

# The study of plant people relation within the purview of traditional medicinal system in Agra

Deepshikha singh & Sharmita Gupta\*

\*Corresponding author

Department of Botany Dayalbagh Educational Institute, Agra (U.P.) India drsharmitagupta123@gmail.com

**Abstract:** A survey in Agra District has been done to know about plant people relation. People of different occupation and of different age groups were interviewed. About 50 plants have reported in this manuscript which is used for various diseases. This manuscript is very useful for those who working with herbal plants.

Keywords: Medicinal plants; traditional healers; ayurvedic acharyas; vaidyas; Agra

# Introduction

"ETHNOBOTANY" is the study of botany of primitive human race. John Harshberger was the first person in 1895 who applied the term "Ethnobotany", to study the plants used by primitive and indigenous people. Richard Schultes "father Evan ofethnobotany", defined the discipline as "Investigating plants used by primitive societies in various parts of the world". The awareness of ethnobotany gain wealthy use and success in experimentation on human being and lead to our familiar foods and medicines. Ethnobotany deals by means of the direct time honoured and natural association among human beings and plants. The indigenous medicinal information of plants is helpful to ecologists, pharmacologists, taxonomists, watershed and wildlife managers in civilising the prosperity of area, besides listing the traditional uses. Starting the pre-historic era to date, people healed themselves with local plants remedies.

Medicinal plants have played an essential role in the development of human culture, for example religions and different ceremonies. (*e.g. Datura* has long been associated with the worship of Shiva, the Indian god). The use of plants for curing various human ailments figured in ancient manuscripts such as The Bible, The Rig Vedas, The Iliad and The Odyssey. Ever since ancient times, in search of rescue for their disease, the people looked for drugs in nature. The beginning of the medicinal plants use

were instinctive, as is the case with animals. In view of the fact, that at the same time there was not sufficient information either concerning the reasons for the illnesses or concerning which plant and how it could be utilised as a cure, everything was based on experience. In time, the reasons for the usage of specific medicinal plants for treatment of certain diseases were being discovered; thus, the medicinal plants' usage gradually abandoned the empiric framework and became founded on explicatory facts. Nonetheless, the decreasing efficacy of synthetic drugs and the increasing contradictions of their usage make the use of natural drugs topical again. Since time immemorial, people have tried to find medication to alleviate pain and cure different illnesses. In every period, every successive century from the development of the human kind and advanced civilizations, the healing properties of certain medicinal plants were identified, noted, and conveyed to the successive generations. The benefits of one society were passed on to another, which upgraded the old properties, discovered new ones, till present days. The continuous and perpetual people's interest in medicinal plants has brought about today's modern and sophisticated fashion of their processing and usage.

There are various Ethnobotanical uses. Some of them are

# 1. Medicinal uses

Indigenous herbal treatment is a part of the culture and dominant mode of therapy in most of the developing countries. These traditional



e-ISSN: 2348-6848, p- ISSN: 2348-795X Volume 2, Issue 08, August 2015 Available at http://internationaljournalofresearch.org

phytoremedies, with a considerable extent of effectiveness, are socially accepted, economically viable and mostly are the only available means. Still, one-third of the modern pharmaceutical preparations have botanical origin. International trade on medicinal plants is, therefore, increasing rapidly mainly as result of intensified adoption of crude extracts for self-medication by the general public in the developed countries. In India, the use of plants for medicinal treatment dates back to 5000 years. Pharmacognostical and antibacterial effects of different extracts of *Euphorbia hirta* L. and *E.tirucalli* L. have been studied (Upadhyay et al., 2010a, 2010b)

# 2. Cosmetic uses

Since ancient times plants have served for human adornment for the millenia and people have been using various kinds of herbs to maintain their beauty. All kinds of skin and hair problems are frequently treated through external application of the herbal preparations in the form of paste, powder, lotion, body massage oil and hair oil.

