



FUNCTIONAL BIOLOGY OF PLANTS

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Functional Biology of Plants provides students and researchers with a clearly written, well structured whole plant physiology text. Early in the text, it provides essential information on molecular and cellular processes so that the reader can understand how they are integrated into the development and function of the plant at whole-plant level. Thus, this beautifully illustrated book, presents a modern, applied integration of whole-plant and molecular approaches to the study of plants.

The book is divided into four parts:

Part 1: Genes and Cells, looks at the evolutionary origins of plants, cell structure, biochemical processes and genes and development.

Part 2: The Functioning Plant, describes the structure and function of roots, stems, leaves, flowers and seed and fruit development.

Part 3: Interactions and Adaptations, examines environmental and biotic stresses and how plants adapt and acclimatise to these conditions.

Part 4: Future Directions, illustrates the great importance of plant research by looking at some well chosen, topical examples including responses to climate change, biomass and bio-fuels, loss of plant biodiversity and genetic modification of crop plants.

Text boxes, many of which illustrate particular aspects of how humans make use of plants, are included throughout the text and a comprehensive glossary will prove invaluable to those coming to the subject from other areas of life science.

- A modern integration of whole plant and molecular approaches.
- Focuses on the networks of processes and functions within organs and their integration in the whole plant.
- Covers genetic aspects of plant development.
- Beautifully illustrated with full colour illustrations throughout.
- Clearly written by two authors with many years teaching experience.



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