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DIVERSITY OF UNDERGROUND PLANT PARTS USED AS ETHNO MEDICINES IN BAHRAICH (U.P.) INDIA

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ABSTRACT
The present study reveals about the vast diversity of the under ground parts of herbal plants used for the treatment of various ailments by the tribes as well as poor villagers of Bahraich district. The potential of ethno botanical 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 Vaidaya or Hakim. They prepare medicines from the medicinal plants available in their locality. They follow all the traditional and ethnic method of preparing the medicine. Bahraich have well blessed phyto diversity 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 underground parts of local medicinal plants in consultation with the local tribes as well as poor villagers and medicine venders. The common medicinal plants used by rural tribes were studied and seventy three plant species belonging to seventy three genera representing forty three families were found to be utilized in the treatment of about various sixty seven ailments. In fever three plant species are being used, for scorpion sting, in snake bite, cough, jaundice, skin disease, malaria, piles, constipation and as tonic two plant species are being used where as in case of headache, kidney stone, for expelling tapeworm, biliousness, inflammation, corpulence, sexual debility, liver complaints, tuberculosis, paralysis, swelling and intermittent fever, leukemia, breast cancer, as emetic, stomach disorder, internal inflammation, chronic bronchitis, epilepsy, catarrhal cough, urinary trouble, chicken pox, joint pain, backache, swellings, as blood purifier, urinogenital trouble, stomachache, to expel intestinal worms, so as to stop conception, in carbuncle, contusion, wounds, ophthalmic problems, as astringent, in diarrhoea, anthelmentic, as diuretic, purgative, in typhoid, insect bite, for leeches, dysentery, in ear pain, bleeding, itching, leprosy, edema, syphilis, mental depression, in Vomiting, ascites , severe windylic, artherites, cold & influenza and in asthma single plant species is being used. 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, Secondary metabolites, Traditional knowledge, Bahraich.

INTRODUCTION
The value of medicinal plants to the mankind is very well proven since Vedic period. It is estimated that 70-80 % of people in developing countries depend on traditional medicines for their primary health needs. India and China are two of the largest countries in Asia which have the richest array of registered and relatively well known medicinal plants. Nature has been a source of medicinal plants for thousands of year and an impressive number of modern drugs have been isolated from natural sources. Different medicinal plants have been used to treat various ailments. In fact there is no any plant which is non medicinal. Plant produces a diverse range of bioactive molecules making them a rich source of different types of medicines. Ethno-botanical and ethno-medicinal studies are today recognized as the most viable method of identifying new medicinal plants or refocusing on those earlier reported plants for bioactive constituents. The rich biodiversity of Bahraich district of Uttar Pradesh has provided an initial advantage to its inhabitants for observing and scrutinizing the rich flora for developing their own traditional knowledge in curing various ailments. The primitive tribals acquired the knowledge of economic and medicinal properties of many plants by trial and error methods and they are the store house of such

valuable knowledge. This accumulated knowledge is passed on from one generation to the other by oral tradition without any written document. The people of the region are rich in ethno-medicinal knowledge owing to their close affinity with the surrounding vegetation. A large number of plant species of immense medicinal value are abundantly found in the district. Medicinal plants form the basis of traditional or indigenous systems of healthcare are being used by the majority of remotely located dwellers of the area. Religious inspiration, inaccessibility and lack of medical facilities in the villages seem to be the cause of depending on these medicinal plant species. Remedies based on these plants often have negligible side effect and due to relatively high cost of allopathic medicines, traditional herbal medicine have become an affordable choice for the poor people in these rural areas. Traditional system of medicine is a wise practice of indigenous knowledge system, which has saved the lives of poor people in the region. There is great traditional knowledge hidden among the tribes and rural people of the district which can be used for human welfare.

Keeping the aforesaid view, the rich ethno medicinal practices of the area have already received considerable scientific attention and the ethno medicinal practices have been documented. The present work is undertaken for the documentation and analysis of various traditional herbal method of treatment for various ailments as well as for well being with the help of under ground plant parts in the rural areas of Bahraich district.

