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## ETHNOMEDICINAL USES OF SOME PLANTS OF MORACEAE AND SOLANACEAE FAMILY OF HAMIRPUR DISTRICT IN HIMACHAL PRADESH

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**ABSTRACT:**

An ethanobotanical survey was carried out among the local people of Hamirpur district of Himachal Pradesh. A total of 16 plant species (belonging to 2 families: Solanaceae and Moraceae) of ethnomedicinal interest upon enquiry from this area informants between the ages of 45 to 75 years were reported. It is interesting to note that a single plant species finds use for treatment of a wide spectrum of health disorders in traditional and folk medicine. Employment of techniques such as cell and tissue culture would provide means of rapid propagation and conservation of the plant species and, from the point of view of phytochemistry, give scope for enhancement of the quality and quantity of the bioactive secondary metabolites occurring in plant.

**KEY WORDS:** Medicinal plants, Ethanomedicinal, Uses, Hamirpur,

*Himachal Pradesh.***INTRODUCTION:**

Hamirpur district is smallest district which falls in Shivalik ranges in Himachal Pradesh mainly constitute rural communities who are the inhabitant of rural areas. Himachal is a great repository of herbal plants and act as a good hot spot for growth of plants of ethnological importance. These indigenous or rural people of this region plays important role in the conservation of local plants of the area due to their faith on the traditional knowledge about the use of local plants for various purposes such as food, fibers, shelter, religious and magic belief, fodder and mainly for the treatment of various diseases or incase of primary health care. They conserve some plants such as crop plants as healer or for the treatment various diseases or health problems. Plants are conserved in abandoned sites of agriculture by rural peoples and as sacred groove as in situ conservation of ecological restoration .

Ethnobotany is totally in virtually a new field of research, if in this field plants investigated thoroughly and systematically, it will yield result of great value of the archeologists, anthropologist, plant geographer, enthnobotanist, linguistics, botanists and phytochemists. *Arora* (1987) described ethnobotany and its role in the domestication and conservation of native plant genetic resources. He gave the detail account of this important area where ethnobotany have still a great to do. *Uniyal* (1989) highlighted the Garwhal Himalaya in his “Notes on the Ethnobotany of Lahaul, a province of the Punjab”. *Brij Lal et. al* (1996) described the plants used as ethnomedicine and supplement food by Gaddis of Himachal Pradesh, India. *Chauhan N.S.* (1999) described the medicinal and the aromatic plants of Himachal Pradesh. *Thakur S.* (2001) described the ethnobotany of Riwalsar (Mandi District), Himachal Pradesh. *Thakur et al* (2004) described the characterization of some traditional fermented food and beverages of Himachal Pradesh. *Brij Lal and Singh* (2008) find out the indigenous herbal remedies to cure skin disorders by natives of Lahaul Spiti, Himachal Pradesh. *Kaur, et al* (2011) studied the uses of plants in control of different diseases in Mandi district, Himachal Pradesh. *Kharwal and Rawat* (2012) studied ethnomedicinal uses of herbal shampoo of Shivalik hills, Himachal Pradesh.. *Kumar and Choyal* (2013) threw light on the traditional health cure practices used for respiratory disorder by the rural people of Hamirpur district of Himachal Pradesh. *Kumar et al* (2015) described about the ethno-medicinal uses of some plant in the treatment of constipation, diarrhea, dysentery and other stomach and digestive disorders from district Hamirpur (Himachal Pradesh), India.

### **METHODOLOGY:**

The completion of study was made possible by doing field survey of rural area of Hamirpur district of Himachal Pradesh. This region has diversity in its soil, physiographical condition, land use pattern and cropping system. The medicinal plants and plants of ethno botanical importance were collected from time to time during flowering and fruiting seasons. The plants collected from study area were consisted of almost all parts so that they can be easily identified and to provide maximum information a herbarium of plants was also prepared.

The information related to collected plants was gathered by discussing with indigenous and tribal people inhabiting the study area who play an important role in the conservation of local plants with their natural habitat due to their usefulness. Study material from various reference books was also referred. The whole available information is then written stated in form of report.

### **RESULT AND DISCUSSION:**

#### **(1) *Artocarpus integrifolia* Linn.**

**Family:** Moraceae

**Local name:** Katahl

**Parts used:** Fruit

**Folk uses:** Fruit (Sorosis) is used as vegetable and also pickled. Ripe fruit is edible and good for dysentery. Extract of garlic powder in hot water is considered good to check tonsillitis.

#### **(2) *Capsicum annum* L.**

**Family:** Solanaceae

**Local name:** Peepli, Lal Mirch

**Parts used:** Fruit and Whole plant

**Folk uses:** Paste of fruit is locally called 'Malham' made with mustard oil which is used in skin disease. Plant is considered magico- religious. Dried powder of the fruit is applied on the parts bitten by rabied dog.

#### **(3) *Datura inoxia* Mill.**

**Family:** Solanaceae

**Local name:** Dhatura

**Parts used:** Leaves, Twigs, Flowers, Fruit and seeds

**Folk uses:** Seed poultices mixed with mustard oil is applied externally for rheumatic pain. Fruit juice is applied on the scalp to check dandruff. Smoke of brunt dried leaves and twigs are inhaled to cure asthma, cough and cold.

