Ethnomedicinal plants from bahraich (U.P.) India

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ABSTRACT

The present study reveals about the vast diversity of herbal plants used by tribes as well as poor villagers of Bahraich district. The potential of ethnobotanical research and need for documentation of traditional knowledge pertaining to the medicinal plant utilization for the greater benefit of mankind is carried out because most of the villages of Bahraich district are not having sufficient medical facilities. But all the villages have the traditional medicines and treatments to cure all the ailments. The rural population has to depend on the local ethnic doctor called as vaidiya or hakim. They prepare medicines from the medicinal plants available in their locality. They follow all the traditional and ethnical method of preparing the medicine. Bahraich have well blessed phytodiversity which is a rich source of medicinal plants as well as ethnic communities. The remote locality, poverty illiteracy and lack of touch with modern civilization make them confined to hold on traditional faith hence they are wholly dependent on indigenous plants for the treatment of various ailments. The investigation was performed by collection of local medicinal plants in consultation with the local tribes as well as poor villagers. The common medicinal plants used by rural tribes were studied and about eighty four plant species belonging to seventy three genera representing thirty seven families were found to be utilized in the treatment of various twenty five ailments viz. antidote for snake and scorpion bite, arthritis, burn, cough, cold, corzya, constipation, conjunctivitis, diabetes, ear pain, fever, gastrointestinal troubles, headache, insomnia, jaundice, leucorrhoea, mouth ulcer, respiratory troubles, skin problems and skeletal problems etc. Various medicinal plant parts viz. leaves, flowers, barks, latex, seeds, rhizome, root, sometimes whole plant were used as ethnomedicine. For each plant species, details of scientific name, authors name, vernacular name and family as well as use were provided along with parts harvested for treatment and the mode of administration.

Keywords, Ailments, ethnobotanical, ethnomedicine, medicinal plants, phytodiversity, secondary metabolites, traditional knowledge, Bahraich.

1. INTRODUCTION

All the plants existing in this universe have their own medicinal value. There is no any plant which is non-medicinal. Plants have been used as primary source of medicine for thousands of years since Vedic period. Many of today’s modern medicines are derived from plants, because plants accumulate a diverse array of natural products. The medicinal value of plants has assumed a more important dimension in the past few decades owing largely to the discovery that extracts from plants contain not only minerals and primary metabolites but also a diverse array of secondary metabolites with antioxidant potential (Akinmoladum et al., 2007, Chanda et al., 2011). There are mainly four major classes of secondary compounds that are significant for medicinal importance. These are alkaloids, phenylpropenoids, flavonoids and terpenoids (Edwards and Gatehouse, 1999). These secondary metabolites are used in preparation of medicines. Plants which are used for extraction of these secondary metabolites are known as medicinal plants. Throughout history secondary metabolites of plants have been utilized by humanity. Inspite of modernization process the rural folk and the tribal natives of the villages are still hold on their traditional faith and they are wholly dependent on indigenous plants for their various needs, especially for medicines.

Tribal communities have developed knowledge and practices by trial and error experiments (Sidique et al., 2004) and by intuitive methods leading to unique creation known as traditional knowledge and they are the store house of such traditional medicinal knowledge. Indian traditional medicine is based on different systems such as Ayurveda, Siddha and Unani which is completely dependent on herbal medicine is used by various communities (Gadgil, 1996) The indigenous cultural and traditional knowledge of medicinal plants of various ethnic communities where it has been transmitted orally for centuries is fast disappearing from the face of the earth due to advent of modern transformation of traditional culture. In recent times many important medicinal plants are being depleted very swiftly due to scientific exploitation, indiscriminate destruction of forest and natural habitats and unsustainable harvesting. Most of plants species are either becoming less abundant or on the verge of extinction (Ishliac, et al., 2006, Kumar et al., 2011 and Prakash et al., 2011).

Keeping the aforesaid view there is an urgent need to document the ethnomedicinal information presently existing among the diverse communities before traditional knowledge is completely lost (Rao, 1996). Since Bahraich is known as Forest City because it has well blessed forest with phytodiversity which is a rich source of valuable medicinal plants as well as a large tribal ethnic community. The present work is undertaken for the documentation of indigenous knowledge on plants utilization as natural remedy.

2. SCOPE OF THE STUDY

The focus of this research work is the perception and context of use of traditional medicines. Traditional folk medicine is the application of indigenous beliefs, knowledge, skills and cultural practices concerned with human health. The study will be
provides a strong biomedical approach particularly in drug discovery programs. By using natural remedies humans will be able to minimize the use of artificial chemicals, unnatural stimulant and our dependence on natural medicines will be make our treatment more effective.

2.1. Study Area
Bahraich is beautiful city, known as the "City of forest" is located at the bank of river ‘Saryu’. It has international border with Nepal on the northern side, Shrawasti is in eastern side where as Kheri Lakhimpur in waste and Sitapur and Barabanki districts in southern side. North eastern part of the district is Tarai which is covered by the dense natural forests. Saryu and Ghagha are the main rivers. The climate is hot and humid. The soil of the district is very fertile. Aforesaid ideal environmental factors support the luxurious growth of biodiversity as result greenery is spread throughout the district. The dense forests and flowing rivers are the specialties of the district Bahraich.

3. MATERIALS AND METHODS
Ethnobotanical surveys were conducted in Bahraich district for the documentation of ethnomedicinal importance of the local flora. Elderly persons and resourceful medicineman were contacted for the purpose. Questionnaire method was adopted for documentation of folk indigenous knowledge. The interviews were carried out in local community to investigate local people and local healers who are the main user of medicinal plants. Ethnomedicinal remedies were asked to them for some common but important ailments. Various medicinal plant parts viz. leaves, flowers, bark, latex, seeds, rhizome, root, sometimes whole plant were used as ethnomedicine. Methods of medicine preparation and its mode of administration were asked to local healers and recorded in field note book. To ascertain the uses of these medicinal plants the earlier published scientific literature sources referred to are Jain 1991, Kirtikar and Basu, 1991, Ambasta et al., 1992. The specimens of medicinal plants were collected, pressed, dried, preserved, mounted as described by Jain and Rao, 1976, and identified through the available taxonomic literature, manuals and floras (Duthie, 1994, Hooker, 1872-1897). The specimens were deposited in the Herbarium maintained by the Department. The data taken in the field was transferred to the slip pasted on the herbarium sheets. The references given in the text has also been provided by their wave link. The plants used in an ailment or the number of plants used in preparation of medicine for an ailments is enumerated below in Table 1 with correct botanical name followed by vernacular names and family as well as plants parts used and mode of administration in respect to different ailments.

