



*Research Paper*

**INDIGENOUS KNOWLEDGE ON MEDICINAL PLANTS OF SIWAN  
DISTRICT OF BIHAR, INDIA**

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**Abstract**

The study was conducted on indigenous knowledge on medicinal plants of Siwan district of Bihar (India) to reveals the local biodiversity of medicinal plants for curing health disorders rather going for modern medicine. There were 30 medicinal plants observed during the study. Documentation of such knowledge is important to evaluate the traditional exerts on the local flora. It is not only important for conservation of indigenous knowledge, but also for drug development and economic gain for the rural India.

Key words: Medicinal plants, Indigenous knowledge, Therapeutic use, Local biodiversity, Siwan (Bihar, India).

**INTRODUCTION**

Human have been always relies on plants for their all needs from living to sustenance. Plants have been used as food as well as remedies for ailments. Indigenous medicinal plants are wealth of India and have been used traditionally since time immemorial. Most of medicinal plants are traditionally obtained from the wild, where they grow naturally. India has rich diversity of medicinal plants and especially north-east region are richest reservoir of medicinal wealth. There are some ethno-botanical survey study have done like as Botany of Bihar and Orrisa<sup>i</sup>, Flora of Chota Nagpur<sup>ii</sup>, Flora of West Champaran District<sup>iii</sup>, Flora of Hazaribagh District<sup>iv</sup>, Flora of Bhagalpur<sup>v</sup>, Flora of Patna<sup>vi</sup> and Flora of Bihar Analysis<sup>vii</sup> are based on Bihar but not mentioned ethnodiversity of district Siwan. Ethnomedicinal survey is always considered as right way of study of traditional herbal knowledge. The present research paper is an attempt to focus and record the ethno-medicinal plants present in Siwan.

**MATERIALS AND METHODS:**

**Defining study area:**

The survey study of medicinal plants was conducted during November 2014 to April 2015 in Siwan district, Bihar, of North-East India. The geographical location of area is confined between 25.53' to 26.23' north latitudes and 84.1' to 84.47' east longitude, distributed in 2219 sq.km<sup>viii</sup>. The district is bounded on the east by the Saran district, on the north by Gopalganj district and on the west and south by two districts of U.P. viz. Deoria and

Ballia respectively<sup>ix</sup>. The land of Siwan district is alluvial in nature and being a major part of Indo-Gangetic plain (fig.1). has balanced weather all over the year and belongs to most important geographical land area of Himalayan range<sup>x</sup>.