#### 3. Soil conservation

Traditionally some plants are kept on the fields by farmers as they know their potential benefits through generations. Khejiri (*Prosopis cineraria* Linn.) is most common tree in the Thar desert of Rajasthan. They are grown all over the crop fields. Crops like millets, moth (*Phaseolus aconitifolius* Jacq.),Currybeans (*Phaseolus lunatus* Linn.), moong (*Phaseolus mungo*Linn.) leaves and oil seeds grow well in combination with it.

#### 4.Mythological Plants

Majority of the people belonging to tribal population believe in traditional superstition. They have strong faith in tree-spirits, evil eye and magics. Tree worship was possibly the earliest and the most prevalent form of religion. Tribals are basically religious hence trees are treated by them as Gods. At the same time they feel that these trees basically fulfill their lives requirements and life is incomplete without them. So the trees are indispensable for the survival of the tribals. Palash (Butea monosperma O.Kuntze.), Kachnar (Bauhinia variegate Linn.), and Mahua (Madhuca indica Gmel.) etc bear flowers and fruits which are offered to Gods and Goddess to invoke blessings for the fulfiliment of wishes (Matiyani, 1957). In Bundelkhand, at the time of the festival of Mamulia, girls decorate the spiny, green branches of Babul (Acacia Arabica Willd.) with colourful flowers. They offer various fruits to the

trees for the fulfillment of their wishes (Sankrityayan and Upadhyaya, 1960).

5. Uses in folk songs and folk life Descriptions of trees and flowers are found profusely in folk songs and there are songs of worship of plants. Religious songs have references to offering of flowers and fruits. Folk songs in praise of Bamboo (Bambusa vulgarisSchard. ex. J.C.Wendl), Basil (Ocimum sanctum Linn.), and Amaltas (Cassia fistula Linn.) are sung, believing these plants are the abode of several Gods and Goddess (Agarwal, 1997). A few trees such as Santalum album, are held sacred by Hindus. Dried inflorescence of Prosopis cineraria Linn. (Khejiri) is held sacred by the Vaishnavas. The use of Palash (Butea monosperma O.Kuntze.) for dying clothes are common in folk songs. In Bengali songs, references are made for decorating the walls of houses with straws of rice (Orvza sativa Linn.) and several flowers. Certain trees like Basil (Ocimum sanctum Linn.), Palas (Buteamonosperma O.Kuntze.), Sandal wood (Santalum album Linn.) find a prominent place in songs sung in religious rites. On auspicious occasions, such as birth of babies, thread ceremonies, marriages and other religious functions, all have associations with mandaps made from bamboo (Bambusa vulgaris Schard. ex. J.C. Wendl) and plant culms, the paintings of floors with sandal (Santalum album Linn.) and the decoration of doors with mangoleaves. In thread ceremonies Palas (Butea monosperma O.Kuntze.) is an essential item(Uppadhyaya, 1960). Thus, from the very ancienttimes, Indian folk life has not only been includingtrees, plants and flowers as members of their ownfamily but has also found in them the image of God(Jain, 1958). It is for this reason that the songs, tales and other expressions are replete with deep affection for trees and plants.

The aim of this study was to interview people of different occupation and of different age groups. The occupation includes doctors of different fields, traditional healers, vaidya, teachers, old aged people, and students. The purpose is to find out how these people use plants in their daily life and how differently they incorporate these plants for various ailments.

The medicinal properties occur almost in every single plants and some people use them on their own to cure some or the other ailments. In today's fast life people need fast relief so they opt for allopathy but there are also some people who use traditional



e-ISSN: 2348-6848, p- ISSN: 2348-795X Volume 2, Issue 08, August 2015 Available at http://internationaljournalofresearch.org

medicines or ayurveda for prolong relief. That information was extracted from people in order to know how effective their medicines are and their dependence on plants.

Plants are important and will always be important in future as they contain every single property for the human relief. Whether wild or cultivated plants they are useful in some or the other way. The cure for every ailment is provided in nature we just have to find it and use it in a proper way.

