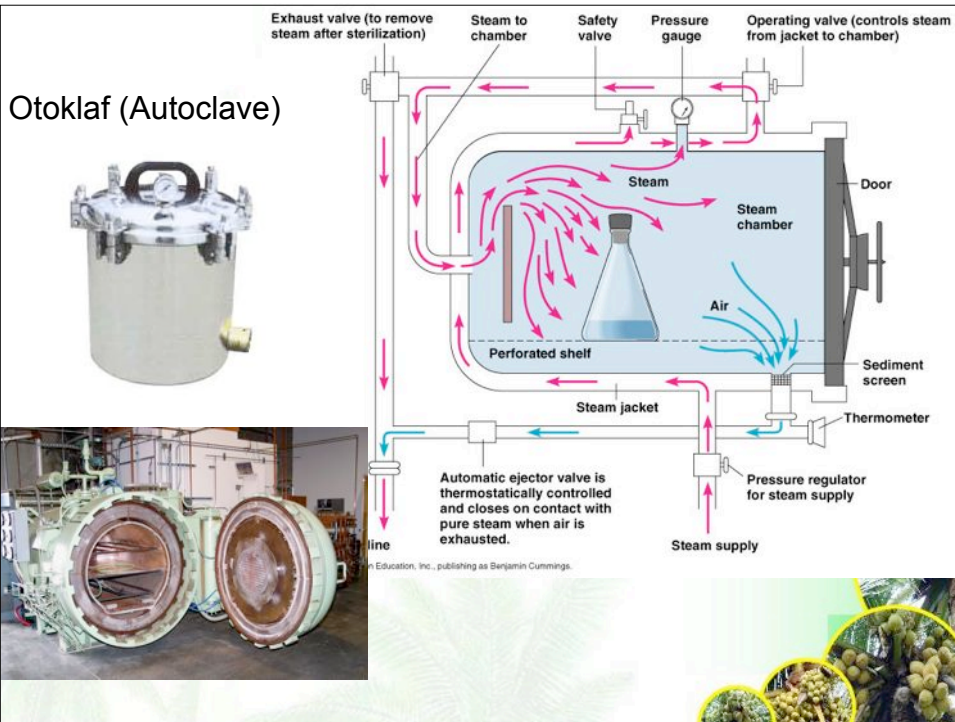


Lab equipment



LAMINAR AIR FLOW BENCH

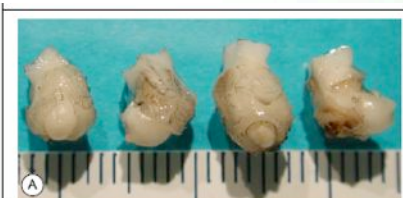
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We provide Sterile Air



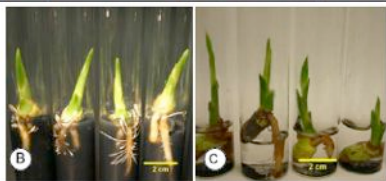
pH meter

- Sebelum digunakan harus dikalibrasi
- Kalibrasi menggunakan 2 buffer
- Cara mengkalibrasi bervariasi tergantung merk pH meter
- Lihat buku manual untuk melakukan kalibrasi

Tidak bisa menggunakan kertas pH indikator karena kurang akurat, pH media kultur jaringan adalah 5,7 – 5,8

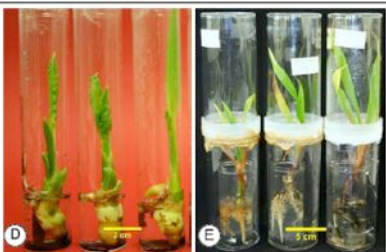


A



B

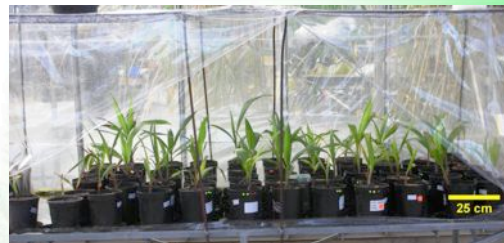
C



D

E

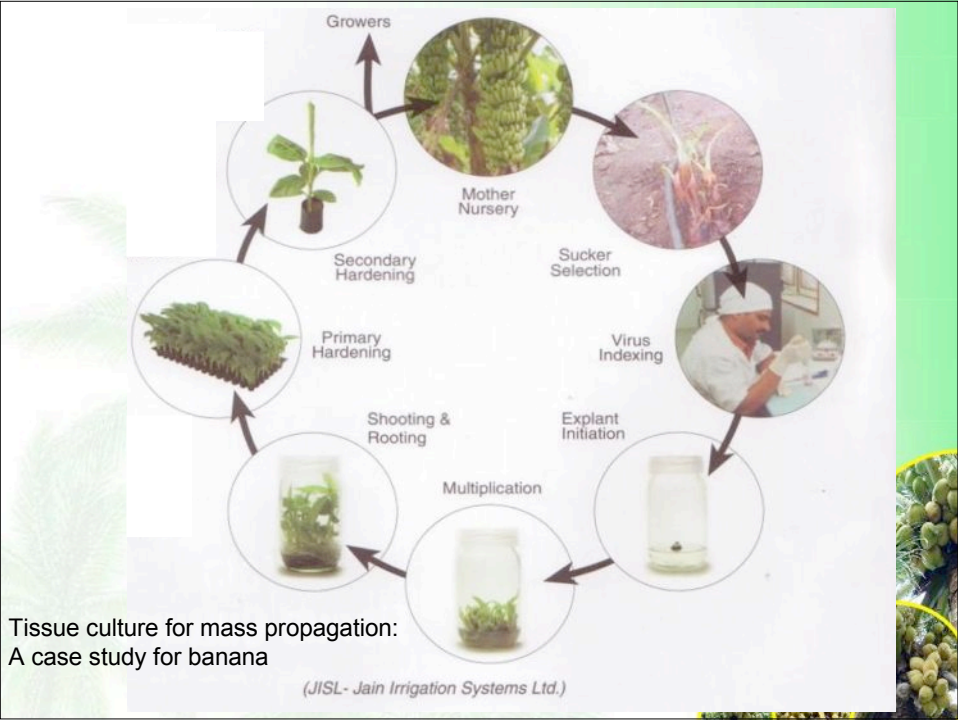
Coconut tissue culture



25 cm



Tissue culture for mass propagation:
A case study for oil palm

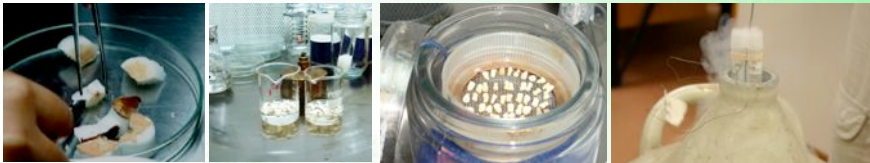


Tissue culture for mass propagation:
A case study for banana

(JISL- Jain Irrigation Systems Ltd.)



Tissue culture for mass propagation:
A case study for yam



❏ Cryopreservation can be used as an alternative approach for coconut conservation