| Table 1 Ethnomedicinal plants used in healthcare by rural people of Bahraich |
|---------------------------------|---------------------------------|
| Abution indicum Linn., Kanghi (Malvaceae) | Leaves as well as flowers are cooked and eaten daily to cures piles. |
| Acacia nilotica (Linn.) Willd. (Syn. A. arabica Linn., Babool, Kikar (Mimosaceae). | Seven leaves are made into paste and taken orally with water daily for a week which cures diarrhea. |
| Acmella olaraca Linn. (Syn. Spilanthes olaraca Linn.), Spilanthes (Asteraceae), | Paste of flower is applied on head as well as forehead which cures headache. |
| Adhatoda vasica Nees. Arusa, Rusa, Vasaka (Acanthaceae). | One teaspoonful of bark powder is taken daily for a month which cures leucorrhoea. |
| Achyranthes aspera Linn. Latjeera, Chirchita, (Amaranthaceae), | Three or four leaves are chewed, which produces cooling sensation in toothache and throat. |
| Acacia nilotica Linn. | The infusion is made into paste with the help of water and applied on scorpion sting. It is a potent antidote. |
| Ageratum conyzoides Linn. Jingali Budina, Goat weed, Chick weed, White weed (Asteraceae), | Ten ml. juice of fresh leaves mixed with five gm of honey is taken daily in the morning for a week which cures cough and coryza. |
| Aegle marmeloise (Linn) Corr. Serr. Bel (Rutaceae), | Flowers dried in shade are to be powdered. Five gm. Powder mixed with five gm. of honey is taken daily with empty stomach so as to cure cough, common cold and coryza. |
| Allium cepa Linn. Onion, Pyaz, (Liliaceae), | Ten ml root decoction is taken daily for seven days which cures chronic bronchitis (Black cough). |
| Ageratum conyzoides Linn. Jingali Budina, Goat weed, Chick weed, White weed (Asteraceae), | Two hundred gm. flower and four hundred gm. sugar candy (Mishree) is taken and kept in a glass jar very close to sun light to make into a soft mixture (Gulkand). One tablespoonful of mixture is taken daily which cures bronchitis, coryza as well as phthisis. |
| Aegle marmeloise (Linn) Corr. Serr. Bel (Rutaceae), | Twenty gm. fruit pulp is mixed with five gm. powder of fennel seeds (Foeniculum vulgare Mill., Fennel, Sauf, Apiaceae.) and taken thrice a day for a week which cures diarrhea. |
| Aegle marmeloise (Linn) Corr. Serr. Bel (Rutaceae), | Leaf juice is applied in the eyes thrice a day to cure conjunctivitis. |
| Aegle marmeloise (Linn) Corr. Serr. Bel (Rutaceae), | Regular consumption of four young leaves with empty stomach controls diabetes increases immune system as well as purifies the blood. |
| Aegle marmeloise (Linn) Corr. Serr. Bel (Rutaceae), | Paste of five leaves mixed with a teaspoonful of cumin (Cumin cyminum Linn. Jeera, Cumin, Apiaceae.) is taken with a cup of cow milk twice daily for few days which cures leucorrhoea. |
| Aegle marmeloise (Linn) Corr. Serr. Bel (Rutaceae), | Ten ml. juice of fresh leaves is taken daily for a week which cures dyspepsia. |
| Aegle marmeloise (Linn) Corr. Serr. Bel (Rutaceae), | Paste of leaves and flower is applied on wound and injuries which stops bleeding. |
| Aegle marmeloise (Linn) Corr. Serr. Bel (Rutaceae), | Leaves are made into paste with the help of water and applied on fire burn skin which produces soothing effect on burning pain. |
| Aegle marmeloise (Linn) Corr. Serr. Bel (Rutaceae), | Leaf juice is applied externally on leprosy and other skin diseases. |
| Aegle marmeloise (Linn) Corr. Serr. Bel (Rutaceae), | Two or three drops of luke warm juice of bulb is put in the ear twice a day to cure the ear pain. |
| Aegle marmeloise (Linn) Corr. Serr. Bel (Rutaceae), | One cup of onion bulb juice is mixed with a teaspoonful of ginger (Zingiber officinale Roscoe, Zingiberaceae) juice and one lemon juice (Citrus medica Linn. Neembu Rutaceae) a pinch of black salt is added to it. It is taken in four equal doses in a day for a week which cures choleras. |
| Aegle marmeloise (Linn) Corr. Serr. Bel (Rutaceae), | Ten ml. juice of onion bulb is mixed with five ml. juice of ginger (Zingiber officinale Roscoe Zingiberaceae). It is taken daily with a teaspoonful of honey for a week which cures cough, cold and coryza. |
| Aegle marmeloise (Linn) Corr. Serr. Bel (Rutaceae), | Ten ml. of onion bulb juice is mixed along with five ml. of ginger juice (Zingiber officinale Roscoe Zingiberaceae), five grinded black pepper (Piper nigrum Linn. Piperaceae) and a pinch of black salt It is taken daily for a week to cure tonsillitis. |
• Daily massage of onion bulb juice mixed with til oil (Seasmmum indicum Linn. Pedaliaceae) cures the arthritis.
• Ten ml. juice of onion bulb is mixed with five ml. juice of mint (Mentha arvensis Linn. Lamiaceae) and taken after every two hours interval helps in curing cholera.
• One small onion cut into four pieces soaked in lemon juice or vinegar. It is taken with a pinch of common salt and black pepper (Piper nigrum Linn. Piperaceae) taking twice daily for ten days cures jaundice.
• One tablespoonful of onion juice is mixed in glass of luke warm milk and taken at bed time. It is useful in insomnia.
• One onion paste is crushed with a tablespoonful of Jaggery and taken with water which reduces fatigue as well as exhaustion.
• Application of onion paste or juice on scorpion bite, insect bite is a potent antidote.
• In case of sunstroke eating of onion relieves thirst and mitigates the effect of sunstroke. Paste of onion is applied on the body also useful in sunstroke.
• Onion mixed with turmeric (Curcuma longa Linn. Zingiberaceae) and a pinch of common salt is made into paste. It is stir fried in mustered oil to make it like an ointment. It is applied on wound and abscess helps in draining out pus as well as cures.
• Daily eating of raw onions controls the blood pressure, blood sugar as well as useful in other cardiovascular ailments.
• One drop of onion extract diluted with rose water helps in improving eyesight and eliminates eye ailments.
• Onion juice and equal amount of mustard oil (Brassica campestris Linn. Brassicaceae) is mixed and warmed. Daily massage of luke warm oil cures rheumatic pain.