**(4) *Ficus benghalensis* Linn.**

**Family:** Moraceae

**Local name:** Bad, Barh, Bargadh

**Parts used:** Leaves, Whole plant, Leaves, Roots, Latex and Wood.

**Folk uses:** Roots powder is used in the treatment of syphilis, dysentery and inflammation of liver.. Oil smeared heated leaves are applied externally for suppuration of under arm boils (Kachhali). Paste of leaves are applied for healing open wounds. Leaves are also used as fodder.

**(5) *Ficus carica* Linn.**

**Family :** Moraceae

**Local name :** Dura, Anjir

**Parts used:** Fruits and Leaves

**Folk uses:** Fruits are eaten for cooling the body *i.e.* cool taksheer of body during hot summer days.

**(6) *Ficus religiosa* Linn.**

**Family:** Moraceae

**Local name:** Peepal

**Parts used:** Whole plant, Roots Wood and Leaves.

**Folk uses:** Dried powder of roots are used in the treatment of scabies, ringworm, leprosy, gonorrhoea, inflammation, wounds, ulcers, diarrhea, dysentery, cholera, cough, asthma and hemorrhages.

**(7) *Ficus roxburghii* Wall.**

**Family:** Moraceae

**Local name :** Triayambele , Traymble

**Parts used:** Fruits, Leaves and Latex.

**Folk uses:** Fruits are edible which are more nutritious. Fresh stem latex is prescribed in case of leucorrhoea. Leaves are used as fodder. Leaves are used to make plates called “Pattal” which are used in taking meal during different ceremonies.

**(8) *Lycopersicum esculentum* Mill.**

**Family :** Solanaceae

**Local name:** Tamatar

**Parts used:** Flower and Fruit.

**Folk uses:** Powder of dried flowers is recommended for oligomenorrhoea. Fresh ripe fruits are eaten raw with kali mirch (*Piper nigrum* Linn.) and salt early in the morning in case of wormicides.

**(9) *Morus nigra* L.**

**Family:** Moraceae

**Local name:** Kala toot

**Parts used:** Fruit and Leaves.

**Folk uses:** Fruit is edible. Fresh fruits are crushed and then its juice is given two times a day for the treatment of jaundice. Leaves are used for rearing silkworm and also used as fodder.

**(10) *Nicotiana tabacum* Linn.**

**Family:** Solanaceae

**Local name:** Tambakhoo

**Parts used:** Leaves

**Folk uses:** Heated leaves are applied to cure pustules and dried leaves powder is smoked to cure asthma. This powder is also used to get relief from nervous excitements.

**(11) *Physalis minima* Linn.**

**Family :** Solanaceae

**Local name:** Patakari or rashbari

**Parts used:** Fruit, Flowers and Aerial plant part

**Folk uses:** Fruits and flowers are cooked by villagers and is given in case of stomach pain and constipation. Ash of aerial plant part is used to heal the burns

**(12) *Solanum melongena* L.**

**Family:** Solanaceae

**Local name:** Baingan, Batha, Bataun

**Parts used:** Fruit

**Folk uses:** Ash of fruit mixed with honey is applicable on the piles. Fruit is cooked as vegetables and considered good for heart and gastric problems. Its infusion is applied on the hands and feet to stop sweating.

**(13) *Solanum nigrum* Linn.**

**Family:** Solonaceae

**Local name:** Makoi

**Parts used:** Leaves, Fruits and Whole plant material

**Folk uses:** Leaves paste and powder is used in the treatment of gout, arthritis and rheumatism. Ripe berries (fruits) are also good for fever and diarrhea. Fruits are also used as laxatives. Ripe fruit is edible and considered good for heart diseases and fever.

**(14) *Solanum tuberosum* Linn.**

**Family:** Solanaceae

**Local name:** Aloo

**Parts used:** Tuber

**Folk uses:** Tuber is relished as vegetables. Its paste is applied on the face to remove the dark circles.

**(15) *Solanum Viarum* Dunal.**

**Family:** Solanaceae

**Local name:** Kandayi, Ban- bhindi

**Parts used:** Whole plant Fruits and Seeds

**Folk uses:** Smoke of seeds and Ajawain (*Trachyspermum ammi* Linn.) is inhaled to cure dental problems. Freshly prepared extract of plant material is mixed with black pepper (*Piper nigrum* Linn.) and which are used for checking fever and used in case of asthma. Fruit powder and seed power is useful in case of menstrual complaints, wounds and as contraceptives.

**(16) *Withania somnifera* Dunal.**

**Family:** Solanaceae

**Local name:** Ashvagandha

**Parts used:** Roots

**Folk uses:** Root powder and paste is used in the treatment of tuberculosis, liver disorder and, rheumatism and skin problems due to anti-inflammatory properties.

**CONCLUSION:**

Thus information generated from the present study regarding the medicinal plant used by local people need a thorough phytochemical investigation including alkaloid extraction and isolation along with few clinical trials. The knowledge regarding the natural habitat it will help to further conserve these species *in situ*. The claimed therapeutic uses of plant species call for the modern scientific studies to establish the safety and effectiveness and to promote the scientific cultivation, which will protect forests and conserve the wild flora.

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