STUDY AREA

Bahraich is known as 'city of forest:' because of its natural beauty and rich phyto diversity. It is situated between 28.24 and externally and 81.6 N to 81.3 E longitude, having area about 4696.8 Sq. km. in which 95,040 hectare land is covered by dense natural forests. Bahraich has international border with Nepal on the northern part. Shravasti is in eastern side where as Kheri Lakhimpur in wastern and Sitapur and Barabanki in southern side. Bahraich is 125 km north-east of Lucknow, which is the state capital of U.P. North - Eastern and Western part of the district is Tarai which is covered by dense natural forests. Saryu and Ghaghra are the main rivers. The climate is hot & humid, maximum and minimum temperature ranges between 44◦c to 5◦c where as average rainfall is 1,125 mm. The soil of the district is very fertile. "Katarniaghat Wildlife Sanctuary" is the main point of attraction and specialty of the district Bahraich. Aforesaid ideal environmental factors support the luxurious growth of biodiversity.

METHODOLOGY

The present study is based on the field survey of Bahraich district of Uttar Pradesh. For the purpose the voucher specimens of under ground plant parts of ethno-medicinal importance were collected and documented with their ethno-therapeutic data. The information was collected from the herbal practitioners or local healers and other experienced persons. They were interviewed for local names, plant part used, method of preparation of medicine, dosages and their mode of administration. The specimens were collected, pressed, dried, preserved, mounted as described by Jain and Rao, 1976 identified through the available taxonomic literature manuals and floras (Hooker, 1897, Duthie, 1994). The specimens were maintained in Herbarium of the Postgraduate Department of Botany. The plants used in the treatment of various ailments are enumerated in Table- with correct botanical name followed by vernacular names and family as well as plant parts used and mode of administration in respect to simple preparation as well as compound preparation of medicine. The literatures available (Jain, 1991, Kirtikar and Basu,1991, Ambasta, 1992, Mar,1999, Fehay,2005, Farooq *et al*., 2006, Tomar, 2009, Binu,2011, Sahani and Mall, 2016, Hossan *et al*., 2016) were also consulted and their findings had also been incorporated where required

ENUMERATION

1- Achyranthes aspera Linn. Latjeera (Amaranthaceae):

- The root paste is applied extremely at the point of **scorpion string** thrice a day for two days for giving instant relief.

2- Acorus calamus Linn**.** Buch (Araceae):

- Rhizome paste is given in **fever** to children thrice daily for 2-3 days.
- Decoction of twenty gm. rhizome is taken orally so as to cure **headache.**
- The paste of the root or whole plant is applied on forehead to cure **headache.**
- Decoction of twenty gm rhizome is taken orally twice daily for few days to cure **joint and muscle pain**. It is aiso useful in **arthritis.**

3- Acmella olerecea Linn. Spilanthes (Asteraceae):

- The paste of the root and flower is applied on forehead which produces soothing effect on **headache.**

4- Aerva lanata (Linn.) Juss. Gedua ki chal. (Amaranthaceae):

- The root paste is rubbed on the forehead in **headache** for 3-4 times till relief.

5- Albizia lebbeck Benth. Siras (Mimosaceae)

- Dilute root paste is given orally repeatedly to the patient regains consciousness in case of **snakebite**, paste is also applied externally on the bite point.

6- Adhatoda vasica Nees., Rusa, Arusa, Vasaka (Acanthaceae).

- Ten ml root decoction is taken daily thrice a day for seven days so as to cure **chronic bronchitis (Black cough).**

7- Amaranthus caudatus Linn., Ramdana (Amaranthaceae):

- The root is grinded so as to make paste. It is taken orally with water thrice in a day to cure **kindney stone.**

8- **Anacardium occidental** Linn., (Anacardiaceae):
- The root is grinded to make fine paste. It is taken orally along with water thrice in a day to cure **cough**.

9- **Annona squamosa** Linn. Sharifa Sitaphal (Annonaceae).
- Dried root powder is taken with water once daily in the morning for four days. It. is a potent **abortifacient**

10- **Aristolochia indica** Linn., (Aristolochiaceae):
- Root paste is used to cure **boils** and **scorpion sting.**

11- **Argemone mexicana** Linn. Peelikateli (Papaveraceae):
- Root is given for **expelling tapeworm**.

