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INDIGENOUS MEDICINAL PLANTS USED BY LOCAL WOMEN IN SOUTHERN HIMALAYAN REGIONS OF PAKISTAN

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Abstract

The present work is based on the results of research conducted on traditional uses of some important plants by the local women in southern Himalayan Mountains, Pakistan. The locals especially women of the area have been using the medicinal plants for many day to day uses for various ailments and are dependent on the plants in their surroundings for food, health, medication and various cultural purposes. A total of 28 important plant species belonging to 25 families were recorded which were used medicinally and various other purposes by the local women. About 130 informants were interviewed in this regard. Mostly plants like *Viburnum foetens* Decne., *Bergenia ciliata* (Haw.) Sternb. *Berberis lycium* Royle, *Geranium wallichianum* D. Don ex Sweet and *Skimmia laureola* (DC.) Sieb. & Zucc. ex Walp. are used by the local women for medication, health care and other purposes. *Geranium wallichianum* D. Don ex Sweet is most commonly used as tonic by women especially for body strength and other internal body disorders. *Bergenia ciliata* (Haw.) Sternb., is used as anticancerous plant and for internal wounds. *Skimmia laureola* (DC.) Sieb. & Zucc. ex Walp. is another widely used plant for respiratory disorders in children by the local women. People have strong faith in herbal medication by ethnomedicinal plants and women are leading men in applying the recipe for medication by these plants.

Introduction

Ethnobotany is the study of how the people of a particular culture and regions make the use of indigenous plants, while the ethnobotanist explores how plants are used for such things as food, shelter, medicine, clothing, hunting and religious ceremonies. It is the science, which studies. The relationship between a given society and its environment and in particular the plant world (Aumeeruddy, 1996).

Indigenous knowledge is as old as human civilization but the term ethnobotany was first coined by an American botanist, John Harshburger (1896), to study the plants used by the primitive and aboriginal people. Since then it has been defined as the traditional knowledge of indigenous communities, about surrounding plant diversity and as the study of how the people of a particular culture and region make use of indigenous plants. Ethnobotany has its roots in botany. Botany, in turn originated in part from an interest in finding plants to help fight illness. In fact, medicine and botany have close ties. Many of today's drugs have been derived from plant resources.

Traditional Unani medicine is a part of our culture and Pakistan is one of those countries where traditional Unani medicine is popularly practiced among the large segment of its population. It originated in Greece, founded by old ancient Greek philosophers, and was used/documented by Muslims during the glorious period of Islamic civilization. It was brought to the Indo-Pak subcontinent by Muslim scholars and practiced here for centuries. Traditional Unani medicine heavily depends on medicinal plants, apart from using animals and minerals. Pakistan has a varied climate and is quite rich in medicinal herbs, though scattered over a large area. All the plants studied are growing wild and no systematic attempt has been made to collect and cultivate herbs in an appropriate manner (Shinwari & Khan, 2000).

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Cunningham (1993) studied African medicinal plants and suggested that priority areas of cooperative action between health care professionals and conservationists are rapidly urbanizing regions with a high level of endemic taxa, particularly West Africa, he also studied the sustainable harvesting of *Prunus africana* bark in Cameroon. He reported that *Prunus africana* is a medicinal plant in International trade and has multiple uses. Its bark is major source of an extract used to treat beginning hyperplasia, an increasingly common problem in elderly men. Shinwari & Khan (2000) described 50 species of herbs belonging to 27 families from Margalla Hills National Park, Islamabad Pakistan, as used medicinally by the local inhabitants of the park, among which 10 species are being sold in the local market. *Asparagus adscendens* Roxb., and *Viola canescens* Wall. ex Roxb. are found vulnerable to harvesting.

Bukhari (1994) worked on ethnobotany and vegetation analysis of Machyara National Park Muzafarabad AJK and reported 10 plant communities in different regions of the National Park; in the status of the plant species in the park specially the medicinal plants in the park. Zandial (1994) worked on the Ethnobotany of the National Park Machyara, AJK, Pakistan and reported 104 important species of plants including tree, shrub and herb species used ethnobotanically by the local people.

