Indian J.Sci.Res.3(1) : 107-111, 2012

MEDICO-BOTANICAL STUDY OF SOME WEEDS GROWING IN MORADABAD DISTRICT OF WESTERN UTTAR PRADESH IN INDIA

ASHOK KUMAR[a1], SANJAY AGARWAL[b], ALKA SINGH[c] AND DESH DEEPAK[d]

[a]Department of Botany, IFTM University, Lodhipur Rajput, Moradabad, U.P., India
E-mail: drakarya81@gmail.com
[b]Department of Botany, Wilsonia Degree College, Ashiana-II, Moradabad, U.P., India
E-mail: sanjay7520@yahoo.co.in
[c]Department of Botany, Hindu College, Moradabad, U.P., India
E-mail: alka1090@yahoo.in
[d]Department of Botany, IFTM University, Lodhipur Rajput, Moradabad, U.P., India
E-mail: ddeepakiftm87@gmail.com

ABSTRACT

The present study revealed that 25 plant species belonging to 18 families, plants parts, and local name are used in medicinal purposes and traditional health care system is an old age practice in this area. The system of ethnic communities is conservation oriented and has great potential. Traditional knowledge is transferred for one generation to another. The present work suggests an impressive coordination for strengthening medicinal plant sector in district Moradabad.

KEY WORDS: Weeds, ethenobotany, rural people and medicinal uses

Generally the plants, which grow with cultivated plants/crops, they called as weeds, thus herbaceous plants compete with them for their nutrition and ultimately reduced the economic production. However, these herbs are mine of useful drugs. On one place where weeds cause so many losses, they also have many beneficial uses in our daily life. The most important positive aspect of the weeds is that nearly all of them are known to possess therapeutic properties and are used by the native people for cure of a variety of human cattle diseases (Ibrar et al.,2003)The ethnic and rural people of India have preserved a large bulk of traditional knowledge of medicinal uses of plants growing around them. People in such remote and rural areas of the districts have been traditionally using indigenous folk remedies to cure various diseases for generations and passing on this knowledge orally. Because of prompt and positive effect of herbal treatment, they have strong faith in their folk medicinal preparation or crude formulation (Purohit and Prajapati, 2003; Chandra et al., 2005. On the other hands, herbs are safe, cheaper, easily available and with no fear of any side effects. It is evident that many valuable herbal drugs have been discovered by knowing that particular plants was used by the ancient folk healers for the treatment of some kind of ailments (Ekka and Dixit, 2007). In recent years efforts to record medico botanical uses of plants from amongst the native of various countries have received close attention of scientists (Singh et al., 1984. Singh and Khan, 1989, Yadav and Patel, 2001, Yadav and Kumar, 2003, Hussain, 2006 and Chaudhary, 2011).

Study Area

Moradabad district form a part of gangetic alluvial plain and lies between 28° 20' and 29° 16' north latitudes and 78° 24' and 79° 0' east longitude covering an area of 3759.79 Sq. Km. It is bounded by Bijnor and Nanital district in north by Rampur district in east by Badaun district in south and in west by J. P. Nagar district. The district administratively divided in 6 tehsil and is divided again in to 13 development blocks.

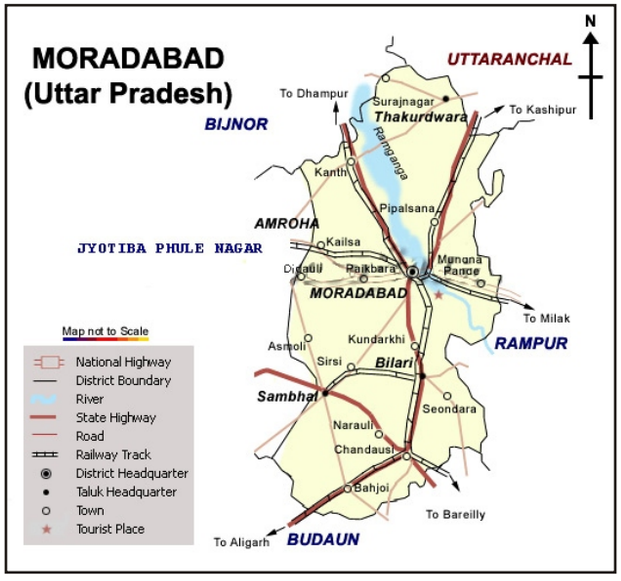

Fig. 1: Location map of study area

[1]**Corresponding author**

The district Moradabad is drained by river Ramganga and its tributaries namely Dhela river, Kosi river, Gangan river, Aril river and Sot river. The total population according to 2011 census is 4,773,138 of which 18,77,550 live in 1388 villages.The density of population is 1284 per Sq. Km. due to large number of villages and huge rural population with rich tradition of utilization of plants for medicinal uses, the district constitutes a suitable and significant area for medico-botanical studies.

Present communication, dealing with medicobotanical uses of herbaceous plants in treatment of various elements. Due to rich and diverse flora of Moradabad district, with a majority of same being used in traditional folk medicine, there is immense scope for their potential commercial use as well.

