

*Full Length Research Paper*

## **Ethno medicinal survey of plants from district Bhimber Azad Jammu and Kashmir, Pakistan**

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**Ethno medicines are developed by the ethnobotanical and ethnopharmacological surveys. This study work revealed the use of traditional ethnomedicines by the local elders of district Bhimber Azad Jammu and Kashmir. A total of 38 plant species belonging to 22 families were reported of having ethnomedicinal utilizations. Ethno medicinal data was collected by the mean of questionnaire method, interviews and direct observation. Information and the medicinal uses of plants were collected by interviews through a questionnaire. About 13 Hakims and 78 local people were visited to collect ethno medicinal data. Medicinal knowledge obtained by these sources is presented in this study.**

**Key words:** Ethnomedicines, traditional knowledge of Bhimber Azad Jammu and Kashmir, herbal remedies.

### **INTRODUCTION**

Man has cultivated the habit of observing plants for thousands of years and had used them for different purposes. Plants have traditionally served as man's most important weapon against pathogens. Medicinal plants are widely used by all sections of community, whether directly as folk remedies or the medicaments of the different indigenous systems as well as in modern medicine system. Economically, weaker section of the community collects medicinal plants for commercial use as livelihood option (Bhagwati, 2005). Starting the prehistoric era to date, people healed themselves with local plants remedies. In the recent days, one can observe an international drift of significance in the long-established structure of medicines. Evaluation of therapeutic herbs has turn into a latent basis of biodynamic substances of curative value. Ethnomedicinal studies have been converted into more and more precious in the progress of fitness and protection programs in various parts of the globe (Black, 1996). Ethnobotanical approaches enable the establishment of

close dialogue and communication with local people, and may ultimately facilitate the elaboration of management plans which ensure participation by local people and avoid having an adverse impact in their life and their environment (Martin et al., 1995; Cunningham, 2001).

Ethnobotany as an interdisciplinary science is in a position to contribute much to health section. This includes a precise understanding of plant resources, traditional ethnomedicinal knowledge and socio-economics of locals. Maximum effort should be made to document and integrate indigenous knowledge about their utilization practice (Pei and Sajise, 1995; Balee, 1989). The population of Pakistan has the understanding of numerous significant medicinal plants of their area. This treasure is transferring to these people from generations to generations by their forefathers. Due to rapid socio-economic and cultural transformation of our modern generation is not known to this valued information of plants. This home-grown treasure is in hazard of being vanished by modern generation. There is urge need to protect this treasure of the plants by recording it in black and white (Shinwari et al., 2002). In this regard, the present study was conducted in Bhimber District AJK to record the important medicinal plants

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resources and their utilization by the indigenous people.

## MATERIALS AND METHODS

A preliminary survey was done to get information about the study area, along with a local person. Area was visited three times for this purpose. The survey was conducted from March 2008 to February 2010. Bhimber District, Azad Jammu and Kashmir, Pakistan is located at 32°58'60N and 74°04'0E. According to 1999 census, the total population of the district stand at 303,000 while the latest information show the population as 350,000, where the annual growth rate is 2.6% (Figure 5). The methodology was based on interviews using checklist and questionnaire of information. The interviewees in the villages were chosen at random. Total No of interviews conducted were 91 consisting of 51 males, 27 females and 13 Hakims. The interviewers were mainly old people, who have enough knowledge about ethnomedicine. Furthermore, also interviewed landholders (Zamindars), agriculturists, pansars and farmers. About 13 Hakims were also consulted, as they are more aware to the medicinal knowledge of plants.

Plant collected from study area were identified and finally deposited in the Herbarium of the Department of Plant Sciences, Quaid-i-Azam University Islamabad (ISL), Pakistan. Questionnaire form was compiled in an ordered form.

## RESULTS

### Botanical name: *Achyranthes aspera* L.

Family: Amaranthaceae.

Local name: Puthknda.

English name: Prickly flower.

Flowering period: May to December.

Part used: Whole plant.

Habit and habitat: Wild herb and terrestrial.

Accession No: 125119.

### Medicinal uses

Plant is purgative, diuretic, and astringent. It is used in dropsy, piles, skin eruptions and colic. Seeds are emetic while root is astringent. Dried powder of this plant is used as toothache and leaves are used against snakebite.

### Recipe

Whole plant is shad dried and then grind into powder form. One spoon of this powder is taken daily with water. Stone in kidney is broken by this remedy.

### Botanical name: *Acacia nilotica* (L.) Delile

Family: Mimosaceae.

