EXPLORATION OF ETHNO MEDICINAL PLANTS IN SHEVGAON, DIST. AHMEDNAGAR (MS) INDIA

Chhaya Bhalshankar

Department of Botany,
New Arts, Commerce & Science College, Shevgaon. Dist.- Ahmednagar (MS)

ABSTRACT

The present research work was designed to gather indigenous knowledge of local people especially medicinal healers about traditional and medicinal uses of plants. Present study was confined to interview people of remote villages of tehsil Shevgaon, district Ahmednagar, Maharashtra, India from July 2011- Feb 2012. Indigenous knowledge was collected by interviewing people of different age groups between 40 to 80 years. Frequent field trips were arranged to record local information. A total of 82 species belonging to 79 genera and 49 families were recorded as being used by local inhabitants for various purposes such as ornamentals, medicinal, vegetables and edible fruits. Most of the species are wild. 28 species enlisted in the present paper.

Key words: Medicinal plants, traditional healers, ornamentals

INTRODUCTION

Shevgaon has rich biodiversity consisting of a large number of plants, some of which are used for their medicinal value. About 80% population of the world depends on the traditional system of health care (Ahmad, 1999). These medicines have less side effects and easily available. The ethno botanical information besides listing the traditional uses of plants help ecologists, pharmacologists, taxonomists, watershed and wild life managers in their efforts for improving the wealth of area (Ibrar *et al*., 2007). In recent years, one can notice a global trend in the traditional systems of the medicines and ethno botanical studies have become increasingly valuable in the development of health care system in different parts of the world (Black, 1996; Ahmed, 2007). Basic quantitative and experimental ethno botany includes basic documentation, quantitative evaluation of use and management and experimental assessment (Choudhary *et al.*, 2008)

MATERIALS AND METHODS

Present Study was carried out at Shevgaon, located at 19'13 to 19'35 North degree of latitude, and 75.01 to 75.37 east degree of longitude. Total area occupied by Shevgaon Tahesil is 1090.7sq.km. And 492 m above the sea level. Seasonal field trips were conducted to access medicinal plants. Plants were collected from local area, Preparation of herbarium and identification of plants by flora of Bombay presidency, flora Ahmednagar, flowers of sahyadris, and internet access. Farmers and old peoples interviewed. Observed medicinal plants listed, data collected about their botanical names, common names, active principals, and their medicinal uses. The Photographs of plants took by camera.

RESULT AND DISCUSSION

In the given table 28 species are enlisted. This study documented eighty two species belonging to 79 genera and 49 families during exploration of ethno medicinal plants most of the plants are wild and few species are cultivated**.** Knowledge depth of respondents were collected from local elderly people, the methods used for ethno botanical data collection were semi structured interviews.The tribal populations, who have been the primary inhabitants of natural habitats, hold tremendous amount of traditional knowledge on the use of various biotic resources Which may have greater importance to the on-going research and discoveries in the field (Uniyal *et al*., 2006).

Plants recorded which were used by local inhabitants for various purposes including vegetable species, edible fruit species, ornamental and medicinal species. It was found that many plants have similar medicinal uses as described by Ahmad *et al*., (2003) and Ashfaq *et al*., (2003). Edible fruits and roots are obtained from species including, *Ipomoea batatas*, Raphanus sativus , *Psidium guajava*, *Punica granatum* and *Mangifera indica*. The data is arranged in the alphabetical order of botanical name followed

Table: 1- Medicinal plants with medicinal uses.

