

Short Communication

Commonly used medicinal plants in Tehsil Baijnath, district Kangra, Himachal Pradesh, India

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Himachal Pradesh is located in Western Himalaya, is a store house of medicinal plants. Plants are used to treat various ailments with magico- religious beliefs in all civilizations. Baijnath is located in the lap of Dhauladhar range in district of Kangra, Himachal Pradesh. Most of the population lives in villages and use various plants for their basic needs such as food, fodder, wood and to treat various diseases. Till date no study was undertaken to document the commonly growing medicinal plants used in villages of Baijnath tehsil. Hence, the study was undertaken and well documented. Study reveals that local healer and villagers use 55 plants which are common and belong to 37 families and 49 genera.

Keywords : Decoction, epistaxis, furuncle, licked.

Introduction

Traditional folklore knowledge is a treasure of India, plays an important role in rural population. Traditional medicines are used by our ancestors since time long for their well being and transmitted orally from one generation to another. It provides systematic knowledge about tradition, culture and other aspects in social life. According to WHO report, rural and tribal population still uses traditional medicines to cure various disease with the natural harmony. In 2008, global market of traditional medicines was estimated 83 billion \$ and 25% of modern medicines are procured from plants (Randhava 2013, Kumar et al., 2014). In 20th century, modern medicines are developed from the plants on the basis of their traditional uses (Heinrich., 2003, 2000., Farnsworth., 1990). Plants produce various phytochemicals during the process of photosynthesis i.e. carbohydrates. All the secondary metabolites (Alkaloids, glycosides, Tannins etc) are derived from carbohydrates and preserved in leaves, fruit, bark and stem. These are inexpensive, accessible, safe and reliable for the treatment of various diseases (Ngo et al., 2013). Baijnath is located in the foot hills of Dhauladhar range in district of Kangra, Himachal Pradesh. Local healer and villagers of Tehsil Baijnath use numerous plants for their health care needs. Till date, no ethno botanical study has been undertaken. Hence, the study was undertaken and documented.

Materials and methods

During the survey all plant specimens were collected, identified and carefully matched with the specimens kept at "Centre of Excellence in Dravyaguna and Medicinal Plants". The study was undertaken in 13 villages of Tehsil Baijnath, district Kangra Himachal Pradesh. Ethno-botanical data i.e. local name, parts used, and its uses were collected from local healers and villagers by conducting discussion and interview in the age group of 40- 70 years old. (Kirtikar and Basu, 1935, Chauhan, 1999, 2003, Anonymous, 2006, Kumar et al., 2013, Randhava and Kumar 2013, Kumar, 2014).

Result and Discussion

The present study reveals that 55 plants commonly grow in their natural habitat in tehsil Baijnath. These plants are used commonly in every house. These belong to 37 families and 49 genera and listed in **Table.1**. These plants are used to treat the disease at primary level, and enumerated with its botanical name, local names and parts employed.

In olden days folklore based ethno botanical knowledge has been used widely to treat disease. Because, advance medical facility and well trained professionals are not easily available. By exploring the use of plants by doing experiment and magical concept to treat disease emerged with passage of time and experience. By following the development process in human civilization, ethno- pharmacological approach will be beneficial. It would be completed by accessing, proper identification, clinical evaluation and, validation by formulating the products. So, it has a great need to conserve the floristic diversity and provide valuable knowledge about the potential aspect to cure minor disease. It will be fruitful only when youth and medical professionals participate to conserve and proliferate, its potential to serve mankind. In the last decade, demand of herbal medicines has been increased globally.