Local name: Kiker.

English name: Arabica.

Flowering period: February to March.

Habit and habitat: Wild tree and terrestrial.

Part used: Leaves, pods, gum bark and flowers.

Accession No: 125401.

### Medicinal uses

Pods of this plant are used in sexual disorders that is premature ejaculation and spermatoria. Soup made from the bark is drunk to hasten digestion and to treat tuberculosis (T.B.) and dysentery. Gum of stem is used for pains especially pain in backbone and joints.

### Recipe

Yellow flowers of it are shad dried and grind into powder. This powder is taken with cow milk. It can cure any type of sexual disorder within few days.

### Botanical name: *Adhatoda vasica* Nees

Family: Acanthaceae.

Local name: Baker.

Flowering period: May to September.

Habit and Habitat: Shrub, wild and terrestrial.

Part used: Leaves and flowers.

Accession No: 125374.

### Medicinal uses

Pain in teeth gums is treated by the liquor of its leaves. Commonly used in flue, cold and cough also regulate menses. Its flowers attract honey bees and contribute in honey formation.

### Recipe

Fresh flowers and leaves are boiled in water. This extract is used threes in a day to get relief from cold and flu.

### Botanical name: *Albizia lebbek* Benth

Family: Mimosaceae.

Local name: Shireen.

English name: Siris.

Flowering period: September to October.

Habit and habitat: Wild tree and terrestrial.

Part used: Leaves and seeds.

Accession No: 125403.

### Medicinal uses

It is tonic and blood purifier. Extract of leaves is use in



**Figure 1.** Flowering and fruiting plant of *Asphodelus tenuifolius* Cavan.

eyes problems. This extract also has cooling effects. Seeds are used in sexual disorders. It is thought that seeds are bedded in a thread and hanged in child neck that relief pain; when baby start to grow teeth.

### **Recipe**

Leaves are brushed in water and this extract is applied in eyes for eye burn.

### **Botanical name: *Artemisia scoparia* Waldst and Kit**

Family: Asteraceae.  
 English name: Artemisia.  
 Local name: Chaou.  
 Flowering period: June to August.  
 Habit and habitat: Wild herb and terrestrial.  
 Part used: Whole plant.  
 Accession No: 125121.

### **Medicinal uses**

It is a highly medicinal plant that is effective in fever, bronchitis, cough, jaundice diuretic, purgative and earache. Plant extract is used in cardiac problems. Plant is also used against poisonous insects bite.

### **Recipe**

1 L root extract is boiled in coconut oil for 2 h. Water from upper surface is removed, the remaining oil is used to stop hair fall. This oil can also turn white hairs back to

black.

### **Botanical name: *Asphodelus tenuifolius* Cavan.**

Family: Liliaceae.  
 Local name: Bhokal.  
 English name: Onion-like weed.  
 Flowering period: December to March.  
 Habit and habitat: Herb, wild and terrestrial.  
 Part used: Leaves and seeds.  
 Accession No: 125108.

### **Medicinal uses**

Leaf decoction is given in kidney stone while leaf paste is applied on swellings. The seeds are diuretic applied externally to ulcers and inflament parts. It is also used as antihypertensive. It is believed to be condiment and reduce blood pressure (Figure 1).

### **Recipe**

It is mixed with maize bread as flavoring agent.

### **Botanical name: *Bryophyllum pinnatum* (Lam.) Oken**

Family: Crassulaceae.  
 Local name: Pthar chat.  
 English name: Bryophyllum.  
 Flowering period: Novemember to December.  
 Habit and habitat: Cultivated herb and terrestrial.  
 Part used: Leaves.  
 Accession No: 125456.

### **Medicinal uses**

It is used against hypertension, gastro-intestinal trouble, depression, renal calculi (kidney's stone) and skin diseases.

### **Recipe**

Its leaves are extracted to get water. This two tea spoon of the water is taken twice a day to break the kidney stone.

### **Botanical name: *Bumusa arundinacea* (L.) Voss ex Villas**

Family: Poaceae.  
 Local name: Baans.

English name: Bamboo.  
 Flowering period: June to July.  
 Habit and habitat: Wild shrub and terrestrial.  
 Part used: Leaves, roots and young shoots.  
 Accession No: 125140.

### **Medicinal uses**

Leaf infusion is given along with milk to treat fever, gonorrhoea, and bronchial diseases. Young shoot paste is used as antiseptic to treat wounds. Leaf paste is given as anthelmintic, astringent and febrifuge. Burnt roots are applied to treat ringworm and skin diseases.