MATERIALS AND METHODS

The present work was under taken through field study carried out the season of January 2011 to November 2011 in various areas of district Moradabad. The information about the folk medicinal uses, local name, plant parts used and mode of administration was collected from local healers, Vaidyas, Hakims and older rural people. The cultivator of village Bagerpur, Billari, Kundarki, Lodhipur, Agwanpur and Dalpatpur etc. also revealed many plants used for daily ailments and also agreed for field trips to collect the plant species. The collected plants were properly preserved and correctly identified with the help of local and regional florasin consultation with herbaria of NBRI Lucknow.

RESULTS AND DISCUSSION

In the following enumeration the 25 common weeds, belonged 18 families are mentioned in the table (1). The species are arranged according to alphabetical order, followed by families, local names, flowering and fruiting periods and folk medicinal uses. Ethnomedicinal properties of plants being used in the treatment of various diseases like, jaundice, urinary tract , kidney stones and cancer (Siddiqui, 2003), Leucorrhoea, Diabetes, Asthama etc. (Chaudhary, 2011). The important information on the folk use of plants described is based on observation and records taken during field trips. The local uses of plants as a cure are common particularly in those areas, which have little or no access to modern health services. The indigenous traditional knowledge of medicinal plants of various ethnic communities, where it has been transmitted orally for centuries is fact disappearing due to the advent of modern technology and transformation of traditional culture. It is very essential to have a proper documentation of medicinal plants and to know their potential for the improvement of health and hygiene through an eco friendly system. The present study reveals that the Moradabad region is rich in herbal medicine with diversified ethnomedicinal values. From the table presented, it can be seen that there is a wide variety of plants for common ailments and diseases.

CONCLUSION

The study revealed that traditional health care system is an old age practice in this area. The system of ethnic communities is conservation oriented and has great potential. Traditional knowledge is transferred for one generation to another. The present work suggest an impressive coordination for strengthening medicinal plant sector in district Moradabad.

ACKNOWLEDGEMENTS

The authors are thankful to Dr. P.K. Singh, Principal and former Head, Department of Botany, Hindu College Moradabad and Professor A. K. Chaudhry, Department of Botany, IFTM University, Moradabad for giving us the valuable suggestions during research.

REFERENCES

Chaudhary S., 2011. Medicinal plants of district Bijnor (UP) India with special reference to their folk medicinal uses. J. of Experimental Science, **2**: 19 - 23.

Chandra V., Soni P. and Sharma S.D., 2005. medicinal plants conservation with reference to HO and Munda Tribals of Bihar and Orissa, Proc Workshop on Conservation of Biodiversity in India-Status, Challenges and Efforts. Indian Council of Forestry Research and Education, Dehradun:243- 246.

Table 1: List of some medicinal herbs of district Moradabad (UP)

S. No.	Botanical Name	Family	Local Name	Flowering & fruiting	Folk Medicinal Uses
1	*Achyranthus aspera*	Amaranthaceae	Chirchita	Throughout the year	The powder of drie d roots is used as massage to cure toothache and gum bleeding.
2	*Amaranthus spinosus*	Amaranthaceae	Kateli chauli	July-December	Scabies: Root paste is used as an external application
3	*Amaranthus virides*	Amaranthaceae	Jangli chauli	Throughout the year	A decoction of the entire plant is used to stop dysentery and inflammation. The root juice is used to treat inflammation during urination. It is also taken to treat constipation
4	*Argimone maxicana*	Papaveraceae	Pili kateli	February-June	The seeds are taken as laxative. The seed oil is used to treat dropsy, jaundice and skin diseases and it is also used to treat malaria.
5	*Boerhaavia diffusa*	Nyctaginaceae	Bichhu ghas	August-November	The leaves are useful in dyspepsia, tumors, spleen enlargement, abdominal ainsleucorrhoea, anaemia
6	*Celosia argentea*	Amaranthaceae	Chatri matri	August-October	The flower and seed are used in the treatment of bloody stool, haemorrhoid bleeding, uterine bleeding, leucorrhoea and diarrhoea.
7	*Chenopodium album*	Chenopodiaceae	Bathua	January-April	Plant pacifies vitiated peptic ulcer, intestinal worms, dyspepsia, flatulence, urinary retention, kidney diseases, general debility and the plant acts as a sexual stimulant.
8	*Cleome gyanandra*	Capparidaceae	Hurhul	Sep.-November	Leaves may be crushed to make a concoction that is drunk to cure diseases such as scurvy. It is a highly recommended meal for pregnant and lactating women.
9	*Coccinia grandis*	Cucurbitaceae	Kanduri	July-September	Diabetes: The juice of its leaves and roots is given in diabetes.
10	*Cuscuta reflexa*	Convolvulaceae	Amar bel	October-December	Stomachache: it is boiled and tied over stomach in belching and in pain of stomach due to digestive problem and gastric troubles.
11	*Cynodon dactylon*	Poaceae	Doob ghas	Throughout the year	Leucorrhoea: The paste of fresh roots of doobghas and kans (*Saccharum spontaneum*) in the dose of 5 gm is given with cow milk and misri (sugar) early in the morning for one month to cure leucorrhoea.
12	*Eclipta prostrata*	Asteraceae	Bhangra ghas	August-February	A leaf extract is applied to the head to relieve dandruff and to blacken gray hair.
13	*Euphorbia hirta*	Euphorbiaceae	Dudhi ghas	Throughout the year	It is used against asthma, bronchitis, worm infestation, conjunctivitis and dysentery. The latex of the plant is used for warts and cuts.
14	*Evolvulus alsinoides*	Convolvulaceae	Shyamakrantha	July-December	The plant is used to cure fever, cough and cold.