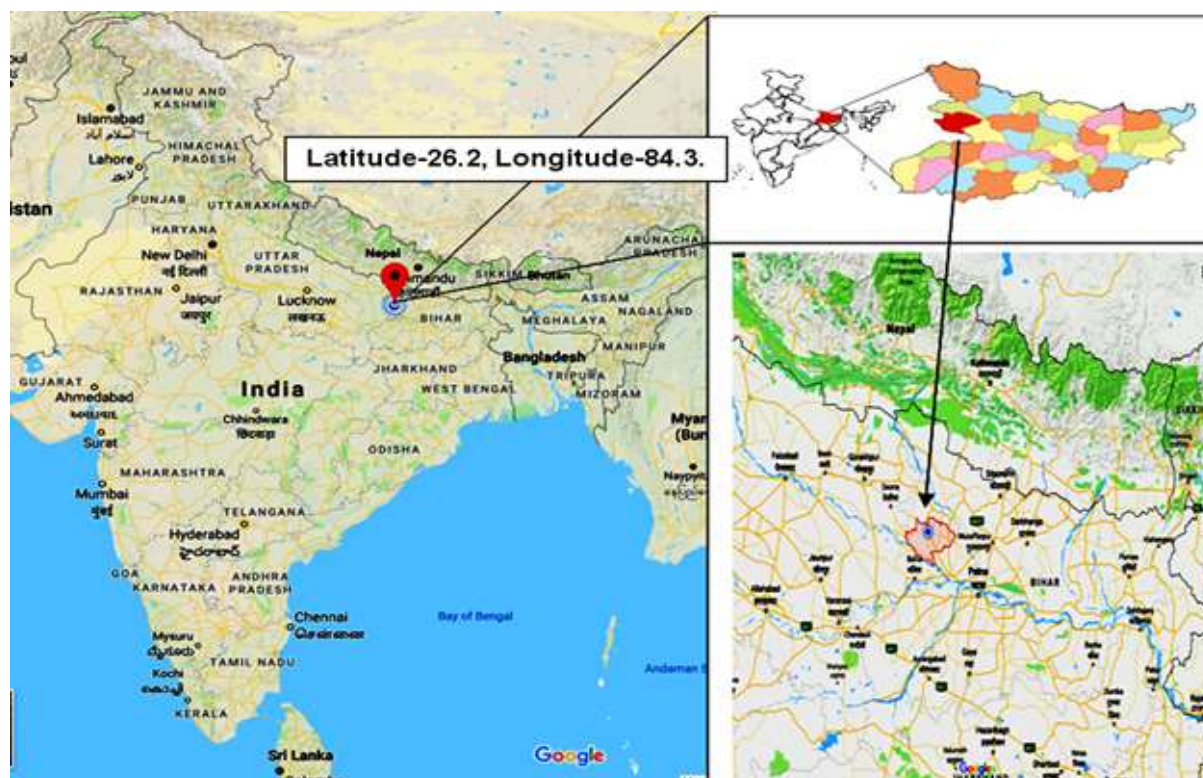


Fig.1 Geographical location of district Siwan of Bihar (India)

#### Data collection and identification of plant species:

The survey study was done for collection of medicinal plants. They were identified by common names, botanical names, family, useful parts and its uses. The ethno-medicinal uses were also recorded from local *Vaidyas*, villagers and experienced peoples.

#### RESULTS:

The survey covered ethno-medicinal plants and resulted that 30 plants species under families were collected, identified and listed. The data were presented in their common name, botanical name, family, parts used and ethno-medicinal uses.

Table-1 Ethno-medicinal plants of Siwan, Bihar, India.

S.N.	Common name	Botanical name/ Family	Parts used	Ethnomedicinal uses
1.	<i>Satavar</i>	<i>Asparagus racemosus</i> Wild./ <i>Liliaceae</i>	Whole plant	Piles, fever, wound, anti-toxic, weakness, cough, diarrhoea, headache, asthma, urinary disorder
2.	<i>Punarnava</i>	<i>Boerhaavia diffusa</i> L./ <i>Nyctaginaceae</i>	Whole plant	Kidney stone, arthritis
3.	<i>Siris</i>	<i>Albizia lebbek</i> Benth/ <i>Fabaceae</i>	Root, flowers, seeds, bark, stem, root, flowers	Scorpion bite, migraine, piles, hydrocele, toothache, wound and cuts

4.	<i>Neem</i>	<i>Azadirachta indica</i> A. juss./ <i>Maliaceae</i>	Seed oil, bark, leaves,wood, fruit	Heart problems, eczema, arthritis,white discharge, ear- toothache, malaria, anti- toxic and anti-microbial, toothwash, chicken pox, blood purification, cosmetics
5.	<i>Baans</i>	<i>Bambusa arundinacea</i> L./ <i>Poaceae</i>	Whole plant	Wound healing, tuberculosis,bronchitis, Leprosy,
6.	<i>Gritkumari</i>	<i>Aleo vera</i> Linn./ <i>Liliaceae</i>	Leaves	Cosmetics, burns, cut and wound,fracture, gastric, eye problem,Headache
7.	<i>Harsringar</i>	<i>Nyctanthes arbortritis</i> L./ <i>Nyctaginaceae</i>	Stem, flowers	Fracture, sciatica pain, nervous pain
8.	<i>Mahua</i>	<i>Madhuca latifolia</i> Gmel./ <i>Sapotaceae</i>	Flowers, whole plant	Anti-bacterial, pain killer, wine/liquor
9.	<i>Vantulsa/ bantulsi</i>	<i>Osmium basilicum</i> L. / <i>Lamiaceae</i>	Leaves, seeds, root,	Cough-cold, green tea, giddiness
10.	<i>Chameli</i>	<i>Jasminum grandiflorum</i> L./ <i>Oleaceae</i>	Leaves, root, flowers, oil	Ulcer, headache, mouth disease,impotency, skin disease, ear problem, worm, fever, perfume
11.	<i>Ghamhaar</i>	<i>Gmelina arborea</i> Roxb. / <i>Verbenaceae</i>	Root, flowers, fruit, bark, leaves, wood	Weakness, snake bite, anti-dote, cut-wound,
12.	<i>Mehandi</i>	<i>Lawsonia inermis</i> L./ <i>Lythraceae</i>	Seeds, leaves, root	Eye disorder, hair fall and coloring,burn, jaundice, headache, stomach problem
13.	<i>Papita</i>	<i>Carica papaya</i> L./ <i>Caricaceae</i>	Leaves, fruit, seeds, latex	Liver enlargement, heart problem, piles, skin problem, cosmetics
14.	<i>Amaltas</i>	<i>Cassia fistula</i> L./ <i>Fabaceae</i>	Leaves, root, seeds, wood	Ring worm, wound, fever, leprosy, cough
15.	<i>Karonda</i>	<i>Carissa carandus</i> L./ <i>Apocynaceae</i>	Root, fruits	Anemia, constipation
16.	<i>Chirchita</i>	<i>Achyranthes aspera</i> L./ <i>Amaranthaceae</i>	Root, seeds, whole plant	Snake bite, stomach pain, fever, hydrophobia, skin problem, cough
17.	<i>Gulmohar</i>	<i>Delonix regia</i> Boj./ <i>Fabaceae</i>	Leaves, flowers, wood	Skin trouble, coloring,
18.	<i>Aarandi</i>	<i>Ricinus communis</i> L./ <i>Euphorbiaceae</i>	Leaves, seeds	Seed oil in purgative, piles, joint pain, hair fall, skin disease, head

