

TAXA OF FAMILY FABACEAE: A POTENTIAL OF LOCAL MEDICINAL VALUES IN VINDHYA REGION UTTAR PRADESH, INDIA**RICHA SINGH CHAUDHARY***

*Duthie Herbarium, Ethno-botany Cell, Department of Botany, University of Allahabad, Allahabad - 211002, Uttar Pradesh, India.

Corresponding author moon_doctor@rediffmail.com

ABSTRACT

The Vindhya region of Uttar Pradesh includes Mirzapur and Sonbhadra districts, which is mostly covered with forest. During exploration of this region we collected 51 species of 35 taxa is belonging to the family Fabaceae. Among these species an account of 23 ethno-medicinal information which is traditional used by tribes like Gond, Kols, Mushar, Baiga & Nutts from this region and 19 species are used as medicines in the welfare of the people. The ethno-medicinal uses, disease, localities and field numbers has been provided in this paper.

KEY WORDS

Ethno-medicinal values, Vindhya region, Fabaceae, India.

INTRODUCTION

The Vindhya region of Uttar Pradesh, lies between 82° E & 83° 23' E longitude and 22° 45' N & 24° 34' N latitude, includes Mirzapur and Sonbhadra districts (showing in Map). Southern plateau covers these districts i.e. Mirzapur and Sonbhadra. The forest of Vindhya region is tropical dry deciduous type. The maximum Vindhya region covered by Laterite soil it consist of iron-bricks, in local language it is called 'Murram'. Mirzapur and some part of district of this region have Red-soil. The Vindhya region where the Deccan Plateau and the small foothills are found, the rainfall varies from 1200–3720 mm, July–August. The area having lesser rainfall have developed tropical thorn forests, ultimately leading to a practical absence of vegetation in the arid and deserted tracts, such as in Vindhyan region. The

greater portion of this rocky area is represented by the flat upper Vindhyan plateau and is delimited by the Kaimur range in the south, which runs almost parallel to the Son Valley. Beyond the Son Valley in the south i.e., after Chopan there is a remarkable change of the topography. This is represented by parallel ranges of hill (100–400 m) running east to west having dense forest and vegetation of monsoon type consisting of mixed deciduous and evergreen trees like *Butea monosperma* (Lamk.) Taub., *Dalbergia sissoo* Roxb., *Erythrina variegata* L. etc. The other common species are *Alysicarpus monilifer* DC., *A. vaginalis* DC., *Canavalia ensiformis* DC.; *C. virosa* (Roxb.) Wt. & Arn.; *Crotalaria medicaginea* var. *luxurians* (Benth.) Baker; *C. medicaginea* Lamk.; *Desmodium gangeticum* DC.; *D. triflorum* (L.) DC.; *Goniogyna hirta* (Willd.) Ali; apart from these Koraon, Khiri and

Candraprabha are small forest tracts of this region.

The family Fabaceae is the second largest in India among the dicotyledonous. The family is represented by about 1152 species under 179 genera in India¹. The region has been explored earlier by Bhattacharyya (1963, 1964)^{2, 3}; Khanna *et al.* (1996)⁴; Singh & Maheshwari (1986)⁵; Singh & Prakash (1994, 1998)^{6, 7}; Singh *et al.* (2002)⁸ and Jain (1991)⁹.

METHODOLOGY

The exploration studies were conducted based on the information gathered from tribal pockets and rural villages, who depend mostly on the forest for their needs and have voice knowledge over

herbal remedies. Plants along with the ethno-botanical information were identified and preserved according to standard method of Jain & Rao (1977)¹⁰. All the plant specimens are kept in the Duthie Herbarium, Botany department, University of Allahabad. The collected 51 species of family Fabaceae, there are 42 information of the plant are given with the part used of the plants, ethno-medicinal uses to cure disease and in abbreviated form along with their localities of the collection and field numbers provided in the table.

ABBREVIATIONS

Wp: Whole plant; Rt: Root; Bk: Bark; Sh: Shoot; Tw: Twig; Lf: Leaf; Fl: Flower; Sd: Seed.