Allium sativum Linn. Garlic, Lahsun (Liliaceae),
• The mixture of ten gm. Garlic and thirty gm. black til (Seasmmum indicum Linn. Pedaliaceae) is taken with empty stomach early in the morning with water for twenty days which controls epilepsy.
• Ten ml. juice of Garlic is taken orally with luke warm water twice a day in winter so as to cure gastric troubles. In summer one or two clot of bulb is taken for water for gastric troubles.
• In winter season daily eating of 2-4 cloves of garlic bulb with luke warm water in morning with empty stomach is beneficial to control blood cholesterol, blood pressure as well as increases immune system.
• Twenty ml. of Garlic juice is mixed with sufficient amount of honey or sugar and taken orally in scorpion sting.
• One or two clot of Garlic fried in Ghee or castor oil (Ricinus communis Linn. Euphorbiaceae) is taken daily for two months in winter season so as to cure muscle pain and arthritis.

Aloe vera Linn. Ghitrikumari, Ghaikwar (Liliaceae),
• Leaf gel is taken orally with empty stomach so as to cure constipation, stomachache, rheumatic pain as well as diabetes.
• Application and massage of gel on skin cures pimples and acne.
• Gel of plant is applied on burn skin thrice a day which cures burning pain.

Amarnathus spinosus Linn. Chaulai (Amaranthaceae),
• Paste of root is applied on the body which cures contagious skin infection.

Andrographis paniculata (Burm.f) Wall ex Nees (=Justicia paniculata Burm.f., J. patibrosa Russ., J.stricta Lam.ex stud) Kalpnath, kalmegh, Buhnimba (Acanthaceae),
• Ten ml. juice of fresh leaves is taken with water twice a day for a week which cures leucorrhoea.
• Four leaves of kalpnath is chewed with four black pepper (Piper nigrum Linn. Piperaceae) and engulfed with water in daily in morning with empty stomach so as to increase the immune system.

Argemone maxicana Linn.Pilikakarti, Bharbhar (Papaveraceae),
• Latex is applied on cut and wounds daily till cure.
• Two drops of fresh latex is applied in eyes twice a day which cures redness and water discharge due to conjunctivitis.

Azadirachta indica A.Juss. Neem (Meliaceae),
• Ten leaves of Neem is taken with seven black pepper (Piper nigrum Linn. Piperaceae) and sufficient amount of rock salt which is made into paste with the help of water. It is taken daily with empty stomach with water for two weeks which cures small pox as well as measles.
• Twenty five gm. of bark is taken in three cup of water and its decoction is prepared, Five gm of Coriander powder (Coriandrum sativum Linn. Apiaceae) and five gm of dried ginger (Zingiber officinale Roscoe. Zingiberaceae) powder is added in decoction. It is taken daily for a week which cures malerial fiver.
• One teaspoonful of juice of leaves is taken with a teaspoonful of honey with empty stomach for 3-5 days. It is a potent vermicide.
• Young leaves are made into paste and applied on the body and leave for 30 min. to dry after it take a bath of water boiled with neem leaves. It is applied daily for a week which cures scabies, eczema and other skin diseases.
• Two or three young leaves are chewed and engulfed with water daily in the morning with empty stomach for a month controls diabetes, blood pressure as well as increases immune system.
• Twenty five gm. leaves are fried in 100 ml. of mustard oil. When the leaves become black it is filtered. The filtered oil is kept into bottle and daily massage of the oil is useful in eczema, itching and other skin diseases.

Bauhinia varigata Linn. Kachnar (Caesalpinaceae),
• The bark and flowers are made into paste and a small amount of Bee wax is added to it. Luke warm poultice of paste is tied on wounds and boils daily till cure.
• Paste of leaves and flowers is applied on burn skin twice a day which reduces inflammation as well as cures.
• Ten ml. decoction of bark is taken daily with a teaspoonful of honey twice daily for 15 days which cures scrofula (Gandmala, kanthmala).
• The bark is to be powdered and five gm. of powder is taken twice daily with the help of water for 20 days for the treatment of scrofula (Gandmala).

Bombax cieba Linn. Semal, Shamli, Mocha, Red Cotton tree, Bombax (Magnoliaceae),
• Paste of leaves or bark is applied on skin which cures skin eruption.
• Flowers and young stem prickles are made into paste and applied on face restore the skin color as well as clear color complexion.
• Paste of leaves, flower, and bark is applied on wounds, boils which cures swelling as well as heals the wound.
• Gum obtained from the tree known as Mocharas is applied on burn skin which creates cooling sensation. It is applied twice or thrice daily till cure.
• Ten ml. decoction of root is taken twice daily for a week which cures dysentery.
• Paste of bark is applied on forehead which cures headache as well as giddiness due to headache.
• One teaspoonful of Gum is mixed with a teaspoonful of dried seed powder of mango (Mangifera indica Linn. Anacardiaceae) and a teaspoonful of honey it is taken twice daily for few days which cures painful menstruation.
• Paste of seeds is applied on small pox and chicken pox for getting relief.

Brassica campestris Linn. Mustard, Sarso, (Brassicaceae),
• Putting of 4-5 drops of oil in both nostrils and ears twice daily cures headaches.

Two hundred ml. of oil is mixed with ten gm. kapoor (Cinnamomum camphora (Linn.) J.Presl. Lauraceae) and kept in a glass bottle very close to sun light for few days. Daily massage of this oil cures muscle pain, body pain as well as rheumatic pain.

