Plant tissue culture techniques help in understanding basic life processes and their proper understanding is essential for improving crop productivity. Besides, recently molecular biology has assumed great importance with respect to plant biotechnology. The present book amalgamates all three aspects into one, practical applications of various techniques being the need of the hour. It discusses micropropagation studies on several crop plants, molecular basis of understanding various life processes including molecular basis of somatic embryogenesis and other physiological and biochemical processes having significant biotechnological applications. It also includes in vitro studies of some important plants like Aloe vera, Simmondsia chinensis, Anacyclus pyrethrum and Crataeva nurvala, Arachis hypogaea L., Phoenix dactylifera, Dendrocalamus asper, Asparagus adescendens Roxb., natural products of plant origin with their therapeutic potential and biotechnological production, genome analysis of crop plants with future applications in biotechnology etc.

Salient Features

- Covers the topics of plant cell and tissue culture techniques to biochemical, molecular genetic aspects and their usage for improving plant productivity.
- The text is well supported with tables, diagrams, and pictures.
- Each chapter has an abstract and keywords, and provides a conclusion at the end.
- Chapters are contributed by 129 eminent scientists and academicians.

Table of Contents

- Contamination Control and Enhanced Axillary Budding from Mature Explants of Taxus baccata ssp. Wallichiana
- Bioinformatics: an Overview
- Intellectual Property Rights in Biotechnology
- In Vivo and In Vitro Studies on Plant Tumors
- Integrated Approaches of Mutagenesis and In Vitro Selection for Crop Improvement
- Clonal Fidelity in Micropropagated Plants
- Tissue Culture of Date Palm (Phoenix Dactylifera L.)—A Non-conventional Approach
- Cytological Analysis of Nodal Stem Segment and Callus Regenerated Plantlets of Azadirachta indica A. Juss. (Neem)
- Establishment of an in vitro Clonal Propagation Method for Commercial Exploitation from A High Biomass Yielding Aloe Vera (L.) Germplasm
- Unravelling the Molecular Basis of Somatic Embryogenesis
- Doubled Haploids in Crop Brassicas: Retrospect and Prospects
- A Review of Tissue Culture Studies on Bamboos
- Cloning of Female Plant of Simmondsia Chinensis (Link) Schneider Selected for Cultivation in Rajasthan
- Comparative Studies on Somatic Embryogenesis and Plant Regeneration from Immature and Mature Zygotic Embryo Axes of Groundnut (Arachis hypogaea L.)
- In Vitro Studies and Micropropagation of Anacyclus pyrethrum and Crataeva nurvala
- Micropropagation and Large-Scale Plant Regeneration of Edible Bamboo Dendrocalamus asper through Somatic Embryogenesis
- Natural Products of Plant Origin with Therapeutic Potentiality and their Biotechnological Production
- Micropropagation of Medicinal Plants of Indian Desert and Aravallis
- Morphological and Biochemical Changes in in vitro Raised Arachis Hypogaea Var RG-141, Under Different Growth Regulators
- Morphogenesis in Cultured Tissues of Three Grass Species
- In Vitro Propagation of Vigna sp
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