BOOK REVIEWS

The first part of the book is on the history, basic physiology of differentiation and redifferentiation, the role of hormones, the choice of explant as per age, size, position and response in culture. One of the chapters is on nutritional aspects. Such as chemical composition of the medium and its physical characteristics (e.g., liquid/solid environment, media and gaseous exchange). Physical characteristics of the culture environment such as the intensity, quality and duration of light, and the temperature are also discussed.

The chapter on the technology of in vitro culture includes information on laboratory set-up and instruments/equipment for in vitro culture, the complete laboratory procedures for preparation of glassware, stock solutions, media and their sterilization. Procedures for the preparation, disinfections are also discussed.

Meristem culture is illustrated with 'Japanese artichoke' as a model system and also micropropagation, giving an example of _Santapaula_. Also covered is the general background of techniques and significance of anther/pollen culture and protoplast culture.

The chapter 'Biotechnologies in horticulture: Possibilities and perspectives' describes modern methods such as protoplast fusion, haploids, somaclonal variation, and molecular genetics. There is also a chapter on gene transformation and somatic embryogenesis, and on genetic aspects of in vitro regenerated plants.

The book contains an informative article on the mycorrhiza and in vitro culture, where the types of mycorrhiza, its association with specific plants, and applications of mycorrhization have been explained in detail. There is one chapter which deals with application of in vitro culture in disease elimination and disease resistance.

Lastly, advantages of in vitro culture, its economical aspects and constraints are presented. There is an account of the present and future status of in vitro culture of ornamental plants, woody plants and fruit trees. A list of plants for which technology has been commercialized is given.

Overall, the book covers information on general techniques of in vitro culture useful for beginners and students. The information could have been better organized and repetition of many aspects avoided. Although recent applications and constraints of in vitro culture have been covered, they should have been described in more detail so as to make the information more complete. As the title of the book indicates, an account of in vitro technologies for economically important horticultural crops and significance of in vitro culture pertaining to specific problems in these crops would have been more useful.

Tissue culture and its commercial exploitation are emerging fields and this book will be useful to people entering these fields.

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Erratum

Testosterone metabolism by rhesus monkey spermatozoa: Effects of antifertility agents

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The title of the article and the names of the authors were inadvertently left out from the Contents of the 10 June issue. We regret the error.

— Editors