

friendly management of diseases is the valid and correct diagnosis of the disease. The authors have clearly explained about the different methods of management like cultural practices, physical, chemical, regulatory methods, biological methods and management through host genes. And they have also briefly explained integrated management of important plant diseases. The present IPM thesis is a composite of disease management and integrated crop management.

In the third part of the book, Chaube and Pundhir clearly explain about disease causing microorganisms like fungi, bacteria, nematodes, viruses, protozoa and phanerogamic plant parasites according to kingdom classification. It consists of symptoms, taxonomical character of the pathogen, its life cycle with some photographs and updated integrated management practices.

This book enhances our knowledge about plant diseases. At the same time it tries to develop methods and materials through which plant diseases can be avoided or controlled. In brief, Chaube and Pundhir have written an updated book for undergraduate and postgraduate students interested in plant pathology. They have arranged the topics and contents for easy reading with due continuity.

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Quaternary Geology – Indian Perspective. U. B. Mathur. Geological Society of India, PB No. 1922, Gavipuram, Bangalore 560 019. Memoir 63. 2005. 344 pp. Price: Rs 500.

Quaternary geology has tremendous implications for the well being of mankind into the future. State-of-the-art data on Quaternary geology are now available from various parts of India. High-resolution data on Quaternary stratigraphy,

sedimentation, geomorphology, palaeoclimatology, neotectonics, sea-level changes, geochronology and various other aspects generated so far provide a fairly well-constrained Quaternary evolutionary history of the Indian subcontinent in a global perspective.

This book is therefore timely, a good compendium and surely will provide momentum to Quaternary geological studies in India. The multidisciplinary aspects of the Quaternary period covered in this book are impressive. It will serve as a good reference book for Quaternary stratigraphers, palaeoclimatologists, geomorphologists and neotectonists, and all the young and novice Quaternary scientists who intend to pursue Quaternary geological studies. This is the first of its kind, is comprehensive and summarizes the standard work on important aspects of Quaternary geology into a readable form. Considering the volume of data and information available and paucity of resources, this will be a valuable contribution and is in fact an accomplishment which needs to be appreciated. The book is written in a lucid manner and is divided into nine chapters.

The first chapter discusses Quaternary period in general, including discussions on Pliocene–Pleistocene boundary, climate cooling, evolutionary changes in marine fauna and flora, land-vertebrate fossils, hominid evolution, palaeomagnetic changes and Pleistocene–Holocene boundary. The second chapter gives details on Quaternary stratigraphy including biostratigraphy, climatostratigraphy and magnetostratigraphy. Chapter three discusses Quaternary climate, emphasizing the need for studying climatic changes during Quaternary and climate proxies. A good account of global climatic changes both, long-term and short-lived, can be found in this chapter. Data on Quaternary climatic changes from various parts of India are also summarized. Quaternary sea-level changes are discussed in the fourth chapter. The fifth chapter provides an update on Quaternary dating methods. The first five chapters are of basic nature with limited examples from India and the contents dealt within these chapters are easily available. A lot of data are available now from the Indian subcontinent on these aspects. Nevertheless, information avail-

able in bits and pieces has been synthesized at one place. Chapter six is devoted to prehistory and protohistory, which provides a review of Hominid and cultural evolution and Palaeolithic, Mesolithic, Neolithic and Chalcolithic ages. Combining Quaternary geological studies with archaeological data helps in understanding the effects of geological changes on human cultures.

Chapters seven to nine provide notes on Quaternary geology of Gujarat. Chapter seven deals with the structure and neotectonics, and geomorphology and Quaternary stratigraphy are described in chapters eight and nine respectively. All these are well-structured, lucidly written and sufficiently illustrated. However, these individual chapters on Gujarat though appear imperative in content, unfortunately lack in synthesizing and bringing out facts and do not provide latest information. What appears in these chapters is only a short description of neotectonic, stratigraphic, sedimentologic and geomorphic evolution of this important Quaternary terrain of India, which otherwise is a treasure house for data pertaining to these aspects. Quaternary geological studies in Gujarat have progressed by leaps and bounds in the last few decades and we do have a much better understanding of the geological processes that played key roles in the evolution of the present scenario of Gujarat. High-resolution data, especially of late Pleistocene–Holocene period, available not only from Gujarat, but also from the several parts of the country could have been properly synthesized.

The book has several figures, photographs and tables. The figures by and large are of good quality barring those directly scanned from various published papers. The reference list given at the end of each chapter is quite exhaustive, though some of the references are repeated. Nevertheless, I feel the author has done a commendable job in writing this book. Earth scientists interested in Quaternary geology would like to obtain a copy of the book.

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