



Ethnobotanical Uses of Some Medicinal Plants of District Mandi, Himachal Pradesh (India)

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ABSTRACT: Himachal Pradesh, one of the pioneer Himalayan States is a rich repository of medicinal flora. The paper documents the traditional knowledge of some medicinal plants that are used by the inhabitants of Mandi district of Himachal Pradesh to cure various diseases. The present study was conducted to assess and document the knowledge and use of medicinal plant species used by the traditional healers to treat different ailments.

Keywords: Medicinal Plants; Ethnobotanical Uses; Himachal Pradesh; Western Himalaya and Traditional Knowledge.

INTRODUCTION: Indigenous knowledge has become recognized worldwide not only because of its intrinsic value but also because it has a potential instrumental value to science and conservation. Traditional knowledge systems are hundreds or even thousands of years old and involve not only the knowledge of plants for medicine and food but also strategies for the sustainable utilization of plant resources. Traditional medicine and ethnobotanical information play an important role in scientific research, particularly when the literature and field work data have been properly evaluated¹. Ethnobotany is the most important approach to study the natural resource management of indigenous people. The term ethnobotany is considered as the art of collection of useful plants by a group of people and the description of the uses of plants². Over the last century, ethnobotany has evolved into a scientific discipline that focuses on the people-plant relationship in a multidisciplinary manner, incorporating not only collection and documentation of indigenous uses but also ecology, economy, pharmacology, public health, and other disciplines³. Recent ethnobotanical surveys among tribal populations have brought new information to the forefront, which can be utilized to improve the economy of the tribes by organizing the systematic collection of forest products and locating cottage industries, especially of herbal drugs⁴. The traditional medicine is increasingly solicited through the tradipractitioners and herbalists in the treatment of diseases. The use of traditional medicine is widespread and it is based on centuries-

old practices based on beliefs and local traditions⁵. Ethnobotanical research also plays an important role for conservation and sustainable utilization of medicinal plant resources. Ethnobotanical studies that explore and help to preserve knowledge are therefore urgently needed before traditional folklores are lost ever⁶.

Himachal Pradesh is a hilly state situated in the Northwest Himalayan region between 30°22'44" N to 33°12'44" N latitude and 75°45'44" E to 79°04'20" E longitude. Because of its geographical position and hazardous means of transport communication; the traditions, myths, legends and folklores of the ancients are carefully persevered in the lores and mores; temples and historical places in existence at various regions of this state⁷. Out of around 3,500 species of higher plants identified in Himachal Pradesh, there are about 1500 species of medicinal and aromatic plants⁸. Mandi district of Himachal Pradesh is well known for its medicinal plants diversity in the Western Himalayan region. Different workers have documented the uses of various medicinal plants from Mandi district of Himachal Pradesh⁹⁻¹⁶. In the present investigation an attempt has been made to explore ethnobotanical information on some medicinal plants used by the villagers to cure various ailments.

Ethnobotanical observations on medicinal plants in Mandi District of Himachal Pradesh were based on the field study and screening of relevant literature. The information related to medicinal species which

are used to cure common ailments was gathered by personal interviews with medicine men, village headmen, rural informants and experienced people. Details of 8 medicinal plants are described alphabetically with their botanical name, family, vernacular name, distribution, part used, folk use/s and uses in Literature.

OBSERVATIONS:

1. *Aloe vera* (L.) Burm. f. (Xanthorrhoeaceae)

Vernacular Name: Duariya

Distribution: Cultivated throughout India.

Part Used: Leaf pulp

Folk Uses: Leaf pulp mixed with dried powdered leaves of Neem (*Melia azadirachta*). Two teaspoons of this mixture mixed in a glass of water, stirred and given daily in morning on empty stomach for gastric disorder. Slightly warmed leaf pulp tied over furuncles to cure them. One teaspoon of leaf pulp juice prescribed daily on empty stomach for liver disorder.

Uses in Literature: Plant is used for digestive disorders, wounds, burns, skin problems, diabetes, arthritis, eye disease, tumor, spleen enlargement, liver complaints, vomiting, bronchitis, asthma, jaundice, ulcers, constipation, maintains a good gastric pH, helps in inflammatory bowel diseases, non-ulcer dyspepsia, gastric and duodenal ulcers¹⁷.

2. *Asparagus adscendens* Roxb. (Asparagaceae)

Vernacular Name: Satavari

Distribution: The Western Himalayas from Himachal Pradesh to Kumaon, up to 1,500 m.

Part Used: Roots

Folk Uses: 50g of fresh powdered roots are mixed in about 500 ml of water by continuously stirring it. About 5-10 ml of the content prescribed twice daily for cough. About 50g powdered roots are mixed in wheat flour and given to cattle for enhancing lactation.

Uses in Literature: It is used in treatment of diarrhea and dysentery, also found to be effective as demulcent, galactagogue and antifilarial¹⁸.

3. *Berberis lycium* Royle (Berberidaceae)

Vernacular Name: Kashmal

Distribution: Distributed in the temperate and sub tropical parts of Asia.

Part Used: Stem Bark

Folk Use: Decoction of bark given daily for diabetes.

