

ETHNOBOTANICAL STUDIES IN LAHUL AND SPITI, HIMACHAL PRADESH

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ABSTRACT: *The paper presents 41 folklore claims collected from the tribes Gaddi, Swangla, Bhot and other local inhabitants residing in the district of Lahul and spiti in Himachal Pradesh. 41 taxa belonging to 39 genera and 24 families have been described. Botanical name of the plant, family, local name, place of collection, altitude, collection number and mode of administration have been given. Uses of most of the herbs are reported here for the first time.*

INTRODUCTION

Lahul and Spiti is the only district with a scheduled tribal population, which since reorganization of the state, has been transferred to Himachal Pradesh. It lies between latitudes 32° 0' 93" and 32° 0' 59" N and longitude 76° 0' 49" and 77° 0' 47" E and cover an area of about 5180 sq. kilometer. The population of the area consists of mostly 3 tribes i.e. Gaddi (13), Swangla (2114), Bhot (12,003)¹ besides other local inhabitants.

The area is quite rich in herbal wealth and the local inhabitants make use of the plants for various uses in their daily life. No serious attempt on ethnobotanical studies has been made so far. Uniyal *et al*² have made preliminary observation on medicinal plants of the area including some ethnobotanical uses.

The food of the inhabitants is simple consisting of buck wheat, flour, barley, wheat and meat. Potatoes are grown and eaten by the people. Sheep and goats are killed at the commencement of winter, dried

and eaten throughout the winter. Drinking of liquor is common amongst both sexes.

The dress is the same as that of other similar hilly area with only difference that the cost is longer and darker in colour. The dress is mainly woolen and this entails necessity of keeping sufficient number of sheep by the local people.

The houses are flat roofed like those in the plains mostly two or three storeyed. The roofs are supported on rafters of pencil cedar, or blue pine when such are available and elsewhere of birch, populus and willow. Doors and windows are made of blue pine which is considered best timber tree.

Methodology

The surveys of different ethnic groups in remote area of Lahul and Spiti were conducted and herbarium voucher specimens were collected, numbered in the field and dried. Information regarding the

uses of herbs was gathered through interview with knowledgeable old men. Voucher herbarium specimens have been deposited in the herbarium of Regional Research Laboratory, Jammu Tawi.

The information collected during the course of the present investigations is presented below. For each species, the information is given in the following sequences: botanical name with author citation, plant family in parenthesis, local name, collection site with altitude, authors collection number and the folk-lore claims. The plant species are listed in an alphabetical order.

Achillea millefolium Linn. (Asteraceae)
“Gandana” Mari, 3200 m, RRL 14821.

Decoction of aerial parts is taken to cure fever and liver disorders.

Aconitum heterophyllum Wall. Ex. Royle (Ranunculaceae) “Patees” Thothang, 3300m, RPL 16999.

Artemisiamaritima Linn. “Seski” Keylong, 3400m, RRL 12642. Aerial Parts of the plant is dried and used to expel intestinal worms.

A. Vulgaris Linn (Asteraceae). “Chirmara”. Mari, 3300m, RRL, 15790. Juice of the plants is dropped in nose to check nose bleeding.

Bergenia strachevi (Hook. F. & Thomas.) Engl. (Saxifiragaceae). “Silpayi”, Kaza 5000m, RRL.

Raw roots are eaten to cure dysentery.

Bupleurum falcatum Linn. (Apiaceae). Tandi, 3000m, RRL 8888. Seeds are used as digestive and carminative.

Powder or decoction of the roots in small quantity is taken to cure cough.

Allium sikkimense Baker (Liliaceae)
“Linchi” Rhotang Pass, 4500m, RRL > 12688.

Aerial parts of the plant dried are used as spice.

Angelica glauca Edgew. (Apiaceae). “Chora” Rhalla, 2800m, RRL 15785. Roots of the plant are kept at 4 – 5 places in a houses and is believed that no snake can enter the house till roots are there. The roots are also used as spice.

Aguilegia vulgaris Linn. (Ranunculaceae)
“Colu” Tandi, 3500m, RRL 12680.

Decoction of the seeds with local liquor is taken for smooth delivery. Paste of the root is massaged on joints to cure joint pain and rheumatism.

