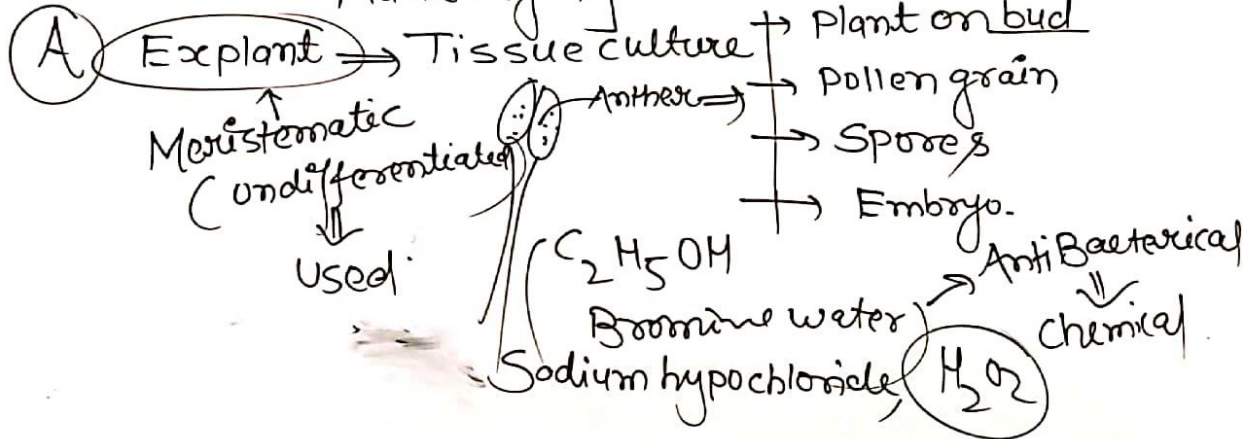


# PLANT TISSUE CULTURE



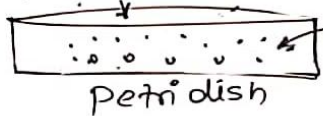
Example ⇒ plant tissue  
plant organ } Nutrient medium



# PLANT TISSUE CULTURE

## CULTURE MEDIUM / Nutrient Medium

Standard culture medium ⇒



petri dish

Inorganic salts

+ Sucrose (Disaccharide)

(Non-reducing sugar)

"Energy and carbon source"

Explant  
↓

Growth regulators

Growth control ⇒

2,4-D, Cytokinin, BAP

BAP ⇒ "Benzyl aminopurine"



cell division

+

Organogenesis

Murashige & Skoog's

M.S (culture medium)

CALLUS

↳ culture medium → Explant

↳ Undifferentiated cells  
1905

# PLANT TISSUE CULTURE

## TYPES OF CULTURE MEDIUM

Callus culture

Explant

Agar (gelatinous)

Cells Meristematic

2-3 weeks

Callus formation

Agar Medium

growth controller

Auxin (2,4-D)

Cytokinin

Suspension culture

liquid culture

only cell group of cells

2,4-D (Auxin)

Cell mass

Divide (cells)

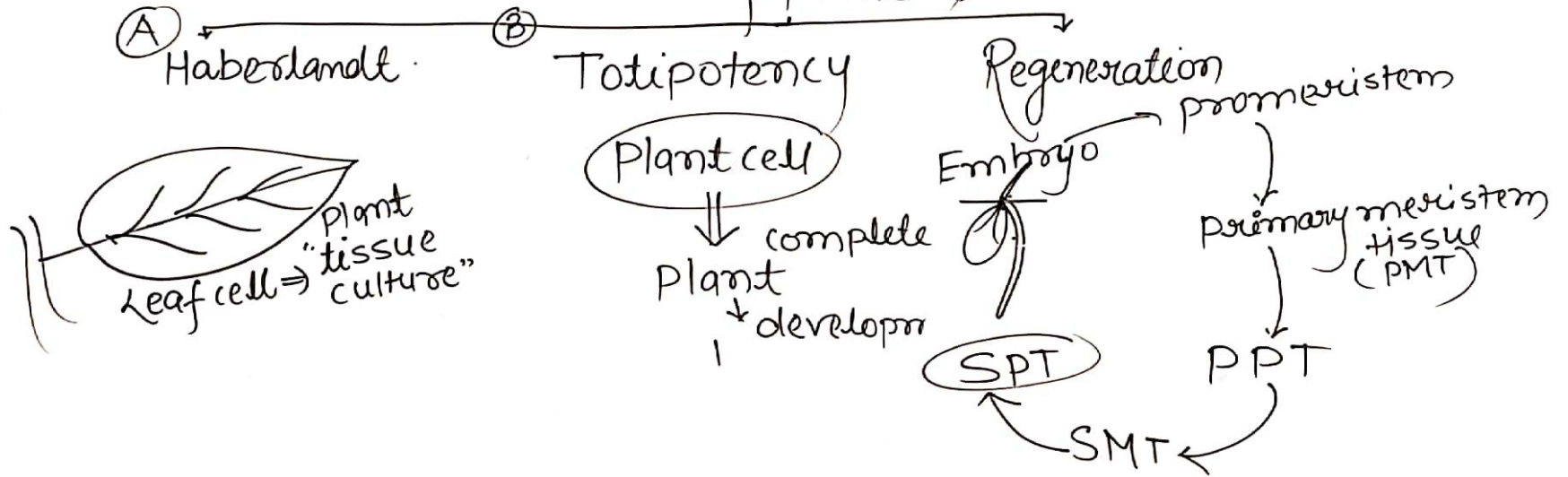
Small-groups convert

Batch culture

continuous culture

# PLANT TISSUE CULTURE

## Formation of plantlets



# PLANT TISSUE CULTURE

