## **Chapter VII**

# SUMMARY AND CONCLUSIONS

#### Summary and conclusions:

Family Convolvulaceae comprising 56 genera and about 1650 species that man uses for different purpose. Most of the plants of this family are used as ornamental and medicinal purposed, some are as food value. The members of family show wide range of morphological variation, such as erect, creeping, twinning herbs and rarely shrubs. Also they show wide range of floral characters such as corolla shapes, hairiness of calyx and its shape, branching pattern of style with different shapes of stigma.

Considering the importance of members of family Convolvulaceae such as vegetables, ornamentals, medicinal, diversification and evolution, the present research work has been taken. Morphotaxonomical studies on Convolvulaceae of Western Ghats of Maharashtra will provide additional set of attributes, which will help in better understanding of their interrelationship, distribution, speciation and evolution in Maharashtra.

The important findings of the present work can be summarized as follows:

#### Taxonomy:

In Maharashtra about 70 species are present. In present study 35 species from different localities were collected including *Merremia rhyncorhiza*, which is regionally endangered to Maharashtra. The present studied species are grouped in to 'night blooming' and 'day blooming'. They show wide range of variation in habit, leaves, flower size; shape and color, fruits and seed show variation in their size; shape and color. The flower of *Ipomoea alba* is larger whereas smallest flower is of *Ipomoea eriocarpa*.

### Palynology:

Based upon pollen morphology family Convolvulaceae is kept under eurypalynous type, which shows wide range of pollen shape and size and with the help their characters the species can be identified. Pollen consists of three types of spines on their surface viz. spines small with blunt apex, spines long with blunt apex and spines long with pointed apex, which have prime importance in identification of