Capsella bursa-pastoris (Linn.) Moench (Brassicaceae). “Jangli sarsoo” Koksar, 3200 m, RRL 12632.

An extract of the plant is taken for cure of hemorrhages and menstruation disorders.

Carum carvi Linn. (Apiaceae). “Singhoo”. Jispa, 3300 m, RRL 12686. The powdered plant is infused and drunk for the treatment of abdominal digestive ailment as a carminative and stomachic.

Chenopodium murale Linn. (Chenopodiaceae). “Kund” Keylong, 3400 m, RRL 8843.

Decoction of the plant is taken early in the morning with empty stomach for 3 days continuously to cure intestinal worms.

Ephedra qerdiana Wall. Ex. Stapf. (Gnetaceae) “Buchur” Jispa, 3200 m, RRL 1269³.

Powdered plant is taken with water as an expectorant and also for infections of blood and for bile complaints. Stem of the plant is chewed for cure of toothache.

Equisetum arvense Linn. (Equisetaceae) “Rugosika” Koksar, 3300 m. RRL 15791.

Powder of the aerial parts one table spoonful is taken early in the morning with empty stomach for 4 – 5 days continuously to cure stones of the kidney and bladder.

Hyoscyamus niger Linn. (Solanaceae) “Dhundun”. Koksas, 3300 m. RRL 12620.

Smoke of the seeds is inhaled to cure toothache due to bacterial infection.

Inularoyleana D.C. (Asteraceae) “Manu”. Pattern valley, 3300 m, RRL 8919.

The paste of the roots is applied externally to cure dermatitis.

Juglans reegia Linn (Juglandaceae) “Akhrot”. Pattan Valley, 3300 m, RRL 16975.

The roasted kernel is taken with tea to cure constipation.

Junipers communis Linn. (Coniferae) “Shuppa”. Koksar, 3300 m, RRL 19684.

Aerial parts are burnt for incense in Gompas.

Junipers excelsa M. B. Syn. *J. macropods* Boiss. (Pinaceae). “Shuppa”. Keylong, 3400m RRL 12651.

Young parts of stem and leaves are used in religious ceremonies (Havans).

Jurinea macrocephala Benth. Ex. Hook. F. (Asteraceae) “Dhup”, Rhotang, 4500 m, RRL 15175.

Roots of the plant is used in *Havans* during religious ceremonies in Gompa. It is also taken to relieve constipation.

Lagotis glauca Gaertn. Var. *Cashmeriana* Hook. F. (Selaginaceae). “Kurroo” Rhotang pass, 4500 m, RRL 12607.

The roots of the plant is used in the same way as the root of *Picrorhiza kurroa* is used. It is very often used as an adulterant to **P. Kurroa**.

Meconopsis aculeate Royle (Papaveraceae) “Sarandi” Rhotang, 4500 m, RRL 16915.

Local inhabitants believe that two plants grow simultaneously.

The normally press gently both the plants by their rights leg thumb in the evening, at morning one of them will erect and other does not. The plant which gets erected is believed highly aphrodisiac and the roots of the same plant mixed with water are drunk by those who are not competent to produce children.

Mentha longifolia (Linn.) Nathn. Syn. *M. sylvestris* Linn. (Lamiaceae). “Jangli Pudhina”. Koksar, 3300 m, RRL 15743. Decoction of the whole plant is taken as carminative and digestive.

Morina longifolia Wall. (Dispsacaceae) “Chhalguddi”, Rhotang, 4500 m RRL 169760.

The extract of the plant is applied externally on wounds for early healing.

Onosma hispidum Wall. Ex. D. Don Syn. *O. echioides* C. B. Clarke (Boraginaceae). “Koma” Koksar, 3200 m, RRL 8750.

Powder of the root is mixed with mustard oil or coconut oil and applied on hairs and also massaged for dressing. It give luxuriant growth of the hairs and is believed to make the hair blackish.

Oxyria digyna Hill. (Polygonaceae) “Chahak”, Rhotang, 4400 m, RRL 12635.

Paste of the whole plant is taken for its acidic taste and also to increase appetite. It is also taken in the form of decoction to cure cough and cold.

