Applied Plant Cell Biology [Cellular Tools and Approaches for Plant Biotechnology /

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Life sciences | Plant biochemistry | Cell biology | Plant physiology | Plant breeding | Life Sciences | Plant Breeding/Biotechnology | Cell Biology | Plant Physiology | Plant Biochemistry

Monografía

The aim of this volume is to merge classical concepts of plant cell biology with the recent findings of molecular studies and real-world applications in a form attractive not only to specialists in the realm of fundamental research, but also to breeders and plant producers. Four sections deal with the control of development, the control of stress tolerance, the control of metabolic activity, and novel additions to the toolbox of modern plant cell biology in an exemplary and comprehensive manner and are targeted at a broad professional community. It serves as a clear example that a sustainable solution to the problems of food security must be firmly rooted in modern, continuously self re-evaluating cell-biological research. No green biotech without green cell biology. As advances in modern medicine is based on extensive knowledge of animal molecular cell biology, we need to understand the hidden laws of plant cells in order to handle crops, vegetables and forest trees. We need to exploit, not only empirically, their astounding developmental, physiological and metabolic plasticity, which allows plants to cope with environmental challenges and to restore flexible, but robust self-organisation

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