ABSTRACT

The present study was carried out to assess the palynomorphic characterization of woody plants of Tehsil Pakpattan. The pollen characteristics i.e. size, shape, tectum, aperture were studied by using Light and Scanning Electron Microscopy. A total of 65 (wild and cultivated) species of woody plants belong to 24 angiosperm families were studied. On the basis of aperture the pollen was recognized as porate, colpate, colporate or inaperturate. Colpate pollen found in 22 species. Porate pollen was found in 15 species. Colporate pollen found in 26 species or inaperturate found in 2 species. *Hibiscus syriacus* has maximum polar length and equatorial diameter which is 12.06±0.15µm and 11.87±0.12µm respectively. *Psidium gujava* has minimum polar length and equatorial diameter which is 0.32±0.01µm and 0.42±0.01µm respectively. Maximum colpi length and width was present in *Abelmoschus esculentus* (16±3.93µm) and *Bauhinia purpurea* (19.6±0.51µm) respectively. Minimum colpi length and width was observed in *Parkinsonia aculeate* (2.7±1.20µm) and *Lantana camara* (0.75±0.38µm) respectively. Maximum pori length and width was observed in *Abutilon mauritianum* (21.7±0.44µm) and *Bauhinia purpurea* (13.5±1.64µm) respectively. Minimum pori length and width was present in *Duranta erecta* (0.67±1.14µm) and (0.9±0.36µm) respectively. Maximum and minimum exine thickness present in *Hibiscus syriacus* (3.1±1.47µm) and *Malpighia glabra* 0.5±0.33µm respectively. Different types of pollen wall ornamentation were observed that ranging from reticulate, perfortae, scabrate, echinate, psilate, regulate, granulate and striate.