12- **Artocarpus lakoocha** Roxb. Monkey Jack fruit (Moraceae).
- The root is used as **refresher**.
- The roots of a lakoocha also found two new stilbene derivatives, lakoochins A (1) and B (2). Both lakoochins A (1) and B (2) exhibited **antimycobacterial** activity.
- The root of *A lakoocha* is an **stringent** and is used as a **purgative**: while saturated extract is used as a **poultice for skin ailments** and bark is used to treat **headache**.

13- **Asparagus racemosus** Willd**.** Satawar (Liliaceae)
- Root powder with cold water is given for **biliousness**. It is also given with honey as **tonic**.
- Shade dried rhizome is grinded so as to make powder. One teaspoon full powder is taken orally along with water thrice in a day to cure **inflammation**.

14- **Bauhinia variegata** Linn. Kachnar (Caesalpiniaceae)
- Root decoction is administered for **reducing corpulence.**

15- **Bombax ceiba** Linn. Samel (Bombacaceae)
- For the treatment of **sexual debility**, root powder is given with milk for 7 days in the morning. Treatment is given twice every alternate month.

16- **Boerhaavia diffusa** Linn., Punarnava (Nyctaginaceae)
- The root paste as well as the whole plant paste is taken orally with water thrice in a day till cure the **jaundice** and other **liver complaints**.

17- **Butea monosperma** (Lam.) Taub., Palas: (Caesalpinaceae)
- The root paste is taken orally with water thrice in a day till cure of **tuberculosis.**

18- **Calotropis gigantea** (Linn.) R.Br., Bara Madar, Bara Aak (Asclepiadaceae)
- The decoction of root bark is given thrice in a day to cure **paralysis, swelling and intermittent fever.**

19- **Cassia tora** Linn. Kasaundi, Chakvar (Caesalpiniaceae).
- Decoction of ten gm. root is taken daily for few days which is useful in **diabetes**.

20- **Catharanthus roseus** (Linn.) G.Don, Sadabahar (Apocyanaceae)
- The decoction of root cure **leukemia**, **breast cancer** and other related problems.

21- **Cardiospermum helicacabum** Linn., (Sapindaceae)
- The decoction of the root is **emetic**.

22- **Carissa carandas** Linn., Karaunda (Apocyanaceae)
- The root is grinded to make fine paste. It is taken twice in a day with water to cure **stomach disorder**.

23- **Chasalia curviflora** (Wallich) Thw.,Curved flower, Woody Chasalia (Rubiaceae).
- Root is made into paste and applied on forehead cures **headache**.
- Root and fresh leaves are made into paste and its poultice is prepared. It is applied on forehead which cures **headache.**

24- **Cissampelos pareira** Linn. Padh, Jaljamini (Menispermaceae)
- Root paste is applied locally in **skin diseases**.
- Root paste mixed black pepper (Kali mirch) powder is given thrice a day for the treatment of **malaria.**

25- **Citrulus colocynthis** Schard Indrayan (Cucurbitaceae)
- For **internal inflammations** root powder mixed with castor oil is given for three days.

26- **Clerodendrum serratum** (Linn.) Moon, Bhat (Verbenaceae).
- Root is made into paste with warm water and is applied on head as well as forehead cures **headache**.

27- **Clitoria ternatea** Linn Gokarni (Papilionaceae)
- Root juice is given in **chronic bronchitis** to help expectoration.

28- **Commelina benghalensis** Linn., Kankua (Commelinaceae)
- Dried roots are powdered 20gm powder is mixed with the equal amount of jaggory. Pea size pills are shade dried. One pill twice a day is given to adults

and one pill only once a day is given to children and women to cure **epilepsy.**

29- Curcuma amada Linn. Amahaldi (Zingiberaceae)**.**

- Paste of rhizome applied on forehead cures **headache.**
- Paste of rhizome is fried in mustard oil (*Brassica compestris* Linn. Brassicaeae)**.** Paste is applied on **joint and muscle to cure pain.**

30- Curcuma domestica Val. Haldi (Zingiberaceae)

- For **cold** milk is boiled with turmeric and sugar is given. For **catarrhal cough**, fresh rhizome and dhania *(Coriandrum sativum)* decoction is given thrice a day.

