International Journal of Theoretical & Applied Sciences **6**(2): 106-112(2014)

ISSN No. (Print): 0975-1718
ISSN No. (Online): 2249-3247

Traditional Uses of Some Plants of Hamirpur District as a Blood Purifier

Nitesh Kumar*, Rajaram Choyal** and Ajay Sharma***
**Assistant Professor, Gautam Group of College Hamirpur, (HP), INDIA*
***Associate Professor, Environmental Science, M.G.S. University Bikaner, (RJ), INDIA*
****Seth Bihlani PG College, Sriganganagar, (RJ), INDIA*

(Corresponding author: Nitesh Kumar)
(Received 01 October, 2014, Accepted 14 November, 2014)

ABSTRACT: Hamirpur district is the smallest district of Himachal Pradesh due to its area. This district falls in the range of Shivalik hills. This district is surrounded by thick forest and act as good reservoir for various medicinal plants and herbal wealth. The practices of the use of local plants and their products for treatment of various health problems has been an old practice. But the people of this district still depends on the local plants for treatment of various health problems. This paper provides the formation about the traditional uses of 14 plant species belong to 13 families for purification of blood.

Keywords*:* Traditional uses, Health problems, Blood purifier, Shivalik hills, Hamirpur

I. INTRODUCTION

Blood is a connective tissue that consists of cells suspended in the liquid matrix. Blood consists of plasma and floating cells in it. The cells are delivered from the extra vascular site and then enter the circulatory system. Plasma consists of some proteins known as plasma proteins such as albumins, globulins and blood clotting proteins. The cells are present in the blood are -Red blood cells, White blood cells and blood platelets thrombocytes. Impurities in the blood and contamination in blood cause many disorders. Therefore purification of blood is necessary for elimination of blood disorders.

It has been found that from the ancient times the documentation of traditional knowledge related the medicinal uses of plants has provided the many important drugs of modern times. Yet, 80% population of the developing country depend on the use of local plant resources for primary wealth of medicinal flora and the traditional knowledge about the plant which constitute the Himalayan state is a rich reservoir of medicinal flora. Hamirpur district is also well known region the western Himalaya which is surrounded by thick forest having rich floral diversity (Kumar and Choyal 2012). Due to the favourable climatic conditions and environmental conditions this district possesses unique medicinal wealth. The old village of this area has huge knowledge associated with the use of these medicinal plants. This unique medicinal wealth study area provide material for pharmaceutical, phytochemical, food, flavoring and cosmetic industries (Kaur *et al*, 2011). This paper emphasized the traditional use of 14 plant species belonging to 13 families for purification blood and as a blood purifier.

II. MATERIAL AND METHODS

Study Area. Hamirpur district is situated between 76°18' – 76°44' East longitude and 31°52'30" North Latitudes. This region is rich in diverse flora he area is hilly covered by Shivalik range and the elevation varies from 450—1,000mtrs meters. This region possesses unique floral diversity and rich herbal or medicinal wealth which needs exploration. This paper explore about the 14 plant species of study area which are used in case of blood purification or as blood as purifier.

Methadology. The ethanobotanical survey were conducted throughout the study period in different localities of Hamirpur district. The plant specimen were collected mostly in the flowering and fruiting stage. The plant specimen collected during the survey were preserved in the form of herbarium. The collected specimens through field work were identified with help of H.J. and Wadhwa Flora of Himachal Pradesh, Flora of FRI Dehradun and Flora of BSI which were frequently consulted one.

