

ABSTRACT

Through use of questionnaires, visits and personal observations 20 villages of Chagharzai valley, District Buner 224 plant species belonging to 89 families were studied. Of them 77 families were Dicots; 7 Monocots and 3 Pteridophytes. Fungi and Gymnosperms were represented by one family each. Asteraceae had 21 spp. which was followed by Papilionaceae (12 spp.); Lamiaceae (10 spp.); Poaceae and Rosaceae (each with 9 spp.); Ranunculaceae (7 spp.); Moraceae (6 spp.); Amaranthaceae, Brassicaceae, Solanaceae, Apiaceae, Euphorbiaceae and Polygonaceae (each with 5 species); Chenopodiaceae, Mimosaceae and Papaveraceae (each with 4 species); Asclepiadaceae, Betulaceae, Caryophyllaceae, Fagaceae, Malvaceae, Meliaceae, Oleaceae, Rhamnaceae and Salicaceae had 3 species each. The remaining families had less number of species.

Ethnobotanical information revealed that 224 species had varied local uses. They included 138 Medicinal plants, 72 Multi-purpose plants, 67 Fodder and Forage species, 52 Fuel wood species, 36 Vegetable /Pot-herb species, Fruit yielding and Thatching/ Roofing 25 species each, 21 Timber species, Marketable medicinal and Ornamental 19 species each, 15 Poisonous plants, 14 Fencing/ hedges Plants, 13 Agricultural tools making species, 09 Honeybee species and 07 species had no known local uses.

The biological spectrum based on life form showed that therophytes (86 spp., 38.56%) and nanophanerophytes (41 spp., 18.38%) were the most abundant, followed by magaphanerophytes (38 spp., 17.04%). Geophytes (18 spp., 8.07%), hemicryptophytes (17 spp., 7.62%), chamaephytes (14 spp., 6.27%) and lianas (9 spp., 4.03%) had low occurrence in the area investigated. Leaf spectra of plants based on leaf size showed that microphyll was dominating group (54.70%), followed by mesophyll (19.28%), and nanophyll (13.00%). Leptophyll (8.96%) and megaphyll (4.03%) showed their low occurrence.

These investigations led to the conclusion that the investigated area is under heavy deforestation, biotic interference and overgrazing pressure. Resultantly, valuable economic and medicinal plants of the area are becoming sparse due to their low generation and their constant high rate of extraction. Recommendations have been discussed for the sustainable utilization, proper management and conservation of the flora of the area investigated.