Brassica oleracea Linn. Kohlrabi, Knol-khol, Ganthogobi (Brassicaceae),

• Taking one cup juice of knol-khol with water daily in the morning with empty stomach is beneficial in diabetes.
• Eating vegetable of plant in the dinner for a week is useful in insomnia.

Calotropis procera W.T.Aiton. Madar Aank (Asclepiadaceae),

• Twenty gm. of leaf buds of Calotropis along with ten gm of carom seeds (Carum copticum Linn. Carom, Ajwain, Apiceae) and 25 gm Jaggery (Gur) are made into paste. Pea size tablets are made to it and one tablet is taken daily in the morning with empty stomach which cures respiratory problems.
• Twenty gm of flower buds are mixed with 10 gm carom seeds (Carum copticum Linn. Carom, Ajwain, Apiceae) and ten gm of rock salt. It is made into paste and pea size tablets are made. One tablet is taken daily in the morning with luke warm milk which cures respiratory problems.
• Paste of root is applied on scorpion sting which prevents poisoning.
• Sticky oozing (latex) of plant is applied on scorpion sting and snake bite which is a potent antidote.
• Latex (sap milk) of calotropis and pinch of turmeric (Curcuma longa Linn. Zingiberaceae) is mixed and applied on face daily for a week which cures pimples, acnes as well as black spot.

• Two drops of leaf juice is put in the both nostrils twice a day which cures headache.
• Paste of root is applied on forehead which cures headache.
• Yellow leaves applied with ghee or castor oil (Ricinus communis Linn. Euphorbiaceae) is warmed. Two or three drops of luke warm extract is put in ear twice daily for few days which cures ear pain as well as dumbness.

Cannabis sativa Linn. Bhang, ganja, (Cannabinaceae),

• Two or three drops of luke warm juice of leaves is put in the ear twice daily which cures ear pain.

Carica papaya Linn. Papita, Papaya, (Caricaceae),

• Decoction of leaves is taken orally to treat hypertension, and obesity.
• Eating of ripe fruit curesconstipation and other stomach disorders.
• One cup decoction of seeds is taken twice daily for 20 days which cures joints pain as well as rheumatic pain.

Catharanthus roseus G. Don, Sadabahar (Apocynaceae),

• Two or three leaves or flowers are chewed every day in the morning with empty stomach which controls diabetes.

Chenopodium album Linn. Goosefoot, Bathua (Amaranthaceae),

• About 20-25 leaves are boiled in water and filtered a teaspoonful of lemon juice (Citrus medica Linn. Rutaceae) is added to it and taken daily for a week which cures constipation.
• Twenty ml. juice of fresh leaves is taken daily in the morning with empty stomach for 2 months in winter season which cures rheumatism.

Clisome viscosa Linn. Hrurhr (Capparidaceae),

• Fresh leaves and seeds are made into paste with the help of water and applied topically on forehead which cures headache.

Cassia occidentalis Linn. (Caesalpiniaaceae),

• Paste of leaves as well as seeds is applied on skin infections so as to cure.

Cassia tora Linn. Chekwad (Caesalpiniaaceae),

• Paste of leaves, flowers or seeds is applied on boils, cuts or wounds so as to cure.
• Ten ml juice of fresh leaves is taken orally for five days which cures abdominal pain due to intestinal worms as well as expel the worms.

Cassia fistula Linn. Amaltas (Caesalpiniaaceae),

• Leaves are made into paste with the help of water and applied on burn skin twice daily till cure.
• Dried leaves are made into powder and one teaspoonful of is taken daily with water which controls diabetes.

Coriandrum sativum Linn. Corander, Dhania, (Apiaceae),

• Ten gm. dried seeds are powdered with equal amount of mishree (sugar candy) and mixed in a cup of water. It is taken twice daily for a week which cures bloody dysentery.
• Eating of 3-4 fresh green leaves thire a day cures mouth ulcer.

Carum copticum Linn. Ajwain, Carom seeds, Caraway. (Apiceae),

• One teaspoonful of seed is powdered and taken daily with a cup of luke warm water before meal which reduces rheumatic pain.

Citrus vulgaris Linn. Watermelon, Terbooj. (Cucurbitaceae),

• A glass of Water melon juice mixed with sufficient amount of sugar is taken which cures headache due to sunstroke.

Citrus medica Linn. Lemon, Neembu (Rutaceae),

• One tablespoonful of juice is taken with a teaspoonful of honey in a cup of luke warm water twice daily for multiple days which cures arthritis.
• One lemon juice is taken with a glass of water twice daily in summer season which prevents from cholera.
• The rind of three lemons is crushed and made into paste and applied on forehead which cures headache caused by heat.
• Paste of leaves applied on forehead cures headache.
• Putting two drops of lemon juice in the opposite side of nostril where the headache exist cure hemi-carnial headache (adhkapari). It is used for few days till the cure.

Curcuma longa Linn. Turmeric, Haldi, Haridra, (Zingiberaceae),

• Fresh rhizome with equal amount of sugar candy is taken and made into paste. One teaspoonful of paste is taken with water twice daily for twenty days which cures blood setting piles.
• Inhalng the smoke of fresh leaves twice a day for few days cures the chronic headache.
• Three or five gm. of rhizome powder is taken with water to alleviate intestinal gas.
• The rhizome of Turmeric and leaves of tulsi (Ocimum sanctum Linn. Lamiaceae) is made into paste and applied on face daily for a week which cures acne, pimples and other black spot of the face.
• Rhizome paste is applied on cut wound or injuries which stops bleeding. Paste is stir fried in Mustard oil (Brassica compestris Linn. Brassicaceae) and applied on wounds or injuries twice daily which cures swelling and heals the wound.
• Drinking a glass of luke warm milk mixed with half teaspoonful of Turmeric twice a day cures the injuries.
• Gargling with the decoction of Turmeric thrice a day cures the mouth ulcer.
• Rhizome is made into paste with the help of water. A thick paste is applied on forehead twice a day which cures headache.

Cymbopogon citratus (D.C.) Stapf, Agiyaaghas (Poaceae),

• Infusion of crushed leaves applied on forehead which cures headache.
• Leaves are boiled along with black pepper (Piper nigrum Linn, kali mirch, Piperaceae) and ginger (Zingiber officinale Roscoe Zingiberaceae). If concentrated solution is taken like tea it has soothing effect on headache.

