



## The traditional herbal heritage used by the tribals of Singrauli district of Madhya Pradesh

Dr. Rajesh Kumar Dwivedi

Ph.D. (Botany) A.P.S. University, Rewa, Madhya Pradesh, India

### Abstract

In the present paper 31 wild plant species consumed by the tribals. All 31 plant species are enumerated with their botanical names, local names, month of collection, parts used and utilization in the study area. The tribes of Singrauli district of Madhya Pradesh utilize a large number of herbs in their day-to-day. This paper includes wild food and vegetable plants, herbal medicine, timber and fuel wood plants, dye yielding plants and commerce and cottage industry based plants. During the course of present work, author have collected, identified and enumerated 31 wild plant species consumed as food and vegetable. The consumption of these species increases during the days of famine and scarcity. Some of these species are valued for their delicious taste and nutritive value.

**Keywords:** herbal, heritage, tribals, Singrauli district

### 1. Introduction

Herbs are staging a comeback and herbal renaissance is happening all over the globe. The herbal products have been symbolizing safety in contrast to the synthetics that are regarded as unsafe to human and environment. Although herbs have been priced for their medicinal, flavouring and aromatic qualities for centuries, the synthetic products of the modern age surpassed their importance, due to serious side effects. However, the blind dependence on synthetics is over and people are returning to the naturals with hope of safety and security.

Our country is now beginning to search her roots in the past and revive her lost glory of the traditional system of medicine, which flourished here for several centuries and contributed much to the development of the medical science of world. To alleviate the sufferings of her large ever-growing population, she has to revive the Traditional Folklore Medicine and bring it into the mainstream of National Health-Care Programme.

It is has been observed that the modern synthetic medicine has greatly over shadowed the traditional medicine. However, a number of peoples of our country depend on herbal remedies. They have deep faith on it, because it is cheaper and easily available. Modern allopathic drugs are costly, beyond the reach of common man and have grave side effect on human health. Thus, the people looking back towards the nature and preferring the herbal remedies. Besides, they do not have any answer to some of the chronic diseases and also it does not cure from the root. People suffering from chronic diseases and after loosing all the hopes from the modern medicine, turn their eyes toward the herbal medicine. The added advantage is that they get this medical service at the doorstep and treat with kindness, grace, patience and tolerance, which play a vital role in the drug healing process today.

Since the herbs influenced the materials culture of men, their references have appeared in tales, songs, myths, riddles and proverbs of ancient time. Besides, chemists, travelers, archeologists, anthropologist, folklorists, historians and

foresters have recorded useful information on plants used in medicine rather indirectly. However, the importance of plants as an antidote to alleviate from pains and sickness was raised by early men alone during the course of their struggle for existence. Although no mode for recording events existed in the pre-historic times, however, the knowledge of herbal remedies passed down orally from one generation to another. In addition to above a number of valuable work on herbal heritage have been come into existence in last decades. Some of the noteworthy contributors among them are those of (Jain *et al.* 1991; Posey 1995; Gupta 2002; Bhatt *et al.* 2003; Patil 2004; Idu *et al.* 2005; Nair and Chandra 2007; Haile *et al.* 2008 and Singh and Sandhu 2011) <sup>[1-9]</sup>.

### 2. Study area

On 24 May 2008, Madhya Pradesh government declared Singrauli as its 50th district by separating from Sidhi with 3 tehsils, Singrauli, Chitrangi and Deosar. On 1 April 2012 two new tehsils were added, Mada and Sarai. This area has group of rock cut caves made in the 7-8th century AD in Mada, 32 km from Waidhan. The Mada caves are situated in Mada tehsil of Singrauli district. Famous caves include Vivah Mada, Ganesh Mada and Shankar Mada, Jaljalja and Ravan Mada. Besides rock cut caves, Singrauli also has pPainted rock shelters. Ranimachi, Dholagiri and Goura pahad lie in Chitrangi tehsil of Singrauli. These painted rock shelters belong to the Mesolithic age of microlithic implements culture. These paintings are representative of the early history of Indian art and are made of red ochre.