### **Recipe**

Roots are burnt and ash is stored. This ash is mixed with water and then applied for 15 min on effected part of skin to cure skin problems especially ringworm.

### **Botanical name: *Calatropis procera* (Willd.) R. Br.**

Family: Asclepiadaceae.  
 Local name: Dasi ak.  
 English name: Milk weed.  
 Flowering period: June to October.  
 Habit and habitat: Wild shrub, terrestrial/desert (sandy).  
 Part used: Stem, bark, leaves, seeds and root.  
 Accession No: 85299.

### **Medicinal uses**

Stem is used to cure reumatism. Bark is used for dysentery. Milky juice is used for diarrhea and skin diseases especially snake bites. It is also effective in malaria, cholera, and cough. The plant is very bitter, laxative, anthelmintic, cures ulcer. It is used as toothaches and headache also cures piles.

### **Recipe**

One tea-spoon full of dried powdered mixed is poured into a cup of green tea and is taken in the morning and evening for curing cough. The decoction of stem and leaves is mixed with sugar-cane juice and used for treating malaria.

### **Botanical Name: *Caralluma edulis* (Edgew.) Bth. and Hk.**

Family: Asclepiadaceae.

Local name: Chunga.  
 English name: Carrion.  
 Flowering period: November to March.  
 Habit and habitat: Wild herb and terrestrial.  
 Part used: Whole plant.  
 Accession No: 125146.

### **Medicinal uses**

It has cooling, alterative, anthelmintic effects; very effective in blood diseases.

### **Recipe**

It is cooked at homes as vegetable and is considered nutritive and used for the treatment of rheumatism.

### **Botanical name: *Carthamus oxyacantha* M. Bieb**

Family: Asteraceae.  
 Local name: Pohli.  
 English name: Safflower.  
 Flowering period: April to July.  
 Habits and habitat: Wild, annual weed of the field and terrestrial.  
 Part used: Seeds and leaves.  
 Accession No: 125123.

### **Medicinal uses**

Seeds are used for jaundice.

### **Recipe**

Seeds are collected, dried under shade and ground to obtain powder. 1 tea-spoon of powder is taken twice a day for 3 to 4 weeks for jaundice.

The oil obtained from seeds is to make a paste. This paste is applied on the face. It is effective to remove white spots of skin. It is used for ulcer and itch.

### **Botanical name: *Capparis deciduas* (Forssk.) Edgew**

Family: Capparidaceae  
 Local name: Tvakri.  
 English name: Capparis.  
 Flowering Period: April to July  
 Habit and habitat: Wild shrub and terrestrial.  
 Part used: Fruits and stem.  
 Accession No: 126662.

### **Medicinal uses**

Its fruit when unripe is used to make pickles, and when ripe is eaten especially in times of scarcity.

### **Recipe**

Flowers and young stems are dried and grinded into powder. Dried powder is used with water before breakfast. It is a best remedy to cure sexual disorders.

### **Botanical name: *Citrullus colocynthis* (L.) Schrad**

Family: Cucurbitaceae.  
Local name: Tumma.  
English name: Colocynth.  
Flowering period: June to August.  
Habit and habitat: Wild, prostate herb and terrestrial.  
Part used: Seeds and fruits.  
Accession No: 125130.

### **Medicinal uses**

Fruit and seeds are used for constipation. Fruits are purgative, used in stomach and intestinal disorder. It is useful for many diseases like stomach, ailment, abdominal congestion, biliousness, cerebral congestion, elephantiasis epilepsy, facial paralyses, fever, gout, hepatic congestion (oil of seed) jaundice, leprosy (root), liver debility, neuralgic complication, paralysis and rheumatism.

### **Recipe**

The dried fruit powder is mixed with an equal volume of natural honey. The preparation is called Tharkha khushta. Two teaspoons of this recipe is taken three times a day for curing constipation. The dried root powder is mixed with water in ratio of 1:5. The extract is sprayed in room as insecticide. The powdered seeds are mixed with half glass of milk and about 20 g animal ghee. It is given twice a day to cure snakebites. Fruits are cut into two pieces and dried in the sun. Dried powder mixed with salt is taken orally for treating constipation. Roasted fruits are given to animals to cure the disorder.

### **Botanical name: *Cuscuta reflexa* Roxb.**

Family: Cuscutaceae.  
Local name: Neeli Ta, and ar.  
English name: Plant creeper.  
Habit and habitat: Wild, climbing herb and terrestrial.  
Part used: Whole plant.

