ABSTRACT

The present study has been carried out to investigate the palynomorphic features of flowering plants of Shalimar Garden, Lahore. Pollen of fourty-seven flowering plants belonging to twenty-five families were selected for their palynological characterization. The analysis has been made by using light microscopes. Pollen shape, aperture, tectum, size, and unit are considered. Most of the species showed medium sized pollen that are thirty in number. Pollen apertures such as colporate, tricolporate, tricolpate, tetracolporate, sulcate, triporate, trizonocolporate, zonocolporate, porate and inaperturate were recorded. Inaperturate pollen was observed in only one species. Tricolporate aperture was dominant in most of the species.

The shape of pollen varied from prolate spheroidal, oblate, oblate spheroidal, prolate, sub prolate to spheroidal. Oblate spheroidal and prolate spheroidal shapes were dominant. Equatorial diameter varied from 10.42µm to 65.50µm, polar diameter varied from 10.45µm to 65.25µm and P/E ratio varied from 93.8 to 176.72. The tectum variations varied from psilate, sub-psilate, echinate, micro-echinate, perforate, reticulate, scabrate, verrucate to striate. Psilate tectum was seen in most of the species. Mostly, pollen were free as monad but dyad and triad pollen were also observed.