31- Curcuma longa Linn.. Turmeric, Haldi (Zingiberaceae)

- Inhaling the smoke of fresh leaves twice a day for few days cures the **chronic headache.**
- Rhizome is made into paste with help of water. A thick layer of paste is applied on forehead which cures **headache.**
- Half teaspoonful of rhizome powder taken with luke warm water twice daily cures **joint pain, muscles pain as well as rheumatic pain.**
- One teaspoonful of rhzimoe paste and sufficient amount of juggary fried in pure ghee (Cow milk fat) and mixed in a glass of milk. It is taken twice daily for a week to cure **joint,muscle** as well as **body** and **rheumatic pain**.

32- Cynodon dactylon (Linn.) Pers. Doob ghas (Poaceae)

- Paste prepared from equal quantities of fresh doob roots and kans (**Saccharum spontaneum**) is given with cow milk and sugar.

33- Cyperus rotundus Linn. Motha (Cyperaceae)

- Scraped roots with ginger and honey are given in **gastric and intestinal disorders**.
- For the treatment of **malaria**, decoction of equal quantities of motha rhizome, *Giloe (***Tinospora cordifolia***)* stem pieces and dried ginger is given thrice daily for 4-6 days.

34- Daucus carota Linn. Carrot, Gajar. (Apiaceae).

- Pure ghee (Curd fat) is applied on leaves and warmed over heat and mashed into paste. Two or three drops of its extract is put into nostrils and ear cures **headache** due to **migraine** or **cold**.
- Paste of carrot is applied on burn skin twice daily which produces soothing effect on **burning pain**.
- Four drops of juice of rhizome is put in the both nostrils which cures **hiecup**.
- Pure ghee is applied on leaves warmed over heat and mashed into paste. Two or three drops its extract is put in the nostrils and ear which cures **headache.**
- One cup juice of fruits is taken daily which is beneficial in **diarrhoea**.
- The decoction of seed is taken for irregular menstruation. If taken in high does it **induces abortion**.

35- Desmostachya bipinnata Stapf. Dhab (Poaceae)

- The root infusion is usually given in **jaundice** and **urinary troubles** twice daily till cure.

36- Euphorbia hirta Linn. Duddhi, Dudhia ghas (Euphorbiaceae).

- Paste of root is applied on **snake bite.**
- Gargling with root decoction twice daily cures **mouth ulcer.**

37- Ficus religiosa Linn. Pipal (Moraceae)

- Adventitious root of *pipal* mixed with sugar is given with fresh water in case of **chicken pox** once daily daily for 7-8 days continuously.

38- Gloriosa superba Linn. Kalihari (Liliaceae):

- Decoction of Kalihari root stock in sesame oil is filtered and applied twice a day followed by massage on **joints pain** continued for one month.

39- Glycosmis pentaphylla (Retz.) A. DC. Orange berry (Rutaceae).

- Paste of leaves mixed with ginger rhizome paste (*Zingiber oficinale* Roscoe, Zingiberaceae) is applied for **eczema and akin affections**.
- Decoction of root is taken for **intestinal troubles.**

40- Grewia asiatica Linn. Phalsa (Tiliaceae)

- Root paste is applied on the back before going to bed in case of **backache.**

41- Gymnema sylvestres R. Br. Gurmar Madhuvinashani (Verbenaceae).

- Decoction of root and leaves is used in **stomach pain.**

42- Hemidesmus indicus Linn. Gurmur (Asclepiadaceae)

- Root paste is used in **swellings** twice a day.
- Root decoction is used thrice a day for one month as a **blood purifier** and **skin diseases**.

43- Hygrophila ouriculata (Sechum.) Heine, Talmakhana (Acanthaceae):

- Root as well as seeds are use to cure **urinogenital troubles**.

44- Hyptis suaveolens (Linn.) Poit., (Lamiaceae)

- The decoction of the root is given thrice to cure **stomachache.**

45- Jasminum sambac (Linn.) Ait Bela (Oleaceae)

- The roots are **analgesic** in nature. Jasmine is used to add fragrance to creams, lotions, and perfumes.