Table1. List of Plants

S.N.	Name of Plant (Family).	Local name	Part used	Uses
1.	<i>Abelmoschus esculentus</i> (Linn.) Moecnh (Malvaceae)	Bhindi	Fresh seeds	Fresh seeds are grounded and applied on wounds externally.
2.	<i>Achyranthes aspera</i> Linn. (Amaranthaceae)	Puthkanda	Seeds & Stem	Crushed seeds applied on bleeding piles. Fresh stem is chewed for toothache.
3.	<i>Acorus calamus</i> Linn. (Araceae)	Varae	Dried rhizome	Rhizome rubbed with mother milk to make a paste and licked to infant for immunity.
4.	<i>Ageratum conyzoides</i> Linn. (Asteraceae)	Neela Phulnu	Fresh leaves	Juice applied on wounds help in clotting.
5.	<i>Ajuga bracteosa</i> Wall.ex Benth. (Lamiaceae)	Neel kanthi	Fresh leaves	Juice applied on scalp for killing lice.
6.	<i>Allium cepa</i> Linn. (Alliaceae)	Piyaz	Bulb	Fresh juice of <i>Allium cepa</i> and <i>Mentha spicata</i> (1:1) used orally to treat diarrhoea.
7.	<i>Allium sativum</i> Linn. (Alliaceae)	Lasun	Bulb	Crushed bulb boiled in Til oil used as ear drop in earache.
8.	<i>Aloe barbadensis</i> Mill. (Liliaceae)	Kuware	Leaf pulp	Pulp applied on oral sores.
9.	<i>Anacyclus pyrethrum</i> DC. (Asteraceae)	Kar kara	Flower bud	Bud is chewed for toothache and oral sore.

10.	<i>Artemisia vulgaris</i> Linn. (Asteraceae)	Charmara	Fresh leaf	Decoction gives relief in fever.
11.	<i>Asparagus adscendens</i> Roxb. (Asparagaceae)	Satavari	Rhizome	Powder taken with milk increase vitality & strength.
12.	<i>Bauhinia variegata</i> Linn. (Caesalpiniaceae)	Karal	Fresh flowers	Used orally for constipation.
13.	<i>Boehmeria platyphylla</i> D.Don (Urticaceae)	Handa	Fresh leaves	Tooth brush for bleeding gums.
14.	<i>Bryophyllum pinnatum</i> (Lam.) Kurz (Crassulaceaea)	Chatpata	Fresh leaves	2-3 leaves taken in empty stomach to evacuate kidney stones and after 30-45 minute drink much water.
15.	<i>Centella asiatica</i> (Linn.) Urban (Apiaceae)	Minkee	Fresh leaf	Leaves are taken with sugar as memory enhancer.
16.	<i>Cinnamomum tamala</i> Nees & Eberm.(Lauraceae)	Tejpata	Leaf	Chewing of leaves used in Pyorrhoea.
17.	<i>Citrus limon</i> (Linn.) Burm.f. (Rutaceae)	Nimbu	Fruit	Juice is taken orally for indigestion.
18.	<i>Coriandrum sativum</i> Linn. (Apiaceae)	Dhaniya	Fresh leaves	Fresh juice applied on scalp to treat dandruff.
19.	<i>Cucumis sativus</i> Linn. (Cucurbitaceae)	Kheera	Ripe fruit	Juice removes dead skin from the face.
20.	<i>Curcuma longa</i> Linn. (Zingiberaceae)	Haldar	Rhizome	Boiled with mustard oil and used topically for wound healing.
21.	<i>Cuscuta reflexa</i> Roxb. (Cuscutaceae)	Akasbel	Whole plant	Aqueous decoction for foot oedema.
22.	<i>Cynodon dactylon</i> Pers. (Poaceae)	Drub	Fresh leaves	1-2 drop poured in each nostril during epistaxis.
23.	<i>Dolichos biflorus</i> Linn. (Papilionaceae; Fabaceae)	Kulathi	Seeds	Decoction in empty stomach removes kidney stones.
24.	<i>Ficus carica</i> Linn. (Moraceae)	Dhudu	Latex	Latex applied on warts.
25.	<i>Linum usitatissimum</i> Linn. (Linaceae)	Alsi	Seeds	Small poultice are tied on furuncle on armpits, buttocks, and thighs.
26.	<i>Mallotus philippensis</i> Muell.- Arg.(Euphorbiaceae)	kaamal	Fruit hairs	Mixed with mustard oil and applied topically on burns.
27.	<i>Melia azedarach</i> Linn. (Meliaceae)	Drek	Leaf	Decoction used in bathing for itching in groins region.
28.	<i>Mentha piperita</i> Linn. emend. Huds (Lamiaceae)	Pipramint	Fresh leaves	Decoction or juice used in diarrhea.
29.	<i>Mentha sylvestris</i> Linn. (Lamiaceae)	Pudina	Fresh leaves	Juice for diarrhea.
30.	<i>Murraya koenigii</i> Linn. Spreng. (Rutaceae)	Gandala	Fresh leaves	Luke warm decoction is applied topically on swelling of foot and legs.
31.	<i>Musa paradisiaca</i> Linn. (Musaceae)	Kela	Fruit	Fruit is taken orally as a mild laxative.
32.	<i>Ocimum sanctum</i> Linn. (Lamiaceae)	Shaili	Leaves	Leaf decoction for cough and cold, and juice for eye inflammation.
33.	<i>Oxalis corniculata</i> Linn. (Oxalidaceae)	Maroli	Fresh leaves	Fresh juice is mixed with pinch of kali mirch used orally for piles.
34.	<i>Phyllanthus emblica</i> Linn. (Euphorbiaceae)	Amla	Fruit	As a tonic for pregnant women.

