



## Micropropagation and In Vitro Techniques: Theory, Methods and Applications

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### Message from the Guest Editors

Micropropagation was first developed in the 1960s and has since found application in various scientific and economic fields with high impact. Due to the mesmerizing ability of most plants to regenerate from a single cell, micropropagation and in vitro techniques became one of the most efficient and secure plant propagation methods. Growing plant organs or tissues in aseptic conditions requires special attention and full control of the whole process of plant regeneration to obtain high-quality and virus-free stocks of crop plants. Micropropagation can successfully be applied for mass propagation, new cultivar development, preservation of wild, old, or rare plant species. Currently, micropropagation and in vitro techniques are practiced on a large scale as an accelerated version of clonal propagation to satisfy the increasing demand for modern crops or to regenerate genetically modified plants. However, before application some disadvantages must be considered, such as production and labor costs and the potential risk of plant contamination or plant



adaptation failure to normal growing environment.



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## Message from the Editor-in-Chief

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