

### **Abstract**

Jhok Reserve Forest is situated on the bank of river Ravi between 31'-14" and 31'-35" North latitude and 74'-15" East longitude. The length of the forest is about 25-30 km to the South West of the Lahore city and Shaikhupura, with total area of 3071 acers. To assess the phytosociological potential of the forest, it was divided in to four sites and further sub-sites (Blocks). Using quadrat method different ecological attributes viz., % frequency, % cover and density were recorded, on the basis of which Importance Value Index (IVI) of the species as well as Family Importance Value Index (FIVI) for families was calculated. In this site ninety one plant species distributed among thirty four plant families. Out of which one family belongs to monocot having seven plant species and thirty three families of dicots having rest of the plant species. Among these family Asteraceae was found to be dominating with fifteen plant species. Along with these highest FIVI was calculated in family Oxalidaceae i.e., 3.72 followed by family Asclepidaceae (3.39) and Poaceae (3.36). Moreover, four plant communities were recorded in Site 1 (Chung), two in each Site 2 (Sharqpur/Dhana), Site 3 (Bhani) and Site 4 (Mohlanwal) which are further subdivided into sub plant communities. As far as the diversity index is concerned it was calculated at sub-site level and its highest value is observed in Block 11 and highest similarity index value was recorded Site 4 (S4) i.e. 66.67. Association of plant species in Jhok reserve Forest was also analyzed by Two Way Indicator of Species Analysis (TWINSPAN) which indicated grouping of the plants at various levels.