Scientific Name	Family	Common name	Habit	Part used	Medicinal Uses
Adathoda vesika	Acanthaceae	Vasaka	Shrub	Whole plant mainly leaf and roots	Expectorant, diuretic, anti rheumatic, Ophthalmia
Acacia catechue Willd	Mimosaceae	Black catechu, cutch tree	Tree	Bark and heartwood	Anthelmintic, anti-inflammatory, hypotensive
Achyranthes aspera Linn	Amaranthaceae	Prickly chaff flower plant	Herb	Whole plant	Cardiac, stimulant, diuretic and astringent
Aegle marmelos (Linn) Corr.	Rutaceae	Holy fruit tree	Small tree	Root, stem, , leaves and fruits	Hypoglycemic, antifungal, CVS active
Albizia lebbeck(Linn)Benth.	Mimosaceae	Siris tree	Tree	Bark, flower, seeds, leaves and roots	Immuno modulator, hypoglycemic , anticancer
Aloe Barbadensis Mill	Liliaceae	Indian aloe	herb	Leaf juice, Elio (Dried gum)	Anthelmintic , purgative, Oxytocic
Argemone mexicana Linn	Papaveraceae	Prickly poppy	Annual herb	Milky juice, seed, fresh root	Astringent, Anthelmintic and aperients
Azadirachta indica A.Juss	Meliaceae	Neem	Tree	Bark, leaves, flowers, seeds, oil	Antiviral, Anthelmintic, , insecticide, antiseptic
*Boerhaavia diffusa*Linn	Nyctaginaceae	Pigweed/ hogweed	Creeping herb	Herb and root	Laxative, diuretic, expectorant, emetic, purgative, Anthelmintic, febrifuge
Calotropis gigantea (Linn) R. Br.	Asclepiadaceae	Gagantic swallow wort	Milky shrub	Whole plant	Depurative, Anthelmintic , expectorant
Cassia occidentalis Linn	Leguminosae	Negro coffee	shrub	Flower	Expectorant, Anti-asthmatic, anti-Constipation, anti- leprosy, anti-rashes, Febrifuge, Kidney stone, appetizer
Catheranthus roseus (Linn) G. Don	Apocynaceae	Periwinkle	herb	Whole plant	Hypotensive, sciative , stomachic
Cardiospermum halicacabum Linn	Sapindaceae	Balloon vine, hearts's pea	Herb	Root, leaves, seeds	Antibacterial, Hypertensive, anti-rheumatism
Citrus aurantifolia(Christm.) Swingle	Rutaceae	Country lime	Thorny Tree	Rind of fruit, fruit juice	Stomachic, Anthelmintic ant scorbutic
Datura metel Linn	Solanaceae	Datura	Sub shrub	Whole plant	Emetic, Narcotic, Anodyne, anti-spasmodic
Euphorbia hirta Linn	Euphorbiaceae	Australian asthma tree	Straggling herb	Seed, leaves	Galactogogue, diuretic, aphrodisiac Asthama, respiratory track infection, latex externally applied for wounds.
Ficus religiosa Linn	Moraceae	Sacred fig	Tree	Bark, Leaves, tender shoots, fruits, seeds, latex	Anti-bacterial, hypoglycemic, Anthelmintic
Hibiscus rosa-sinensis L.	Malvaceae	Hibiscus	shrub	Leaves, Flowers	The soaked petal along with coconut oil is externally applied for alopecia. The leaves and flowers are observed to be promoters of hair growth and it aids in healing of ulcers.
Jatropa curcas Linn	Euphorbiaceae	Purging nut	shrub	Nut, whole plant, latex	Purgative, Burn injury
Lantana camera Linn var. aculeata Moldenke	Verbenaceae	Wild sage	Evergreen shrub	Whole plant	Anti-rheumatic, anti malarial
*Lowsonia innermis*Linn	Lythraceae	Henna	Evergreen shrub	Whole plant	Anti-bacterial, anti-inflammatory
Melia azedirach Linn	Meliaceae	Pride of India	Tree	Bark, leaves, flower, oil	Antidiarrhoeal, deobstruent, diuretic
Mentha arvensis Linn	Lamiaceae	Mint	Aromatic herb	oil	Carminative, expectorant, antifungal
Ocimum americanum Linn	Lamiaceae	Hoary basil	Branched herb	Whole plant	Carminative, diaphoretic, stimulant
Phyllanthus emblica Linn	Euphorbiaceae	Indian gooseberry	Tree	Root, bark, leaves, fruit	Antiviral, CVS active