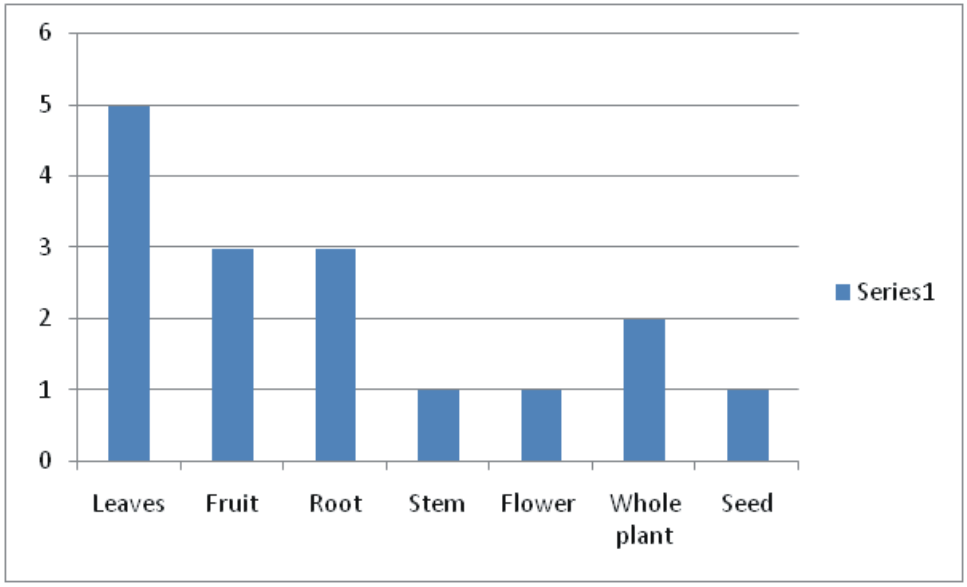
III. RESULTS AND OBSERVATIONS

The ethanobotanical investigation revealed the use of –14 plant species belonging to13 families for the purification of blood or as purifier.

Table 1: A list of medicinal plants along with their part used for the purification of blood as purifier.

Sr no.	Scientific name	Family	Local name	Parts used	Folk use
1.	*Aloe vera*(L.) Burm.f.	Liliaceae	Kwarya	Leaves	Dried powder of leaves is used as blood purifier.
2.	*Aristolochia indica* Linn.	Aristolochiaceae	Sunanda	Whole plant material	Whole plant material extract is beneficial in case of blood purification.
3.	*Berberis aristata* DC.	Berberidaceae	Kashmalaya	Root	The powdered root extract is used for purification of blood.
4.	*Cassia fistula* Linn.	Fabaceae	Aliah	Seed	Powder of seeds are used as blood purifier.
5.	*Dalbergia sissoo* Roxb.	Fabaceae	Tahli	Leaves	Decoction of leaves and powder f dried leaves is used in case of blood purification.
6.	*Fumaria parviflora* Linn.	Papaveraceae	Pit papra	Whole plant material	Dried and powdered whole plant material is taken with water twice in a day for two weeks which helps in purification of blood.

7.	*Justicia adhatoda* Linn.	Acanthaceae	Basuti	Leaves, roots and flowers	The extract of leaves, roots and flowers is used for the purification of blood or as blood purifier
8.	*Mallotus Philip pensis* Murl.Arg.	Euphorbiaceae	Kamala	Fruit	Half spoon of powdered fruit with "ajwain" and black paper is taken for half of month.
9.	*Momordica charantia* Linn.	Cucubitaceae	Karela	Fruit	Fruit juice which is taken daily in case of blood purification.
10.	*Taraxacum officinale* Wigg.	Asteraceae	Dulal	Roots	Dried powder of roots used as blood purifier.
11.	*Thevetia neriifolia* Juss.	Apocynaceae	Peelikaner	Leaves	One tea spoon of powdered leaves with honey is as blood purifier.
12.	*Tinospora cordifolia*(Willd.) Miers.	Menispermaceae	Giloe, Guljya	Stem	Dried stem powder is used in case of purification of blood and as blood purifier.
13.	*Syzyium cumini (L.) Skeels.*	Myrtaceae	Jamun	Fruit	Fruit juice is used for purification of blood
14.	*Woodfordia fruticosa* Kurtz.	Lythraceae	Dhataki, Dhavi	Leaves	Decoction of fresh leaves is used for the purification of blood.



Graph 1. Quantity of different plant parts used for blood purification.

IV. DISCUSSION

This table and graph shows that the leaves of maximum plant species (with 5 plant species) are used as blood purifier which are followed by fruit and root (with 3 plant species) and other plant part with minimum quantities which are used as blood purification.