- An infusion made from the roots of the plant is used to cure **diabetes mellitus**.
- The roots are used to treat **headaches, insomnia, and pain due to inflammation, dislocated joints or broken bones.**

46- Lantana camera Linn. Kuri (Verbenaceaew).
- Paste of roots or whole plant paste used as antidote for **snake bite**.

47- Madhuca indica Gmel. Mahua (Sapotaceae)
- Root paste in mahua liquor is given at bed time for 3-5 days continuously to **expel intestinal worms**.

48- Mimosa pudica Linn. Chui-mui (Mimosaceae)
- Root powder with crystalline sugar for three days is given after **menstruation to stop conception**.

49- Mirablis jalapa Linn.Gulabons (Nyctaginaceae)
- Root poultice is applied over **carbuncles, contusions** and **wounds**.

50- Momordica charantia Linn. Karela (Cucurbitaceae)
- Root paste applied over **piles**.
- The root is grinded in to fine paste and squeezed. The extract is dropped two to three drops in eyes to cure **ophthalamic problems**.
- The root paste taken orally with water thrice in a day as **astringent** till full cure.

51- Morinda pubescens Smith., (Rubiaceae)
- The root paste along with water is given thrice in a day to cure **constipation, inflammation** and **as a tonic.**

52- Moringa oleifera Linn. Sahjan (Morangaceae)
- The roots are used in **natilithic**, **rubefacient, vesicant, carminative, antifertility, anti-inflammatory, stimulant in paralytic** afflictions; act as a **cardiac/circulatory tonic**, used as **laxative, abortifacient**, treating **rheumatism, inflammations, articular pains**, **lower back** or **kidney pain and constipation**.
- *Maringa* roots, leaves, flowers, gum and the aqueous infusion of seeds have been found to posses **diuretic activity**.
- *Maringa oleifera* roots have been reported to posses **anti-spasmodic** activity.
- *Maringa* roots have **antibacterial** activity and reported to be rich in antimicrobial agents. These are reported to contain an active antibiotic principle.
- The root extract also possesses **antimicrobial activity** attributed to the presence of 4-α-L-rhamnosyloxy benzyl isothiocyanate.
- Roots are **cardiotonic**.
- Roots are useful in **digestive disorders** specially in diarrhoea **and flatulence**.
- Roots are useful in **edema.**
- Roots are also useful in nervous disorders for example as **anti-spasmodic, in epilepsy hysteria and headache.**
- Its roots are helpful in reproductive health for example as **abortyfscient aphrodisiac.**
- Roots are useful in **akin disorders** as **stringent, rubefacient** as well as in **vasicient**.
- Roots are also reported to be used in general **disorder/ condition** like **gaut hepatamegaly, low back/kidney pain, scurvy** and **splenomegaly.**

53- Morus alba Linn. Sahtoot (Moraceae)
- Tea made from root is used twice a day for 5-7 days to treat **diarrhoea**.
- The root paste along with water is taken twice in a day to expel worms in the intestine i.e., **anthelmentic**.

54- Mucuma pruriens (Linn.) DC., Kewanch (Papilionoideae)
- The one cup decoction of the root is given twice in a day as **tonic**, **stimulant, diuretic** and **purgative.**

55- Murraya koenigii Linn. Meethi neem, Curry plant (Rutaceae).
- Eating five leaves of curry plant every day in morning with empty stomach **lowers cholesterol** and controls **diabetes**.
- Paste of bark and root are applied on **skin eruptions** as well as on bites of **poisonous animals.**

56- Musa paradisiaca Linn.Kela (Musaceae)
- Saffron (*Crocus sativus*) stamens mixed with banana root is given once in the morning to cure even most complicated case of **typhoid**.

57- Nardostachys jatamansi (D. Don.) DC. Jatamansi, Spikenard (Valerianaceae).
- Rhizome is crushed and boiled in 500 ml. of water. Head and pot is covered by towel and its steam is inhaled. The infusion produces **cooling sensation on headache.**

58- Nerium indicum Mill. Kaner (Apocynaceae)
- Kaner (White flowers) roots ground and fried in ghee is applied externally on the ear of patient to cure **inflammation**.