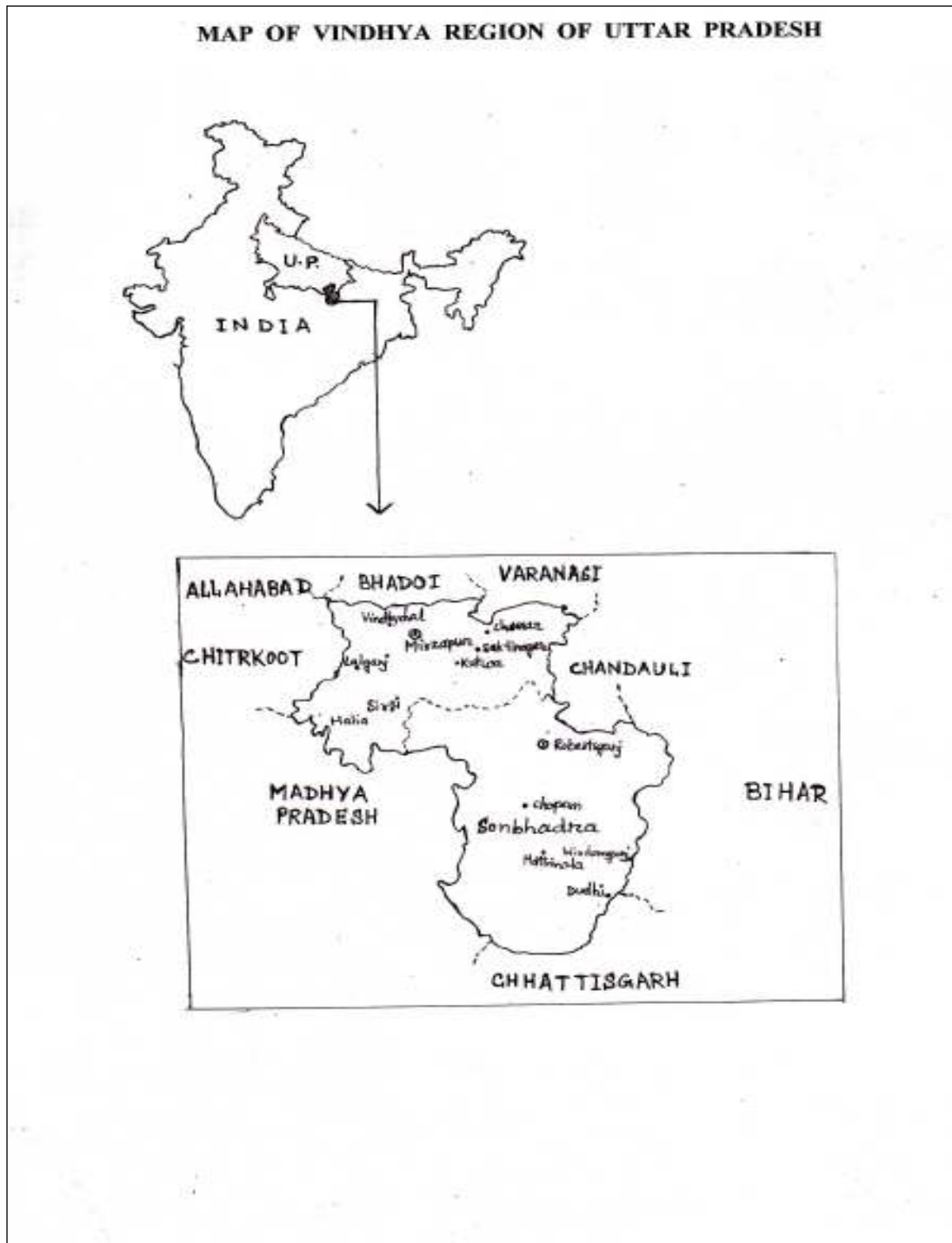


TABLE
Ethno-Medicinal Information of Plants of Family Fabaceae from Vindhya Region U.P., India.

