New Generic Classification and Present Status of Tribe Merremieae In India

Patil Sujit B.[*1], Vinod B. Shimpale[1]

[1]Department of Botany, The New College, Kolhapur-416012, Maharashtra, India

Patilsj21@gmail.com

*Presenting author

The family Convolvulaceae is one the dominant and diverse families of angiosperms, globally it comprises *Ca.* 1900 species under 59 genera occurring throughout the tropical and warm temperate regions.The members of family Convolvulaceae have been grouped into 12 tribes viz., Aniseieae, Cardiochlamyeae, Convolvuleae, Cresseae, Cuscuteae, Dichondreae, Erycibeae, Humbertieae, Ipomoeae, Jacquemontieae, Maripeae and Merremieae. Among these tribes, Merremieae is one the diverse tribes. Austin (1982) was the first who formally recognized the tribe Merremieae on the basis of spiral dehiscence of anthers during anthesis, pollen 3-Colpate or Panta-Colpate with smooth exineand included various genera like *Aniseia* Choisy, *Hewittia* Wight. & Arn., *Merremia*Dennst. Ex Endl, *Operculina* Silva Mansoand *Tetralocularia* O'Donell. RecentlyStefanovicet al., (2003) have applied major changes to the tribe Merremieae by adding more three genera viz., *Hyalocystis* Hallier f., *Decalobanthus*Ooststr, *Xenostegia* D. F. Austin & Staples. While Simose and Staple (2017) have conducted molecular studies and concluded that the genus *Merremia* is not monophyletic and can be further split into various genera on the basis of molecular evidences and phenetic characters. Hence Simose and Staple (2017) have split genus *Merremia* into following genera viz., *Camonea*Raf., *Daustinia*Buril & A. R. Simose (Buril et al. 2014), *Distimake* Raf., and *Merremia*. Now at present the tribe Merremieae possesses genera like *Camonea, Daustinia, Decalobanthus, Distimake, Hewittia, Hyalocystis, Operculina, Remirema* and *Xenostegia*. In India all genera of tribe Merremieae is reported except *Hyalocystis,* and *Remirema*. In present piece of work authors have studies the distribution pattern, present status, endemism and threats of rarity of endemic species along with updated classification is highlighted. Also the key for the all genera is given in the present communication.

Keywords: Convolvulaceae, Tribe Merremieae, Phytogeography, conservation.

Revision of *Ficus* L., (Moraceae) in Southern Western Ghats contributing to Phenetics and Phylogenetics

Sreehari S Nair[*1], K H Amitha Bachan[1]

[1]Research and P G Department of Botany, MES Asmabi College,

P. Vemballur, Thrissur, Kerala-680671

E-mail Id : harificus@gmail.com

The genus *Ficus* L., (Moraceae) comprises around 750 species distributed mainly in the pantropical regions. The genus includes shrubs, trees and climbers. They are commonly called 'figs' and are characterised by the presence of milky latex and hypanthodium inflorescence.115 taxa of figs have been so far reported from India, with majority of the species confined in the north eastern region. Floristic survey and revision in the Southern Western Ghats region using detailed morphological features based on live collections and existing herbarium records, syconium characters supported with floral imaging developed for all the taxa elucidated 32 species and 4 varieties of *Ficus*, among which five are endemic species. Two species, *F. amplocarpa* (NT) and *F. guttata* (EN) are in the IUCN RED LIST Category. According to the classification by Berg 2005, the genus is divided into 6 sub-genera namely *Urostigma, Pharmacosycea, Sycomorus, Sycidium, Synoecia* and *Ficus*, but this system of classification is not supported by phenetic and molecular evidences. Thephenetic study on the genus showed a clustering pattern which was similar to the habit of the plants into epiphytes, hemi epiphytes and independent trees. Preliminary study using molecular data also generated a much similar clustering pattern.Ecological role of figs in ecosystem dynamics and role of ecological factors in the evolutionary patterns are being studied. A detailed study including more morphological features, molecular studies with many more loci and greater number of taxa can provide a detailed insight into the trend of this classification.