59- Ocimum sancaum Linn. Tulsi (Lamiaceae)
- Root decoction is given in **malarial fevers.** The fresh root paste is applied to **bites of insects** and **leeches**.

60- Pithecellobium dulce (Roxb.) Benth., Jangal Jelavi, Bilayati Imli (Mimosaceae)
- The root bark is grinded with water to make paste. It is given thrice in a day to cure **dysentery**.

61- Plambago zeylanica Linn. Chitra, Agiea (Plumbaginaceae)

- Chitra root are crushed and boiled in mustard oil is filtered and kept in a bottle. It is applied (3-4 drops) in the **ear pain, bleeding** and **itching** twice a day.
- The root paste is given thrice a day with water to cure **leprosy, edema** and **piles**.

62- Raphanus sativus Linn. Muli (Crucifereae)
- Fresh root juice is given in 1-2 gm doses in **urinary troubles** and **syphilis**.

63- Rauvolfia serpentine Benth. (Ex.) Kurz. Sarpgandha (Apocynaceae)
- In case of **mental depression**, root powder is given twice a day for 2 days.

64- Ricinus communis Linn. Castor, Arand, Randi (Euphorbiaceae)
- Three clove of Garlic (*Allium sativum* Linn., Liliaceae) is fried in caster oil. When garlic cloves become black oil is filtered. Massage of this oil cures **joint pain.**
- Root paste is given in the morning for three days for **abortion**.

65- Sesbania grandiflora (Linn.) Poir. Agastya (Fabaceae).
- Root of agastya and dhatura are taken in equal amount and made into paste. Poultice of this paste is tied on swellings of joints and muscles which cure **pain as well as reduces swelling.**

66- Sida cordifoilia Linn. Kharaiti (Malavaceae):
- Root extract is given once a day for three days and repeated twice every week in case of **constipation.**

67- Tephrosia purpurea (Linn.) Pers. Jungli-matar (Papilionaceae)
- In **fever** and **vomiting**, root paste made with water and ginger is given with honey thrice a day for 3-4 days.

68- Tianthema portulacastrum Linn. Santh (Aizoaceae)
- In case of **ascites**, root and black pepper paste is given twice daily for 8 days. During the treatment, no salt should be used.

69- Urena labata Linn. Vilayti san (Malvaceae)
- Root decoction is used as a remedy in **severe windyic.**

70- Vanda tasselera (Roxb.) Hook ex. & G. Don. Hadjor, Turwari (Orchidaceae)
- Arial roots are made into paste. It is applied on forehead to cure **headache.**
- Arial roots are made into paste and applied on **inflament joints and muscles so as to cure.**

71- Verbena offcinalis Linn. Peela gulabi phool (Verbenaceae)
- Root paste is used as antidote to **snakebite**.

72- Withania somnifera (Linn.) Dunal. Aswagandha (Solanaceae)
- Root powder is given with goat milk for about 2 months to cure **arthritis** especially of early stage. During the treatment, use of rice is avoided.

73- Zingiber officinalis Rosc. Adrak (Zingiberaceae)
- Ginger tea is usually given in **colds** and **influenza**. Ginger fresh rhizome juice with honey is a domestic remedy for **coughs** and **asthma**. In case of **common Fever, during pregnancy**, dried rhizome is pounded and given orally with goat's milk twice daily for 4-5 days.
- A small piece of adrak is mixed with pulp of bel (*Aegle marmelos* (Linn.) Correa ex. Roxb.) and equal amount of sugar is added to the mixture. This mixture is given twice a day till cure of **asthma**.

