

ABSTRACT

The present study was conducted to document the ethnobotanical data by interviewing local inhabitants and hakmis/ herbalists using questionnaire and to investigate the ecological status using Quadrat method for denoting frequency, density, cover and importance value index (IVI) of locally found plant species in Head Sulemanki and its adjoining areas of District Okara, Pakistan. In total 83 wild plant species belonging to 36 angiosperm families and one pteridophyte family were recorded. The most frequently occurring species were *Cyanodon dactylon*, *Desmostachya bipinnata* and *Achyranthes aspera* having the frequency values, 19.51%, 19.51% and 13.41% respectively while the most densely populated species were *Cyanodon dactylon*, *Desmostachya bipinnata* and *Echinochloa crus-gali* with density values, 6.28/m², 5.18/m² and 4.57/m² respectively. *Prosopis glandulosa*, *Cyanodon dactylon* and *Suaeda fruticosa* having the cover values, 4.51%, 4.3% and 3.35% respectively. The plant species with maximum importance value index (IVI) were *Cyanodon dactylon*, *Desmostachya bipinnata* and *Echinochloa crus-gali* having the values were, 9.89, 8.3 and 6.35 respectively.

Soil analysis of the area showed that it contained the moisture content 15.23%, the organic matter 0.87%, pH 8.57, EC 36.22d_{sm}⁻¹, CO₃⁻ absent while HCO₃⁻ 2.55meq/L, Cl⁻ 4.73meq/L, and the Ca⁺⁺ and Mg⁺⁺ 14.28meq/L and 2.20meq/L respectively. It also contained Na⁺ 25.63meq/L, having sodium asorption ratio (SAR) 8.92.