# **OBJECTIVES**

1. Through field studies and survey, identification of resource person.

2. To collect data about medicinal plants of the study area.

3. The survey of medicinal plants used by Agraites for various ailments.

# METHODOLOGY

# STUDY AREA

Agra is a city on the banks of the Yamuna river in the northern state of Uttar Pradesh, India. It is 363 kilometers west of the state capital, Lucknow, 200 kilometers south of the national capital New Delhi and 125 kilometers north of Gwalior. With a population of 1,686,976 (2010 est), it is one of the most popular city in Uttar Pradesh. According to census of India 2001 Bhotia tribes are maximum in Agra.

# METHODS

The survey was conducted throughout the study period. Different areas of Agra were surveyed for the identification of resource person i.e. people who would be the best source of information. The areas that was surveyed were Sikandra, Davalbagh, Rawat pada, Kothi meena bazaar, Sanjay place.In order toensure a sample that includes representatives of whole community, the attempt was to interview from variety of age groups, people sex. socioeconomic and ethnic community (for detail information about gender, age, ethnicity, and occupation of informants). The criteria for the selection of informants for the interview was their reputation in the society regarding their knowledge about herbal medicines and traditional healthcare system. To know the uses of plants, different categories of people like family heads, healers, old experienced and knowledgeable informants were interviewed. Plants involved, part used for preparation of the remedies, methods of preparation, dosages, mode of use is recorded. A questionnaire was designed. The questionnaire was used for gathering data about medicinal plants of the study area. A survey of medicinal plants present in DEI, dairy campus and around was made to record the plant species available.

#### STATISTICAL ANALYSIS

The data was collected and was calculated to identify various proportions like plant families, habit, availability of medicinal plants, frequency of citation and popularly used medicinal plants in the study area.

#### *Frequency of citation (%) =*

Factor of informants consensus ( $F_{IC}$ ) for different ailments categories was calculated for testing homogeneity on the informant's knowledge followed by the method provided by Trotter and Logan and Heinrich et al (1986).

#### $F_{IC} = NUR-NTAXA/(NUR-1)$

Where  $N_{UR}$  = number of use report in a particular illness category and  $N_{TAXA}$ = number of taxa used to treat that particular category by informants.

# **RESULTS:**

The outcome of interview conducted from people was that ayurvedic people told many uses of plants as per their knowledge. They are professionals in their field and some prepare their medicine while some order from factories. Allopathic doctors were unable to tell about natural uses of plants as they particularly deal with chemically based prepared medicines and have less knowledge about plants. Traditional healers are not professionals but they told many uses of plants. They collect plants from their hometown or from wherever they can easily get. They get knowledge from their elders and are full confident about their medicines. Elderly people were not able to speak properly though but some information was extracted. They can only tell about ailments like cold, cough, headaches etc. General people are also interested but only little they can only tell what they have heard about some plants. Local gardeners have knowledge about the cutivation of plants. Students are least bothered about plants. They lack interest in medicinal properties of plants. They take ayurvedic medicines



e-ISSN: 2348-6848, p- ISSN: 2348-795X Volume 2, Issue 08, August 2015 Available at http://internationaljournalofresearch.org

but don't have knowledge about medicines and plants.

# Table 1

# Details of informants and resource person through survey:

Age groups	Number of people	Sex	Occupation
19-35	11	M/F	Traditional healers, maids,
			students
35-50	2	М	Allopathic doctor, service in
			private sector
50-65	1	М	Business
65-85	13	M/F	Ayurvedic doctor, traditional
			healer, old aged