Accession No.: 125118.

### **Medicinal uses**

It is used for paralyses and is useful to lower the sugar level, that is, useful for diabetes. The plant is also used for toothache and septic gums. Dried powder of this plant is used to cure sexual disorders especially premature ejaculation.

### **Recipe**

50 g of whole plant is fried on 250 ml of mustard oil and applied externally on the head for a month for baldness. Plant is dried under shade, ground to obtain powder. For children, half teaspoon of powder is taken twice a day for rickets.

This is recommended for a month. A paste of the plant powder in butter is prepared and is externally applied for wounds.

### **Botanical name: *Cyperus rotundus* L.**

Family: Cyperaceae.  
Local name: Deela.  
English name: Nut grass.  
Flowering period: March to May.  
Habit and habitat: Wild herb and terrestrial/aquatic.  
Part used: Rhizome.  
Accession No: 125109.

### **Medicinal uses**

Rhizome is used as diuretic, anthelmintic, carminative and stomachic.

Paste of the rhizome is applied on the breast to increase the secretion of the milk. Decoction of the rhizome is given to the mothers suffering from swelling of the breast, or impure milk.

### **Recipe**

Rhizome is dried and its paste is given to the child along with honey to treat dysentery and vomiting. Rhizome paste is given along with ginger and honey to expel intestinal worms.

### **Botanical name: *Cynodon dactylon* (L.) Pers.**

Family: Poaceae.  
Local Name: Khabal ghas.

Flowering period: Throughout the year except December to February.

Habit and Habitat: Wild herb and terrestrial.

Part used: Whole plant.

Accession No: 125136.

### **Medicinal uses**

Root is diuretic and laxative. Floral parts are used as blood purifiers and also used against dysentery. Powder of grass is also used as stomachs.

### **Recipe**

The decoction of whole plant is mixed with raw sugar (Gur), which is considered as remedy for epistaxis (nose bleeding). The recipe is administered orally three times a day for one month.

### **Botanical name: *Datura innoxia* Mill.**

Family: Solanaceae.

Local Name: Black Dhatura.

English Name: Thorn apple.

Flowering Period: June to October.

Habit and Habitat: Wild herb and terrestrial.

Part Used: Whole plant.

Accession No: 125383.

### **Medicinal uses**

Seeds are highly poisonous, used as sedatives, rheumatism; leaves juice is used in otitis, gonorrhoea and to kill the lice. Seeds are used to cure sexual problems especially premature ejaculation. This plant is thought to have anticancer properties.

### **Recipe**

Two seeds of *Datura innoxia* Mill. wrapped in silver cover are used to treat premature ejaculation. It is used for one month. Leaves extract is applied on hairs to kill lice.

### **Botanical name: *Eclipta prostrata* (L.) L.**

Family: Asteraceae.

Local name: Bhangra.

Flowering period: August to September.

Habit and habitat: Wild herb and terrestrial.

Part used: Whole plant.

Accession No: 125116.

### **Medicinal uses**

Tonic, emetic, purgative, deobstruent in hepatic and spleen enlargement. Leaves are used in scorpion sting. Roots are applied externally as antiseptic to ulcers and wounds.

### **Recipe**

The plant juice in combination with aromatics is administered for jaundice. The oil prepared with this herb is of great use as a hair dye and has cooling effect in the brain.

### **Botanical name: *Euphorbia hirta* L.**

Family: Euphorbiaceae.

Local name: Lmbi dhodhi.

English name: Snake weed.

Flowering period: May to August.

Habit and habitat: Wild herb and terrestrial.

Part used: Leaves and milky latex.

Accession No: 125131.

### **Medicinal uses**

Leaf extract is used for asthma, cough, sores, dysentery and diarrhea.

The plant is useful for wounds and lip cracks. Milk is used to cure sexual disorders.

### **Recipe**

Fresh plant is washed with water and is placed in fresh water over night.

Next day early morning the plant is removed and water is taken to cure sexual disorders.

### **Botanical name: *E. heliscopia* L.**

Family: Euphorbiaceae.

Local name: Dhidhal.

English name: Sun spruce.

Flowering period: February to April.

Habit and habitat: Wild herb and terrestrial.

Part used: Whole plant.

Accession No: 125389.

### **Medicinal uses**

The herb is cathartic. Latex is applied to eruptions. Root is anthelmintic. Oil from seed is thought to be purgative.

### **Recipe**

Seed are roasted with pepper. It is given twice daily to cure cholera.

