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SUMMARY
AND
CONCLUSION



VII. SUMMARY AND CONCLUSION

The dissertation includes the results of the studies made on the fossil plants from Upper Gondwana exposure at Kandkuru in Prakasam district of Andhra Pradesh. Kandkuru represents a small exposure situated on the border of Prakasam and Nellore districts. The plant fossils of this area are not studied by earlier workers.

The Chapter First is the introduction which gives the classification of Gondwana system and relevant information of Gondwana flora of India. It is given on p.p. 1-8

The Second Chapter represents the earlier work done on the different Upper Gondwana beds of India. It is the 'Previous Work' and given on p.p. 9-52

The 'Material and Methods' is the Third Chapter which gives the different methods used in the collection of material and the techniques used for their studies. They are given on p.p. 53-59

IV This chapter gives 'Geology and Topography of the locality Kandkuru in Prakasam district. It helps to understand the occurrence of plant fossils here. It is given on p.p. 66-62

The Chapter Five is 'Descriptive'. It includes two parts. The part first gives the description and identification of gymnospermous woods. They consist of 4 genera and one species^{of} each. The genera are -

- A. Genus - Podocarpoxyton Gothan
- B. Genus - Taxaceoxyton Krausel & Jain
- C. Genus - Ginkgoxyton
- D. Genus - Araucarioxyton Krauss .

The genus - Podocarpoxyton represents P. chandrapurensis described by Rajanikanth and Sukh-Dev (1989) from Kota beds of Maharashtra. The other 3 genera represents new species based on distinct anatomical features. They are -

1. Taxaceoxyton kandkurensis sp.nov.
2. Ginkgoxyton biradaraii sp.nov.
3. Araucarioxyton jeyasinghii sp.nov.

The part two includes plant impressions belonging to Cycadophyta, Coniferophyta and Pteridophyta. The Cycadophyta includes genus - Ptilophyllum having 2 species. The genus Pterophyllum is represented by a single species. Genus - Dictyozamites represents a single species. Genus - Otozamites represents a single species. Coniferophyta includes genus - Elatocladus, having 3 species. Genus - Brachyphyllum represents a single species. Genus - Pagiophyllum represents a single species. All the above genera represent vegetative organs. While genus - Conites which is represented as Conites sp. is the only reproductive organ present in this flora. Therefore it is quite significant. Genus - Desmiophyllum represented by single species shows open affinities. But Bose and Maheshwari (1974) includes it under Coniferophyta. The Pteridophyta is represented by a single genus - Equisetites. It is described here as E.sehorensis which is a new occurrence on the east-coast.

The Chapter Six is 'General Considerations'. Which gives out the appreciations of floristic studies carried out on the basis of analysis of floristic elements. It is suggested that the flora is a small piece of Upper Gondwana plant assemblage of east-coast. The dominance of Cycadophytes suggest warm humid climate. While the Conifers represents small pockets of temperate habitat. The paucity of Pteridophytes is well known fact of the east-coast flora. Which is resulted due to rising of Himalayas. The flora as such do not represent a typical Rajmahal or Jabalpur assemblage. But suggests a mixture of these elements. The determination of age of this stage is not possible due to little information. However it falls within the range of Upper Jurassic to Lower Cretaceous. This chapter is given on p.p. 95-103

Chapter Seven is 'Summary and Conclusion'. It gives the content of individual chapters. It is given on p.p. 104-106

Chapter Eight is the 'References'. It gives references to literature cited in the dissertation. It is given on p.p. 107-124

The dissertation concludes with a note on the authors gratitude and sincere thanks to Dr. B.A. Vagyani for his guidance and help throughout the course of the work.