



Asian Journal of Plant Sciences

ISSN 1682-3974

science
alert

ANSI*net*
an open access publisher
<http://ansinet.com>

Medicinal Uses of Plants with Particular Reference to the People of Dhirkot, Azad Jammu and Kashmir

¹M. S. Gorski and ²Rizwan Shahzad

Department of Botany, University of Azad Jammu and Kashmir, Muzaffarabad, Pakistan
Department of Biological Sciences, Quaid-i-Azam University, Islamabad, Pakistan

Abstract: An ethnomedicinal exploration was carried out in Dhirkot and its allied areas district Bagh. The check list consists of 43 species of angiosperms belonging to 14 families. These medicinal plants are singly used or used with the mixture by the local inhabitants. The present report assists in coordinating and co-operation among various agencies such as forest, Pharmaceutical firms interested in the utilization of these medicinal plants and to initiate regeneration work in affected area.

Key words: Ethnomedicinal, district Bagh, local community

Introduction

Dhirkot is bounded on the Northern side by district Muzaffarabad and on the South by district Poonch and on Western by Murree and Hazara. The average mean maximum and minimum temperature of the year is 22 and 4°C respectively. December and January are the coldest months, while June and July are the hottest months of the year.

Human behavior has a direct impact on the plant communities with which they interact. These interactions are the focus of ethnobotany (Pei, 1995). Shinwari (1996) discussed the present status of Ethnobotany in Pakistan. He emphasized on the need of investigation, documentation and application of traditional knowledge in the use of natural resources. Shinwari and Khan (1999) reported ethnobotanical conservation status of Margalla Hills, Islamabad. They described that the inhabitants of park have always used medicinal plants for various ailments and have for long time been dependent on surrounding plant resources for their food, shelter, health and other cultural purposes. Leoratti and Lattanzi (1994) studied medicinal plants ethnobotanically in Makran. They also discussed their traditional medicinal uses. Goodman and Ghafoor (1992) conducted ethnobotanical study in Baluchistan province. It is the region where a heterogeneous cultural group known as Bloch lives. They collected information about 114 plant species used by nomads and village dwellers. Shahzad *et al.* (1999) reported vegetation composition of Samahni valley (AJK). For area like Dhirkot no information about the plants used in medicines by the local inhabitants is available.

The objectives of this study were to document this treasure, also to enlist and confirm the species of special concern, nationally traded important. For this we have to stay with local people for participatory approaches.

Materials and Methods

Plants were collected from Dhirkot and its allied areas of district Bagh. Plants were pressed in presser papers and were dried carefully. Data relating to different ethnobotanical aspects were collected from local people of the area. The collected plants were identified with the help of available literature (Nasir and Ali, 1970-1987). Further identification was done by comparing the collected plant with the collection in Herbarium, Department of Biological Sciences, Quaid-i-Azam University, Islamabad. Most specimens of the species were deposited in the Herbarium of the department of Botany, University of Azad Jammu and Kashmir, Muzaffarabad.

Results and Discussion

The results are presented in Table 1. Information about the usefulness of the plants as medicines has been collected and documented as used by the local people. The medicinal plants are comprised of 43 angiospermic plant species belonging to 14 families. These medicinal plants are either used singly (mufrad) or in combination (murakkab) with some other plant or plant parts. Some plant species are claimed to be quite effective remedies for rheumatism, asthma, teeth cleaning, pulmonary affections, cough, skin diseases. In some cases, not only single plant part but also other part of the same plant in combination used to cure a particular disease, Kikar seeds are not separated but remain in the fruit and then used as a remedy against diarrhoea. In other instance, Tahli leaves in combination with seeds are used in stomach problems. Natural vegetation of medicinal plants is adversely affected by a number of factors, in the area explored. vegetation of the area is affected by heavy grazing and intensive fall of trees.

