

PALEOBOTANY

THE BIOLOGY AND EVOLUTION OF FOSSIL PLANTS

SECOND EDITION

Paleobotany is a subject of interest to life and earth scientists of many kinds – from evolutionary biologists to plant systematists – from paleoecologists to earth scientists and geologists. Substantial new fossil discoveries are constantly changing our ideas about the biology and evolution of plant species. Fossil plants are also important as proxy records of climate change, as shifts in fossil plant community composition demonstrate species responses to historical – and recent – alterations in CO₂ concentrations and changes in global temperature patterns.

Paleobotany: The Biology and Evolution of Fossil Plants presents the most up-to-date and comprehensive treatment of the subject available. It combines an unrivaled scope and depth of coverage with the most complete range of illustrations ever published on the subject. It discusses the fossil record of all of the major plant groups, as well as, uniquely, the microbes and algae. Each chapter starts with a brief introduction to the group(s) under consideration, putting the fossil forms into context with a systematic, structural, evolutionary, and ecological overview of the group. Descriptions of the most recent research on the variety and characteristics of early plant life, plant evolution, paleoecology, and a novel discussion of reconstructed ancient plant/animal interactions are included. This book will serve as both a comprehensive textbook and a major reference for paleobotany and allied disciplines.

- *Covers the fossil record of all the known plant groups, plus microbes and algae*
- *Comprehensive classification of organisms and an expanded table of contents provide quick access to the subject text*
- *Lavishly illustrated with over new 2100 illustrations, most in color*
- *Over 5000 references provide an extensive entrée to the primary literature*
- *Extensive glossary of more than 950 terms*
- *Up-to-date research throughout, including phylogenetic systematics, paleoecology, and new paleontological methodologies*
- *Information on living plants places the discussions of fossil forms in context*

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ACADEMIC PRESS

An imprint of Elsevier
elsevierdirect.com

ISBN 978-0-12-573972-8



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