

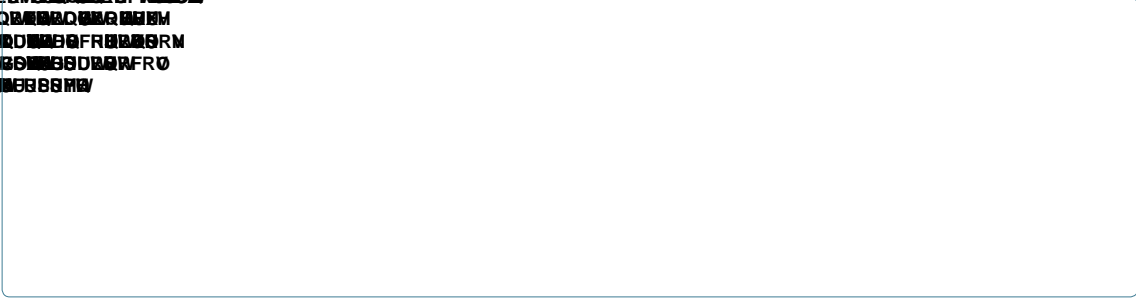


Brief Notes on Cellular culture of plants

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Keywords: Plant cell culture; Tissue culture; Callus culture; Secondary metabolites; Phytochemicals; Anticancer; Antimicrobial; Antioxidant; Anti-inflammatory; Immunomodulatory; Cytotoxic; Antiparasitic; Antiviral; Antifungal; Antitumor; Anticancer; Antimicrobial; Antioxidant; Anti-inflammatory; Immunomodulatory; Cytotoxic; Antiparasitic; Antiviral; Antifungal; Antitumor.

Introduction

1970 -
1971 -
1972 - C *Nicotiana tabacum*
1974 -
1977 - C *Agrobacterium tumefaciens* D/A
1978-
1981-
1983 - G
1984 - *Agrobacterium*

Basics of Plant Cell and Tissue Culture

in vitro
A
1
in vitro.
5.4 - 5.8. B
(2G)
2
A
F 1
2

Meristem: The region of active cell division in a plant, typically found at the tips of stems and roots.

Micropropagation: A technique for producing large numbers of clones of a plant from a small piece of tissue.

Propagule: A small piece of plant tissue that is capable of growing into a new plant.

Somatic embryos: Embryos that develop from somatic cells rather than from zygotes.

Subculture: The process of transferring a culture from one container to another.

Tissue culture: *in vitro* culture of plant cells or tissues.

Totipotency: The ability of a cell to differentiate into all cell types of an organism.

Transgenic: An organism that has been genetically modified to contain DNA from another species.

Undifferentiated: A state of being not yet specialized into a particular cell type.

Conclusion

The study of plant cellular culture is a rapidly growing field with many applications in agriculture, horticulture, and biotechnology. The techniques described here are just a few examples of the many ways in which plant cells can be cultured and manipulated. The future of plant cellular culture is bright and full of potential.