Aloe vera (L.) Burm. F.
Family - Xanthorrhoeaceae/Liliaceae
Genus- Aloe vera
Local name - Kawarya, Kurian
Aristolochia indica L.
Family - Aristolochiaceae
Genus- Aristolochia
Local name - Sunanda
Berberis aristata DC.
Family- Berberidaceae
Genus -Berberis
Local name- Kasmalya, Daaru haldi
Dalbergia sisoo Roxb.
Family-Fabaceae
Genus- Dalbergia
Local name-Talhi
Fumaria parviflora Lam.
Family- Papaveraceae
Genus- Fumaria
Local name- Pitpapda
Mallotus phillippensis (Lam.) Muell. Arg.
Family- Euphorbiaceae
Genus- Mallotus
Local name- Kaambal


Momordica charantia L.
Family- Cucurbitaceae
Genus- Momordica
Local name- Karela
Syzygium cumini (L.) Skeel.
Family- Myrtaceae
Genus- Syzygium
Local name- Jamanya,Jaman
Taraxacum officinale Webber ex.Wigg
Family- Asteraceae
Genus- Taraxacum
Local name- Dulal, Doodhli
Thevetia nerifolia Juss.
Family- Meliaceae
Genus- Thevetia
Local name- Peeli kaner
Tinospora cordifolia (Thunb.) Miers
Family- Menispermaceae
Genus-Tinospora
Local name- Giloye, Guliye
Woodfordia fruticosa Kurtz.
Family-Lythraceae
Genus- Woodfordia
Local name-Dhai, Dhavi,Dhataki

V. CONCLUSIONS

The use of herbal remedies among the rural people in Hamirpur district of Himachal Pradesh show their great interest in the primary health care. The scientific validation and knowledge of these localphyto-remedies may help in discovery of new drugs from the local plant species which form the basis of pharmaceutical industry. The information on traditional uses of plants may provide a great knowledge for discovering new drugs which helps in promoting awareness among the local people to use them as primary health care. Therefore the documentation and recording of traditional knowledge associated is necessary step for the preservation of traditional knowledge about the use of local plant wealth and conservation of threatened plant species of study area.

ACKNOWLEDGEMENT

Authors are thankful to Principal, Dr. Rajneesh Gautam, Gautam Group of Colleges, Hamirpur and local people of study area for his valuable guidance and help at each stage of their work.

REFERENCES

[1]. Arora, R.K. (1987), Ethnobotany and its role in domestication and conservation of native plant genetic resources. In: Jain S.K. (ed.): A Manual of Ethnobotany Scientific Publishers, Jodhpur PP 94-102.

[2]. Brij Lal, Vats S.K., Singh R.D. and Gupta A.K. (1996), Plants used as ethnomedicine and supplement fund by the Gaddis of Himachal Pradesh, India, in : Jain S.K. (ed) Ethnobiology in Human Welfare, New Delhi.

[3]. Brij Lal & K.N. Singh (2008), Indigenous herbal remedies used to cure skin disorders by the natives of Lahaul-Spiti in Himachal Pradesh, *Indian Journal of Traditional Knowledge*. Vol. **7**(2) : 237-241.

[4]. Chauhan, N.S. (1999), Medicinal and aromatic plants of Himachal Pradesh, (Indus Publishing Company, New Delhi).

[5]. Harshberger, J.W. (1896),The purpose of ethnobotany. *Bot. Gaz.*, **21**: 146-158.

[6]. Jain, S.K. (1964), The role of a botanist in folklore research. Folklore April, 1964.

[7]. Jain, S.K. (1965c), On the prospectus of some new or less known medicinal plant resources. *Indian Medical Journal* December: 67-79.

[8]. Jain, S.K. (1976b), Ethnobotany its scope and study. *Indian Mus. Bull*, **2**:39-43.

[9]. Jain, S.K. (1986), Ethnobotany. Interdisciplinary Science Reviews **11**(3): 285-292.

[10]. Jain, S.K. (1987c), Ethnobotany-its scope and various sub disciplines. In S:K. Jain (ed.) *A manual of Ethnobotany. Scientific Publishers, Jodhpur*.

[11]. Kala, C.P. (2005), Ethnomedicional botany of the Aptani in the Eastern Himalaya Region of India J*ournal of Ethnobiology and Ethnomedicine*2005, **10**(11).

[12]. Kapur, S.K. (1996), Traditionally important medicinal plants of Bhaderwah Hills Jammu, Province - II, 62-69. In Maheshwari, UC.(ed.); Ethnobotany in South Asia. *J. Econ, Taxon Bot. Additional series*, **12**. Scientific Publishers, Jodhpur (India).

