



This latest edition of *The Physiology of Flowering Plants* has been completely updated to cover the explosion of interest in plant biology. A whole-plant approach has been used to produce an integrated view of plant function, covering both the fundamentals of whole plant physiology and the latest developments in molecular biology. New developments in molecular techniques are explained within practical applications such as genetically modified plants. The book further examines:

- photosynthesis, respiration, plant growth and development;
- nutrition, water relations, photomorphogenesis and stress physiology;
- function, with particular attention to adaptations to different habitats.

Each chapter is fully referenced with suggestions for complementary reading including references to original research papers.

The Physiology of Flowering Plants is valuable to both undergraduate and postgraduate students studying plant biology.

Helgi Öpik was Senior Lecturer in the Department of Botany at the University of Wales, Swansea until her retirement. Throughout her career she has taught plant physiology at all undergraduate levels, and since retiring has lectured in plant physiology for adult education. Her research interests have included plant respiration and ultrastructure, always aiming at integration of structure and physiological function.

Stephen Rolfe was awarded a European Molecular Biology Fellowship and undertook postdoctoral research on the phytochrome regulation of gene expression at the University of California, Los Angeles. He took up a post at the Department of Animal and Plant Sciences, University of Sheffield in 1991. His research interests include the study of photosynthesis and primary plant metabolism with a special interest in non-invasive imaging techniques.

Designed by Zoe Naylor

Cover illustration: front - Cliff paintbrush (*Castilleja rupicola*) growing in Mt. Rainier National Park, Washington, USA; back - White water-lilies (*Nymphaea alba*) growing in the Tennant Canal, near Swansea, South Wales. © Charles R. Hipkin.

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