Pak. J. Bot., 42(3): 1511-1522, 2010.

A CHECKLIST OF PHANEROGAMIC FLORA OF HARIPUR HAZARA, KHYBER PAKHTUNKHWA, PAKISTAN

HINA FAZAL[1*], NISAR AHMAD[2], ABDUR RASHID[3] AND SHAHID FAROOQ[1]

[1]PCSIR Laboratories Complex, Peshawar, Pakistan
[2]Department of Biotechnology and Microbiology, Quaid-i-Azam University, Islamabad, Pakistan
[3]Department of Botany, University of Peshawar, Pakistan

Abstract

Taxanomic studies were undertaken for the purpose of collecting information about floristic composition of District Haripur during the years 2004-08. The flora of the area consists of 211 species of 170 genera, distributed among 66 families. Of which, 5 species of 5 genera are Gymnospermic distributed among 4 families. Out of 66 families, 7 are Monocotyledonous having 26 species distributed among 24 genera. Rest of the 55 families are dicotyledonous including 180 species distributed among 141 genera.

Introduction

District Haripur is situated in Hazara Division at an elevation of 610 m. It lies between the latitude 33º-44´ to 34º-22´ and longitude 72º-35´ to 73º-15´ (Fig. 1) Geographical significance of the district lies in the fact that its boundaries touch Mardan, a center of Gandhara civilization in the North-West Abbottabad in the North-East Mansehra district in North. Margalla hills range in South-East Swat valley in North-West Buner and Swabi district in the West. Besides these important districts of Khyber Pakhtunkhwa two districts of Punjab province i.e., Attock and Rawalpindi lies on southwest and southeast respectively. Federal capital Islamabad is also adjacent to the district in South.

Geographically, Haripur district is divisible into four regions i.e., Maidan-e-Hazara, Tanaval region, Khanpur Punjkahta, Chhachh (Maidan-e-Khari), which is mainly the study area, located in the west of the city. All submerged under the reservoir of Tarbela dam. The soil of the area is dissected loess plain or dissected piedmont plains in silty loam, silty clay loam texture respectively. The fertile land contains the common plants like *Dalbergia, Morus, Acacia, Zizyphus* etc. The most important rivers are Indus, Sirin, Dauor and Haro. The coldest months of the area are December and January while the maximum temperature is recorded in the months of June and July. Downpour falls in the months of July, August, December and January.

Literature regarding the research reveal that Hookers (1872-97), Brandis (1879), Parker (1956), Blatter & Farnandez (1933-35), Nasir (1959), Ali (1981-85), Stewart (1967-1972), Quraishi & Khan (1976), Qaiser (1973), Beg & Samad (1974), Kazmi (1974), Ghafoor (1974, 1981), Townsend (1974), Jafri & Ghafoor (1974), Austin & Ghazanfar (1979), Nazim-ud-din & Qaiser (1983), Nasir Yasin (1971, 1975, 1984, 1985), Radcliffe (1986) have contributed and are still contributing to the flora of Pakistan. Stewart (1972) prepared an annonated catalogue of the flora of Pakistan. Collectors have visited most parts of Pakistan, but no area has been thoroughly explored. So it was considered imperative to document the flora of the area.

*E-mail:hina_fazalso@yahoo.com

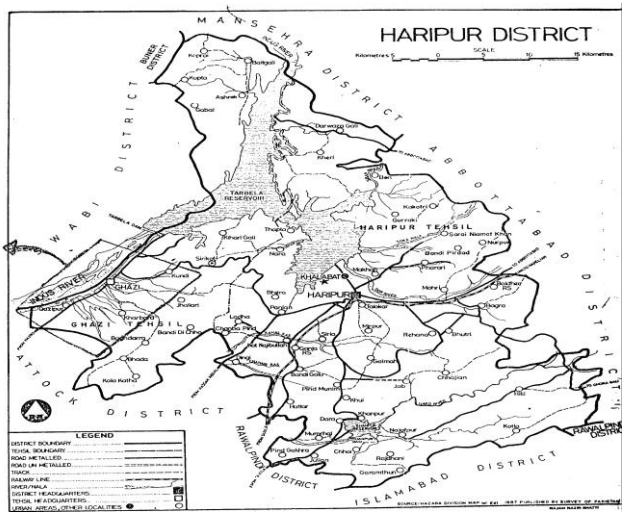

Fig. 1. Map of District Haripur showing collection sights.

Materials and Methods

Frequent field trips in different seasons 2004-08 were arranged to collect plants. Plants were dried and preserved with their full structure (stem, leaves, flowers, fruits and roots). Field information like habitat, associate species, status of plant, flower color, flowering season etc., were recorded; also the traditional knowledge about the indigenous plants like their common names was also collected from local people. Poisoning in Isopropyl alcoholic solution of Mercuric chloride was done. Again they were dried and then mounted on herbarium sheets. The field data was transferred to the herbarium sheets. The mounted specimens were identified through the available taxonomic literature, colored pictures, catalogues, manuals and floras both macro and microscopically. The specimens were deposited in the Herbarium, Pakistan Council of Scientific and Industrial Research Laboratories Complex, Peshawar (PES).

Discussion

This study was performed for bioperspective survey of plant resources for exploration, identification and documentation of economically and medicinally important plant species and wild relatives of the cash crops. In future, it will be helpful and serve for the conservation and sustainable utilization of plant resources of the area. The said area is suffering high pressures of biotic interferences but has got high floristic composition. In the light of the data recorded, a total of 211 species of vascular plants were identified from this area belonging to 170 genera and 66 families. Out of 66 families, 55 are Dicotyledonous having 141 genera and 108 species (85.3%), 7 families are Monocotyledonous with 24 genera and 26 species (12.3%), 4 families are Gymnospermic having 5 genera and 5 species (2.4%). Maximum species i.e., 18 were recorded in the case of Asteraceae (8.61%) followed by Poaceae with 16 species (7.7%), which is in turn followed by Brassicaceae having 11 species (5.3%). Information regarding botanical name, vernacular name, family, flower color, habit, plant height and flowering season of the species are given in the Check List (Table 1). The cultivated have also been reported (Table 2). The ratio of wild to cultivated is 61:39.s

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(Received for publication 20 January 2009)