Summary & Conclusions

## **SUMMARY AND CONCLUSIONS**

present investigation incorporates The the data gathered from the morphological and anatomical investigations on the fossil plants from Nagpur district in Maharashtra. The plants studied here are from three different localities viz. Satnaori, Bazargaon and Umred. They are preserved in the form of impressions and petrifications. The elements studied belong to the Glossopteris flora, which represents the Lower Gondwana flora of India. The impressions were collected from Bazargaon, Umred and Satnavri, while the petrifications come from Satnavri only. The floral assemblege broadly suggest the age of the flora as Upper Permian to Lower Triassic, however the locality Umred does not fall in this range which is some what older Barakar stage. Hence the floral range becomes and belongs to wider ranging from Carboniferous to Early Triassic.

- I. <u>CHAPTER I</u>: It is the introduction and gives the brief information of the classification of Gondwana system. It also adds different views about the classification. It is given on pp. 1 to 7.
- 2. <u>CHAPTER II</u>: Relates with the earlier work done on the divisions of Lower Gondwana formations. The chapter is named as the previous work and it gives specific information regarding the 'Previous work' on the fossil flora of the different Gondwana divisions. It starts from Talchir Stage and ends upto Kamthi Stage. It is given on pp 8 to 22.

- 3. <u>CHAPTER III</u>: The material investigated in the present work and technique employed for it forms this Chapter. It is entitled as 'Material and Methods'. It is given on pp. 23 to 28
- CHAPTER IV : It deals with the Geology and 4. in Nagpur district Topography of the area studied surrounding region. The relevant Geological information is added. For understanding the geology and topography of the area which includes the localities studied here. The brief discussion of lithology and characters of Kamthi rocks is given. This is due to difference found in rocks of the Kamthi formation and features of others. It is given on pp. 29 to 31.
- 5. <u>CHAPTER V</u>: It is descriptive and includes two parts such as -

PART-I: Covers the studies of petrified woods found at Satnavri. The woods are assigned to 4 genera and they are identified up to the specific level. The part shows the following genera of gymnospermus woods and their species.

- a) <u>Araucarioxylon</u> Kraus 1870

  It is represented by a new species viz. A.lepekhinae.
- b) <u>Kamthioxylon</u> Mahabale and Vagyani 1980
  It is represented by a new species viz. <u>K.satnaoriense</u>
  sp.nov.
- c) <u>Dadoxylon</u> Endlicher

  It is represented by a new species <u>D.maheshwarii</u>.
- d) <u>Prototaxoxylon</u> Krausel & Dolianti 1958

  It is represented by a new species <u>P.satnagrii</u>.

 $\underline{PART-2}$  : It includes the impressions. They are assign to -

- A) Genus Glossopteris Sternberg

  It is represent by following 5 species
- I. G. emarginata Maheshwari & Prakash 1965
- 2. G. retifera Feistmantel:
- 3. G.longicaulis Feistmantel 1880
- 4. G.surangei Chandra & Prasad 1981
- 5. <u>G. sp.</u>
- B) Genus <u>Rubidgea</u> Tate 1867

  It is represented by only one species <u>R.lanceolata</u>

  (Maithy 1965).
- C) Genus <u>Gangmopteris</u> Mc Coy

  It is represented by two species.
- 1. G. major
- 2. G. sp.
- D) Genus <u>Neocalamites</u>

  It is represented by only one species. N.foxi (Lele)
- E) Noeggerathiopsis Feistmantel 1879

It is represented by two species (I) <u>N. spathulata</u>

Dona and (2) <u>N. hislopi</u> (Bunf) Feistmantel.

A fertile scale assign to the female fructification Venustostrobus.

 $\frac{\text{CHAPTER} - \text{VI}}{\text{includes}}$ : It is general consideration and includes the observations of the genera included here.

The comparative account of these genera is also added and their occurrences in India is also discussed. The homotaxial position of Kamthis Stage and Raniganj Stage is also considered for the discussion of age. The age of the flora is also discussed in this chapter. It is given on pp. 80 to 92.

- 7. <u>CHAPTER VII</u>: This is called as Summary and Conclusion. It gives the contents of the chapters of the work. It is given on pp. 93 to  $g_6$ .
- 8. <u>CHAPTER VIII</u>: Chapter-VIII is references which gives the literature consulted in this dissertation and given on pp.97to log.
- 9. The dissertation ends with a note on authors sincere thanks to Dr. Mrs. S.S. Chitagvis for her guidance and for the help rendered by Dr. B.A. Vagyani throughout the work.

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