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Floriculture attracts attention of thousands of researchers and growers. Biotechnological methods can significantly help them in their hard effort to improve quality, widen the assortment, and decrease the price of cultivated flowering plants, as well as to preserve endangered naturally grown species.

The first volume comprises two sections "Structure, metabolism, development, physiology and genetics" and "Genes, genomes, genomics, and breeding" and each of them is divided into several parts. The contributions of the Parts 1 to 6 of the first section are devoted to flower growth, development and senescence, to cytology, to endogenous rhythms, to flower colour and scent, to phytohormones and to seeds. The Parts 1 to 3 of the second section deals with molecular techniques, with breeding and with mutagenesis.

The second volume consists of sections "Genetic engineering and transgenesis" and "Tissue culture and the *in vitro* environment". After introduction, the main topics of contributions of the first section (Parts 1 to 6) are marker genes, transformation techniques, transgene expression, and applications and risks of genetically modified organisms. The second section incorporates papers concerning somaclonal variation, somatic embryogenesis, improved organogenesis, bioreactors, and practical applications of *in vitro* cultures.

The first section of the Volume III "The *ex vitro* environment, minerals, water stress, remediation" is addressed to abiotic stresses and contributions of this section discuss mainly effect of minerals, salinity and

water stress (Parts 1, 2, 4). In addition, two methodological parts are included: hydroponic systems (Part 3) and phytoremediation (Part 5). The second section of this volume "Plant-organism interactions, disease, and control" deals with biotic stresses. After evaluation of general mechanisms, papers of following parts gives attention to plant-plant, plant-fungus, plant-bacteria, plant-virus and plant-insect interactions.

The fourth volume contains three sections "Flowering plants: the future", "Ornamental plants and flowers in art and society" and "Novel ornamental gems and floricultural assets". The contributions in this volume touch very broad spectrum of topics from nanotechnology in plant science and conservation of genes to plants for spaceships. Important seems to be that more than twenty contributions are focused on production of pharmaceutically important secondary metabolites and another twenty contributions to novel ornamentals.

This book is far from being a complete and systematic survey of this broad field, but attention is given to recent progress. Some contributions are reviews in nature, but others bring original data. Thus, in addition to new data, the readers find here useful surveys of up-to-date state of knowledge in some special fields or merits and pitfall of many biotechnological methods. Many illustrative figures, photographs and tables are included.

Ultimately, this comprehensive source of up-to-date information will both attract the new students to this field and stimulate further exploration of it by teachers, researchers and growers.

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