CHAPTER - VI

SUMMARY AND CONCLUSION

Present work deals with the investigations of the plant fossils of the Deccan Intertrappean Beds of the Nawargaon, Wardha district. The fossiliferous exposures of Nawargaon are scattered on the hill tops, hill slopes and along small and large water courses. This locality is quite rich in petrified woods of dicotyledons and monocotyledons. Five palm woods, two palm petioles, palm fruit, and six dicotyledonous woods have already been described from Nawargaon area. Review of literature of the Deccan Intertrappean beds by U.Prakash (1960 & 1972), Lakhanpal (1968) has shown that the floras of different exposures of Deccan Intertrappean beds vary to certain extent and the age of different intertrappean beds range from Upper Cretaceous to Early Tertiary.

The work on Deccan Intertrappean Beds of Wardha district was undertaken by Patil (1975), Shete (1979), Shenvi Prabhu (1985) and Rao (1988). The present work is the continuation of the same line of research and adds further to the knowledge of the Deccan Intertrappean Beds of the Nawargaon.

The work is presented for the thesis in 7 parts.

The Introductory Part (Pages - 1 to 11) deals with the brief outline of the Tertiary exposures of India. Along with the detailed information on the Deccan Intertrappean Beds pertaining to their mode of origin, geology and classification. The different views expressed so far regarding the age of the Deccan Traps and their intercalated intertrappean beds are briefly summarized on pages 4 to 6. The details of the Intertrappean exposures and their floruls have been mentioned along with an account of the exposures in Wardha district, Maharashtra on the pages 6 - 10. A brief account of the physiography and geology of Wardha district is given in the concluding pages 10 & 11 of the Introductory part.

Part second deals with the review of the megafossil literature pertaining to the different exposures of the Deccan Intertrappean beds of India. The account of the different groups of the plants like Thallophyta, Bryophyta, Pteridophyta, Gymnosperms, and Angiosperms represented so far from these beds has been given in the tabulated form. Angiospermous literature is surveyed organ wise like woods,roots,leaves, flowers and fruits respectively. (Table - 1 ; Pages 14 - 39).

Part third deals with the details of materials collected and methods followed during the present investigations. (Pages - 40 to 45)

Part fourth deals with the observations since all the fossil plants described here belongs to the Angiosperms. This part is divided into two subparts - Dicotyledons and Monocotyledons. In Dicotyledonous part three dicotyledonous woods are described while monocotyledonous part includes only one monocot fossil, the culm portion of which only is described in the present work.

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Name of the fossil	Comparable living form	Locality
DICOTYLEDONS -		
i. *Tiliaceoxylon nawargaoense* gen.et.sp.nov.	*Grewia* Tiliaceae	Nawargaon
ii. *Lanneoxylon indicum* sp.nov.	*Lannea* Anacardiaceae	- " -
iii. *Schreberoxylon deccanense* sp.nov.	*Ligustrum* Oleceae	- " -
MONOCOTYLEDONS :		
iv. *Cyperaceocaulon tomlinsonii* gen.et.sp.nov.	Cyperaceae	- " -

Four new species are described. These are distributed in four modern families , three belonging to dicotyledons and one to monocotyledons. Two new form

genera Tiliaceoxylon and Cyperaceocaulon have also been described in the present work.

The part fitth deals with the "General Considerations and Discussion" in which the floristic,phytogeographical and palaeoecological consideraations based on the present work have been discussed on pages 76 - 83.

The evidences brought out by the present work support the widely expressed view that the climate during the Eocene time was more humid than it is today and seasonal changes were not marked. During post Eocene times the peninsular part of India started progressively getting dessicated as a result of which the moisture loving elements of its flora either got restricted to localised ecological nitches or migrated to more congenial parts like ghats.

Part sixth deals with the "Summary and Conclusions." (Pages - 84 to 88) and it is followed by part seventh "References to the Literature cited." (Pages - 89 to 116)