

Preface

This book of Plant Sciences represents the concerted effort of hundreds of scientists from around the world to present current knowledge about plant life on Earth. The overview format is intended to be accessible to a range of scientists, agriculturalists, policy makers, science writers, students, and the public. Our aim has been to provide authoritative, yet accessible, articles that canvass the major topics from evolution to molecular biology, from ecology to morphology, from physical systems to cropping systems. Selected references accompany every article, intended to help the interested reader delve further into each topic.

Agriculture is fundamental to human life on Earth. Crop production supports all aspects of agriculture, including production of livestock. Plants dominate today's biosphere. Because of their numbers, diversity, and ubiquity (on land and in water), plants are by far the most important primary producers on Earth. Through photosynthesis, plants control our atmosphere and capture the incident energy from the Sun, which provides nearly all of the chemical energy required to support the entire food chain that makes up the vast biodiversity of life on Earth.

Author