

Appraisal of Rare, Endangered and Threatened (RET) Medicinal Plants - Western Ghats

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Introduction :

Plants have been used in the traditional healthcare system from time immemorial, particularly among the tribal communities. Medicinal plants are also under constant threat due to over exploitation and high anthropogenic pressures and associated fragmentation of natural forests have resulted in loss of habitat and species.

Study method :

Information on RET ethno-medicinal plants of Western Ghats has been reviewed and compiled from published literatures. Data has been analysed for generating baseline information on dominant RET plants and their uses.

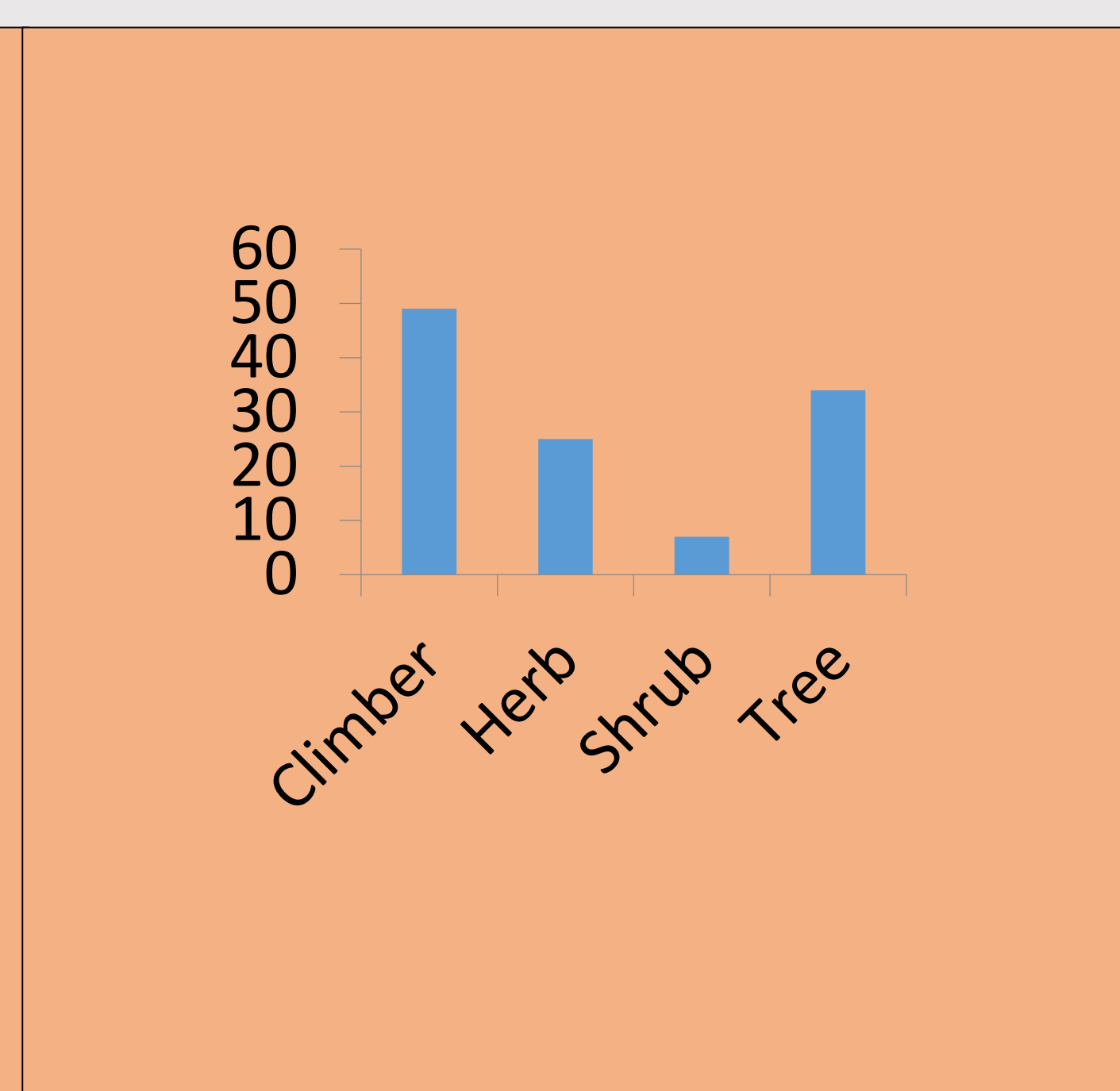
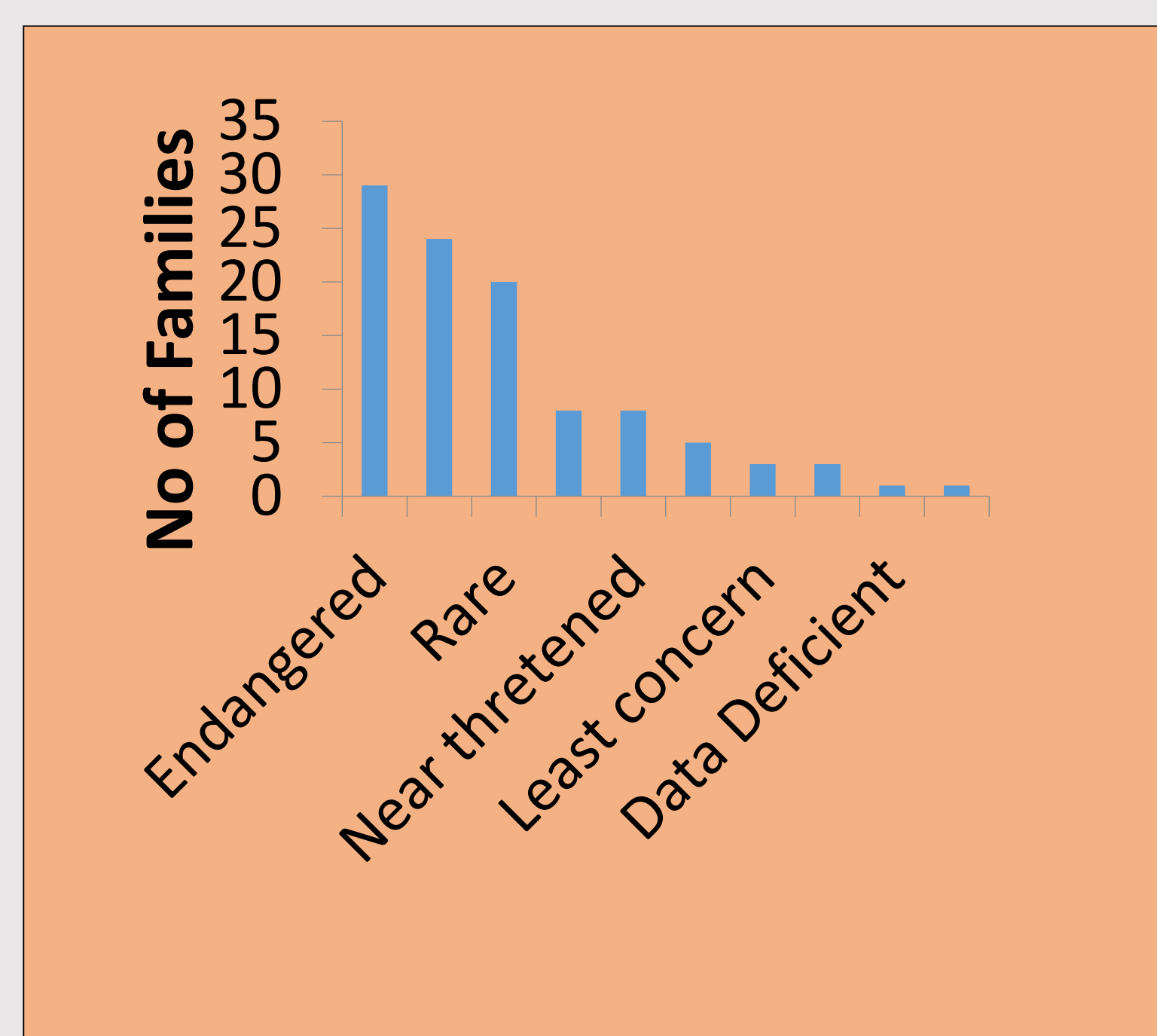
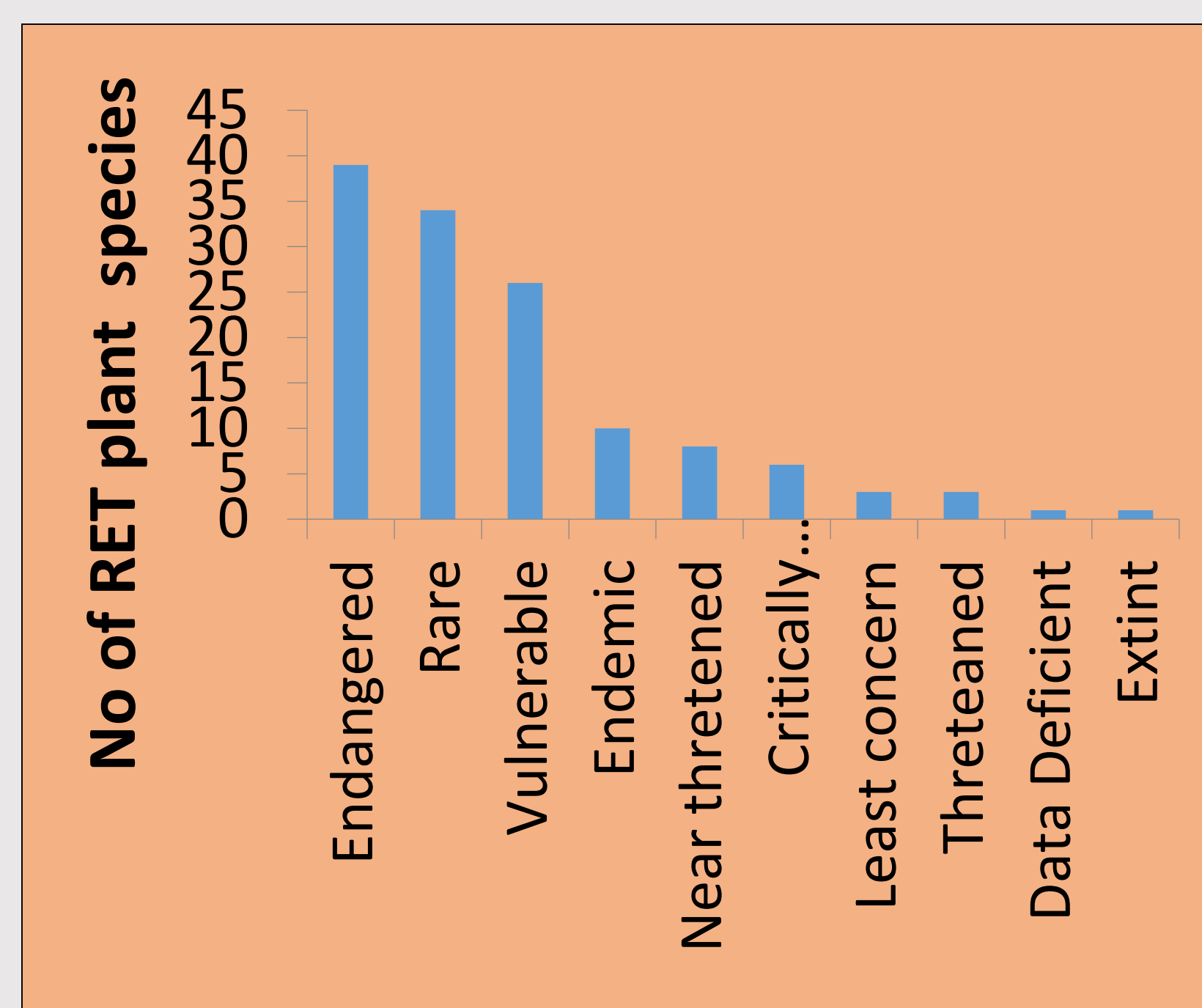
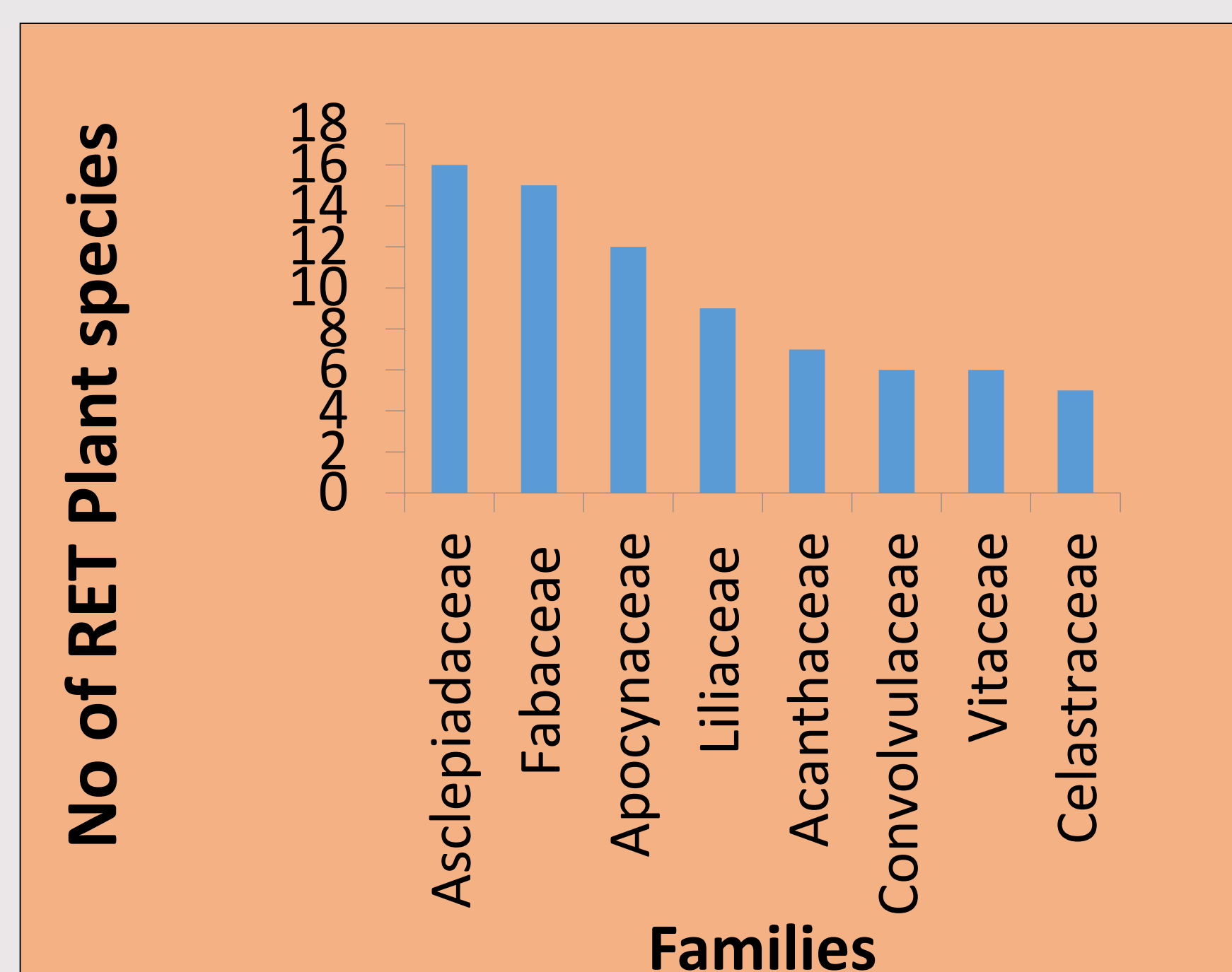
Findings : 108 RET medicinal plants documented