Out of the total Singrauli population for 2011 census, 19.25 percent lives in urban regions of district. In total 226,786 people lives in urban areas of which males are 120,313 and females are 106,473. Sex ratio in urban region of Singrauli district is 885 as per 2011 census data. Similarly child sex ratio in Singrauli district was 899 in 2011 census. Child population (0-6) in urban region was 30,804, of which males and females were 16,219 and 14,585. This child population

figure of Singrauli district is 13.48% of the total urban population. Average literacy rate in Singrauli district as per census 2011 is 75.51% of which males and females are 83.97% and 65.93% literates respectively. In actual number 147,990 people are literate in urban region of which males and females are 87,408 and 60,582 respectively.

### Faith and Religion

The tribals of Singrauli district are very religious and have deep faith on God and Goddess. They worship a number of devatas, viz., Lord Vishnu, Shiva, Hanuman etc. They treated some plants, e.g., neem, peepal, bargad, shami, tulsi and amala as their parents. They are apart from modern concept of diseases. Many of them believe that ailments caused due to evil sprits. They believe that the ancestor sprits are superior and protect from evil sprits and diseases. Mostly they have embraced the Hindu faith. However, they have also faith on danawa, daitya, bhuta, preta, jadu-tona etc.

### 3. Materials and Methods

Systemic field trips of the study sites were made during the August 2010 to December 2012. The entire region was covered and five places in each tehsils were touched. Data regarding to herbal heritage were collected as per plan suggested by Womersely (1981) [10], Miguel (1998) [11] and Parabia and Reddy (2002) [12].

During fieldwork personal observations regarding to uses of plants were noted in the field book, including herbal treatment and their mode of administration, dose, and duration, obtained

by the tribals. Reports of the interpreters, guides, medicine men and other knowledgeable people were also recorded. The herbs used by the tribals were collected and numbered. Their habit, habitat, botanical features and uses were entered in the field book on the spot. On return, the specimens were kept in the field press as per technique devised by Agrawal (1983) [13] and Jain and Rao (1978) [14]. The voucher specimens and their parts collected from different study sites were shown to other people in the village market and other common places and more information were sought. It has been observed that the inhabitants used more herbs, but plants not personally observed and collected are not included. However, the plants used by them in their daily life and also used in the treatment of various ailments, have been included in this work.

### 4. Results and Discussion

The wild plants have been a source of food and medicine from the dawn of human civilization. These plants are more economic and often more acceptable during the days of famine and scarcity. The tribal mostly uses wild plants as food and vegetable (Devi *et al.*, 2009) [15]. The natives have also sold these plants in local village markets. Some of these are rich in nutrients and also consumed by urban people (Gopalan *et al.*, 2003) [16]. The studies of wild edible plants are important not only identifies the potential source, which could be utilized as alternative food but to select promising type of domestication. The author have collected and identified some important wild food plants (Table 1) from the different remote places of the study area.