### **Botanical name: *Heliotropium strigosum* Willd.**

Family: Boraginaceae.  
Local name: Gorakh pan.  
English name: Seaside heliotrope.  
Flowering period: March to April.  
Habit and habitat: Wild herb and terrestrial.  
Part used: Whole plant.  
Accession No: 125126.

### **Medicinal uses**

Leaves are diuretic; extract of leaves is regulating the urine flow in few moments. This extract also breaks the kidney and bladder stone. In urine excretion with burning pain, leaf extract give relief.

### **Recipe**

3 to 4 g of dried plant is kept overnight in an earthen pot containing half litre of water. This extract is filtered and one cup is taken before breakfast for blood purification and nose bleeding. This prescription is recommended for one week. Five seeds each of black pepper and cardamon are added to 20 almonds in 10 g dried aerial parts of the plant. This material is crushed to obtain a powder. 1 g of this powder is taken twice a day for fifteen days as brain tonic.

### **Botanical name: *Nerium oleander* L.**

Family: Apocynaceae.  
Local name: Gandeer  
English name: Oleander.  
Flowering period: March to October.  
Habit and habitat: Wild shrub and terrestrial.  
Part used: Leaves, flowers, latex and bark.  
Accession No: 125382.

### **Medicinal uses**

Shade dried leaf powder is given to treat stomach pain. Leaves extract is used to treat ear pain and eyes problems. Latex is used for inducing abortions. This plant is highly poisonous.

### **Recipe**

Bark is boiled in mustard oil, cooled and the oil is applied

to treat scabies and scaly skin.

### **Botanical name: *Onosma hispidum* Wall. ex G. Don**

Family: Boraginaceae.  
Local name: Gaowzoban.  
English name: Onosma.  
Flowering period: April to July.  
Habit and Habitat: Wild herb and terrestrial.  
Part used: Roots, seeds and leaves.  
Accession No: 125098.

### **Medicinal uses**

The roots are boiled in water and extraction is mixed with the powdered roots of *Acorus*. The mixture is taken 4 times a day for curing hydrophobia. Root extract is used for pneumonia and typhoid fever and also used for dying hairs.

### **Recipe**

50 g of fresh aerial parts are crushed and mixed with half liter of water. One cup of this extract is used twice a day as heart and liver tonic.

### **Botanical name: *Oxalis corniculata* L.**

Family: Oxalidaceae.  
Local name: Khati booti.  
English name: Indian sorrel.  
Flowering period: March.  
Habit and habitat: Wild herb and terrestrial.  
Part used: Whole plant.  
Accession No: 125289.

### **Medicinal uses**

The fresh leaves are eaten as vegetable to stimulate appetite and to aid digestion.

### **Recipe**

Leaf juice mixed with black pepper and ghee is used for red spots on the skin, the juice of leaves is also dropped in the eyes of domestic birds in coronoid opacity.

### **Botanical name: *Parthenium hysterophorus***

Family: Asteraceae.  
Local name: Thandi boti.

Part used: Leaves and flowers.  
 Flowering season: May to October.  
 Habit and habitat: Wild shrub and terrestrial.  
 Accession number: 125310.

### **Medicinal uses**

Powder of its leaves and flowers is used to cure diabetes.  
 Leaf extract has carminative properties.

### **Recipe**

Fresh leaves and flowers are shade dried and packed in capsules. These capsules are used two times daily for two years to treat diabetes.

### **Botanical name: *Periploca aphylla* Dcne.**

Family: Asclepiadaceae.  
 Local name: Batta.  
 English name: Silk vine.  
 Flowering period: March to July.  
 Habit and habitat: Wild shrub and terrestrial.  
 Part used: Roots, flowers, branches and leaves.  
 Accession No: 125087.

### **Medicinal uses**

Decoction of root is diaphoretic stimulant. Decoction of stem is useful for urticaria. The plant is useful for constipation and tumor.

### **Recipe**

Branches and flowers are dried under shade, ground to obtain powder. 2 to 4 g of this powder is taken twice a day with water for constipation and stomach ulcer. Latex, squeeze from fresh branches is externally applied for skin infection.

### **Botanical name: *Portulaca quadrifida* L.**

Family: Portulacaceae.  
 Local name: Jangli kulfa.  
 English name: Purslane.  
 Flowering period: October.  
 Habit and habitat: Herb, wild and terrestrial.  
 Part used: Leaves and seeds.  
 Accession No: 126663.

### **Medicinal uses**

Leaves are used to treat, cough, urinary tract infections,

inflammations, leucorrhoea, piles, vomiting and ulcers. Leaf paste is applied as antiseptic to treat wounds and burns. Leaves are diuretic.