Medicinal plants used by the local people ethnobotanically are of great importance that is the reason that people are engaged in the trade of important medicinal herbs, shrubs and tree species in and out side the country. The present report gives an account of the indigenous medicinal plants used by local women in southern Himalayan regions of Pakistan. Elisabetsky (1990) reported that annual world market value for medicines derived from medicinal plants by indigenous people is US $ 43 billion.

Materials and Methods

Before starting the research work on indigenous uses of important medicinal species of the area and the general information about the area was collected from the local women. About 11 villages around the area were visited and surveyed where interviews of about 130 local informants especially women were made. Information on demographic (age, gender) and ethnobotanical information (medicinal plants and their uses) was gathered from each site by using a semi-structured and close ended questionnaire containing questions such as (1) Do you know the medicinal plants in your local area; If yes, please name them; (2) What is the use of these medicinal plants? How do you use them (as a spice or a medicine) and for which ailment? (3) Which part of these plants are used for medicinal purposes? (4) When do you collect these plants? and (5) Do you collect them for your personal use or for selling them to pharmaceutical companies?

Plant collection and data recording for traditional/ indigenous uses of these plants in various localities were primarily done by carrying the collected specimens to local women The informants were asked questions, in Urdu (national language of Pakistan) regarding traditional uses of plants, their vernacular names, distribution, morphology and economical importance. Collected plant material has been dried, pressed, preserved (Poisoned), accessioned, identified and finally deposited in the Herbarium of the Department of Plant Sciences, Quaid-i-Azam University, Islamabad (ISL). Identification of the field collected medicinal plants was done by confirming them by the respondents and comparing them with those in the various Herbaria of Pakistan. Necessary literature has also been collected from different libraries e.g., Pakistan Museum of Natural History, Islamabad (PMNH), World Wide Fund for Nature (WWF) and National Herbarium, National Agricultural Research Centre, Islamabad (NARC).

Results

Discussion

The present study provides information on the indigenous uses of 28 important ethnobotanically important plants belonging to 25 families. The important objective of this study was to record the indigenous uses of these plants used by the local women for various purposes. The ethnobotanically important plants are a source of income and cure for the local women.

Ethnobotany helps us in identifying conservation issues such as cases where a rate of harvest exceeds the rates of re-growth. There is an urgent need of conserving the medicinal plants that are over harvested so that in future the coming generations could benefit from these precious plants that are a real gift of nature for the mankind. It is a collaborative venture between people in local communities and various scientists and specialists. A tragedy of the modern times is that the precious ethnobotanical knowledge is disappearing very fast. Westernization, breakdown of traditional cultures and even the extinction of whole tribal groups are responsible. A chief goal of such a study is to ensure that local natural history becomes a living tradition in communities, where it has been transmitted orally for many years. The results of this work can later be applied to biodiversity, conservation and community development. (Martin, 1995).

All over the world the medicinal plants are used with great interests and are active participants in the trade and economy of the country. In China as many as 2394 traditional Tibetan medicines are used all from plants (1106), animals (448) and natural minerals (840) (Yang, 1988). Many of the important medicinal plants are sold at higher prices in the market. As Elisabetsky (1990) reported that annual world market value of the medicines derived from the medicinal plants by the indigenous people is US $ 43 billions. Most of the plants used by the local people are not conserved but are over exploited. It is therefore necessary to find the ways of promoting the local people towards conservation as Shenji (1994) suggested that ethnobotany is the science of documenting the traditional knowledge on the use of plants by the indigenous people and for further assessing human interactions with the natural environment.

Local women are using the plants for various purposes i.e., medication, food, cosmetics, and fodder for the cattle. They have faith on these plants. The ratio of the women using allopathic medicines is negligible because they are directly dependent on plants for medication and other basic needs. The ethnobotanically important and other beneficial plants are quite useful for the basic health and hygiene of the local women. Local women are directly dependent on these plants for cure of different diseases, food, skin care, cosmetics and fodder for the cattle. These plants are a source of interaction between the women and the natural resources of the area. It is very important that the precious ethnobotanical knowledge about the plants should be transferred to the younger generation, which is disappearing very fast. The data can be used in future for pharmacological studies.

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