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Chhhindwara District, Madhya Pradesh, India.

Sommario/riassunto

This book describes the microbiota of the intertrappean beds in the Chhindwara District, Madhya Pradesh, India. In this work, special emphasis is placed on the microbiota from the Late Cretaceous-Early Palaeocene transition of the central Narmada River region. Recently, the intertrappean beds of the Eastern Deccan Volcanic Province (one of the subprovinces of the Deccan Volcanic Province) have received considerable attention, which resulted in the addition of some significant biotic assemblages to the existing record from the Dindori-Chhindwara area of the province. The biotic assemblages include charophytes, ostracods, foraminiferans, fishes, frogs, lizards, turtles, crocodiles, and mammals. In spite of the recent discoveries, the known fossil record of the Late Cretaceous-Early Palaeocene biota of India is not sufficient and thus does not permit us to speculate on the possible impact of environmental changes triggered by the Deccan volcanic lava flows on the contemporary biota and to precisely document their palaeoecologic, palaeoenvironmental and palaeobiogeographic implications. The recent biotic reports from the intertrappean beds exposed in the Chhindwara region of the Eastern Deccan Volcanic Province clearly indicate that these beds have a vast potential in terms of fossil content, which could reveal new and dissimilar biotic remains when compared to the Western Deccan Volcanic Province. The record of diverse accumulations of freshwater charophytes, brackish to freshwater ostracods, and planktic foraminiferal and fish assemblages from the intertrappean beds of Jhilmili and adjacent areas of Early Danian (P1a) age and lying just north of Chhindwara town and in the heart of peninsular India has intriguing implications for defining the age limits of the basaltic flows. The occurrence of non-marine taxa, for example, algae, molluscs, and vertebrates, associated with brackish water ostracods in the nearby Singpur and Mohgaon Kalan localities of the Chhindwara region, has also raised concerns about the sedimentary environments of these intertrappean beds. The new finds (presented in this book) prove useful for the better understanding of the palaeoecology and palaeoenvironment of the biota and also throw light on various paleobiogeographic models proposed for the northward drifting Indian plate. The microbiotic assemblages of the intertrappean beds of the eastern Deccan volcanic province at District Chhindwara, Madhya Pradesh are documented in this book. The microbiota of the central Narmada River region, the charophytes, ostracods, planktic foraminifera, and fishes, receive special attention in this study.