# A survey of medicinal plants was conducted. The results are summarized in the Table 2

# Medicinal plants for various ailments:

Botanical name	Local name	Family	Plant part	Medicinal uses
4 . 1.	D 1 1	) <i>(</i> '	used	
Acacia arabica	Babul	Mimosaceae	Whole plant	For eyes, mouth ulcer, jaundice,
Wild.	T	A (1	т	cough, weakness tooth problems.
Achyranthes	Latjeera	Amaranthaceae	Leaves	Dysentery, fever
aspera Linn.	x7 1	A		
Adhatoda vasica	Vasaka	Acanthaceae	Flower,	Antiseptic, Cough, Diphtheria,
Nees.			leaves	Hemorrhoids, Jaundice,
				Low blood pressure, Pulmonary
				disease, Ringworm, Respiratory
4.1		T '11'	T	Stimulant
Aloe vera	Ghritkumari	Lilliaceae	Leaves	For stomach problems, burns,
1	1 .	A (1	т 1	ulcers, tever
	chaurai	Amaranthaceae	Leaves and	Leucorrhea, diuretic,
viridis Linn.	D 1: 1 : 1 :	7. 1	stem	
Amomum	Badı elaichi	Zingiberaceae	Fruit, seeds	Digestion, headache, cardiac
subulatum Roxb.		-		stimulant, for cold and cough
Argemone	Pili kateli	Papaveraceae	Root, latex	Constipation, Diarrhoea, Dysentery,
mexicana Linn.				Fever,
				Flatulence, Guinea-worm
				infestation, Inflammations, Itching,
				Piles,
4 11 1			T .	Skin disease, Vesicular calculus
Azadirachta	Neem	Meliaceae	Leaves, stem,	Acne, pimples, skin diseases,
indica A. Juss.	2	D.	bark	itching, tooth problems
Bambusa spinosa	Bans	Poaceae	Whole plant	Anthelmintic, Aphrodiasiac,
Roxb.				Aromatic, Astringent, Diapheretic,
				Diarrhoea, Diuretic, Emollient,
				Leprosy, Tonic
Barleria prionitis	Bajradanti	Acanthaceae	Leaves and	Toothache, cough
Linn.			root	
Bryophyllum	Patharchatta	Crassulaceae	Leaves	Analgesic, antimicrobial,
pinnatum Lam.				antitumorous
Calotropis	Madar	Asclepiadaceae	Root and	Boils, pimples, and skin disease.
gigantea L.			latex	Milky latex is

Available online: http://internationaljournalofresearch.org/



International Journal of Research (IJR) e-ISSN: 2348-6848, p- ISSN: 2348-795X Volume 2, Issue 08, August 2015 Available at http://internationaljournalofresearch.org

				applied on muscular pain, cut, wounds, boils, and ringworm.
Calotropis procera (Ait.)R. Br.	Aak	Asclepiadaceae	Latex	Aching tooth
Cannabis sativa Linn.	Bhang	Cannabinaceae	Leaves, inflorescence	Mental disorders, cough, malaria, arthritis
Capsicum annum Linn	Banmirch	Solanaceae	Fruit	Throat problems, cough,
Cassia fistula Linn.	Amaltas	Caesalpiniaceae	Root, bark	Throat problems, fever, cough, ulcer, tonsils, stomach problems
Cassia occidentalis Linn.	Karonda	Caesalpiniaceae	Leaves, fruit	Tonsils
Catharanthus roseus(L.)G.Don	Sadabahar	Apocynaceae	Leaves	Dysentery
Cinnamomum Zeylanicum Bl.	Dalchini	Lauraceae	Bark	Cough, throat problems, stomach problems
Cinnamomum tamala Nees &Eberm	Tejpatta	Lauraceae	Leaves	Headache, cough, eye sight, jaundice, stones,
Cymbopogon citrates	Lemon grass	Poaceae	Leaves	Stomach problems
Cyanadon dactylon(L) Pers.	Doob	Poaceae	Leaves	Headache, ulcers
Datura metel L.	Dhatura	Solanaceae	Leaves	Asthma, hallucinations, wounds, abortion, joint pains.
Emblica officinalis Gaertn.	Ambla	Euphorbiaceae	Berry	Eyes, skin problems, aging, ulcers, scurvy, for hair problems
Euphorbia hirta L.	dhudhi	Euphorbiaceae	Whole plant	cough, asthma and digestive problems.
Ficus glomerata Roxb.	Gular	Moraceae	Fruits, leaves	Fruits are eaten, used in diahorrea, diabetes
Ficus religiosa L	Peepal	Moraceae	Fruit and leaves	Fertility, wounds
Glycyrrhiza glabra Linn.	Mulethi	Fabaceae	Leaves, bark	Anti-ulcer, laxative, diabetes, inflammation
Hibiscus rosa sinensis	Gudhel	Malvaceae	Leaves, fruit	Used as tea, stimulant, regulate mensuration, arthritis
Jatropha gossypifolia L.	Ratanjyot	Euphorbeaceae	Whole plant	Piles and burn
Lawsonia inermis Linn.	Mehendi	Lythraceae	Leaves	Mouth ulcer, boils and burns, used in hair colouring
Mangifera indica Linn.	Aam	Anacardiaceae	Fruit, leaves	Jaundice, rheumatism, ulcer, skin disease,
Mentha piperata L.	pudina	Lamiaceae	Leaves	Throat infection, stomach problem
Morus alba Linn.	shahtoot	Moraceae	Leaves and fruits	Fruits eaten, refrigerant, in sore throat, and skin infections. Leaves helpful in lowering blood pressure
Nerium indicum	Kaner	Apocynaceae	Stem, flower,	Tooth ache, skin problems, itching

