A Middle Triassic age for the Kamthi(Hingir) Formation of the Lower Gondwana Ib-Hingir basin, Orissa, India: New Palaeobotanical Evidence

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with 1 plate and 1 figure

Abstract. The Kamthi(Hingir) Formation has so far been considered as the uppermost lithostratigraphic unit of the Lower Gondwana Group of India. An Upper Permian age has been assigned to this formation as no typical Triassic fossil was earlier known from it. The present discovery of a rich Dicroidium flora in the Kamthi(Hingir) Formation of the Ib-Hingir basin points to a younger age. The flora is comparable with that of the Dicroidium odontopteroides Oppel-zone which has been dated in Australia as Middle Triassic (Late Anisian to Ladinian).


Introduction

Earlier palaeobotanical studies (Bunbury 1861, Ball 1877, Feistmantel 1887, Chandra & Prasad 1981) vehemently argued for an Upper Permian age for Kamthi Formation and that "Kamthi flora does not have any typical Triassic elements" (Chandra & Prasad 1981). Kamthi Formation has been shown as the uppermost litho-unit of the Lower Gondwana sequence (King 1881, Pascoe 1968, Krishnan 1968). More recent work by the Geological Survey of India (Sastry et al. 1977) confirms this stratigraphic disposition but stating that "the age of Kamthi is placed between Upper Permian to Lower Triassic. Subsequent work would ascertain whether it is possible to identify an upper stratigraphic unit with Lower Triassic fauna and flora from the typical Kamthi". At the same place, it is stated that typical Triassic flora is yet to be reported from the Kamthi-like lithology (Sastry et al. 1977). The present workers recognised a rich Dicroidium flora in the lower part of Kamthi(Hingir) Formation which points clearly to a Middle Triassic age.

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