### **Recipe**

Half kg branches are boiled in two liters of water for 2 h in order to make decoction. Two teaspoon of this decoction is used daily for constipation. Milky juice of branches is applied to tumors and swellings.

### **Botanical name: *Solanum nigrum* L.**

Family: Solanaceae.  
 Local name: Kanch-mach.  
 English name: Black night shade.  
 Flowering period: February to March.  
 Habit and habitat: Wild herb and terrestrial.  
 Part used: Leaves, berries and stem.  
 Accession No: 125144.

### **Medicinal uses**

Leaves are cooked as vegetable, which are energetic and cure the backbone pain. The fruits are eaten to treat abdominal pain and are laxative. Berries are edible and leaves and barriers are used for heart diseases and fever, rheumatism, joint pains, enlargement of spleen and liver. Fruits are used for hepatitis. Stem is used for mouth problems.

### **Recipe**

Fresh leaves are cooked like vegetables at homes. This dish is energetic and best to give relief from pains.

### **Botanical name: *Solanum surattense* Burm. f.**

Family: Solanaceae.  
 Local name: Mokri.  
 Flowering period: April to October.  
 Habit and habitat: Wild herb and terrestrial.  
 Part used: Whole plant.  
 Accession No: 125290.

### **Medicinal uses**

The decoction of plant is used for sore throat, body pains and fever, rheumatism, cough and chest complaints. The seeds are smoked like cigarette to expel tooth worms. The ripe fruits are directly placed in between the aching teeth for few minutes to relieve pain. The seeds are boiled in milk and taken to treat stomach pain.





**Figure 2.** Flowering and fruiting plant of *Sisymbrium irio* L. ex Steud.

### Recipe

A tea spoon full of the powdered roots is taken twice a day with a cup of tea to treat cough and asthma. Leaves and fruit are boiled in water. From this extracted water soup is prepared. One cup of this soup is taken daily to treat rheumatism.

**Botanical name:** *Sisymbrium irio* L. ex Steud.

Family: Brassicaceae.

Local name: Khoob kalan.

English name: Cherry.

Flowering period: March.

Habit and habitat: Wild herb and terrestrial.

Part used: Seeds and fruits.

Accession No.: 125102.

### Medicinal uses

Seed is used in typhoid, small pox (cheechak and khasra), chest debility cholera, cough, fever, harassness and vocal organ debility and vomiting. Fruit is also used in medicines (Figure 2).

### Recipe

In summer season 20 ml fresh juice of plant is mixed in 5 g sugar candy and consumption of this drink for a week is recommended for eye diseases both in adult and children.

**Botanical name:** *Taraxacum officinalis* Weber

Family: Asteraceae.

Local name: Peeli booti.

English name: Dandelion.

Flowering period: February to May.

Habit and habitat: Wild herb and terrestrial.

Part used: Whole plant.

Accession No: 125125.

### Medicinal uses

Leaves are used for diabetes. Root paste is applied on swelling and joints pains. Used for constipation and bile. Plant is diuretic, laxative and tonic, to treat liver and spleen problems. Tea made from boiling flowers is used to treat heart trouble.

### Recipe

20 to 30 g dried aerial parts are boiled in 1 L of water for 15 to 20 min to which is added 15 to 20 g sugar. This decoction is filtered and half cup is given twice a day to the patient suffering from jaundice. For children quarter cup of decoction is given twice a day for a week. Half kg dried aerial parts are boiled in 2 L of water and decoction is filtered. One cup of this decoction is taken twice a day for diabetes. The flowers are boiled and used with honey for cough. One tea-spoon is taken twice a day to relief cough. The leaves are cooked and eaten to release constipation and also to purify blood.

**Botanical name:** *Tamarix dioica* Roxb. ex Roth

Family: Tamaricaceae.

Local name: Pilchi.

English name: Tamarix.

Flowering period: March.

Habit and habitat: Wild/cultivated, shrub/tree and terrestrial.

Part used: Whole plant.

Accession No: 125099.

### Medicinal uses

The bark is used for anal-fisher, cough, diarrhea, dysentery, pectoral affection, piles, ulcer, leucorrhoea, spleen trouble. It is bitter and tonic. Smoke of this plant is useful for polio and tuberculosis. Fumigation of leaves is used in cold and flu.

Bark and galls are recommended in diarrhea, dysentery and pectoral affections (particularly cough). Externally applied as ointment for ulcers, piles and fissure (Figure 3).