Uses in Literature: Roots are used in the treatment of ophthalmia (swollen and sore eyes), jaundice, malaria, wounds, gonorrhea, curative piles, unhealthy ulcers, acute conjunctive, scrofula, fistula, acute spreading suppurations and other skin diseases; also used as bitter tonic astringent, diaphoretic and febrifuge. Fruits are cool and laxative and are used for the relief of intestinal colic and pharyngitis, typhoid and fever. The leaves of the plant are used in the treatment of jaundice. Stem is known to be diaphoretic and laxative and are useful in rheumatism. The stem is also used in treatment of ophthalmia and jaundice. The plant is used for dyeing clothes and for tanning leather. The berries are mostly consumed in raw form¹⁹.

4. *Rhynchosyilis retusa* Blume (Orchidaceae)

Vernacular Name: Dal Laichi

Distribution: North East and South India, Nepal, Bhutan, Sri Lanka, Myanmar, Thailand, Indonesia, Java and Philippines.

Part Used: Leaves

Folk Use: Decoction of leaves prescribed for asthma.

Uses in Literature: The whole plant is used to treat rheumatic disease, tuberculosis, epilepsy, blood dysentery, menstrual disorders, gout, asthma, skin diseases and external inflammations. Roots are used to cure malarial fever, cuts and wounds. Leaves are used to cure rheumatic pain. Dried flowers are used as insect repellent and to induce vomiting²⁰.

5. *Stephania glabra* (Roxb.) Miers (Menispermaceae)

Vernacular Name: Bis-khappar

Distribution: Himalayas from Shimla to Sikkim, Khasi Hills and Assam.

Part Used: Tuber

Folk Uses: Small pieces of tuber mixed in fodder and given to cattle to increase milk yield and also to cure inflamed teats (Bushair disease).

Uses in Literature: Tubers are used in pulmonary diseases, asthma, intestinal disorders and hypergly-

caemia, diabetes, cancer, tuberculosis, dysentery, sleep disturbances, psycho-disorders, inflammation and fever^{21,22}.

6. *Viola odorata* L. (Violaceae)

Vernacular Name: Banaksha

Distribution: Found in Kashmir and Western Himalaya.

Part Used: Flowers

Folk Uses: Decoction of flowers along with cardamom and black pepper efficacious in checking cold and cough. Flowers added to tea which is prescribed for curing cold and nose bleeding.

Uses in Literature: The herb is valued as an expectorant, anti-inflammatory, diaphoretic, antipyretic, diuretic. It is commonly used as remedy for coughs and sore throat, hoarseness and tonsillitis^{21,23}.

7. *Vitex negundo* L. (Verbenaceae)

Vernacular Name: Bana

Distribution: Throughout India ascending to 900 m in the North-Western Himalaya.

Parts Used: Branches, Leaves

Folk Uses: Juice of tender branches mixed in curd given to cure gastric disorders. Decoction of leaves prescribed for diabetes and skin disorders.

Uses in Literature: Plant is astringent, cephalic, stomachic, antiseptic, alterant, thermogenic, depurative, rejuvenating, ophthalmic, anti-gonorrhoeic, anti-inflammatory, antipyretic and useful in bronchitis, asthma and enlargement of spleen. Roots are tonic, febrifuge, anti-rheumatic, diuretic, expectorant and are useful as a demulcent in dysentery, in cephalalgia, otalgia, colic, uropathy, wound and ulcers. Bark is useful in odontalgia, verminosis and ophthalmopathy. Leaves are aromatic, bitter, acrid, astringent, anodyne, anti-inflammatory, antipyretic or febrifuge, tranquilizer, bronchial smooth muscle, relaxant, anti-arthritis, antihelmintic and vermifuge. Flowers are cool, astringent, carminative, hepatoprotective, digestive, febrifuge, vermifuge and are useful in haemorrhages and cardiac disorders. Fruit is nervine, cephalic, aphrodisiac, emmenagogue and vermifuge. Seeds are prescribed in spermatorrhoea, for promoting spermiogenesis, and for retaining and promoting virility^{21,24}.

8. *Withania somnifera* (L.) Dunal (Solanaceae)

Vernacular Name: Ashwagandha

Distribution: Throughout the drier and subtropical parts of India.

Parts Used: Leaves, Roots

Folk Uses: Poultice of leaves applied to cure joint pains. Its powdered dried roots given to promote sexual vigour.

Uses in Literature: The plant is used for the treatment of nervous exhaustion, memory related conditions, insomnia, tiredness potency issues, skin problems, cough, chronic fatigue, weakness, dehydration, bone weakness, loose teeth, thirst, impotency, premature aging emaciation, debility, convalescence and muscle tension. Roots are used as an anti-inflammatory drug for swellings, tumours, scrofula and rheumatism and as a sedative and hypnotic in anxiety neurosis. Leaves are anti-inflammatory, hepatoprotective, antibacterial. Fruits and seeds are diuretic^{21 & 25}.

CONCLUSION: Present ethnobotanical investigation indicated that the Mandi District of Himachal Pradesh is quite rich in herbal wealth and the local inhabitants make use of the plants for various uses in their daily life. It has been realized that such kind of ethnobotanical explorations are required in the region in order to develop a comprehensive database on medicinal plants.

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