

IMPORTANT MEDICINAL AND AROMATIC PLANTS OF SHOPIAN DISTRICT OF JAMMU AND KASHMIR, WITH EMPHASIS ON THEIR ETHNOBOTANICAL IMPORTANCE

Zakir Hussain khanday¹, Sumer Singh²

¹Research Scholar Department of Botany, Singhania University, Rajasthan(India)

²Associate Professor Department of Botany, Singhania University, Rajasthan(India)

ABSTRACT

The present study was undertaken to collect knowledge about medicinal and aromatic plants of Shopain district (J&K), from the tribal and local people. The information was gathered through interactions and questioners with these people. The people of this district have always used the medicinal & aromatic plants for caring various diseases, and are still dependent on aromatic plants for various other purposes. The present study provides information of about 36 plant species of 22 families which are used as aromatic plants and in treating certain types of diseases.

Key words: Diseases, J&K, Medicinal Plants, Tribal

INTRODUCTION

The earliest medicines used by a man were obtained from plants. Evidence of this are the thousands years old traditions and records of popular healing. In present day world, around 120 pure compounds extracted from some 100 species of higher plants are used in medicine. Two thirds of these preparations. Until the pharmaceutical industry is able to produce active substances more are temperate species. Although a wide range of tropical plants has been used in traditional health care in developing countries. The biochemical potential of these plants has largely been overlooked in western pharmacies. The modern pharmaceutical industry makes use of medicinal plants especially in the dried form as crude drugs and as raw materials in the manufacture of medicinal economically on a commercial scale, botanical drugs will remain as important as ever.

Rigveda is the earliest celebrated treatise mentioning the use of some medicinal plants. The work of Agnivesha resulted in the compilation of Charaka- Samhita by Charaka. Sushruta a brilliant discipline of Dhanvantri was known for his knowledge of surgery and medicine. Some Portuguese and Dutch scientists in sixteen century came to India for study of medicinal plants. Van Rheed's Hortus Malabaricus is the monumental work in 12

volumes on the study of Indian plants published between [1]. William Roxburgh, the father of Indian Botany worked a lot on Indian plants and his work was published by Dr. Carey in [2]. Heber Drury of Madras Army (1858-69) published his monumental work on useful plants of India [3]. Dymocks Vegetable MateriaMedica of India appeared in 1883 and his comprehensive work Pharmacographice Indica [4] was prepared in collaboration with Warden and Hooper. Sir George Watt produced a Voluminous Dictionary of Economic plant of India in six volumes [5]. These are outstanding works countries wealth of information on economic plants.

In [6] voluminous work on Indian Medicinal Plants by Kirtikar and Basu was published. Indian MateriaMedica by K.M Nadkarni appeared in [7]. Sir R.N . Chopra produced a treatise on Indigenous Drugs of India in [8]. Dr. Chopra along with R.L Bhadwer and S. Ghosh prepared a monograph on Poisonous plants of India in [9]. Council of Scientific and Industrial Research, New Delhi came out with a consolidated account and updated information on economic plants in Wealth of India[10] Many regional flora and accounts on medicinal plants appeared in India during the last few decades.

II.MATERIAL AND METHODS

Shopian district a part of PirPanchal range of the Kashmir Himalayas is located between 33^o.71N latitude and 74^o. 83 E longitude with a total area of 612.9 Sq. Kms. towards the south west of Jammu and Kashmir. The present survey involves explorations and critical study of plant species for 2- years. Frequent field trips were made to cover all the areas of the district from 2016-17. Methods used to document the first hand information was gathered by interacting with rural & tribal communities. Emphases were given to local traditional healers to tap the knowledge of medicinal plants by questionnaire. Medicinal information and uses of plant species were collected through informal interviews. A dozen of group discussions were also conducted during the investigation period (Table 1). The useful information was recorded in the field book. Data was collected as per the appropriate Methodology (Schultes [11], Jain [12]) . To get the correct information and uses of these medicinal plants, the various published scientific literature were conducted Sharma et a[13], Kirtikar and Basu [14], Chopra et al [15], Jain [16].

Table 1. No of Informants from Shopian Jammu & Kashmir who share their knowledge of medicinal plants during the survey.

	Count	% of total
Occupation		
Traditional healers	10	20
Farmers (elders)	60	70
Age (years)		
40-50	20	30

50-60	40	40
60 +	15	20
Gender		
Male	80	93
Female	3	1
Education		
University	5	3
Sec School	30	33

Table 2. List of Medicinal and Aromatic plants of Shopain district of (J&K) & their Uses.