				ache
19.	<i>Arjun</i>	<i>Terminalia arjuna</i> Roxb./ <i>Combretaceae</i>	Bark, leaves	Heart and liver disease
20.	<i>Ber</i>	<i>Zizyphus jujube</i> Miller./ <i>Rhamnaceae</i>	Fruits, leaves, bark, stem	Ulcer, fever, wound, abdominal pain, asthma,
21.	<i>Aanar</i>	<i>Punica grantum</i> L. <i>Punicaceae</i>	Fruits, leaves, whole plant	heart problem, eye and ear disorder, tonic, migraine, jaundice, vomiting, piles, worms
22.	<i>Karanj</i>	<i>Pongamia pinnata</i> Mars L./ <i>Fabaceae</i>	Seeds, leaves	Leucoderma, anti- parasitic, malaria
23.	<i>Aanwla</i>	<i>Emblica officinalis</i> Gaertn./ <i>Euphorbiaceae</i>	Seeds, fruits, leaves, bark	Constipation, arthritis, fever, itching, digestive, hair fall, diabetes, eye and skin problem
24.	<i>Peepal</i>	<i>Ficus religiosa</i> L./ <i>Moraceae</i>	Whole plants, latex	Eczema, toothache, leucorrhoea, cut and wound, earache, cough and cold, jaundice, stomach pain,
25.	<i>Dudhi</i>	<i>Euphorbia hirta</i> L./ <i>Euphorbiaceae</i>	Root, leaves	Cough, dysentery, Anti -asthmatic ,milk secretion,
26.	<i>Gular</i>	<i>Ficus glomerata</i> Roxb./ <i>Moraceae</i>	Fruits, milky latex	Diabetes , asthma, piles, urinary problem
27.	<i>Shisham</i>	<i>Dalbergia sissoo</i> Roxb./ <i>Fabaceae</i>	Oil, leaves, whole plant	Skin disorder, toothache, eye ailments, burning sensation,
28.	<i>Dhatura</i>	<i>Dhatura stramonium</i> L./ <i>Solanaceae</i>	Leaves, whole plant	Eye problem, asthma, arthritis, headache, male impotency,
29.	<i>Giloy</i>	<i>Tinospora cordifolia</i> (Wild.)/ <i>Menispermaceae</i>	Whole plant	Piles, eye problem, fever, jaundice, arthritis
30.	<i>Adusa</i>	<i>Adhatoda vasica</i> Linn./ <i>Acanthaceae</i>	Leaves, root, whole plant	Asthma, urinary problem, piles, cough,

#### DISCUSSION:

In the present study there are 30 medicinally important plant species belonging to 21 families were collected from around the Siwan district and their common name, botanical name, family name, parts used and medicinal properties were presented in table-1. Fabaceae represents highest no of species (5 species), followed by *Euphorbiaceae* as 3 species and then *Moraceae*, *Liliaceae* and *Nyctaginaceae* represent 2 species and rest 16 families represent single species. These medicinal plants have been used traditionally as remedies of various diseases as Piles, fever, wound, anti-toxic, weakness, cough, diarrhoea, headache, asthma, urinary disorder, jaundice, arthritis, Skin disorder, toothache, heart and liver disease. Frequently parts used are leaves, fruits, flower, stem, root and seeds. Traditionally these medicinal plants have been frequently used in the form of juice, paste, powder, decoction, extract and raw forms<sup>xi</sup>.

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### CONCLUSION:

This study shows that knowledge and usage of herbal medicine for the treatment of various ailments among peoples is still a major part of their life and culture. This information collected from local healers indicates good knowledge of traditional medicine. The results of the present study provide evidence that medicinal plants continue to play an important role in the healthcare system of people in Siwan district of Bihar. The indigenous knowledge of a particular area have to analyzed for best utilization of natural resources. Authors also recommend that the clinical studies are required for further scientific validity of these drugs.

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