

ETHNOMEDICINAL SURVEY OF PLANT OF GHARSI VILLAGE HILLS AND ITS ALLIED AREA OF DISTRICT SOLAN

HEMRAJ VASHIST*, DIKSHA SHARMA

L. R. Institute of Pharmacy, Rajgarh Road, Solan 173212. Email: Shimla_pharmacy@rediffmail.com

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ABSTRACT

Objective: An exhaustive ethnomedicinal investigation of plants was carried out in Gharsi Village and its allied valleys of Solan district.

Methods: The paper encompasses 58 medicinal plants. These plants were collected from forest of Gharsi village and authenticated. This study is primarily concerned with the therapeutic properties of the medicinal plants. The information was collected from local people and list being mentioned are expected to prove helpful in short listing the plant species found in this area.

Result: Total 58 medicinal plants were studied in the Gharsi village forest are very valuable medicinal plants which are already known for their numerous medicinal values.

Conclusion: This study will assist the forest, pharmaceutical firm, medicos and wild life manager in their efforts for improving the public health service and medicinal plant wealth of the area.

Keywords: Ethnomedicinal, Therapeutic, Public health.

INTRODUCTION

Gharsi village is small village situated in the north-west of Solan district 50 kilometer from Solan district at an elevation of 1300 meter from sea level. The average maximum and minimum temperature of summer is 33°C and 28°C, the average minimum and maximum average temperature of winter is 18°C and 8°C while the average maximum and minimum temperature of rainy season is 25°C and 20°C. Geographically the mountains are folded mountain, the rocks are metamorphic and sedimentary, the soil is clayey loam.

Human behavior has a direct impact on plant the communities with which they interact. These interactions are the focus of ethnobotany [1]. Heinrich and Barerra [2] have described the ethnobotanical in understanding relative importance of medicinal plants and their indigenous prescription and products for society. Shinwari [3] discussed the present status of ethnobotany in Pakistan and stressed on the need of exploration, documentation and application of traditional knowledge in the use of natural resources. Leopardi Lattanzi [4] studied 27 medicinal plant medicinal plants ethnobotanically in Makran and discussed their traditional medicinal uses. Goodman and Ghafoor [5] conducted ethnobotanical study in Bluchistan province. It is the region where a heterogenous culture group known as Bluch lives. They collected information about 114 plant species nomads and village dwellers. Shinwari and Khan focused on information regarding traditional uses of plants of kaghan.

If we would consider flora of India then we would come to know that India has about 45000 plant species: medicinal properties have been assigned to several thousand. Currently, with over 400,000 registered ayurvedic practitioner, the government of India has formal structure to regulate quality, safety, efficacy and practice of

herbal medicine. The turnover of herbal medicine in India as over the counter products, ethical and classical formulation and have remedies of Ayurveda, Unani and Siddha system of medicine is about \$ 1 billion with a merge export of \$ 80 million. Even though India is the gold mine of herbal medicine. 80% of its export to the developed countries are of crude drug and not finished formulation leading to low revenue of the country [6].

Apart from whole country if we would concentrate on the medicinal treasure of Himachal Pradesh then we would found that the state is having a lot of valuable plants than other area of the country. The state is needed to give a full focus on the search of medicinal plants according to their altitude and other environmental conditions. Present study is therefore focused on the search and ethnomedicinal survey of medicinal plants from 'Gharsi' village hills of Himachal and its allied areas.

The present information can serve as the foundation for further investigations because no detail ethnobotanical exploration has been carried in this area so far.

MATERIAL AND METHODS

The plant specimens were collected from Gharsi Village and its allied areas of district Solan during different periods of a year. The plant specimens were collected and pressed in the blotting paper for removal of moisture, powdered naphthalene was sprinkled over the plant against fungal growth. Blotter was changed after each 2-3 days until the plant were fully dried. The dried plant were fully glued and mounted on herbarium sheets. Data related to each ethnobotanical aspects were collected from local people of that area. The collected plants were identified with the help of available literature [7-8]. Further authentication was done by Dr. Manoj Joshi, botanist environmental education expert, Una, HP, India.

| Botanical name | Common name | Local name | Ethnobotanical uses |
|----------------------|-------------|-------------|---|
| Achyranthus aspera | Apamarg | Puttakanda | Abortifacient, Astringent emetic [9] |
| Adhetoda vasica | Vasaka | Basutti | Expectorant, Antitussive |
| Aegle marmelos | Bael | Bil | Antifungal, antidarrhoeal, Antiulcer, Anti-hypercholesterolemic, Anti-inflammatory, hepatoprotective, Antidysentric, Analgesic, Antioxidant, Antidiabetic |
| Amaranthus lividus | Chulai | Chulai | Antioxidant [10] |
| Aloe vera | Aloe | Kawanrpatta | Purgative, laxative and diuretic |
| Asaparagus Shatavari | recimosus | Sansarmol | Galactogague, tonic and diuretic Astringent, liver tonic |
| Bacopa moneri | Jal brahmi | Brahmi | Nerve tonic |