S.No	Botanical Name	Family	Habit	Part used	Used for
1.	<i>Aesculus indica</i> Hook.	Hippocastanaceae	Tree	Fruit	Cracked Heal, Dandruff, Hairfall
2.	<i>Allium sativum</i> L.	Lilaceae	Tree	Cloves	Influenza, Rhematism, Alopiareata
3.	<i>Anagalis arvensis</i> L.	Primulaceae	Herb	Aerial part	Pimples, Ring worm
4.	<i>Artium lappa</i> L.	Asteraceae	Herb	Leaves	Boil, Blood impurity
5.	<i>Brassica campestris</i> L.	Brassicaceae	Herb	Seed	Frost bite, dandruff, hair fall
6.	<i>Borago officinals</i> L.	Boraginaceae	Herb	Leaves, seed	Boil, Burns
7.	<i>Colchium luteum</i> Baker.	Lilaceae	Herb	corn	Dandruff, Joint Pain
8.	<i>Cuscutta reflexa</i> Roxb.	Cuscutaceae	Parasitic	Whole plant	Skin infection, dandruff, Warts
9.	<i>Cydonia oblongata</i> Mill.	Rosaceae	Tree	Fruit, seed	Chopped skin, Asthama
10.	<i>Datura Stramonium</i> L.	Solanaceae	Herb	Seed, leaves	Asthama, Boil, Dental caries
11.	<i>Ficus Carica</i> L.	Moraceae	Tree	Leaves, fruit	Hyper critic dermatitis,
12.	<i>Fritillaria imperalis</i> L.	Lilaceae	Herb	Bulb	Fever
13.	<i>Iris nepalensis</i>	Iridaceae	Herb	Rhizome	Boil, pimples
14.	<i>Juglans regia</i> L.	Juglandaceae	Tree	Drupe, Root	Grey hair, frost bite, Rheumatism

15	<i>Lycopuseuropacus</i> L.	Lamiaceae	Herb	Aerial part	Skin allergy
16	<i>Marrubium vulgare</i> L.	Lamiceaeae	Herb	Seed, leaves	Skin infection, Rheumatism
17	<i>Ocimum canum</i> Sims.	Lamiaceae	Herb	Seed, Aerial part	Micturition, skin problems, constipation
18	<i>Origanum vulgare</i> L.	Lamiaceae	Herb	Aerial part	Tonsillitis, Tooth ache
19	<i>Pinus wallichiana</i> A.B.Jackson.	Pinaceae	Tree	Resin	Cracked Heel
20	<i>Plantago major</i> L.	Plantaginaceae	Herb	Seed.Root, leaves	Gastric ulcers, Toothache
21	<i>Podophyllum hex andrum</i> Royle.	Podophyllaceae	Herb	Rhizome	Boil, Diahorrea, Stomach Trouble
22	<i>Polygonum hydropiper</i> L.	Polgonaceae	Herb	Leaves	Toothache, Uterine disorders
23	<i>Prunella vulgaris</i> L.	Lamiaceae	Herb	Flower	Dizziness, High fever, Rheumatism
24	<i>Ranunculus scleratus</i> L.	Rananculaceae	Herb	Root	Hyper critic dermatitis
25	<i>Rheum emodi</i>	Polygonaceae	Herb	Rhizome	Boil, wound
26	<i>Rhododendron campanulatum</i> D. Don	Ericaceae	Herb	Leaves	Cold, Toothache
27	<i>Saussurea sacra</i> Edgew.	Asteraceae	Herb	Whole plant	Pimples, Acnes, Boil
28	<i>Senecio jacquemontainus</i>	Asteraceae	Herb	Tube	Stomach trouble, Boil
29	<i>Senecio graciflorus</i> D.C	Asteraceae	Herb	Leaves	Skin eruption, Acidity
30	<i>Solanum nigrum</i> L.	Solanaceae	Herb	Leaves, fruit	Skin eruption, cough
31	<i>Sonchus asper</i> (L) Hill.	Asteraceae	Herb	Aerial part	Fever, Burn
32	<i>Thymus serphyllum</i> L.	Lamiaceae	Herb	Flower, Whole plant	Asthama, Skin rashes
33	<i>Urtica dioica</i>	Urticaceae	Herb	Aerial part, leaves	Skin infection, dandruff

34	<i>Viciafaba L.</i>	Fabaceae	Herb	Whole plant	Skin abrasions
35	<i>Vitis vinifera L.</i>	Vitaceae	Climber	Leaves, fruit	Boil, diarrhoea, Ear ache
36	<i>Xanthium strumarium L.</i>	Asteraceae	Herb	Leaves, Root	Herpis iris, Abscess, Boil

III.RESULTS AND DISCUSSION

The people of Jammu and Kashmir have a tremendous passion for medicinal plants and use them for a wide range of health related applications from a common cold to memory improvement and treatment of poisonous snake bites to a cure for muscular dystrophy and the enhancement of body’s general immunity. In the oral traditions local communities in every ecosystem from the Himalayas down to the plains have discovered the medicinal uses of thousands of plants found locally in their ecosystem. The personal observation is very important to know the knowledge of tribal and rural people about plants around them. The assistance of old people of tribal and rural areas is taken in collection of information about part (s) of the plant of medicinal value, mode of administration, dosage etc.