Table1: Ethnomedicinal status of plants in district Bagh

Family name	Botanical name	Local name	Status	Medicinal uses
Acanthaceae	<i>Adhatoda vasica</i> wall	Bhakar	Shrub	The leaves are used for rheumatism. Fresh flowers are used in ophthalmia.
Amaranthaceae	<i>Amaranthus viridis</i> L.	Ginar	Herb	The leaves are used as an emollient. The leaves are also used as vegetable.
	<i>Achyranthus asper</i> L.	Kandyara	Herb	The plant is said to be used in piles and boils. It is pungent purgative and astringent.
Apocynaceae	<i>Carissa opaca</i> Staph.	Granda	Shrub	Leaf decoction is reported to be used in asthma, Fruits and leaves are used as stimulant.
	<i>Nerium olender</i> L.	Gundera/Kneer	Shrub	Bark is used for teeth cleaning. Root paste is useful in scorpion sting and snake bite.
Asteraceae	<i>Achillea millefolium</i> L.	Sultani booti	Herb	The flowers are said to be useful as laxative, diuretic, tonic to the female organs of generation. Fresh leave decoction is regarded as a family specific against cold.
	<i>Echinops echinatus</i> Roxb.	Kanda	Herb	The Plant is pungent and bitter in taste, used in urinary discharges and also pain in joints.
	<i>Helinathus annus</i> L.	Soonju	Shrub	The seeds are reported to be used as diuretic and expectorant, drug make used in bronchial and Pulmonary affections, cough and cold.
	<i>Lactuca dissecta</i> L.	Salad	Herb	The fresh plant is a mild sedative and antispasmodic. The leaves are said to be used in purifying the blood.
	<i>Senecio chrysanthemoids</i> L.	Chahal	Herb	Aqueous extract is used as antipyretic and calmate. Its root extract is given to children against cholera and lung diseases.
Brassicaceae	<i>Sonchus asper</i> Hill	Hand	Herb	The plant as a whole is pounded and applied to wounds.
	<i>Capsella bursa-pestoris</i> Medik.	Saag hallwon	Herb	Plant's seeds are used as stimulant and also for the chest trouble.
Convolvulaceae	<i>Convolvulus arvensis</i> L.	Hern khuri	Herb	The roots are reported to possess properties.
	<i>Cuscuta reflexa</i> roxb.	Neeli dhari	Herb	The seeds are used as carminative tonic, purifies the blood, also used externally against itch and internally in febric ailments.
Euphorbiaceae	<i>Mallotus Phillipensis</i> (Lam.)Muck.	Maela	Herb	Powder obtained from the fruit is used as vermifuge, purgative and in parasitic skin diseases.
	<i>Ricinus communis</i> L.	Harnoli/Arand	Shrub	The oil from seed is given to children in case of constipation. The decoction of leaves are applied to the breasts of women, act as galactagogue, i.e., increases milk secretion.

