

NAME OF THE THEME: Life sciences

Palynomorphological Diversity Among the Species Belongs to 12 Genera of Malvaceae

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Abstract: Malvaceae *sensu lato*(s.l.) is a heterogeneous family rich in highly diversified characters among its taxa, since phylogenetic studies on Malvaceae *sensu lato* lead to merger of core families of Malvales, i.e. Sterculiaceae, Tiliaceae, Bombacaceae and Malvaceae *s.s.* into its fold and distribution of their genera among nine subfamilies: Bombacoideae, Brownlowioideae, Byttnerioideae, Dombeyoideae, Grewioideae, Helicteroideae, Malvoideae, Sterculioideae, and Tilioideae. While understanding its taxonomical relationships and affinities, it is important to identify palynomorphology to delimit the taxa. In this study, pollen morphology of common species of this family belong to Chityal Reserve Forest area, Nalgonda district, Telangana is discussed. Pollen morphological characters of these species range from spheroidal to prolate, echinate and reticulate to scabrate to granulate, pantoporate to colporate to trizonoporate etc., which reflect the diversity among the taxa. This study is based on pollen morphological variations among the common species, each belong to 12 different genera with a key for their simple identification.

Key words: Malvaceae *s.l.*, Palynomorphology, Chityal RF.

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