The tribal and rural people are using plant and plant products for the purpose of medicine, food, folklores, tales and taboos etc. In the present survey 36 plant species belonging to 22 families are being used as Alternative medicine for the treatment of various diseases. These medicinal plants have been described and compiled in Table (2). Among the families Asteraceae, Lamiaceae and Lilaceae dominate the area. (Table 3).

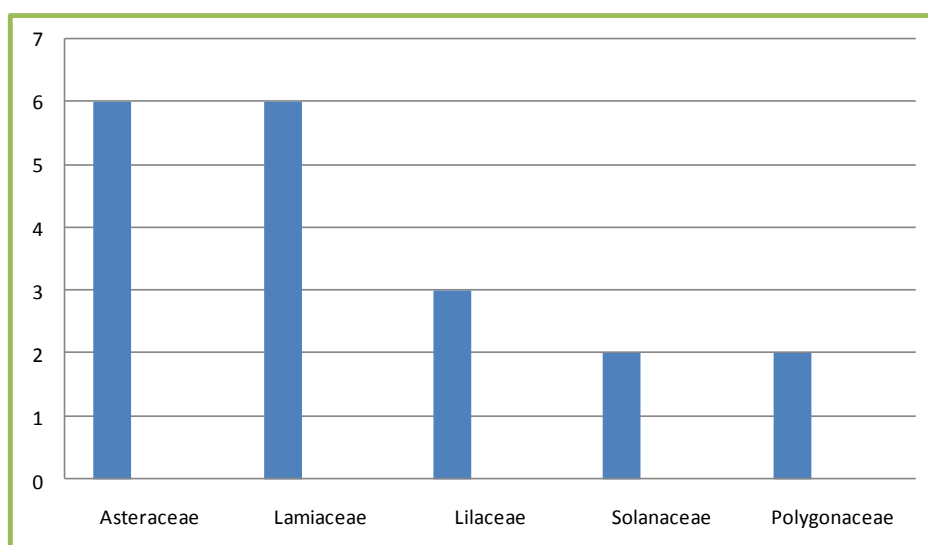


Table 3. Five dominant families of Shopian district.

There is no systematic training for transmitting knowledge of these curative plant remedies from one generation to the next. The people of modern generations are picking up from their ancestors based on observation only. Before putting the afore said medicinal plants to practice use a careful pharmacological trail on experimental analysis is necessary. Further the survey revealed that the species given in table (2) are either rare or on the verge of extinction in the area of present investigation and hence deserve special and concerned efforts for their conservation so that their elimination is prevented.

IV.ACKNOWLEDGMENT

We express our sincere love to the rural and tribal people of Shopian district and especially the traditional healers to share their knowledge. We are also thankful to all the researches that helped us in sharing their valuable information about medicinal plants during the survey work.

REFERENCES

- [1.] Van Rheed. Hortus Malabaricus. 1678-1703.
- [2.] Roxburg, W. Flora Indica, Vols I & II, Eds, 1820-1824. Carey & Wallich Serampore.
- [3.] Drury, H. Useful plants of India, 1973. William Allen and Co., London.
- [4.] Dymock, Hooper, England.W.Pharmacographica India- A History of the Principal Drugs of vegetable origin in British India, 1891. Warden and
- [5.] Watt, G. A Dictionary of Economic Products of India, Vols. 1- IV1889-1893. Govt. Press, Calcutta.
- [6.] Kirtikar, K.R. and Basu, B.D.Indian Medicinal Plants, 1918. Allahabad.
- [7.] Nadkarni, K.M. Indian MateriaMedica, Vol. 1 and II, 1926. Popular Prakashan Ltd. Mumbai.
- [8.] Chopra, R.N. Indigenous drugs of India. Their medical and economic aspects, 1933.The Art Press Calcutta.
- [9.] Chopra, R.N.,Badwar, R.L and S.Ghosh , Poisonous plants of India.Vol. 1, 1949. Manager of Publications.Govt of India Press, Calcutta.
- [10.] Anonymous. Wealth of India (Raw Materials) Publication and Information Directorate, 1995-1992. CSIR, New Delhi.
- [11.] Schultes, R.E. The role of ethnobotanists in the search of new medicinal plants.Lloydia,1962. 24: 257-265.
- [12.] Jain, S.K.. A Manual of Ethnobotany (2ndedu), 1995. Scientific Publishers, Jodhpur.
- [13.] Sharma, P.C., K.S. Morthy., A.V.Bhat., D. Narayanappa and K. Prem.Medicinal-lores of Orissa -1, Skin diseases. Bull Medico-ethnobot. Res., 1985. 67: 93-101.
- [14.] Kirtikar,K.R.and Basu, B.D. Indian Medicinal Plants.Vol. 4, 1991. Lalit Mohan Basu Publications, Allahabad, India.
- [15.] Chopra, R.N., S.LNayar and I.C. Chopra. Glossary of Indian Medicinal Plants. CSIR, New Delhi, 1996. ISBN: 8172361262.
- [16.] Jain, S.K.. Dictionary of Indian Folk Medicine and Ethnobotany, 1991.Deep Publications, New Delhi..