Cynodondactylon (Linn.) Pers., Doobghas (Poaceae),
Linn. Brassic
Linn. Spinach, Palak
Spinach
R
Embelica
One teaspoonful of powder (Triphala churn) is taken with water daily in the night which cures constipation.
Linn. Apiaceae) are soaked in water in
officinalis
D
also
R
t is applied topically on scalp for the treatment of
hair loss, graying
Whole plant is crushed and boiled with water. The steam is inhaled twice a day for a week which cures nasal congestion,
Bargad, Ficus
P
which cures burning pain and prevents boils to
which cures dysentery. I
Roxb.
is taken with water daily
Behaya, a potent
bengalensis
(Linn.) Ait. (Ol
(Lauki
racemosa
d (chebula (ac
Eclypta
Linn. Peepal, (Moraceae)
compestr
camera
globulus
I
M
Lawsonia
compestris
(Linn.) Mart. Salms., Jalkumbhi, w
religiosa
Eichornia
Linn. (Euphorbiaceae)
• Leaves are made into paste with the help of water and applied on burn skin
• Paste of leaves is applied on wounds twice a day as to cure.
• Paste of leaves is applied on wounds so as to cure.
Eucalyptus globulus
Linn. (Myrtaceae),
• Inhaling the steam of hot water which contains few drops of Eucalyptus oil cures headache.
Euphoria hirta
Linn. (Euphorbiaceae),
• Paste of leaves is applied on wounds, boils and pimples daily for few days which cure it due to its healing property.
• Sap of plant is applied on cracked or chopped lips which heal it.
• Paste of root is applied on snake bite.
• Gargling with root decoction twice daily cures mouth ulcer.
Eichornia crassipes
• Two hundred gm. fresh fruits of Emblica are taken with 150 gm. of dried fruits of baheera (Terminalia bellerica Roxb. Combretaceae), and harahe (Terminalia chebula (Retz.) Obs. Combretaceae) it is powdered with sufficient amount of black salt.
Embelica officinalis
Gaertn. Awla (Euphorbiaceae),
• Two hundred gm. fruits of Emblica are taken with 150 gm. of dried fruits of baheera (Terminalia bellerica Roxb. Combretaceae), and harahe (Terminalia chebula (Retz.) Obs. Combretaceae) it is powdered with sufficient amount of black salt.
Equal amount of dried fruits of Emblica and coriander seeds (Coriandrum sativum Linn. Apiaceae) are soaked in water in the night. It is filtered in the morning, sufficient amount of sugar candy (mishree) is mixed in the filtrate and taken daily in the morning for a week which cures acute headache.
Ficus bengalensis
Linn. Bargad, Ficus (Moraceae);
• Latex is applied on rheumatic pain twice daily which cures pain.
• Paste of ten gm. adventitious roots with three cloves (Syzygium aromaticum (Linn.) Merril & Perry, Martaceae) is taken with bark juice in empty stomach twice a day for three week to cure fissure.
Ficus racemosa
Linn., Gular (Moraceae),
• Twenty ml juice of fresh leaves is taken with water for about ten days to treat gastrointestinal problems.
Ficus religiosa
Linn. Peepal, (Moraceae),
• Three or four drops juice of young leaves is put in the ear twice daily for few days which cure ear pain.
• Daily eating of 2-3 young leaves of Ficus for multiple days cures headache as well as common cold and coryza.
• Five gm. of powder of dried leaves is mixed with a teaspoonful of honey and taken twice daily which cures asthma as well as cough and coryza.
Foeniculum vulgare
Mill. Fennel, Sauf (Apiaceae),
• A teaspoonful of Fennel seeds are chewed and engulfed with a glass of luke warm water. It is taken daily in the night before sleeping which cures Constipation.
• Five gm. of Fennel seeds are taken daily after meal which prevents formation of gas in the gastrointestinal tract. It is a potent carminative as well as natural blood purifier.
Fennel seeds are soaked in a cup of water it is filtered with sieve. Washing the eyes with filtered water is useful in sore eyes, puffy eyes, and blood shot eyes.
Hibiscus rosa- sinensis
Linn. Guralah (Malvaceae),
• Paste of leaves is applied on head as well as forehead which cures headache.
• Crushed flower of Hibiscus is mixed with mehandi (Lawsonia inermis Linn. Lythraceae) and bhringraj (Ecypta alba (Linn.) Hassk. Asteraceae) leaves are made into paste. It is applied topically on scalp for the treatment of hair loss, graying and dry hair.
Ipomea aquatica
Forsk. Syn. I. repta (Linn.) poir, Karmua, Nari ka saag. (Convolvulaceae),
• Whole plant is cooked and eaten daily for a week which is useful in digestive problems as well as liver diseases.
Ipomea fistulosa
Mart ex. Choisy, Behaya, Morning glory (Convolvulaceae),
• Four or five leaves are taken and Mustard (Brassica compestris Linn. Brassicaceae) oil is applied on one side. It is warmed and tied on rheumatic pain.
Jasminum sambac
 (Linn.) Ait. (Oleaceae),
• Infusion of crushed flowers is applied topically on forehead which cures headache.
Lantana camera
Linn. Kuri (Verbinaceae),
• Paste of leaves is applied on wounds twice a day till cure.
• Paste of root or whole plant paste is used as an antiseptic for snake bite.
Lawsonia inermis
Linn. Mehandi, (Lythraceae),
• Paste of leaves is applied on head which cures headache.
• Leaves are made into paste with the help of water and applied on burn skin which cures burning pain and prevents boils to occur.
Lagaria sicerraria
(Molina) Standl. Lauki. Bottle guard, (Cucurbitaceae),
• Leaves are taken and Mustard oil (Brassica compestris Linn. Brassicaceae) is applied on smooth surface of leaf. It is warmed and tied on wounds, boils or abscess to remove the pus.
• One cup of fruit juice is taken daily with empty stomach which cures peptic ulcer, constipation as well as control diabetes.
Lucas aspera
Spreng., Chitrapatikina, Guna, Thumbai (Lamiaceae),
• Whole plant is crushed and boiled with water. The steam is inhaled twice a day for a week which cures nasal congestion, cough, cold, fever as well as headache due to sinusitis.
• For unconsciousness due to snake bite twenty gm. paste of leaves is given orally with water and two- two drops of leaf juice is put in both nostrils.
• Two – two drops of flower juice is put in both nostrils thrice daily for a week which cures sinusitis.
• Twenty ml. juice of fresh leaves as well as flower or its decoction is given once for three days which expelled intestinal worms in children.
• Whole plant paste is applied on wounds, cuts, boils, as well as on painful swellings is tied with cotton cloths. It is applied for few days which wheals the wounds.
• Leaves and flowers are cooked and taken for ten days which is useful in rheumatic pain.
• Fresh Leaves are constantly rubbed on affected area of scorpion bite which provides relief.