Tribulus terrestris Linn	Zygophyllaceae	Puncture vine	Annual perennial herb	Fruits, leaves	urinary infection and Kidney stone disorder.
Withania somnifera L.Dunal	Solanaceae	Aswagandha	Herb	Root, Leaves	Root powder used in Adenopathy, arthritis, asthma, hypertension, inflammations and rheumatism. The leaves were also used as a cure for several illnesses including tumors, inflammations, Conjunctivitis and tuberculosis.
Zingiber officinale, Roscoe	Zingiberaceae	Ginger	Herb	Rhizome	Indigestion, liver diseases, chronic cough and cold.

by family, local name, habit, part used and medicinal uses (Table 1). Local peoples use medicinal species in health care system. The promising species include *Adathoda vesika*, *Aegle marmelos*, *Achyranthes aspera*, *Aloe barbadensis*, *Butea monosperma*, *Datura alba*, *Ipomoea batatas*, *Withania somnifera* and *Trigonella foenum-graecum*. The results agrees with the findings of Gupta *et al*., (1995), Lewis & Elvin (1995), Destagir (2001) who reported plants that are traditionally used for curing many diseases and Ibrar *et al*., (2007) who reported ethno botanical studies on plant resources of Ranyal Hills, District Shangala.

It has been realized all over the world that much valuable knowledge about uses of plants including medicinal uses is still endemic among many tribal or rural human societies. The ayurvedic system of medicine not only provides cure for a large number of general and chronic diseases but it also strengthens the inner body strength.

Acknowdgement: Author expressing vote of thanks to UGC for providing financial assistance.

LITERATURE CITED

Ahmad H, 1999. Issues Regarding Medicinal Plants of Pakistan. *Udyana Today*, **6**(3): 6-7.

Ahmed SS, 2007. Medicinal wild plants from Lahore-Islamabad Motorway (M-2), Pakistan. *Pak.J. Bot*., **39**(2): 355-375.

Ahmad M, MA Khan and RA Qureshi, 2003. Ethnobotanical study of some cultivated plants of Chhuchh Region (District Attock). *Hamdard Medicus*., **46**(3):15-19.

Black MJ, 1996. Transforming ethnobotany for the new millennium. *Annals of the Missouri Botanical Garden*, **83**: 58-66.

Choudhary K, Singh M, Pillai U, 2008. Ethnobotanical survey of Rajasthan- An Update. Am.-Eurasian J. Bot., **1**(2): 38-45.

Dastagir G, 2001. Medicinal plants of Mai Dhani Hill, Muzaffarabad, Azad Jammu and Kashmir. *Hamdard Medicus*, **46**: 29-35.

Gupta MP, MD Corea, PN Soils, A Jones and C Galdames, 1995. Medicinal plants inventory of Kuna Indians: Part I. *Journal Ethnopharmacology*, **40**: 77-109.

Gupta A, Mishra AK, Bansal P, Kumar S, Sannd R, Gupta V, Goyal BM, Singh AK, Kumar A, 2010. Antileprotic potential of ethno-medicinal herbs: A review. *Drug Invention Today*, **2**(3): 191-193.

Harshberger JW, 1896. The purpose of Ethnobotany. *Bot.Gaz.,* **21**: 146-158

Ibrar, MF Hussain and A Sultan, 2007. Ethnobotanical studies on plant resources of Ranyal hills, District Shangla , Pakistan. *Pak. J. Bot*., **39**(2): 329-337.

Lewis WH and MP Elvin, 1995. Medicinal plants as source of new therpeutics. *Annals Missouri Botanical Garden*, **82**: 16-24.

Uniyal SK, Singh KN, Jamwal P, Lal B, 2006. Traditional use of medicinal plants among the tribal communities of Chhota Bhangal, Western Himalaya. Journal of Ethnobiology and Ethnomedicine, **2**:14.