Available online:<u>http://internationaljournalofresearch.org/</u>



International Journal of Research (IJR) e-ISSN: 2348-6848, p- ISSN: 2348-795X Volume 2, Issue 08, August 2015 Available at http://internationaljournalofresearch.org

Mill.			leaves	
Nyctanthes	Harshingar	Oleaceae	Leaves	Used in sciatica, diabetes
arbortistis	-			
Ocimum sanctum	Tulsi	Lamiaceae	Leaves	Cough, cold, throat problems, fever,
<i>L</i> .				skin problems.
Ocimum	Shayma tulsi	Lamiaceae	Leaves	fever, cough, cold, headache,
tenuiflorum L.				nausea,
				Diarrhoea, dysentery and skin
				diseases
Phyllanthus	Bhumi amla	Euphorbiaceae	Leaves	Liver, spleen abnormilities,
niruri				psoriasis, skin disease, asthma.
Rauvolfia	Sarpgandha	Apocynaceae	Leaf and root	Blood pressure control, intestinal
serpentine Benth				disorder, diabetes
ex Kurz				
Ricinus	Arandi	Euphorbiaceae	Root and	diarrhoea, dysentery, and skin
communis L.			seeds	diseases, burns, constipation.
Sapindus	Reetha	Sapindaceae	Fruit	Eye problems, tooth problems, for
trifoliatus Linn.				hair problems.
Saraca asoca	Ashok	Caesalpiniaceae	Bark	Leucorrhea, anthelminthic, piles, in
(Rosb.)				menstrual disorder
Solanum nigrum	Makoi	Solanaceae	Whole plant	unripe fruits paste is applied on
L.				ringworm, constipation, headaches
				and joint
<u> </u>	т			pain, dysentery and fever
Syzigium cumini	Jamun	Myrtaceae	Fruit and	Diarrhoea, dysentery, cut and
<i>L</i> .			leaves	wounds, indigestion and
TT · 1·	A ·	0 1 /	D 1	constipation
<i>Terminalia</i>	Arjuna	Combretaceae	Bark	Heart disease
arjuna Koxb.	0.1	M ·	XX71 1 1 4	
linospora	Giloy	Menispernaceae	whole plant	Fever of all types, blood disorders,
Coraijolia Willa	Californi	7	With a law taw t	anaemia
1ribulus tomostria I	Goknru	Zygopnynaceae	whole plant	For males, urinogenital tract
Vetiveria	Irbug	Daaaaaa	laavaa	Durning place skin problem
v eliveria	KIIUS	roaceae	leaves	Builling, ulcer skill problem,
Zizunioides	Achuvacandha	Salanaaaaa	Poots and	Cough dropsy lougerthan
somnifora Dunald	Asiiwagaiiulla	Sulallaceae	leaves	menstrual problems
Zizvnhus	Baer	Phampacaoa	Stem bark	Diarrhoea
Li2ypnus maunitiana Lamb	Dael	Knanmaceae	fruit	dysentery indigestion constinution
тайгшана, Lamk			IIuli	dysentery, indigestion, consupation