RESULTS AND DISCUSSION

Tha perusal of the enumeration reveales that out of one thousand twenty seven plant species belonging to six hundred genera of one hundred thirty four families of flora of Bahraich (Saini, 2005) seventy eight plant species belonging to fifty three genera representing forty three families were found to be utilized in the treatment of about various sixty seven ailments. In fever three plant species are being used, for scorpion sting, in snake bite, cough, jaundice, skin disease, malaria, piles, constipation and as tonic two plant species are being used where as in case of headache, kidney stone, for expelling tapeworm, biliousness, inflammation, corpulence, sexual debility, liver complaints, tuberculosis, paralysis, swelling and intermittent fever,leukemia, breast cancer, as emetic, stomach disorder, internal inflammation, chronic bronchitis, epilepsy, catarrhal cough, urinary trouble, chicken pox, joint pain, backache, swellings, as blood purifier, urinogenital trouble, stomachache, to expel intestinal worms, so as to stop conception, in carbuncle, contusion, wounds, ophthalmic problems, as astringent, in diarrhoea, anthematic, as diuretic, purgative, in typhoid, insect bite, for leeches, dysentery, in ear pain, bleeding, itching, leprosy, edema, syphilis, mental depression, in vomiting, ascites, severe windylic, artherites, cold & influenza and in asthma single plant species is being used.

Three families viz. Apocynaceae, Verbenaceae and Ziniberaceae are represented by four plant species each where as five families Amaranthaceae, Mimosaceae, Moraceae, Caesalpiniaceae, and Papilionoideae are represented by three plant species each; eleven families viz. Araceae, Liliaceae, Nyctaginaceae, Asclepiadaceae, Rubiaceae, Cucurbitaceae, Poaceae, Euphorbiaceae, Rutaceae, Lamiaceae and Malvaceae are represented by two plant species each and rest of the twenty four families viz. Araceae, Asteraceae, Anacardiaceae, Annonaceae, Aristolochiaceae, Papaveraceae, Bombacaceae, Sapindaceae, Menispermaceae,

Commelinaceae, Cyperaceae, Apiaceae, Tiliaceae, Oleaceae, Sapotaceae, Morangaceae, Musaceae, Valreianaceae, Plumbaginaceae, Cruciferaae, Fabaceae, Aizoaceae, Orchidaceae and Solanaceae are represented by single plant species each only.

Traditional medicine are used by about 60 percent of the world's population. These are not only used for primary health care just in rural areas, in developing countries, but also in developed countries, where modern medicine are predominantly used, while the traditional medicine are derived from medicinal plants, minerals and organic matter, the herbal drugs are prepared from medicinal plants only. Use of plants as a source of medicine has been inherited and is an important component of the health care system in India. Indian system of medicine derives many of their curative tools from plants (Kumar *et al*., 2005). Reference to plants used as medicines are often found in our old literatures viz., Atharveda, Charak Samhita, Sushruta Samhita, etc.in spite of achievement of allopathic medicines the Indian system of medicine still continue to provide medical cure to majority of the people on account of there cheaper coast and no sided effects. (Kokate *at al*., 2002). There are about 45000 plant species in India, with high concentration in the region of Eastern Himalayas, Western ghats and Andaman & Nicobar island. The officially documented plants with medicinal potential are 3000 but traditional practitioners use more than 6000. India is the largest producer of medicinal herbs and is appropriately called the botanical garden of the word. In rural India, 70 percent of the population is dependent on the traditional system of medicine, the Ayurveda, which is the ancient Indian therapeutic measure renowned as one of the major system of alternative and complementary medicine. (Bhatia *at al*, 2013). Nature has provided us a large number of miraculous plants like *Moringa oleifera* which is a highly valued plant, distributed in many countries of the tropics and sub tropics. It has an impressive range of medicinal uses along with high nutrimental value. Different parts of this miracle plant contain a profile of important minerals and are a good source of protein, vitamins, beta carotene, amino acids and various phenolics. It provides a rich and rare combination of zeatin, quercctin, beta-sitosterol, caffeoylquinic acid and kaempferol. In addition to its compelling water purifying power and high nutritive value, it is very important for its medicinal value. Various parts of this plant such as the leaves, roots, seeds, bark, fruit, flowers and immature pods acts as cardiac and circulatory stimulant, posses antitumor, antipyretic, antiepileptic, anti-inflammatory, antiulcer, antispasmodic, diuretic, antihypertensive, cholesterol lowering, antioxidant, antidiabetic, hypatoprotective, antibacterial, and antifungal avtivities, and are being employed for the treatment of different ailments in the indigenous system of medicine (Farooq *et al*., 2006).