Mangifera indica Linn. Mango, Aam, (Anacardiaceae)
• Two or three drops luke warm juice of leaves is put in the ear twice daily which cures ear pain.
• One teaspoonful of leaf powder is taken daily in the morning with empty stomach for twenty days which controls diabetes.
• Sticky oozing of the tree is applied on scorpion sting to prevent poisoning.

Madhuca indica Linn. (Syn. M. longifolia Roxb) Mahua, (Sapotaceae)
• Twenty ml. decoction of fifty gm. flower is taken twice daily for a week to cure cough, cold and headache.
• Luke warm bark paste is applied on rheumatic pain twice daily so as to cure.

Mentha arvensis Linn. Mint, Pudina (Lamiaceae)
• Juice of fresh leaves is applied on forehead which cures headache.
• Juice of plant is applied on scorpion sting as well as taken orally with sufficient amount of sugar or sugar candy which prevents poisoning.

Mentha piperita Linn. Piper mint, (Lamiaceae)
• One or two drops of oil is applied on forehead which creates soothing effect and cures headache.

Mimosa himalayana Gamble. (Mimosaceae)
• Root is made into powder mixed with honey in equal quantities. One teaspoonful of is taken for twenty days which cures asthma.

Nomarica charantia Discourt, Bitter guard, Karella, (Cucurbitaceae)
• One cup juice of leaves is taken daily for five days in the night before going to bed. It is a potent vermicide.
• One cup of fruit juice is taken daily with empty stomach to control the diabetes.
• Application of fruit juice on fire burn skin twice a day is beneficial.
• Luke warm juice of fruit is applied on rheumatic pain thrice daily so as to cure.
• One cup bitter guard juice mixed with sugar is taken twice a day for few days which cure blood oozing piles.

Moringa olfera Linn. Sahjan (Moringaceae)
• Fifty ml. decoction of leaves mixed with sugar is taken twice a week for a week to developing appetite.
• Two or three drops of leaf juice is put in the ear thrice daily for few days which cures ear pain.
• Massage of seed oil is beneficial in rheumatic pain.
• Roasted seeds are made into paste and applied on painful joints twice daily it cures joint pain.
• Two leaves are chewed daily in the morning with empty stomach to control diabetes.
• Fresh inner bark of Moringa is taken and its decoction is prepared a pinch of carom (Carum copticum Linn. Carom, Ajwain Apiaceae) powder, dry ginger powder (Zingiber officinale Roscoe. Zingiberaceae) and heeng (Ferula asa-foetida Linn. Apiaceae) is added to it. It is taken twice daily with empty stomach for multiple days which cures arthritis.

Murray koenigii Linn. Sprengel, Curry plant, Meethi neem, (Rutaceae)
• Eating 5 leaves of Curry plant every day in morning with empty stomach lowers cholesterol and controls diabetes.

Musa paradisiaca Linn. Banana, Kela (Musaceae)
• Eating one Banana fruit with a cup of cold milk thrice a day is beneficial in peptic ulcer as well as mouth ulcer.
• One Banana is taken with five gm. of Ghee or Butter twice daily for few days which cure leucorrhoea.
• Daily eating of five Banana fruit daily for a week is beneficial in jaundice and typhoid weakness.
• Pulp of fruit is made into paste and mixed with sufficient amount of honey. It is applied on burn skin which prevents boils to occur as well as cures burning pain.

Nerium indicum Mill. Kaner (Apiceae)
• Smelling of dried leaf powder is beneficial in headache.
• Flower paste is applied on head as well as forehead so as to cure headache.
• Paste of root is applied on snake and scorpion bite as an antidote.

Ocimum sanctum Linn. Tulsi, Holy basil (Lamiaceae).
• Ten leaves of tulsi along with five gm of dalchini (Cinnamom zeylanicum Linn. Lauraceae), ten gm of sugar candy is taken and decoction is prepared. It is taken daily for a week which cure viral fever.
• Seven leaves of tulsi is taken with four black pepper (Piper nigrum Linn. Piperaceae) It is chewed and engulfed with sugar with empty stomach daily for few days so as to save from malerial fever.
• Seven crushed leaves of tulsi and three gm. powder of dalchini (Cinnamom zeylanicum Linn. Lauraceae) is mixed with a teaspoonful of honey. It is taken twice daily for week which cures typhoid fever.
• Seven leaves of tulsi is taken with four kalpnaith leaves (Andrographis peniculata (Burm.f) Wall. ex Nees. Acanthaceae) and seven black pepper (Piper nigrum Linn. Piperaceae) in three cup of water and decoction is prepared. Luke warm decoction is taken daily for week to cure viral fever, malerial fever, or any seasonal fever. It is also a potent immunomodulator.
• Paste of leaves is applied on inflamed skin helps to reduce the pain and inflammation.