#### Statistical analysis:

#### Table 3 Frequency of citation:

Plant	No. of informants who cited the species	Total no. of interviews	F
Acacia arabica Wild	12	30	43%
Adhatoda vasica Nees.	10	30	33%
Aloe vera	18	30	63%
Amomum subulatum Roxb.	5	30	17%
Asparagus racemosus Wild.	10	30	35%
Azadirachta indica A. Juss	21	30	70%

Available online:<u>http://internationaljournalofresearch.org/</u>



e-ISSN: 2348-6848, p- ISSN: 2348-795X Volume 2, Issue 08, August 2015 Available at http://internationaljournalofresearch.org

Barleria prionitis Linn.	7	30	22%
Bryophyllum pinnatum Lam.	6	30	20%
Calotropis procera (Ait.)R. Br.	10	30	36%
Cassia fistula Linn.	9	30	33%
Cinnamomum tamala Nees & Eberm	5	30	16%
Cyanadon dactylon (L) Pers.	15	30	50%
Emblica officinalis Gaertn.	16	30	53%
Mangifera indica Linn.	18	30	60%
Mentha spicata L.	7	30	22%
Nerium indicum Mill.	5	30	18%
Nyctanthes arbortistis	4	30	13%
Ocimum sanctum L.	24	30	83%
Phyllanthus niruri	9	30	30%
Ricinus communis L	7	30	23%
Saraca asoca (Rosb.)	8	30	24%
Tinospora cordifolia Wild.	9	30	32%
Tribulus terrestris L.	9	30	30%
Withania somnifera Dunakl.	11	30	36%

Table 4

#### Statistical analysis:

Ailments	Nur	NTAXA	FIC
Common cold	335	16	0.95
Fever	248	17	0.93
Dermatalogical	438	20	0.95
problems			
Ear, nose,	198	10	0.95
throat			
Cardio vascular	45	4	0.93
Oral problems	150	8	0.95
Mental disorder	50	4	0.93
Gastro -	748	23	0.97
intestinal			

**Nur** = no. of use report in particular illness category

**NTAXA**= no. of taxa used to treat that particular category by informants

#### **FIC**= factor of informant consensus

Consensus of agreement about uses of medicinal plants:

Among informants to gain credibility, scientific studies that utilize traditional knowledge must be reliable. In ethnobotanical studies, consensus analysis provides a measure of reliability for any given claim providing reliable evidence. The product of FIC ranges from 0 to 1. High value of FIC indicates the agreement of selection of taxa between informants, whereas a low value indicates disagreement. Recently consensus analysis has been used as an important tool for the analysis of ethnobotanical data. In the study area the informants consensus about usages of medicinal plants ranges from 0.93 to 0.97 with an average value of 0.93 which shows high level of agreements among the informants. The high level of consensus among the informants about the usages of medicinal plants for the treatment and prevention of various diseases and ailments prevalent in the study area suggests that the ethnomedicinal uses of plants are currently in practice in the study area.

#### **DISCUSSION:**

In most of the treatments with medicinal plants, the herbal preparations areadministered orally. The specific amount of material could not be ascertained. Therecommended dosage is normally a handful of leaves or few pieces of root, rhizome,stem or bark, flowers, fruits and seeds. For small herbs, the whole plant or a few plantsmay be used. Leaves are the most common part used. The roots are the second-mostcommon part used in traditional medicine, followed by bark and the reproductiveparts. They are used fresh or dry, chewed, or boiled in water and the decoction takenas tea. The herbal preparation is usually taken once or twice daily until the patient recovers.

Interviews were conducted among people of every age group and according to their profession. Some vaidya and acharya do not prepare their medicines on their own but they do have knowledge about plants. The vaidyas system or ayurvedic system of medicine pursues the holistic approach and does not aim to cure only the affected area alone but aims to



e-ISSN: 2348-6848, p- ISSN: 2348-795X Volume 2, Issue 08, August 2015 Available at http://internationaljournalofresearch.org

find out the origin and causal factor of the disease in order to eradicate the disease from its root.

