



Diversity of Lower Plants, 1/e

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About the Book

Biodiversity is the variation of life forms within a given ecosystem, biome or for the entire earth. Biodiversity is often used as a measure of the health of biological system. Biodiversity or biological diversity is the sum of all the different species of animals, plants, fungi, and microbial organisms living on earth and the variety of habitats in which they live. Scientists estimate that upwards of 10 million—and some suggest more than 100 million—different species inhabit the earth. Each species is adapted to its unique niche in the environment, from the peaks of mountains to the depth of deep-sea, hydrothermal vents, and from polar ice caps to tropical rain forests.

Biodiversity is also described as some of the fascinating varieties of organisms and complex ecological relationships that give the biosphere its unique, productive characteristics. The biodiversity found in earth consists of many millions of distinct biological species. Biodiversity is not distributed evenly on earth, but is consistently rich in the tropics and in specific localized regions it is less rich in polar regions where fewer species are found. Humans and most other animals are almost totally dependent on plants, directly or indirectly, as a source of energy through their ability to convert the sun's energy through photosynthesis.

The algae, fungi, mosses, lichens and liverworts, collectively known as lower plants, are the unsung heroes of natural history. Lower plants are at the heart of our life support system." "Without lower plants, the rest of the living world couldn't function. We have left their existence to chance in the past but we now have to take positive action to conserve their immense diversity."

Keeping in mind the above thought the present book has been compiled which consists of wide ranging 26 articles encompass topics which emphasize on various aspects of diversity of algae, cyanobacteria, bacteria, pathogenic bacteria, fungi, lichens, bryophyte, pteridophyte, etc. The information incorporated in the book is provided by the authors who are internationally acknowledged experts in their field. The book has been written with the intention of providing a sufficient depth of the subject to satisfy the needs at a level which will be comprehensive and interesting. We have tried to synthesize all the information which will be useful to the students, teachers, scientists and researchers in the field of biodiversity of lower plants.

Salient Features

- ▶ Provides an insight on various groups of plants, namely, algae, fungi, cyanobacteria, lichen, pteridophytes, bryophytes, etc, given in 26 chapters.
- ▶ Intends to make its readers well versed with the challenges posed to plant biodiversity along with their roles and patterns.
- ▶ Each chapter begins with an abstract before elaborating the topic, and is illustrated with photographs, photomicrographs and diagrams.

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