Ocimum sanctum Linn. Tulsi, holi basil, Lamiaceae, 20 gm
Carum copticum Linn. Ajwain, carum seeds, Apiaceae, 10 gm
Zingiber officinale Roscoe. Sonth, dry ginger, Zingiberaceae, 10 gm
Cinnamom zeylanicum, Dalchini, Lauraceae, 10 gm
All the above ingredients are to be powdered with sufficient amount of rock salt. Five gm. of powder is taken with water twice daily so as to cure cough, cold and coryza.
• Twenty five gm. of fresh tulsi leaves and three cloves (Syzygium aromaticum (Linn.) Merril. And Perry, Myrtaceae) are taken in four cup of water its decoction is prepared. Gargling with this decoction helps to reduce throat pain as well as mouth ulcer.
• Four leaves of Tulsi taken with two fresh leaf of neem (Azadiracta indica Linn. Meliaceae) and two leaf of bel (Aegle marmelose Linn. Rutaceae). It is made into paste and taken daily with help of water which controls diabetes, blood pressure, as well as increases immune system.
• One teaspoonful of juice of fresh tulsi leaves and one teaspoonful of fresh ginger juice (Zingiber officinale Roscoe. Zingiberaceae) is mixed with a teaspoonful of honey. It is taken thrice daily to cure cough, cold and coryza.
• Fresh leaves of tulsi and leaf buds of castor (Ricinus communis Linn, Euphorbiaceae) is taken and made into paste with a pinch of common salt and warmed. Luke warm paste is applied on external part of ear and swollen portion inside ear. It is applied twice a day to cure otitis media (swelling of ear).

• Regular consumption of ten fresh leaves of tulsi reduces stress, headache, controls blood pressure, blood sugar as well as cures pimples and acne. It is also a potent immunomodulator.

• Five leaves of Tulsi along with five leaves of mint (Mentha arvensis Linn. Lamiaceae) and five gm. of Fennel seeds (Foeniculum vulgare Mill. Apiaceae) are made into paste. It is taken orally with water to cure vomiting.

• Tulsi leaves along with flower of marigold (Tagetes erecta Linn. Asteraceae) is made into paste and a small amount of honey is mixed. It is applied on face daily for a week or 10 days so as to cure pimples, acne as well as to clear color complexion.

• Two or three drops of leaf juice is put in the ear thrice a day which cures ear pain.

• Paste of leaves is applied on forehead which cures headache.

• Seven leaves of tulsi and one teaspoonful of dalchini (Cinnamomum Zeylanicum Linn. Lauraceae) are made into paste with water. Paste is applied on forehead which cures headache.

• Inhaling the steam of hot water boiled with fresh tulsi leaves and a teaspoonful of fresh or dried Ginger (Zingiber officinale Rosc. Zingiberaceae) daily for a week cures sinus headache.

• Oxalis debilis HBK var. Corymbosa (DC) Lour. O. martiana Zucc. Khatiboot (Oxalidaceae).

• Fresh leaves are chewed and engulfued with water it is useful in curing piles as well as scurvy.

• Paste of whole plant is taken orally as well as applied on affected skin of snake bite.

Physalis minima Linn. Rastbhari (Solanaceae),

• Twenty ml juice of fresh leaves is taken daily for a week which is useful in urinary ailments.

• Two drops of fresh leaf juice is put in ear thrice daily which cures ear ache.

Psidium guajava Linn. Guava, Amarud (Myrtaceae),

• The mixture of one Guava fruit and five gm. of sugar is taken twice daily for a week which cures diarrhoea.

• Five soft leaves are made into paste and taken with water twice daily for a week which cures dysentery.

• Paste of young leaves is applied on body to treat odor and rough skin.

Punica granatum Linn. Pomegranate, Anar (Lythraceae),

• The paste of young leaves is applied on burn skin twice daily so as to cure.

• One glass of fruit juice is taken daily for 15 days so as to cure anemia.

Raphanus sativus Linn. Radish, Muli (Brassicaceae),

• Eating of two or three fresh leaves is beneficial in hiccup (Hichki).

• One cup juice of radish is taken daily to cure piles.

• Daily consumption of Radish cures constipation. It is a potent carminative.

• Daily eating of cooked vegetable of whole plant is helpful in the treatment of jaundice.

• One cup Radish juice is taken daily with sufficient amount of sugar or candy sugar which cure muscle pain.

Ricinus communis Linn. Castor, Arand, (Euphorbiaceae),

• Equal amount of Castor and mehandi leaves (Lawsonia inermis Linn. Lythraceae) are made into paste. It is applied on joints which cures joint pain.

• Three clove of Garlic (Allium sativum Linn. Liliaceae) is fried in Castor oil. When garlic cloves become black oil is filtered. Massage of this oil cures joint pain.

• Castor leave is taken and ghee or Castor oil is applied on smooth side of leaf. It is warmed and tied on joint pain twice daily which cures joint pain.

• Paste of leaves is applied on wounds and tied with cotton cloth. It is applied daily till cure.

• Leaves are made into paste with help of water. Paste is fried in Mustard oil in winter (Brassica campestris Linn. Brassicaceae) or sesame oil in summer (seasmum indicum Linn. Pedaliaceae). It is applied on burn skin twice daily till cure.

Rosa indica Linn. Rose, Gulab, (Rosaceae),

• Flower paste is applied on forehead which cures headache.

• Flower of Rose and Sugar or sugar candy is taken in 250 gm of equal amount and kept into a glass jar very close to sun light for a week to form a soft mixture known as Gulkand. One tablespoonful of is taken twice daily which cures constipation as well as dyspepsia.

• Paste of leaves is stir fried in Mustard oil (Brassica campestris Linn. Brassicaceae) and is applied on wounds and abscess twice a day till cure.

Seasum indicum Linn Seasme, Till (Pedaliaceae),

• Hundred ml. Seasme oil is taken and mixed with 10 gm. of camphora (Cinnamomum camphora (Linn.) J. Presl. Kapoor, Camphor, Lauraceae). Daily massage of oil on the forehead cures headache.

Sida cordata (Burm. f) Bross. Syn. S. veronicaefolia Lamk. Bariyar (Malvaceae),

• Paste of fresh leaves is applied on cuts, wounds and injuries to heal it as well as cures.

• Ten ml decoction of whole plant is taken orally in urinary ailments as well as in piles. It is taken twice daily for few days.

Solanum melongena Linn. Brinjal, Baigan, (Solanaceae),

• Half cut and warmed fruit is tied on boils and abscess to remove the pus.

Solanum nigrum Linn. Makoye (Solanaceae),

• Paste of fresh leaves is applied in skin diseases.

• Extract of whole plant is applied externally in skin inflammation and leprosy.

Solanum tuberosum Linn. Potato, Aaloo, (Solanaceae),

• A thick paste of raw Potato is applied on burn skin twice daily. It produces soothing effect on burning pain.