Picrorhiza kurroa Royle ex Benth. (Scrophulariaceae) “Kurru”, Rhotang, 4500 m, RRL 16975.

Decoction of the roots is taken for cure of gastritis, colic pain, rheumatism and liver ailments. It is said that it also produce resistance in the body. Smoke of the root is considered efficacious for cure of asthma.

Plantago major Linn. (Plantaginaceae) “Bartang”, Sisso, 3200 m, RRL 12694.

The seeds of the plant are soaked in water and jelly is taken to cure dysentery, gastric complaints and burning sensation in the stomach.

Pleurospermum stellatum Benth. (Apiaceae) “Laussar”, Rhotang, 4500 m, RRL 15789.

While plant is burnt on fire and ash of the plant is mixed with butter and applied on tongue to cure stomatitis. The plant is also

kept between the clothes in a box to repel the insects.

Polygonum affine D. Don (Polygonaceae) “Machruo”, Mari, 3500 m, RRL 16931.

Roots of the plant is boiled in water and taken as tea for cure of rheumatic pains.

Prunella vulgaris Linn. Syn. *Brunella vulgaris* Linn (Lamiaceae) “Khadoos”, Sisso, 3300 m RRL 12697.

Aerial parts are used in form of a tea to cure internal wounds. External wounds are also washed by the extract of the plants for early healing.

Rhododendron anthopogon D. Don (Ericaceae) “Moruo”, Rhotang, 4500 m, RRL 16966.

Aerial parts are burnt for incense in Gumpas. Flowers are boiled in water and taken as a tea for cure of chronic bronchitis.

Rosa webbiana Royle (Rosaceae). “Chua” Jispa, 3300 m, RRL 12645. The flowers are dried and taken in the form of tea for cure of constipation. Fruits are also eaten to cure throat irritation.

Saussurea lappa C. B. Clarke (Asteraceae). “Kuth”, Jispa, 3500 m, RRL 12657.

Powder of the root is taken for cure of chronic bronchitis and also for rheumatic pains. The oil obtained from the root is mixed with mustard oil is also massaged to cure rheumatism. Power of the root along with the common salt is generally give to animals for cure of dysentery.

S. simposniana (Field & Garden) Lipschiltz syn. *S. sacra* Edgew (Asteraceae) “Jogi”, Rhotang, 4500 m, RRL 16959. While plant

is burnt and smoke is driven in the house where animals live. The animals those who stop milking due to influence of evil spirits, start milking again.

Selinum candollei DC. Syn. *S. tenuifolium* Wall. Ex DC (Apiaceae) “Motosal”, Raninala, 3900 m, RRL 15178. Powered rhizome is taken for mental disorders. The root of the plant is burnt and smoke is inhaled by the person influenced from evil spirit.

Swertia chirayita Buch. – Ham. Ex – C. B. Wall (Gentianaceae) “Chirayita”, Mari, 3300 m, RRL 8553.

The cold decoction of the plant is taken for seven days in the early morning with empty stomach at the change of season to purify blood and also cure live disorders.

Taraxacum officinale Weber ex Wiggers (Asteraceae) “Gainthal”, Rhotang, 4500 m, RRL 16978.

The root is used as antipyretic, diuretic and in vertilago.

Urtica doica Linn. (Urticaceae) “Bichhua” Keylong, 3300 m, RRL 12650. They young aerial parts of the plant is boiled in water and used as vegetable.

Verbascum Thapsus Linn. (Scrophulariaceae) “Geadar tambaku”, Koksar, 300 m, RRL 12641.

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Leaves and flowers taken in the form of tea for cure of whooping cough. A poultice of the leaves is also used for cure of wounds and sores.

Waldheima tomentosa (Decne). Regel. (Asterceae) “Solopo”, Chatru, 3800 m, RRL 15792.

A hot aqueous extract of the plant is massaged on joints for cure of joints pain and rheumatism.

Discussion and Conclusion

Ethobotanical studies have a major role to play in modern drug development programmes from plant resources. Botanists can play an important role in the correct identification of the drugs allowing chemists to isolate and identify active principles and pharmacologists to investigate therapeutic properties. These old and long used traditional claims are worth investigating scientifically to prove the efficacy and thus producing drugs with no or the least side effects.

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