### Recipe

Drinking water from bowl made of tamarix wood is



**Figure 3.** Flowering and fruiting plant *Tamarix dioica* Roxb. ex Roth.

against splenetic inflammation. Powdered of bark is used for wounds.

**Botanical name: *Trianthema portulacastrum* L.**

Family: Aizoaceae.  
Local name: Itsit.  
English name: Desert horse-purslane.  
Flowering period: May to October.  
Habit and habitat: A small succulent prostrate herb, wild and terrestrial.  
Part used: Roots and leaves.  
Accession No: 125112.

**Medicinal uses**

The plant is a strong anthelmintic in local herbal medicine. Roots are used for cathartic, irritant and fever. It also has better effects against constipation. Leaves are effective in urinary tract infection as these are diuretic also break the kidney and bladder stone.

**Recipe**

Fresh leaves are brushed in water and this mixture is applied on skin to remove pimples and dark circles.

**Botanical name: *Tribulus terretris* L.**

Family: Zygophyllaceae.

Local name: Pakhra.  
Flowering period: June to August.  
Habit and habitat: Prostrate herb, wild, and terrestrial.  
Part used: Fruit, seeds and leaves.  
Accession No: 125375.

**Medicinal uses**

Diuretic has cooling effects, extract of leaves is used to break kidney and bladder stone, fruit cures premature ejaculation.

**Recipe**

Dried powder of seeds is used to break kidney stone. Extract of leaves is more effective to break stone.

**Botanical name: *Trichodesma indicum* (L.) R. Br.**

Family: Boraginaceae.  
Local name: Prkwti.  
English name: Trichodesma.  
Flowering period: August to October.  
Habit and habitat: Herb, wild and terrestrial.  
Part used: Whole plant.  
Accession No.: 125127.

**Medicinal uses**

Whole plant decoction is used to treat fever and also used as blood purifier. It is also used as refrigerant. Leaf juice is used as eye drops to treat eye infections. Root paste is applied to treat rheumatic swelling of joints.

**Recipe**

Whole plant extract is mixed with sugar and is given to treat diarrhea, dysentery and urinary problems.

**Botanical name: *Xanthium strumarium* L.**

Family: Asteraceae.  
Local name: Chota Dhatoora.  
English name: Cocklebur.  
Flowering period: June to July.  
Habit and habitat: Wild herb and terrestrial.  
Part used: Leaves and fruit.  
Accession No: 125124.

### Medicinal uses

The fruit is cooling and effectious in the small pox and dysentery. It is also useful in urinary diseases. It is used as toothaches, headaches, in fevers and leprosy.

### Recipe

Fresh leaves are crushed with the leaves of *Calotropis procera*, which is applied 4 times a day for curing wet eczema.

### Botanical name: *Withania somnifera* L.

Family: Solanaceae.

Local name: Aksan.

English name: Winter cherry.

Flowering period: Throughout the year.

Habit and habitat: Wild herb and terrestrial.

Part used: Roots, seeds and leaves.

Accession No: 125145.

### Medicinal uses

Root decoction is used in the weakness of sexual organ, premature ejaculation, leucorrhoea and frequent miscarriages. Seeds are sedative and narcotic and used in loss of memory, nervous exhaustion and rheumatic affection. Roots are useful for sexual debility, syphilis, worms, inflammation, bronchitis, constipation and bole. It is considered best against tumor.

### Recipe

1 kg roots are cut into small pieces dried under shade and ground to obtain powder. 10 g powder is mixed in one tea-spoon of honey and used daily at night for 2 to 3 weeks for sexual debility in male, constipation, asthma and inflammation. Equal quantity of powder and honey is given to children for insomnia, constipation and abdomen worms.

### Botanical name: *Zaleya pentandra*

Family: Aizoaceae.

Local name: Slathi.

Flowering period: May to October.

Habit and habitat: A small prostrate herb, wild and terrestrial.

Part used: Whole plant.

Accession No: 125388.

### Medicinal uses

It is a camel food. Its roots are hanged on the neck like bead and it is thought to cure jaundice.

### DISCUSSION

During human health system history on this planet would not be complete without a look at the role of medicinal plants. In recent years there has been a reawakened scientific interest in the fundamental role of plants in medicinal field. It is noticed that the people living in urban areas have almost no knowledge about medicinal properties of plants (Alcorn, 1984; Altieri et al., 1987). In rural areas, the people, especially, elders and females have a sufficient knowledge about this prosperous natural treasure, which is gifted to mankind by God. The people were somewhat dependent upon medicinal plants for food and to cure themselves. Elders like to cure their child and themselves by these medicinal plants. The important factor to use plants as ailments is the higher prices of allopathic medicines and unavailability of better medical facilities (Qureshi et al., 2006).