Gorsi and Shahzad: Ethnomedicinal, district Bagh, local community

Table 1: Continued

Family name	Botanical name	Local name	Status	Medicinal uses
Labiataeae	<i>Ajuga bracteosa</i> wall	Kori booti	Herb	A bitter astringent given in the treatment of fevers also is regarded as diuretic.
	<i>Mentha royleana</i> L.	Jangli podina	Herb	Herbal tea is taken in abdominal disorders. It is also used as carminative in dysentery.
	<i>Micromeria biflora</i> (Dedon) Benth.	Chai booti	Herb	Plant is used as a relief from pain of joints.
	<i>Nepeta elioptica</i> Royle	Muskbal	Herb	The seeds are especially used in cold water as a remedy for dysentery.
	<i>Salvia moorcroftiana</i> wall	Rati jari	Herb	The root is given in cough and seeds are given in colic and dysentery.
	<i>Thymus serphyllum</i> L.	Ajwain	Herb	The plant has sharp pleasant taste, the leaves are used as laxative, stomachic, and useful in purifying the blood.
Mimosaceae	<i>Acacia modesta</i> wall	Phalai	Tree	The extract from the bark is used as tonic and stimulant.
	<i>Acacia nilotica</i> L.	Kikar	Tree	Seeds enclosed in fruits are used as astringent and in diarrhoea and dysentery.
	<i>Albizia lebbbeck</i> Benth.	Shreen	Tree	The seeds are reported to be used as tonic to the brain. The leaves are used in relieving tooth ache and strengthens the gums and teeth.
Moraceae	<i>Ficus palmata</i> Forrsk.	Phugwara	Tree	Leaves are said to be used in constipation and are laxative, fruit is used as cooling both fresh and fry.
	<i>Morus alba</i> L.	Toot	Tree	Fruits are eaten both fresh and dry, they are said to be laxative. Leave are emollient, cooling agent.
	<i>Ficus bengalensis</i> L.	Bohar	Shrub	The leaves are heated as a Poultice, applied to abscesses. The milky juice of fruits, leaves and bark of roots is used as aphrodisiac.
Papilionaceae	<i>Dalbergia sisso</i> Roxb.	Tahli	Tree	The leaves in combination with seeds are said to be used in stomach disorders.
	<i>Lathyrus aphaca</i> L.	Jangli matter	Herb	Ripened seeds are said to be narcotic has soothing effect.
Rosaceae	<i>Fragaria nubicola</i> Lindley	Bud mava	Herb	Fruit is said to be laxative and poragatve.
	<i>Prunus arminica</i> L.	Khobani	Tree	The seeds are reported to be used as tonic and also relieves the headache.
	<i>Prunus persica</i> Stokes.	Aru	Tree	The fruit is antipyretic, tonic to the brain, enriches the blood, flowers are said to be used as laxative.
	<i>Pyrus malus</i> L.	Seb	Tree	The Poultice made of rotten apple is used for weak eye, for brain tonic.
	<i>Rosa indica</i> L.	Gulab	Shrub	Gulkand-- is made by mixing petals with sugar for letting some days which is given in stomach disorders and also in fevers.
	<i>Rubus fruticosus</i> L.	Akhra	Shrub	An infusion of leaves is taken to stay diarrhoea, The decoction of root is also useful against whooping cough in its spasmodic stage.
Solanaceae	<i>Datura stramonium</i> L.	Datura	Herb	The seeds have an acrid and bitter taste, used as tonic, febrifuge. The leaves after roasting are applied locally to relive pain.
	<i>Solanum nigrum</i> L.	Kach mach	Herb	Fruit is reported to be useful in thirst due to fever and in inflammation
	<i>Solanum pseudo capsicum</i> L.	Mirchola	Herb	Decoction of the plant is used for cleaning and washing the wounds. Juice of the leaves is used for skin diseases.
	<i>Solanum surratens</i> Burm.	Mokri	Herb	The whole plant is expectorant, stomachic and diuretic. It is used in fever and chest pain.
	<i>Withania somnifera</i> D.Don.	Aksun	Shrub	The leaves are applied to tumors. The roots are regarded as useful in rheumatism and dyspepsia. The fruit is diuretic.
Umbelliferae	<i>Daucus carota</i> L.	Gajar	Herb	The whole plant is said to be anti-dysenteric, carminative, tonic.
	<i>Phoeniculum vulgare</i> L.	Sonf	Herb	Fresh leaves are reported to be stomachic. Fruits are used in spices and curries.

Similar observations were recorded by Shahzad and Qureshi (2001). They also observed that rapid urbanization and unplanned exploitation have resulted in loss of such medicinally important plant species.

It is concluded that local people and hakeems collect and use the plants, which are being eradicated and becoming rare. It is therefore, suggested that afforestation program followed by proper protection is the need of the time.

References

Leooratti, M.L. and E. Lathanzi, 1994. Traditional Physiotherapy on coastal areas of Makran (Southern Pakistan), *Fitoterapia*, 65: 157-161.

Nasir, E. and S.I. Ali, (eds.), (1970-1987). *Flora of Pakistan*, Nos. 1-187, Pakistan agricultural Research Council, Islamabad/Department of Botany, University of Karachi.

Pei, S., 1995. Ethnobotany and Sustainable use of Plant Resources in the HKH Mountain Region. Planning workshop on Ethnobotany and its application to conservation and community development in Hindu Kush Himalayan (HKH) region, Nepal.

Shahzad, K.R., Z.H. Malik and R.A. Qureshi, 1999. Phytosociological survey of Samahni valley, Bhimber, Azad Kashmir. *Pak. J. For.*, 49: 91-100.

Shahzad, K.R. and R.A. Qureshi, 2001. Common ethnomedicinal uses of plants in Jatlan area, District Mirpur (AJK). *Hamdard Medics*, 3: 42-45.

Shinwari, Z.K., 1996. The Ethnobotany in Pakistan. Proceeding of first training workshop on Ethnobotany and its application to conservation, NARC, Islamabad, pp: 14-25.

Shinwari, M.I and M.A. Khan, 1999. Folk use of medicinal herbs of Margalla Hills National Park, Islamabad. *J. Ethn.*, 69: 45-56.