• Drinking of 2 tablespoonful juice of raw potato before meal is useful in rheumatic pain.

Szeygum cumini (Linn.) Skeels. (Syn. S. jambulana DC. Eugenia jambulana Lam.) Jamun, Jambul (Myrtaceae),

• Five gm. powder of seeds is taken with water twice daily which controls diabetes.

• Ten ml. juice of fresh leaves is taken daily with empty stomach which controls diabetes.

• Two leaves chewed daily which cures gingivitis as well as controls diabetes and blood pressure.

Terminalia chebula Retz. Harre, Harida (Comberetaceae),

One teaspoonful of fruit powder is taken orally with water once daily before sleeping which cures chest pain.

Tamarindus indica Linn. Tamarind, Imali, (Caesalpinaceae),

• Two or three drops of leaf juice is applied on eyes thrice a day to cure inflammation, redness, and water discharge due to conjunctivitis.

• Seeds are made into paste with the help of water and applied on scorpion sting. It reduces poisoning in very short duration.

• Fruit pulp is soaked in water for 2-3 hours. It is filtered. Sufficient amount of sugar is mixed in the filtrate and taken twice a day which cures headache.

• The bark of tree is burned and its ash is taken and made into a paste with ghee, butter or castor oil. It is applied on fire burn skin so as to cure.
**REVIEW**

Tectona grandis Linn. Teak, Sanga (Verbinaceae),
- Wood is rubbed on stone with the help of water. The paste obtained is applied on forehead which cure headache.
- Ash of wood is applied over swollen eyelids to cure conjunctivitis.

Trigonella foenum – graecum Linn. Methi, (Fabaceae),
- One teaspoonful of seeds powder is taken daily in the morning with empty stomach which cures rheumatic pain as well as controls diabetes.

Zea mays Linn. Maize, Makka, (Poaceae),
- Paste of leaves is applied on head and forehead which cures headache.

Zingiber officinalis Roxcoe, Ginger, Dry Ginger, Sonth, Adrak, (Zingiberaceae),
- Ten ml. rhizome juice and a teaspoonful of honey is mixed in a cup of carrot juice (Ducus carota Linn. Apiaceae) it is taken twice for the treatment of tonsillitis.
- Three gm powder of dry ginger and aawla (Embelica officinalis Gartn. Euphorbiaceae) is mixed with a teaspoonful of honey and taken twice a day for 20 days to cure leucorrhoea.
- Ten ml. Ginger juice and 10 ml lemon juice (Citrus medica Linn. Rutaceae) are mixed and sweetened with sugar it is taken twice for developing appetite.
- Dry or fresh Ginger and castor root (Ricinus communis Linn. Euphorbiaceae) is made into paste and applied on forehead which cures headache.

Ziziphus mauritiana Lam. Indian plum, Ber (Rhamnaceae),
- Ten or twelve leaves are made into paste and fried with ghee or butter, a pinch of rock salt is added to it. The paste is taken daily for few days to cure asthma.
- Bark paste is applied on sores so as to cure.

**3. RESULTS**

The perusal of the result shows that there were about eighty four plant species belonging to seventy three genera representing thirty seven families used in about twenty five different ailments viz. arthritis, antidote for scorpion stinging, burn, cough, cold, conjunctivitis, diabetes, ear pain, fever, gastrointestinal troubles, headache, hiccup, insomnia, jaundice, leucorrhoea, mouth ulcer, respiratory problems, skin problems, scrofula, tonsillitis and urinary ailments etc. The plant parts used for medicine preparation were bark, flowers, leaves, latex, rhizome, root, seeds, and whole plant.

Twenty four plant species were found to be used to treat headache, where as twenty one plant species to treat skeletal diseases (joints pain, arthritis, rheumatism), twenty plants species for gastrointestinal ailments (constipation, choleria, dysentry, diarrhoea, gastric trouble), fourteen plant species for diabetes, twelve plant species for ear pain and burn, ten plants species were used as antidote for scorpion and snake bite, four species for leucorrhoea and, four species were used to cure conjunctivitis. Most of the interviews were familiar with the common ailments viz. cough, cold, fever, wound and other skin diseases. The most important medicinal plant species were Allium cepa used in sixteen different ailments, where as Allium sativum in seven ailments, Adhatoda vasica in seven ailments, Azadirachta indica in seven ailments, Bombax cieba in eight ailments, Calotrops procera in eight ailments, Curcuma longa in eight ailments, Lucas aspera in seven ailments, Ocimum sanctum in seven ailments, Zingiber officinalis were used in nine ailments. Besides it Bauhinia varigata, Citrus medica, Embellica officinalis, Ficus religiosa, Mangifera indica, Moringa oleifera, Musa paradisiaca, Ricinus communis, Tamarindus indica etc. were medicinally important plant species which were used to treating many different ailments.

**4. DISCUSSION**

The enormous potential hidden in these plants is god gifted being provided by nature. The perusal of the table shows that many of the plant species which were used by the rural people for treatment of various ailments are very common, easily available either at low or no cost and their mode of preparation as well as administration is also simple and convenient, treatment are without any side effect hence affordable and useable. Since rural people of the Bahraich district are economically as well as socially very poor due to poverty and illiteracy so they are wholly dependent on traditional uses of medicines for treating various ailments. Interestingly the rural people are aware of the sustainable use of these medicinal plants. Although our ancient sages through their hit and trial method developed these medicines for treating various ailments which people are using even now. The reported uses of these plant species do not certify efficacy. The present preliminary report on ethnomedicinal uses and tested for bioactive activities need to pharmacologically screened, chemically analyzed and tested for bioactive activity (Chandler et al., 1979, Fairbairn, 1980). Pharmacological screening of plant extract provides insight of both their therapeutic and toxic properties and helps in eliminating the medicinal plants or practices that may be harmful.

**5. CONCLUSION**

The study indicated that, the study area is rich in plants having ethnomedicinal properties that may cures wide spectrum of human ailments. The knowledge of traditional healthcare is limited to traditional healers, vaiddya, elder tribes, who are living in rural areas. Hence there is a need to preserve the traditional knowledge and its proper documentation before it is lost. The study also highlights the need for further investigation on biochemical and pharmaceutical aspects of this traditional system of medicine.

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