15	*Fumaria parviflora*	Fumariacea	Ban dhanya	January-March	Shoots are used in diarrhea, as cooling agent and blood purifier. The whole plant is used in fever, as liver tonic for hepatic ailment. Fresh plant is crushed and obtained juice is given orally for blood purification.
16	*Ipomoea digitata*	Convolvulaceae	Jaljamini	October-December	It is mainly used for increases secretion of milk, enlarged liver and spleen, increases weight, moderates menstrual discharge, poor digestion.
17	*Oldenlandiaalsinoides*	Rubiaceae	Parpata	June-January	Whole plant decoction given with a glass of butter milk in 3 spoonfuls twice a day for about 5 days in Jaundice
18	*Phyllanthus niruri*	Euphorbiaceae	Hazar dana	July-September	The extract of fresh entire plant is used to treat jaundice, dropsy, gonorrhea, menorrhagia and other genitourinary affections.
19	*Polygonum plabajum*	Polygonaceae	Rani phul	February-May	Crushed leaves are taken in pneumonia, roots are used in bowel complaints
20	*Portulaca oleracea*	Portulaceae	Kulfa sag	Throughout the year	Dysentery with Blood: Its leaf is ground and mixed with crystalline sugar and kali mirch (black pepper). This is given only once and stated to be quite effective medicine.
21	*Silene conoidea*	Caryophyllaceae	Gulahi Booti/ Khash Khashi Booti	February-April	The dry root is crushed and used as soap to wash wounds and hair.
22	*Solanum nigrum*	Solanaceae	Makoi	Throughout the year	The whole plant used as antiseptic, anti-inflammatory swelling, cough, asthma. The juice of the berries used as antidiarrhoea, and hydrophobia.
23	*Solanum xanthocarpum*	Solanaceae	Gokhru	Throughout the year	Solanum fruits, flowers and stems possess carminative, anthelmintic and bitter properties, root is expectorant and used in treatment of toothache, chest pain due to cough, asthma and bronchitis. The leaves are applied externally as a pain relieving agent
24	*Spergula arvensis*	Caryophyllaceae	Ban soya	February-March	The plant has been used as a diuretic
25	*Stelaria media*	Caryophyllaceae	Cheridan	January-April	The fresh leaves have been employed as a poultice for inflammation and indolent ulcers. The water in which the Chickweed is boiled should also be used to bathe the affected part. A decoction made with the fresh plant is good for constipation

Ekka N.R. and Dixit V. K.; 2007. Ethno-pharmacognostical studies of medicinal plants of Jashpur district (Chhattisgarh). I. J. G. P., **1** (1): 2-4.

Hussain W.; 2006. Biodiversity conservation of medicinal plants, *Proc Natl Symp Biodiversity Germplasm Conserv,* (DN College, Meerut, UP), 14-19.

Ibrara M., Hashim S. and Marwat K.B., 2003. Ethnobotanic study of the weeds of five crops in district Abbottabad, N-W. Pak. J. Weed Sci. Res., **9** (3 & 4): 229- 240.

Purohit S. S. and Prajapati N. D., 2003. Local Heritage with Global Importance, AGROBIOS News Let.,**1** (8): 7-8.

Siddiqui M.B., 2003. Anti-cancer drugs from traditional plants of Sitapur District, Uttar Pradesh. Ancient Science of life, XXII (3).

Singh V.K., Mohd A. and Abrar M. Khan., 1984. Folk medicinal claims of Chakrata forests, Uttar Pradesh, India. J. P. I. Nature, **1** (2): 16- 21.

Singh V.K. and Khan M.A.,1989. Use of folk medicinal in the context of primary health care programme in North India: Liver disorders. Int. Conf. Rec. Adv. Med. Aroma and Spice Crops. New Delhi.,Abst.No. 68.

Yadav S.S. and Patel H. S., 2001. Traditional medicines and health care system of tribals of Satpuda Region, Maharastra State. Plant Archives,**1**: 111- 118.

Yadav J.P. and Kumar S., 2003. Folk medicinal uses of some indigenous plants among the people of Mahender garh district, Haryana, India. Plant Archives **3**: 37- 42.