81 genera and 53 families where 2 are gymnosperms and orchids. Asclepiadaceae is the dominant (16 spp) followed by Fabaceae (15 spp) and Apocynaceae (12 spp).

Climbers one of the dominant life form. Most of species & families under endangered category.



Figure 1: RET-listed medicinal plants collected from Thadagamalai Reserve Forest of Kanyakumari district. (a) *Ceropogia hirsuta* Wt. & Arn.; (b) *Drosera indica* L.; (c) *Celastrus paniculatus* Wild.; (d) *Eugenia calcadensis* Bedd.; (e) *Hybanthus travancoricus* Melch.; (f) *Gardenia gummifera* L.f.; (g) *Hydnocarpus macrocapra* (Bedd.) Warp.; (h) *Salacia oblonga* wall.



Conclusion :

The declining habitats of native plants can no longer supply the expanding market for medicinal plant products. In the case of rare, endangered or over-exploited plants, cultivation is the only way to provide material without further endangering the survival of those species. By conducting the awareness program among the tribal's, we can promote the knowledge about importance of diversity and also can conserve the RET plants.



Gloriosa superba



Ceropogia sp



Terminalia arjuna



Hemidesmus indicus

Dominant RET Medicinal Plant Species

RET MET Plant	Part Used	Uses
<i>Celastrus paniculatus</i>	Stem and flower	Drowsiness
<i>Ceropogia mannarana</i>	Tubers	Fever
<i>Gloriosa superba</i>	Tubers	Arthritis
<i>Decalepis hamiltonii</i>	Rhizome, Root	Health tonic, Apetizer
<i>Santalum album</i>	Whole plant	Skin disease, Urinary infections, gastritis, headache, biliousness, vomiting and diarrhoea
<i>Aristolochia tagala</i>	Aerial parts	Migration
<i>Cayratia pedata</i>	Flower and stem	Asthma
<i>Smilax zeylanica</i>	Rhizome	Venereal disease
<i>Terminalia arjuna</i>	Bark, leaf and flower	Heart disease and skin disease
<i>Hemidesmus indicus</i>	Root	Rheumatism, ulcer, urinary disease and skin trouble.

References : i) Our Nature (2014), 12(1): 37-43., ii) International Journal of Botany Studies, Volume 2; Jan'17; PP 32-37, iii) Journal of Biodiversity & Endangered Species Volume 3 • 2015, 3:1•iv) Revista Chilena de Historia Natural (2016) 89:9, v) Veeraiyan Nandogopalan et/al IJRAP 3(6)/ Nov-Dec 2012. PIC collected from internet.