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# ETHNOMEDICINAL STUDIES ON PLANT RESOURCES OF TEHSIL SHAKARGARH, DISTRICT NAROWAL, PAKISTAN

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**Abstract**

The present research work was designed to gather indigenous knowledge of local people especially medicinal healers (Hakims) about traditional and medicinal uses of plants. Present study was confined to interview people of remote villages of tehsil Shakargarh, district Narowal, Pakistan from September 2003- August 2004. Indigenous knowledge was collected by interviewing people of different age groups between 40 to 80 years. Frequent field trips were arranged to record local information. A total of 102 species belonging to 93 genera and 62 families were recorded as being used by local inhabitants for various purposes such as fuel, furniture, fodder, making baskets and mats, brushing teeth, medicinal, vegetables and edible fruits.

## Introduction

Shakargarh, District Narowal, is bounded on the north and north east by occupied Jammu and Kashmir state, on the east and south east by Gurdaspur and Amritsar Districts of India, on the west and south west by Narowal and Sialkot is situated on its west. Tehsil Shakargarh spreads over an area of 3, 12, 915 square acres. The climate is hot during summer and cold during winter, June and July being the hottest months; while October and March are pleasant. The average annual rainfall is about 1000 mm with highest rainfall from July to September (Punjab Development Statistics, 2000). An area of 6777 acres is under forests. Baeen and Basanter (the small water drains) and River Ravi are the sources of water. The soil is sandy clay loam.

About 80% population of the world depends on the traditional system of health care (Ahmad, 1999). These medicines have less side effects and easily available. In Pakistan the ethnomedicinal uses of plants is practised in the remote areas. The ethnobotanical information besides listing the traditional uses of plants help ecologists, pharmocologists, taxonomists, watershed and wild life managers in their efforts for improving the wealth of area (Ibrar *et al*., 2007). The use of medicinal wild plants has persisted as a long standing tradition in Indo-Pakistan. In recent years, one can notice a global trend in the traditional system of the medicines and ethnobotanical studies have become increasingly valuable in the development of health care system in differecnt parts of the world (Black, 1996; Ahmed, 2007).

Many studies have been conducted on the ethnobotany of medicinal and other useful plants of neighboring countries (Gupta *et al*., 1995; Singh *et al*., 1997; Vedavathy & Mrudula, 1997; Siwakoti & Siwakoti, 1998; Ghimireet *et al*., 1999; Siddique *et al*., 2000). Ethnobotanical studies in various areas of Pakistan have also been carried out (Hussain *et al*., 1995; Badshah *et al*., 1996; Shinwari & Khan, 2000; Durrani *et al*., 2003; Gilani *et al*., 2003; Sher *et al*., 2003, 2004; Hussain *et al*., 2007; Ibrar *et al*., 2007). The present study reports indigenous knowledge (IK) of the uses of medicinal plants of Tehsil Shahkargarh which is still available among the local people and medicinal healers

(Hakims). The area of tehsil Shakargarh was selected for the present study because it has a great diversity in its flora. Moreover, it looks from the literature that the documentation of the plant wealth of this area was ignored during the study of Flora of Pakistan and even in the district wise gazzeters of Government of Pakistan.

## Materials and Methods

The area was visited several times for the collection of data during the year 2003-2004. The local names and traditional uses of plants, with emphasis on medicinal uses, were documented by interviewing the local elderly knowledgeable persons including local herbal healers (Hussain *et al*., 2007). The plants were collected, pressed and later on identified with the help of Flora of Pakistan (Nasir & Ali, 1971-1995; Ali & Qaiser, 1995-2005). Questionnaires were adopted for documenting ethnobotanical knowledge of the area. The data obtained was checked with the available literature.

## Results and Discussion

The present study was conducted in remote villages of Shakargarh. A total of 102 plant species belonging to 93 genera and 62 families were recorded which were used by local inhabitants for various purposes including 5 fuel wood species, 4 furniture wood species, 9 vegetable species, 10 edible fruit species, 2 baskets and mat making species, 2 teeth cleaner species, 6 fodder species, 7 ornamental and 76 medicinal species. It was found that many plants have similar medicinal uses as described by Ahmad *et al*., (2003) and Ashfaq *et al*., (2003). Edible fruits and roots are obtained from 12 species including, *Ipomoea batatus*, *Phoenix dactylifera*, *Psidium guajava*, *Punica granatum* and *Mangifera indica*. The data is arranged in the alphabetical order of botanical name followed by family, local name and traditional uses (Table 1).

Local peoples use 76 medicinal species in health care system. The promising species include *Abutilon indicum*, *Achyranthes aspera*, *Artemisia vulgaris*, *Butea monosperma*, *Datura alba*, *Ipomoea batatus*, *Prosopis spicigera* and *Trigonella foenum-graecum*. The results agrees with the findings of Gupta *et al*., (1995), Lewis & Elvin (1995), Destagir (2001) and Hussain *et al*., (2005) who reported plants that are traditionally used for curing many diseases and Ibrar *et al*., (2007) who reported ethnobotanical studies on plant resources of Ranyal Hills, District Shangala.

After establishment of this tehsil uptill today, two wars had been fought with India, in 1965 and 1971. During the war of 1971 more than half area of Shakargarh was occupied by India and nearly most of the trees and shrubs were destroyed except big trees those are worshiped by the Hindu's that is *Ficus religiosa*, *F. bengalensis* and *Mangifera indica*. Thereafter the forests and other vegetation of the area were grown by native peoples and forest department. The present study also contained information on threatened species like *Butea monosperma,* a broad leaved tree growing naturally with dwindling population in some graveyards and forests as severely affected member of the existing biota and playing a vital role in stabilization of the fragile ecosystem, providing medication, a shelter to wild life and recreation for the inhabitants of the surrounding area. Being a remote area no effective measures have yet been taken by the concerned experts for its conservation.

There is almost no ethnobotanical and medicinal data available from this remote area bordering India and occupied Jammu and Kashmir. Hopefully, this work may help to add information into the documentation of Red Data Book of Pakistan. The area is under heavy deforestation and overgrazing pressure, which has reduced regeneration of woody plants. Overgrazing has deteriorated the habitat, as there is no management of grazing land. Most of the medicinal plants are uprooted by the local people for selling or for fuel wood purposes and are also grazed heavily. There is a dire need to conserve the resources for our own survival. Forests are the resource that control the environmental pollution and provide livelihood not only to the local communities but to others as well as stated by Ibrar *et al*., (2007).

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