[13]. Kaur, Ismeet, Sharma Shalini and Lal Sukhbir (2011), Ethnobotanical survey of Medicinal plants used for Different diseases in Mandi district, Himachal Pradesh, *International Journal of research of Pharmacy and Chemistry, IJRPC.*

[14]. Kharwal, Anjna D. and Rawat Dhiraj S. (2012), Ethnobotanical notes on indigenous herbal shampoos of Shivalik hills, Himachal Pradesh,(India). *Plant Science Feed.* **2**(6): 88-90.

[15]. Kumar ,Nitesh and Choyal ,Rajaram (2012) Hamirpur district of himachal Pradesh for the treatment of Arthritis rheumatism and other inflammatory disorder Indian. *Journal Plant Sci* Vol. PP. 1-5.

[16]. Manilal, K.S. (1989), Linkages of ethnobotany with other sciences and "disciplines. *Ethnobotany* **1** : 15-24.

[17]. Negi, P.S. and Subramani, S.P. (2002), Ethnobotanical study in village Chhitkul of Sangla Valley, Kinnaur district, Himachal Pradesh, *J. non-timber forest prod.* **9**(3-4): 113-120.

[18]. Prakash Vipin and Aggrawal Ashok (2010), Traditional uses of ethnomedicinal plants of lower foot-hills, Himachal Pradesh.

[19]. Schultes, R.E. (1960),Tapping our heritage of ethnobotanical lore. *Econ. Bol.* **14**:257-262.

[20]. Schultes, RE. (1962), The role of the Ethnobotanistint he search of new medicinal plants. *Lioydia*, **25**(4):257.

[21]. Schultes, R.E. (1986), The reason for ethnobotanical conservation. *Bull. Bot. Sur. India*.**28** (1-4): 203-224.

[22]. Sen Sharma, P. (1995), Plants in Indian Puranas_ An Ethnobotanical Investigation. Nayaprakash, Calcutta.

[23]. Sharma B, Salunke R, Balomajumder C, Daniel S, Roy P. (2010),Anti-diabetic potential of alkaloid rich fraction from *Capparis decidua* on diabetic mice. *J Ethnopharmacol* 2010; **127**: 457-462.

[24]. Sharma, O.P. (1976), Some useful wild plants of Himachal Pradesh, College of Biosciences, HPU, Shimla.

[25]. Sharma, P.K. and Chauhan N.S. (2000), Ethnobotanical studies of Gaddi-a tribal community of Kangra district, Himachal Pradesh, in : Kohli, R.K., Singh H.P, Vij S.P, Dhar K.K., Batish D.R. and Dhiman B.K. (eds) Man and Forest, Punjab University Chandigarh, 301-302.

[26]. Sharma, P.K., Chauhan, N.S. & Brij Lai (2003), Commercially important medicinal and aromatic plants of Parvati Valley, Himachal Pradesh, *J Econ Tax Bot*,**27**(4)937-942.

[27]. Singh, K.K. and Kumar, K. (2000), Ethnobotanical wisdom of Gadditribe in western Himalaya (Bishen Singh, Mahendra Pal Singh, Dehra Dun).

[28]. Singh, S.K. (1999). Ethnobotanical study of useful plants of Kullu district in Northwestern Himalaya, India, *J. Econ Tax Bol*, **23**(1) (1999), 185-198.

[29]. Thakur, N. Savitri and Bhalla, T.C. (2004), Characterization of some traditional fermented foods and beverages of Himachal Pradesh, *Indian J Traditional Knowledge*, **3**(3): 325.

[30]. Thakur, S. (2001), Study on the ethnobotany of Rewalsar (Mandi District, Himachal Pradesh, India) Ph.D. thesis, Himachal Pradesh University, Shimla.

[31]. Uniyal, M.R. and Chauhan, N.S. (1982),Commercially important medicinal plants of Kullu, Forest Division of Himachal Pradesh, *Nagarjuna*, **15**(1) 4.

[32]. Warman, C.K. (2004), Trees of India, (Medicinal commercial, Religious and ornamental). CBS Publishers and Distributors Darya Ganj, New Delhi, India.