

CHAPTER V

CONCLUSIONS

The present study embodies observations of nearly 4 years' (1970-1974) work on the Papilionaceae of Gujarat. The study covers the fields of floristics, stomatology and hair morphology.

In floristics we have enumerated 201 species belonging to 55 genera found in Gujarat. Of them, two species are not recorded from erstwhile Bombay Presidency and one from Gujarat. The distribution of different species in Gujarat is given in a tabulated form. The corrections in the names of authors for some genera, according to Rules of Nomenclature, are made.

Stomatology for 220 species belonging 72 genera is described tribe-wise. The diversity of stomatal types seems to be a common feature of most of the species investigated. In spite of diversity, it has been indicated that it is possible to group different genera on the basis of most frequent type. This diversity is associated with diverse mode of ontogeny such as mesogenous, mesoperigenous and perigenous.

The mature structure of hairs is also studied in the species in which stomata are studied.

The hairs may be glandular and eglandular. Within each type, several sub-types are found. Because of uniformity of their morphology it is possible here also to group different genera within a tribe. Further segregation of different genera in a group is possible by adding stomatal character.

The results of our study are supported by (i) 1657 illustrations (Figs. Plates A-G and A₁-G₁), and 58 photomicrographs (Plate K) of stomata and hairs, (ii) 17 tables, (iii) histograms (Plates J & I) showing mean frequency (%) of each of the types of stoma in various tribes and mean frequency of different types of stoma in each tribe, (iv) charts (H & H₁) showing diagrammatic derivation of different types of stomata, and (v) schematic classification of hairs (Plate L). It is regreted that the habit sketches of different species are not included in this work because of lack of time.

The study on the morphology of stomata and hair in the species obtained from different sites outside the Gujarat State, has been helpful to compare our observations based on plants from Gujarat.

With the abstract of the data given above, I humbly say that the present study makes an original contribution in our knowledge on the aspects of floristics, stomatology and hair morphology by extending an information on a number of species which so far have not been investigated.