Pakistan has verity of climate and its soil is rich with medicinal plants and herbs which are growing naturally in different season of the year in the country. District Bhimber AJK, Pakistan is a hilly area; these hills are rich with plants communities, number of medicinal plants are found here. Cultivation, collection and proper storage of these plants in planned way is required as there is no proper way to screen these plants.

Bhimber AJK is an urban area, but the people of this area are not much advanced, as they are living traditionally. In city Bhimber AJK, a few people are adapted to the urban life style. More than 75% residents of city live in traditional style and are dependent on ethnomedicines. They prefer to cure themselves through plants. Old people study areas are well equipped with indigenous medicinal knowledge and they seek someone to share this treasure. Modern generation is not paying much attention to preserve this treasure. That is the reason the indigenous medicinal knowledge is in danger to extinct. The ethno medicinal values of these plants are quite helpful for healthcare and hygiene of local people (Aumeeruddy, 1994). Local people of study area are mostly dependent on indigenous plants for the cure of various diseases as *Solanum nigrum* L. and *S. surattense* Burm. f. are frequently used to cure pains in body. *S. nigrum* L. is used as vegetable and liquor of *S. surattense* Burm. f. fruit is used for this purpose. From this study three plants are reported that are effective against cardiac problems (*Artemisia scoparia* Waldst and Kit., *S. nigrum* L., *Taraxacum officinalis* Weber).

Few important plants were also reported that are considered valuable against tumor that is *Periploca aphylla* Dcne., and *Withania somnifera* L. Similarly,

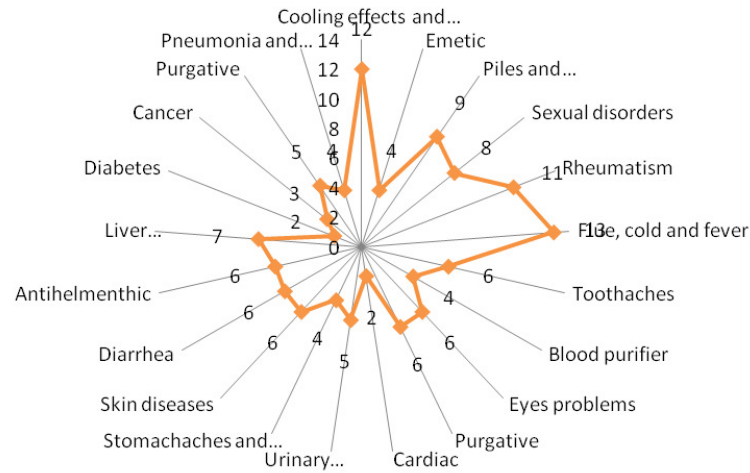


Figure 4. Proportion of diseases treated by ethnomedicinal remedies in the study area.



Figure 5. Map showing Bhimber District, Azad Jammu and Kashmir, Pakistan.

*Acacia nilotica* (L.) Delile, *Carthamus oxyacantha* M. Bieb are used for jaundice and hepatitis. A number of plants which can break kidney and spleen stones come in consideration through this investigation survey. Figure 4 shows the ratio and numbers of diseases which are being cured by medicinal plants in the study area. These plants are a good source to interact with nature. It is crucial to have this precious ethno medicinal knowledge and it should be transferred to the younger generation also, neither have we will loss a great treasure that is disappearing rapidly. In the past different scientists made their efforts to explore the indigenous medicinal uses of plants from Azad Jammu and Kashmir, Pakistan. Shahzad and Qureshi (2001) studied 31 plant species of 18 families from Jatlan area of district Mirpur (Azad Jammu and Kashmir). They recorded the mostly used ethnomedicinal utilizations. Akhter and Malik (2002) made the floristic survey of Leepa Valley Azad Jammu and Kashmir, Pakistan. They recorded 620 species, out of which 80 species were found to be ethnobotanically important. This survey was conducted in this scenario to preserve the possible available information. This data can be used in future for pharmacological studies, as most of the pharmaceutical companies are paying attention to plants for the development of various drugs. Synthetic drugs have side effects, while plant originated drugs are safe to use.

Plants with high medicinal values are preferred for biological screening to get valuable pharmacological products. This research can offer a big source of medicinal information for pharmacological studies.

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