S. No.	Name of Species	Part Used	Name of Diseases cure by Ethno-medicinally	Name of Locality and Plants field number
1.	<i>Abrus precatorius</i> L.	Wp	Epilepsy	Patharia- 16097
		Rt	Leucorrhoea, Snake bite, Cough	Anpara-18167
		Lf	Rheumatism	Windom garden-20296
		Sd	Sciatica, Contraceptive	
2.	<i>Alysicarpus bupleurifolius</i> (L.) DC.,	Wp	Fever	Chunar-20394
3.	<i>A..monilifer</i> (L.) DC.	Wp	Antidote to Snake bite	Robertsganj-20051
4.	<i>A .vaginalis</i> (L.) DC	Wp	Bone fracture, Joint pain.	Lalganj-20119
5.	<i>Atylosia scarabeoides</i> (L.) Benth.	Rt	Expectorant, Antifert.	
		Wp	Dysentery & Gastric	Patharia-17063 Chopan-20244
6.	<i>Butea monosperma</i> (Lam.) Taub.	Lf+Bk	Blood dysentery	Lalganj-16052
		Fl	Eczema, Skin diseases.	Makra-18067
		Sd	Leucoderma.	Sirsi forest-20249
7.	<i>B. parviflora</i> Roxb.	Fl	Skin disease	Makra-18176
8.	<i>Cajaus cajan</i> (L.) Huth.	Rt+Lf	Dysentery.	Chunar-16024 Salkhan-18158
		Lf	Mouth ulcer.	Rajgarh-20150
		Rt	Dysentery.	Jigna-17146
9.	<i>Clitoria ternatea</i> L.	Lf	Vermicide.	Windom garden-20248
		Sd	Rheumatism	
10.	<i>Crotalaria juncea</i> L.			Sirsi-20393

S. No.	Name of Species	Part Used	Name of Diseases cure by Ethno-medicinally	Name of Locality and Plants field number
11.	<i>Dalbergia sissoo</i> Roxb. ex DC.	Lf	Jaundice, Liver disorder.	Jigna-17145
		Fl	Cough & cold.	Saktinager-18105 Jamalpur-20148
12.	<i>Desmodium gangeticum</i> (L.) DC	Rt	Typhoid fever, Cerebrospinal meningitis, Snake bite.	Chunar-20117
13.	<i>D. triflorum</i> (L.) DC.	Lf	Weakness due to diarrhea & Dysentery.	Dudhi-18068
14.	<i>Erythrina variegata</i> L., (Handua)	Bk	Common cold, Rheumatism & Skin disease	Jigna-17067
15.	<i>Indigofera cordifolia</i> Heyne ex Roth.	Lf	Swell mouth.	Windomganj-20392
16.	<i>I. linifolia</i> (L.f.) Retz.	Rt	Stomach disorder.	Dudhi-18210
		Ft	Ache & Rheumatism.	Thaura-20246
17.	<i>I. linnaei</i> Ali	Wp	Diarrhea	Windom garden-20132
18.	<i>I. tinctoria</i> L.	Rt	Fever, Wounds, Whooping	Halia-20390
		Lf	Eye disorder, Fracture of fingers, hair growth, Nervous disorder.	
19.	<i>I. trita</i> L. f.	Tw	Strength of gums & teeth.	Anpara-20389
20.	<i>Lablab purpureus</i> (L.) Sw., (Sem)	Rt	Antifert., Vermicide.	Village area- 20387
		Lf	Cough, Ringworm.	

S. No.	Name of Species	Part Used	Name of Diseases cure by Ethno-medicinally	Name of Locality and Plants field number
21.	<i>L. sativus</i> L.	Lf	Stomach ulcer, Asthma.	Lalganj-17152 Makra-18211 Rajgarh-20063
22.	<i>Lens esculanta</i> Moench.,	Sd	Small pox, Edible pulses.	Vindhyanchal-20137
23.	<i>Medicago polymorpha</i> L.	Lf	Skin plagues, Dysentery.	Robertsganj-18215 Windom garden-20114
24.	<i>M. indica</i> (L.) Ali	Lf	Constipation & indigestion.	Robertsganj-18212 Sirsi fall-20061
25.	<i>Millettea ovalifolia</i> Kurz	Lf	Fever, Spleen disorder.	Sirsi-20116
26.	<i>Mucuna pruriens</i> (L.) DC.	Lf	Rabies, Dermatitis.	Patharia-17063 Robertsganj-18213
27.	<i>Ougeinia oogeinsis</i> (Rox.) Hochr.	Bk	In still birth of child.	Hathinala-18009
28.	<i>Pisum sativum</i> L.	Sd	Antifert., Diabeties, Ed. veg.	Basedha-20250
29.	<i>Pongamia pinnata</i> (L.) Pierre	Rt	Leprosy.	Haldighat-16016
		Bk	Malaria fever, Piles.	Ranikoot-18214
30.	<i>Pterocarpus marsupium</i> Roxb.	Sd	Cough, Leucoderma.	Vindhyanchal-20269
		Wp	Diabeties	Basedha- 17040
31.	<i>Puraria tuberosa</i> (Rox. ex Willd.) DC.	Rt	Leucorrhoea, gastritis, body pain.	Patharia-16017