35.	<i>Phyllanthus urinaria</i> Linn. (Euphorbiaceae)	Bhumi amla	Whole plant	Decoction used orally for hepatic problem.
36.	<i>Psidium guajava</i> Linn. (Myrtaceae)	Amrud	Branchlets	As a tooth brush.
37.	<i>Punica granatum</i> Linn. (Punicaceae)	Dadu	Fruit	Roasted dried rind mixed with honey for dry cough.
38.	<i>Raphanus sativus</i> Linn. (Brassicaceae)	Muli	Stem	Fresh stem used as a diuretic.
39.	<i>Ricinus communis</i> Linn. (Euphorbiaceae)	Arnad	Fresh leaves	Leaves are coated with luke warm oil and applied topically for joint pains.
40.	<i>Rosa alba</i> Linn. (Rosaceae)	Gulab	Flower	Decoction in eye inflammation.
41.	<i>Sapindus mukorossi</i> Gaertn. (Sapindaceae)	Ritha	Fruit	Crushed rind used for hair wash.
42.	<i>Sesamum indicum</i> Linn. (Pedaliaceae)	Til	Seeds	Powder is taken with milk for amenorrhea.
43.	<i>Solanum khasianum</i> C.B.Clarke emend. Sen Gupta (Solanaceae)	Kandyari	Fruit	Fruit fumes are inhaled in asthma and dental pain.
44.	<i>Solanum tuberosum</i> Linn. (Solanaceae)	Aalu	Tuber	Crushed tuber applied on sun burns.
45.	<i>Syzygium cumini</i> (Linn.) Skeels (Myrtaceae)	Jamnu	Seed kernel	Powder used orally for diabetes.
46.	<i>Tageta erecta</i> Linn. (Asteraceae)	Gut	Fresh leaves	Leaf juice is instilling for earache.
47.	<i>Terminalia arjuna</i> Roxb. Wight&Arn. (Combretaceae)	Arjun	Bark	Bark paste applied locally on wounds.
48.	<i>Terminalia bellirica</i> Roxb. (Combretaceae)	Bahera	Fruit	Roasted fruit for cough and cold.
49.	<i>Terminalia chebula</i> Retz. (Combretaceae)	Harad	Fruit	Rubbed with mother's milk & licked to infant as a laxative.
50.	<i>Tinospora cardifolia</i> (Willd.) Miers. (Menispermaceae)	Giloye	Stem	Decoction used orally in joint pains.
51.	<i>Viola patrinii</i> Ging. (Violaceae)	Banaksha	Whole plant	Decoction used orally in cough and cold.
52.	<i>Vitex negundo</i> Linn. (Verbenaceae)	Bana	Fresh leaves	Chewing provides relief in oral sores.
53.	<i>Woodfordia fruticosa</i> Kurz (Lythraceae)	Dhaye	Flowers	Powder used orally and applied topically on vagina to treat leucorrhoea and uterine bleeding.
54.	<i>Zanthoxylum alatum</i> Roxb. (Rutaceae)	Tirmira	Leaves & soft stem	Decoction used as gargle for throat irritation.
55.	<i>Zingiber officinale</i> Rosc. (Zingiberaceae)	Adra	Rhizomes	Roasted rhizome chewed and its juice mixed with honey for cough and cold respectively.

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