The study indicated that, the study area is rich in plants having ethno-medicinal properties that may treat various diseases. Through modern medical system is well designed to treat the diseases but the local people dependent on traditional medicine because of their deep rooted tradition and belief in their traditional culture. The knowledge of traditional healthcare is limited to traditional healers, 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 because one of the major problems with the herbal formulation is that the active ingredients are not well defined. Therefore, it is important to know the active component and their molecular interaction which will help to analyze therapeutic efficacy of the medicine. It is also important to note here that the rich diversity of study area and its natural beauty is God's most precious gift that's why needed to be conserved for human welfare and for existence of life on earth.

CONCLUSION

There is no any plant which has no medicinal value. Every plant existing in this universe has its own medicinal value. Plants are being used as medicine since Vedic period because plants constitute specific chemicals which are used for the production of medicines. The study shows that there is wide scope for further scientific study. Ethno-medicinal data may provide a base to search the new compounds related to phyto-chemistry and pharmacology. It is also important to note here that the floristic diversity and natural beauty of the study area is God's most precious gift so attention should also be made on sustainable exploitation, cultivation and conservation of these medicinal plants for human welfare because we know that "Nature Protect if She is Protected".

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REFERENCES

1. Ambasta SP, Ram Chandran K, Kashyappa K, Chand R. The Useful Plants of India. Council of Scientific and Industrial Research, New Delhi India, 1992; 918.
2. Bhatia Harsh, Kaur J, Nandi S, Gumani V, Chaudhary A , Reddy PH, Vashishtha A and Rathi V. Journal of Pharmacy Research, 2013; 6(1): 224-229.
3. Binu S. Medicinal Plants used for treating body pain by the tribals in Pathanamthitta district, Kerla, India. *Indian Journal of Traditional knowledge*, 2011; 10(3): 547-549.

4. Duthie J F, Flora of Upper Gangetic plain and of the adjacent Shivalic and Sub Himalayan Tract Botanical Survey of India (Calcutta) Reprinted, 1994.
5. Fahey JW Moringa oleifera: a review of the medical evidence for its nutritional, theraphutic and prophylactic properties part 1. Trees for life journal, 2005; 1-(5): 20.
6. Farooq A, Sajid L, Muhammad A and Gilani AH. Moringa olleifera: A Food Plant with multiple Medicinal Uses. Phytother. Res., 2007; 21: 17-25.
7. Hooker J D. Flora of British India 7 vol, Reev and Co. Ltd. England (1872-1897).
8. Hossain MF, Islam MA, Akhtar S and Numan SM. Nutritional value and Medicinal uses of Monkey Jack Fruit *(Artocarpus lakoocha).* International Research Journal of Biological Sciences, 2016; 5(1): 60-63.
9. Jain SK, Rao RR. A Handbook of Field and herbarium method, Today and Tomorrow Printers and Publishers, New Delhi, 1976.
10. Jain SK. Dictionary of Indian Folk Medicine and Ethnobotany. Deep publications, New Delhi, 1991.
11. Kirtikar KR, Basu BD. Indian Medicinal Plants. Vol.4, lalit Mohan Publications Allahabad, India. 1991.
12. Kokate CK, Purohit AP & Gokhale SB Pharmacognosy, (Nirali Publicatiion, pune), (2002-1-6).
13. Kumar S, Parveen F, Goyal SD and Chauhan A Trading of Ethnomedicinal plants in the Indian arid zone, Indian Forester, 2005; 131(3): 371-378.
14. Mar. C, Bent S, An evidence –based review of the 10 most commonly used herbs. Westen Journal of Medicine, 1999; 171(3): 168-171.
15. Sahani Sangeeta, Mall TP Ethnomedicinal Investigations in Bahraich District of (Uttar Pradesh) India World Journal of Pharmaceutical Research, 2016; 5(1): 1268-1305.
16. Saini DC. Flora of Bahraich District, Uttar Pradesh-IIJ. Econ. Taxon. Bot., 2005; 29(3): 528-920.
17. Tomar Amit. Folk medicinal uses of plant roots from Meerut district, Uttar Pradesh Indian Journal of Traditional Knowledge, 2009; 8(2): 298-301.