**Table 1:** Wild food and vegetative plants used by the tribals of Singrauli District of Madhya Pradesh

S. No.	Botanical Name	Local Name	Month of Collection	Parts Used	Utilization
1.	<i>Achyranthes aspera</i> L.	Chirchiri	Jul-Oct	Tender shoot	Leafy vegetable
2.	<i>Aegle marmelos</i> (L.) Corr.	Bel	May-Jun	Ripe fruits	Pulp edible
3.	<i>Amorphophallus bulbifer</i> (Roxb.) Bl.	Suran	Dec- Mar	Roasted/ boiled corm	Vegetable Prickle
4.	<i>Anthum graveolens</i> L.	Soya	Oct-Jan	Tender shoot	Vegetable
5.	<i>Annona squamosa</i> L.	Sitafal	Feb-Apr	Ripe fruits	Pulp edible
6.	<i>Bambus officinalis</i> Willd.	Bans	Jul- Nov	Tender shoot	Vegetable
7.	<i>Bauhinia variegata</i> L.	Kachnar	Jan-Mar	Flowers	Vegetable
8.	<i>Boerhaavia diffusa</i> L.	Punarnaba	Aug-Oct	Leaves	Leafy vegetable
9.	<i>Calonyction muricatum</i> G Don.	Khotalaiya	Aug-Nov	Floral pedicle	Vegetable
10.	<i>Cassia tora</i> L.	Chakura	Jul-Sep	Leaf	Vegetable
11.	<i>Chenopodium album</i> L.	Bathua	Nov-Feb	Tender shoot	Leafy vegetable
12.	<i>Coccinia indica</i> W.&A.	Kundru	Sep-Dec	Unripe fruits	Vegetable
13.	<i>Commelina benghalensis</i> L.	Tankaua	Jul-Nov	Tender shoot	Leafy vegetable
14.	<i>Cyprus rotundus</i> L.	Nagarmot--ha	Apr-Jun	Tuber	Edible
15.	<i>Dioscorea bulbifera</i> L.	Khanima	Oct-Dec	Boiled tubers	Edible/vege-table
16.	<i>Diospyros melanoxylon</i> Roxb.	Tendu	Feb-Apr	Ripe fruits	Edible
17.	<i>Feronia limonia</i> L.	Kaitha	Oct-Feb	Fruit pulp	Prickle
18.	<i>Ficus benghalensis</i> L.	Bargad	Mar-Apr	Ripe fruits	Edible
19.	<i>F. racemosa</i> L.	Umar	Mar-Apr	Ripe fruits	Edible
20.	<i>F. religiosa</i> L.	Peepal	Mar-Apr	Ripe fruits	Edible
21.	<i>Lathyrus asphca</i> L.	Jangali matar	Feb-Mar	Ripe seeds	Famine food
22.	<i>Momordica dioica</i> L.	Parora	Jul-Sep	Unripe fruits	Vegetable
23.	<i>Nelumbo nucifera</i> Gaertn.	Kamal	Mar-May	Rhizome	Vegetable
24.	<i>Nymphaea nouchali</i> Burm. f.	Kumudini	Mar-May	Rhizome	Vegetable
25.	<i>Portulaca oleracea</i> L.	Kulfa	Sep-Dec	Tender shoot	vegetable
26.	<i>Phoenix sylvestris</i> Roxb.	Khajoor	May-Jun	Ripe fruits	Edible
27.	<i>Pithecellobium dulce</i> (Roxb.) Benth.	Jangal jalebi	Apr-May	Ripe fruit pulp	Edible
28.	<i>Solanum nigrum</i> L.	Makoya	Oct-Dec	Ripe fruits	Edible
29.	<i>Vigna radiata</i> (L.) Willd.	Banmoog	Oct-Nov	Seeds	Famine food
30.	<i>Vicia sativa</i> L.	Akari	Feb-Mar	Seeds	Famine food
31.	<i>Zizyphus numularia</i> Lamk.	Jhar-ber	Nov-Dec	Ripe fruits	Edible

The tribals of Singrauli District of Madhya Pradesh utilized the same food and vegetable plants as used by the other class of society. The food and vegetable plants are rich in nutritive value (Gopalan *et al.* (2003)<sup>[16]</sup> and have been used by the all class of our society, mostly by the tribal and rural people. The present author had collected and identified 31 wild plant species consumed by the tribals (Table 1).

The tender shoot and leaves of *Achyranthes aspera* (Chirciri), *Anthum graveolens* (Soya), *Bambusa officinalis* (Bans), *Boerhaavia diffusa* (Punarnaba), *Cassia tora* (Chakura), *Chenopodium album* (Bathua), *Commelina benghalensis* (Tankaua) and *Portulaca oleracea* (Kulfa) are used as leafy vegetables. Floral buds and flower of *Bauhinia variegata* (Kachnar) and immature floral pedicel of *Calonyction muricatum* (Kotaliya) are stuffed in pakories and also used as vegetables. Likewise, the rhizome of *Cyperus rotundus* (Nagarmotha), *Nelumbo nucifera* (Kamal), *Nymphaea nouchali* (Kumudini), *Amorphophallu bulbifer* (Suran) and *Dioscorea bulbifera* (Khanima) are eaten by tribals after boiling them and also consumed as vegetables.

