

# Plant Cell and Tissue Culture for the Production of Food Ingredients

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## **Plant Cell and Tissue Culture for the Production of Food Ingredients**

Commercial development of cultured-derived food ingredients has attracted international interest. As consumers have become more health conscious in recent years, the demand for natural food ingredients and disease-preventative phytochemicals has increased tremendously. Plant Cell and Tissue Culture provides an alternative method for controlled production of these products. A wide range of food ingredients has been shown to be produced in culture. Much progress has been made in advancing this technology to the point that large-scale production has become possible. This book is developed from the Symposium "Plant Cell and Tissue Culture for Food Ingredient Production" which was held on April 13-17, 1997 at the American Chemical Society National Meeting in San Francisco, CA. In this book, international experts in academia, government, and industry discuss current advances in the field of plant cell and tissue culture with special emphasis on its application for food ingredient production. Topics related to various aspects of plant cell and tissue culture technology are discussed, including overviews of recent advances in plant metabolic pathway studies, process development for improving yields, and bioreactor design and operation for large-scale production. Economic considerations and issues related to the commercial development of culture-derived food ingredients are discussed. Also included are the safety assessment schemes and regulatory frameworks set up by regulatory agencies around the world.



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