

BOOK REVIEW

J. Dighton. *Fungi in Ecosystem Processes*. (Marcel Dekker Ag./IBS Bookservice AG, Hutgasse 4/Postfach 812, CH-4001 Basel, 2003.) ISBN 0824742443. Pp. 430, numerous illustrations in the text. Price: \$ 175.

This book is entirely dedicated to the functional role of fungi in all kind of ecosystems, and it attempts to show how the world would function if fungi were not there. It is conceived as an introduction to the subject for students in mycology and ecology. The introductory chapters deal with fundamental themes, and define fungi, ecosystems and their interaction. The two following chapters deal with fungi and primary production, elucidating the way fungi make available nutrients, and the roles symbiotic and parasitic relations play with regards to plant growth and carbon fixation. Chapter 4 gives an overview of secondary productivity: fungi as food for secondary producers, and fungal-faunal interactions such as ant and termite fungus gardens, bark beetle fungus interactions, and the role of fungi as faunal pathogens. Chapter 5 has population and community regulation by fungi as central theme, dealing with the role of mycorrhiza with regard to plant successions and plant fitness, saprotroph-pathogen interactions, the role of endophytes and nematophagous fungi. Chapter 6 has the interaction of fungi with humans as subject, focussing on fungi and the environment: their interaction with acidifying pollutants, heavy metals, radionucleotids, and their reaction on climatic changes. The final chapters are a synopsis and outlook to the future, in which suggestions are made for further research in the subject, using new methodology and tools. In conclusion, the book offers a lot of information on the subject, and will serve as a great source of information on fungi in ecosystems. The large number of references may facilitate further reading.