

ACKNOWLEDGMENTS

PREFACE

One of the major challenges faced by paleobotanists is the extraordinary interdisciplinary nature of the science. Most paleobotanists are quick to point out, however, that they were practicing collaborative and interdisciplinary science long before the concepts became fashionable in the research environment of today. We view this book as an up-to-date introduction to the discipline for advanced undergraduate and graduate students, and as a book that is more encyclopedic in organization than other paleobotany textbooks and that can be used as a reference for a number of disciplines that today encompass the biological and geological sciences, whether professional or amateur.

Although this book is not technically a second edition, it does include material from *The Biology and Evolution of Fossil Plants* by Thomas N. Taylor and Edith L. Taylor (1993), which has long been out of print. To make the book usable to a wider range of readers, we begin each chapter with a general introduction that provides the essential characteristics of a particular group, including not only information about fossil members but also, where applicable, living representatives. In addition to a comprehensive table of contents, we have added a table to each chapter that summarizes the higher taxa in the chapter and the geologic range of each group. Chapters are subdivided to make it easier for readers to find information. For the nonbiologist, we have included a discussion of plant structure, tissue systems, and plant organs (Chapter 7) that is supplemented by illustrations and diagrams. To further assist in making the book useful, we have

expanded the glossary from Taylor and Taylor (1993) to more than 900 entries. For easy reference, a chart showing the geologic periods is included inside the front and back covers.

With more than 5000 references, this book provides an introduction to the primary literature. For further literature, please see the Bibliography of Paleobotany, <http://paleobotany.bio.ku.edu/BiblioOfPaleo.htm>

We have also included more than 2100 illustrations, many in color, and a large number unpublished. We received numerous favorable comments regarding the portraits of distinguished paleobotanists and therefore have included many more in this book.

We found the following online sources to be of enormous assistance in writing this book and would like to thank those who maintain these resources: (1) Index Nominum Genericorum, <http://ravenel.si.edu/botany/ing/ingForm.cfm>; (2) GBIF portal, <http://www.gbif.org>; (3) Peter Hoen's *Glossary of Pollen and Spore Terminology* 2nd edition, <http://www.bio.uu.nl/~palaeo/glossary/glos-int.htm>, from the University of Utrecht (4) the International Commission on Stratigraphy site, <http://www.stratigraphy.org>; and (5) L. Watson and M. J. Dallwitz's *The Families of Flowering Plants*, <http://delta-intkey.com/angio/>.

We have followed the 2008 International Commission on Stratigraphy (ICS) conventions on naming geologic time periods (<http://www.stratigraphy.org>) and have provided the international name in addition to local stage names throughout.