

ABSTRACT

An ethnobotanical survey of the plants of District Kotli, Azad Jammu & Kashmir was carried out by interviewing local people through a questionnaire during 2006-2007. People of this area have had their distinct way of life, beliefs, traditions and the way of utilization of local plants for various purposes especially as medicinal plants over generations.

About 270 plant species belonging to 85 families, including 71 dicot and 10 monocot angiosperms, 1 gymnosperm and 3 pteridophytes families were recorded, Poaceae was the most abundant family having 24 species.

Ethnobotanical data revealed the varied local uses of these plant species: 183 medicinal, 83 fodder and forage, 60 fuelwood and multipurpose, 43 thatching and roofing, 41 ornamental, 33 vegetable, 33 fruit yielding, 17 fencing/hedge, 16 timber yielding, 12 agricultural, 10 honey-bee hosting and 24 of no local uses. In order to verify ethnobotanical data on scientific lines the antimicrobial including MIC and antioxidant activity of the crude extracts of the fruit of a local plant, *Sauromatum venosum* (Ait.)Schott. were tested using Gram-positive and Gram-negative bacteria and 2,2-diphenyl-1-picrylhydrazyl (DPPH). The results indicated a reasonable antimicrobial and significant total antioxidant activity, thus supporting traditional medicinal practices.

These investigations led to the conclusion that the area was under heavy deforestation, overgrazing and biotic interference. Low regeneration and high exploitation of valuable economic and medicinal plants exposed many species to risk of extinction. The results have been discussed and recommendations made for the sustainable utilization, proper management and conservation of the flora of the area investigated.