32.	<i>Rhynchosia minima</i> DC.	Lf	Abortif., Asthma, Piles.	Kutwa-20122
33.	<i>Sesbania bispinosa</i> (Jacq.) Wt .	Sd	Edible.	Chopan-20386
		Wp	Urine complains.	Patharia-17015
34.	<i>S . sesban</i> (L.) Merr.	Fl	Impotency.	Windom fall- 20133
35.	<i>Smithea coferta</i> Sm.	Lf	Antifert , Edible veg.	Hathinala-20385
36.	<i>Tephrosia purpurea</i> (L.) Pers.	Rt	Liver disorder	Salkhan-17169
		Lf	Itching	
37.	<i>T. villosa</i> (L.) Pers.	Wp	Cough & cold	Lalganj-20384
		Rt	Pain in scrotum	
38.	<i>Teramnus labialis</i> (L.f.) Spreng.	Rt	Scorpion bite.	Dudhi-18080
		Lf	Body pain	Chopan-20245
		Sh	Edible vegetable	Lalganj-20115
39.	<i>Trigonella foenum- graecum</i> L .	Sd	Carmine, gas trouble, Edema, Piles, Rheumatism, Sores, tonic.	
		Lf	Stomach disorder	Basedha-1715 Salkhan-18216 Windomgarden- 20134
40.	<i>V. sativa</i> L .			
41.	<i>Uraria picta</i> (Jacq.) Desv. ex DC.	Rt	Body ache.	Basedha-16003
		Lf	Wounds.	
		Wp	Cramps, Dysentery, Wounds.	Sirsi-20382
42.	<i>Zornia gibbosa</i> Span			
		Rt	Sedative, Spermat.	

The aim of this study is to give a consolidated account of medicinal values of the plant of family Fabaceae for wealth of the people being used for the treatment of common ailments through tribal system of medicines. The mode of administration & dosages are not essential for this kind of treatment as well as it has without any side effects.

REFERENCE

1. Sanjappa, M., *Legumes of India*. Bot. Surv. Ind. Calcutta, (1990).

ACKNOWLEDGEMENT

The authors are cordially grateful to the Head of the Botany Department, University of Allahabad, for providing facilities. I would like to wish for the local people of Vindhya region for their cooperation.

2. Bhattacharya, U.C., A Contribution to the flora of Mirzapur-I. Some new recorded for the district & for the Upper Gangetic

- Plain. *Bull. Bot. Surv. Ind.* 5 (1): 59–62, (1963).
3. Bhattacharya, U.C., A Contribution to the Flora of Mirzapur-II *Bull. Bot. Surv. Ind.* 6 (2–4): 191–210, (1964).
 4. Khanna, K. K, V. Mudgal, G. Shukla & P. K. Srivastava, Unreported Ethno - medicinal uses of plant from Mirzapur district, U. P. *J. Econ. Taxon. Bot.* Additional series Vol. 12 Scientific Publisher, Jodhpur, (1996).
 5. Singh, S.P. & S. K. Maheshwari, Ethnobotany of tribals of Mirzapur district U.P. Nat. Bot. Res. Inst. Lucknow, (1986).
 6. Singh, K.K & Anand Prakash, Indigenous Phytotherapy among Gonds tribe of U.P., India. *Ethnobotany* Deep publication, New Delhi. 6: 37– 41, (1994).
 7. Singh, K. K & Anand Prakash, Native plant remedy for Liver disorder among the tribal of U.P. India. *Ethnobotany* Deep publication, New Delhi. 10: 136 – 137, (1998).
 - Singh, A.K., A. S. Rhaguvanshi & J. S. Singh, Medico–ethnobotany of tribal of Sonaghati of Sonbhadra district, U. P. India. *Jour. Ethno - pharmc.* Elsevier, 81 (1), (2002).
 8. Jain, S.K., *Dictionary of Indian Folk medicin & Ethnobotany.* Deep Publication. New Delhi, (1991).
 9. Jain, S. K. and R. R. Rao, *A hand book of field and herbarium methods.* Today and Tomorrows Printers and Publishers, New Delhi, (1977).