The traditional healers have good knowledge of plants. They get this knowledge from their elders and pass them from generations to generations. They prepare their medicines on their own and collect plants from their hometown or the places where a particular species grows. They provide medicines for various ailments. They particularly belong to castes like rajgodh, pahadi rajput, jaat. Any tribe was not particularly witnessed.

Elderly people do have knowledge to some extent. But there knowledge is not enough to treat permanently. Some are experienced and can tell the medicinal property that can be used only for limited ailments for e.g, cough and cold, headaches, indigestion, mouth ulcers. And secondly they are old so they have difficulty in remembering.

The younger generation lack interest in medicinal plants. The younger generation is generally unable to recognise the plants nor their traditional use. They are dependent on modern medicines.

Some new uses of, Mentha piperita, Mangifera indica, Syzigium cumini, Azadirachta indica, Ocimum sanctum, Cynadon dactylon, Cassia fistula, Cinnamomum tamala, Amomum subulatum, Nerium indicum, Nyctanthes arbortristis. have been reported.

New uses as told by the traditional healers, vaidyas and acharyas.

1. The 5 leaves of *Mangifera indica, Syzigium cumini, Azadirachta indica, Ocimum sanctum* are crushed and juice is given to diabetic patient.

2. *Cynadon dactylon* is taken during the menstruation to stop excess bleeding.

3. *Mentha piperita* is taken to induce sterility.

4. Cassia fistula inner stem's juice is given in fever.

5. *Nyctanthes arbortistis* leaves decoction is given to sciatica patient

6. *Cinnamomum tamala* leaves are crushed with water and are applied on forehead for relief in headache.

7. Nerium indicum stem is used in tooth problems.

8. Amomum sabulatum is used to induce fertility.

Some specific uses were found out:

*Ocimum sanctum* aroma is helpful in keeping away insects, it also removes scars, helpful in viral fever. *Argemone mexicana* is useful in blindness. *Tinospora cordifolia* is useful in jaundice. *Aloe vera* enhances immune system.

# Conclusion

Present study revealed that the local traditional healers of Agra, are rich in ethnomedicinal knowledge. They prepare their own medicine based on their ancestral knowledge and provide medicines for ailments like headache, body ache, constipation, indigestion, cold, fever, diarrhea, dysentery, boils, wounds, skin diseases, urinary troubles, fractures, round worms, etc. The survey also revealed that all the traditional healers have strong faith on their traditional medicine. The interviews show vaidvas are full of knowledge about medicinal plants and their property. People come to visit them and are satisfied with their treatment for prolong relief. Allopathic doctors show less interest in medicinal plant. Old aged people know about some plants which they are using from long time for ailments like cough, cold, headache, stomach pain etc. Their treatment is not enough for permanent cure. On the other hand, younger generation lack interest in ethnomedicines and properties of plant. Some new uses of plants are reported as told by vaidyas, acharyas and traditional healers. Those are Mentha piperata, Mangifera indica, Syzigium cumini, Azadirachta indica, Ocimum sanctum, Cynadon dactylon, Cassia fistula, Cinnamomum tamala, Amomum subulatum, Nerium indicum, Nyctanthes arbortristis. Some common plants also has some specific uses those are Ocimum sanctum, Argemone Mexicana, Tinospora cordifolia, Aloe vera.