The ripe fruits of *Aegle marmelos* (Bel), *Annona squamosa* (Sitafal), *Diospyros melanoxylon* (Tendu), *Ficus benghalensis* (Bargad), *F. racemosa* (Umar), *F. religiosa* (Peepal), *Feronia limonica* (Kaitha), *Phoenix sylvestris* (Khajoor), *Pithecellobium dulce* (Jangal jalebi), *Solanum nigrum* (Makoya) and *Zizyphus numularia* (Jhar ber) are eaten by tribals and other people of the rural areas while the unripe fruits of *Coccinia indica* (Kundru) and *Momordica dioica* (Parora) are consumed by tribal as well rural people.

The seeds of *Lathyrus asphca* (Jangali matar), *Vigna radiate* (Ban moong) and *Vicia sativa* (Akari) are consumed ehe days of famine and scarcity.

## 5. Acknowledgement

The author is thankful to authorities of S.G.S. Govt. P.G. College, Sidhi (M.P.) for granting permission to carry out this work.

## 6. References

1. Jain SK, Sinha BK, Gupta RC. Notable Plants in Ethnomedicine in India. Deep Publications, New Delhi, 1991.
2. Posey DA. Indigenous People and Traditional Resource Rights: A Basis for Equitable Relationship? Green College Centre for Environment Policy and Understanding, Oxford, 1995.
3. Gupta AK. Value addition to local Kani tribal knowledge: Patenting, licensing and benefit sharing, WP No. 2002-20008-02, August, 2002, A case study based on the data collected from Kani tribe, Kerela, India, 2002.
4. Bhatt DC, Patel NK, Mitaliya HM. Herbal magic by contact therapy among tribals of Gujrat. In- Ethnobotany of Medicinal Plants of India and Nepal, Singh & Jain (Ed.), Scientific Publication, Jodhpur, 2003, 98-103.
5. Patil DA. Origin of medicine *vis-à-vis* Doctrine of signature. Ethnobotany. 2004; 16:52-58.
6. Idu M, Osawaru M, Orhue E. Medicinal plants in some local markets in Benin city, Nigeria. Ethnobotany. 2005; 17:118-122.

7. Nair R, Chandra SV. Antibacterial activities of some medicinal plants of the western region of India. Turk. J Biol. 2007; 31:231-136.
8. Haile Y, Ensurmu K, Tanarat B, Ermias L. Plants used as traditional management of human ailments at Bale Mountain National Park, Southeastern Ethiopia. J Med. Planta Res. 2008; 2:132-153.
9. Singh HB, Sandhu RS. Herbal Medicine of Manipur: A Colour Encyclopedia. Daya Publishing House, Delhi, 2011.
10. Womersely JS. Plant Collection and Herbarium Development – A Manual. FAO, Rome, 1981.
11. Miguel NA. Selected Guideline for Ethnobotanical Research: A Field Manual. Scientific Publisher, Jodhpur, 1980.
12. Parabia M, Reddy MN. Protocol for Ethnomedicinal studies in Ethnobotany. Avishkar Publishers, Jaipur, 2002.
13. Agrawal VS. Perspective in Botanical Museum with special reference of India. Today & Tomorrow, New Delhi, 1983.
14. Jain SK, Rao RR. A Hand Book of Field and Herbarium Methods. Today & Tomorrow, New Delhi, 1978.
15. Devi KS, Devi YS, Singh PK. A census of edible flowers found in the valley district of Manipur. J Econ. Taxon. Bot. 2009; 33:232-239.
16. Gopalan C, Rama BV. Sastri, Balasubramanian SC. Nutritive value of Indian foods. National Institute of Nutrition, ICMR, Hyderabad, 2003.