| Botanical name | Common name | Local name | Ethnobotanical uses |
|------------------------------------|------------------|------------|---|
| Bauhinia Variegata | Kachnar | karalo | Antibacterial, Asthma, in ulcer[11] |
| Berberis aristata | Kashmal | Kasmal | Stomachic, Cholagogue, Antiperiodic, Carminative, Purgative body-wash bruises, warts, aches and pains |
| Burchellia bubalina | Wild pomegranate | Dadu | The roots provide an infusion[12] |
| Calendula officinalis | Calandula | | Healing ointment for cuts, Burns[13] |
| Centella asiatica | Brahmi | Brahami | Nerve tonic |
| Cereus imbricata / cereus rapandus | - | Chhuro | In panchkarma the stem is used for warming bones. |
| Cissampelos pareira | Akauadi | Putandu | Anti-inflammatory |
| Citrus limonis | lemon | Nimbu | Vit.C source |

| Botanical name | Common name | Local name | Ethnobotanical uses |
|---------------------------|---------------|------------|--|
| Citrus medica | Bijapura | Bajuri | Vit.C source |
| Coleus vettiveroides [14] | Hrivera | - | Heart disease, convulsions |
| Cucumis | Khira | Kakri | Cosmetics |
| Curcuma longa [15] | Haldi | Haldi | Antiseptic, Coloring agent |
| Cuscuta pentagona | Cascuta | | Amarbel Osteoporosis[16], alopecia[17] |
| Dioscorea deltoidea | Diascorea | Taradi | Anti-inflammatory, dietary modulator |
| Dryopteris filix-mas | Male fern | | Anthelmintic |
| Embelica officinalis | Amla | Aonle | Antioxidant, emmenagogu |
| Ephedra fragilis | Ephedra | | Asthma, sympathomimetic[18] |
| Echinocystis lobata | Wild cucumber | Ban kakdi | Anticancer |
| Monstera delicosa | Monstera | Latru | In bone fracture, fevers, mild laxative treatment. |
| Ficus carica | Figs | Fayokde | Diuretic, Purgative[19] |

| Botanical name | Common name | Local name | Ethnobotanical uses |
|----------------------|--------------------|---------------|--|
| Fragaria vesca | Wild strawberry | jangli kaphal | Arthritis, Gout, Hypoglycemic, Acute diarrhea in brewing, frothing agent, in dysentery |
| Jasminum multiflorum | Wild jasmine | - | Perfumery |
| Leucas aspera | - | - | Cytotoxic [20] |
| Morchella esculenta | Morchella | Guchhi | Immunoregulatory[21-22] fatigue resistance, Antiviral, Antioxidant[23- 27] |
| Morus nigra | Mulberry | Shahtoot | Hallucinogenic[28] |
| Murraya koenigii | Kari patta | | Antidiabetic, antioxidant, Antimicrobial[29], |
| Oxalis corniculata | - | - | Antioxidant |
| Pinus roxburgii | Chir | Cheel | Disinfectants, Antinociceptive |
| Pistacia integerrima | Kakkar | Kakdo | Anti asthmatic, expectorant, |
| Plumbago zeylanica | Chitrak | Chicha | Antifungal, Antioxidant, |
| Prunus persica | Aru | Aru | Antihalitosis, Astringent, |
| Rheum emodi | Rhubarb | | Antifungal, anti-Parkinson, Rheumatism, narvine tonic[31] |
| Rosa acicularis | Wild rose | Kujjo | Astringent, carminative[32] |
| Rubus ellipticus | Yellow Rashapberry | Heenr | Antioxidant, Antidiabetic, Hypoglycemic, frothing |
| Silybum marianum | Milk Thistle | chule | Agent, in dysentery[33-34] Aticancer, Immunomodulator |
| Solanum | Kantkari | | In Cold, Fever, Asthma, migrane, |
| Xanthocarpum | | | |
| Solenum americium | Black Nightshade | | Asthma, sudorific, Analgesic sedative |

| Botanical name | Common name | Local name | Ethnobotanical uses |
|-----------------------|--------------|------------|--|
| Spinacia turkestanica | Wild spinach | - | source of vit.A, C, E, B ₆ , [35] |
| Stephania glabra | Raj patta | Gnota | Antihyperuricemic, Febrifugal |
| Sweretia chirata | Chirata | Chirata | Antipyretic |
| Syzygium cumini | Jamun | jaman | Antidiabetic |
| Terntinalia belerica | Bhehera | Behra | Carminative, Purgative |
| Tinospora cardifolia | Gulanch | Gloe | Antihyperuricemic, |
| Traxicum officinalis | Dendelon | | Hapetoprotective |
| Viola reichenbachiana | Viola | Banaksha | Emetic[36], Antipyretic |
| Vitex nirtundii | | Bana | Antidiabetic, gingivitis |
| Vitis spp | Wild grape | Moambe | Wild fruit |
| Woodfordia fruticosa | Dhataki | Dhai | Antidiarrhoeal, Antiallergic, |
| Zanthoxylum simulans | Tirmira | Timro | Astringent, diaphoretic[37] |
| Ziziphus mauritiana | ber | Ber | Pulmonary ailments |

RESULT

Total 58 medicinal plants were studied in the Gharsi village forest, are very valuable medicinal plants which are already known for their medicinal values.

CONCLUSION

This study will assist the forest, pharmaceutical firm, medicos and wild life manager in their efforts for improving the public health service and medicinal plant wealth of the area.

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