# REFERENCES

- [1.] Ayyanar M, Ignacimuthu 2009. Herbal medicines for wound healing among tribal people in Southern India: Ethnobotanical and Scientific evidences. *International Journal of Applied Research in Natural Products Vol. 2(3), pp. 29-42, Sep-Oct.*
- [2.] Boktapa N.R and Sharma A.K 2010. Wild medicinal plants used by local communities of Manali, Himachal Pradesh, India. *Ethnobotanical Leaflets 14: pp 259-67.*



e-ISSN: 2348-6848, p- ISSN: 2348-795X Volume 2, Issue 08, August 2015 Available at http://internationaljournalofresearch.org

- [3.] Chaudhary S 2011.Medicinal plants of district Bijnor (U.P) India with special reference to their folk medicinal uses. *Journal of Experimental Sciences Vol. 2, Issue 4, Pages 19-23.*
- [4.] **Data highlights:**The scheduled tribes. Census of india 2001.
- [5.] **Devi U and Thakur M 2011**. Exploration of ethno botanical uses of some wild plants from cold desert of Himachal Pradesh. *Asian j. Exp. Biol. Sci. Vol 2(2) 2011: 362-366.*
- [6.] Jain S.C, Jain R, and Singh R 2009. Ethnobotanical survey of Sariska and Siliserh regions from Alwar District of Rajasthan, India. *Ethnobotanical Leaflets 13: pp171-88.*
- [7.] Jain S.K and Bortharkur S.K 2013. Ethnobotany of the Mikirs of India. *Economic Botany, Vol. 34, No. 3 (Jul. - Sep., 1980), pp. 264-*272.
- [8.] Jain S.K and Dam N 1979. Some ethnobotanical notes from Northeastern india. The *New York Botanical Garden. Bronx. NY 10458.*
- [9.] Kalisdha, Balasubramani R, Surulinathi M, and Amsaveni N 2013. Indian Contribution to Medicinal plants research: A Scientometric Study. *Journal of Advances in Library and Information Science ISSN: 2277-2219 Vol. 1. No.2.2013.* pp.65-77.
- [10.] Kar A and Bortharkar S K 2008. Medicinal plants used against dysentery, diarrhoea and cholera by the tribes of erstwhile Kameng district of Arunachal Pradesh. *Natural Product Radiance, Vol. 7(2),2008, pp.176-181.*
- [11.] Kaur I, Sharma S and Lal S 2011. Ethnobotanical survey of medicinal plants used for different diseases in Mandi District of Himachal Pradesh. *International journal of research in pharmacy and chemistry*.
- [12.] Kumar N and Choyal R 2012. Ethnobotanical notes on some plants used for the treatment of leucorrhoea and other gynaecological problems in Hamirpur district ofHimachal Pradesh.*Indian Journal of Fundamental and Applied Life Sciences ISSN: 2231-6345.*

- [13.] Lingaiah M and Rao N 2013. An Ethnobotanical survey of medicinal plants used by traditional healers of Adilabad District, Andhra Pradesh, India. *Biolife* 1(1): pp 17-23.
- [14.] Malla B and Chhetri R.B 2009. Indigenous knowledge on ethnobotanical plants of Kavrepalanchowk District.*Kathmandu University Journal of science, Engineering and Technology VOL. 5, No. II, September, 2009, pp 96- 109.*
- [15.] **Pujari M and Soni S.K 2011**. Medicinal importance of trees of Dayalbagh Educational Institute Campus.
- [16.] Rahul J 2013. An Ethnobotanical study of medicinal plants in taindol village, district Jhansi, region of Bundelkhand, Uttar Pradesh, India. *Journal of medicinal plants studies 2013 volume:1 issue:5 pp 59-71 ISSN:2320-3862*
- [17.] Rani R, Gautam R, and Gautam R.K.
  2009. Floristic survey of medicinal plants in sur sarovar wet land, keetham, Agra, India. *Journal of applied and natural science 1(2): pages 196-200.*
- [18.] **Singh A.G, Kumar A, Tewari D.D. 2012.** A ethnobotanical survey of medicinal plants used in Terai forest of western Nepal. *Journal of Ethnobiology and Ethnomedicine.*
- [19.] Singh K, Gupta S, Mathur P.K. 2010. Investigation on ethnomedicinal plants of district Firozabad. *Journal of Advanced Laboratory Research in Biology*.
- [20.] Thakur S 2011. Medicinal plants used by tribal inhabitants of Sirmour District, Himachal Pradesh. *Indian J.Sci.Res.2(4):125-127*..