

## Wild Edible Leaves Consumed By Tribal People of Hazaribag District of Jharkhand

<sup>1\*</sup>Hari Shankar Lal, <sup>2</sup>Reshmi Chatterjee, <sup>3</sup>Sanjay XaXa

<sup>1,3</sup>Jharkhand Biodiversity Board Ranchi

<sup>2</sup>Mrinalini data Mahavidapith Kolkata

Email-lal\_harishankar@yahoo.com

### ABSTRACT

An extensive survey was carried out of wild edible leaves used by tribal in Hazaribag district of Jharkhand. Data were collected through interview questionnaire around the district. The study identifies 22 species of wild edible leaves belonging 21 genera and 18 families that are commonly consumed by tribal people as per their availability. The habits, mode of preparation, Medicinal property have been discussed.

**Key- words-** Wild edible, Medicinal property, Jharkhand

### INTRODUCTION

India has a variety of tribal population reflecting its great ethnic diversity. H.B.Singh and R.K.Arora, 1978 have made great contribution to prepare a list of Indian wild edible plants. Majority of tribal population of Jharkhand lives in forest ecosystems and has its own socio cultural pattern, traditions and typical food practices. Vegetable eaten are mainly of leafy variety, which grow as wild in nature. It has become their habit and till date, these edible plants are integral part of their diet. during rainy and summer season, when the vegetables are in short supply, people collect various species of edible leaves from forest and agricultural land to supplement their stable food. The range of these types of food used by tribal varies from locality to locality depending on the availability of resources. Tribal people are very much dependent on wild edible leaves to fulfil their nutrition, food security and income generation. India is one of the thickly populated countries of the world suffering from scarcity of food. These edible leaves play a significant role in the food security of tribal (Kujur, 1989). Tribal



people pass knowledge traditionally uses of wild edible leaves through their next generation but no systematic information is yet available. Keeping this in mind an investigation was conducted to document such edible leaves of tribal with food security orientation.

The district Hazaribag of Jharkhand lying between 23°25' to 24°48' latitude and 84°27' to 86°34' E longitude and is situated at 610 meter altitude. It forms the north eastern position of the north Chotanagpur division of Jharkhand state. Hazaribag having 45% forest land has got a good number of wild edible leaves eaten by tribal population is still to be carried out. 12.2% of total population is of tribal which possess remarkable wisdom to utilize different forms of wild plants for various purposes.

### Materials and methods

The study was conducted in Hazaribag district. The five villages selected randomized for data collection which is covered by forest and residing tribal people. Selected Village are Sikri, Ulhara, Kaile, Surugaru, Lotwa. Five families from each selected villages inhabited by oron, Bhumiz, Birhor, Munda, Manjhi were selected randomly for data collection. Several field surveys were carried out during the year 2015-2016. Data collected by

interviews with tribal people of the selected village. They provided useful information on the common names of different wild leafy plant species, including the uses and mode of consumption preparation method. Repeated interviews through questionnaires were made in different villages to authenticate the information collected from different places and tribes. All species were collected to herbarium for taxonomical identification. Local floras were used to identify the plant species. Photographs were taken to show other tribal people for the correct identifications (Kanyang 2007, Panda 2007). The plants enumerated alphabetically with their botanical name, family, local name and mode of preparation for consumption.

***Alternanthera sessilis*** Br. Amaranthaceae Local Name Salanti sag

A prostrate and rooting much branched herb mostly found in waste land during rainy season. Young plants are consumed by tribals as a vegetable.

***Amaranthus spinosus*** L. Amaranthaceae, Local Name Kantabhaji

An erect herb with axillary spines found in rainy and summer seasons. Leaf and tender shoots are eaten as vegetable.

***Amaranthus viridis*** L. Amaranthaceae, Local Name Bhaji sag

An erect much branched annual herb found in cultivated ground. Leaves and young shoot are eaten as vegetable.

***Antidesma diandrum*** Roxb. Euphorbiaceae, Local Name Matta sag

A medium shrub found nearby sal tree. Dried leaves under sundry cooked with rice starch (Maar) and eaten by Munda and all tribes.

***Basella rubra*** L. Basellaceae, Local Name Poi sag

A prostrate climber found throughout the year. Young leaves stem cooked as vegetable.

***Bauhinia variegata*** L. Caesalpiniaceae, Local Name Koinar sag

A medium sized tree found in all forest

area. Young leaves are cooked after boiled to remove bitter taste.

***Boerhaavia diffusa*** L. Nyctaginaceae, Local Name Khapra sag

A diffused herb very common in waste place. Leaves cooked as vegetable.

***Cassia tora*** L. Caesalpiniaceae, Local Name Chakor sag

An erect herb found in waste land during rainy season. Leaves are eaten as vegetable.

***Celosia argentea*** L. Amaranthaceae, Local Name Silver sag

A common annual herb grows in paddy crops. Tender plants are eaten as vegetable.

***Centella asiatica*** L. Apiaceae Local Name Beng sag

A variable herb with long creeping stem rooting at the nodes found mainly in rainy and spring season throughout the year. Whole plants are eaten as vegetable by Oroan. Munda tribes also used to cure jaundice.

***Chenopodium album*** L. Chenopodiaceae, Local Name Bhatua sag

An erect or ascending herb commonly grows as weed along with rabi crop. Leaves are eaten as vegetable.

***Cleome viscosa*** L. Capparidaceae, Local Name hurhuria sag

An erect glandular herb found in rainy season. Young plants are cooked as vegetable by Manjhi tribal.

***Colocasia esculenta*** L. Araceae, Local Name Pechki sag

An perennial herb found in rainy season and summer season. Leaves are eaten as vegetable.

***Commelina benghalensis*** L. Commelinaceae, Local Name Kena sag

Very common herb grows in cultivated and uncultivated fields. Leaves are cooked as vegetable by Munda tribes.

***Leucas aspera*** Spreng. Lamiaceae, Local Name Guma

sag

An annual herb commonly found in the field of Maize, Arhar crops. Young plants are eaten as vegetable.

***Limnophila confirta*** Benth. Plantaginaceae, Local Name Muchri sag

Weeds of watery place. Leaves are eaten as vegetable by all tribes.

***Marsilia minuta*** L. Marsiliaceae, Local Name Sunsunia

An aquatic herb found in crop field throughout year. Leaves are eaten with garlic, tomato, onion, to cure weakness and cooked as vegetable.

***Moringa oleifera*** Moringaceae, Local Name Munga sag

A small tree grows in cultivated land. Leaves are cooked as vegetable and are also used to cure blood pressure by tribes.

***Oxalis corniculata*** L. Oxilidaceae, Local Name Netho sag

A small annual or perennial herb found in open field. Leaves are consumed by Bhumiz and Oroan.

***Polygonum glabrum*** Willd. Polygonaceae, Local Name Nadi sag

A herb found on the water or mud. Young tender plants cooked as vegetable.

***Portulaca oleracea*** L. Portulacaceae, Local Name Gologola sag

A prostrate or erect sub-succulent herb of rainy season commonly found in open grounds. Young plants are eaten as vegetable.

***Vangueria spinosa*** Roxb. Rubiaceae, Local Name Katai sag

A small tree or shrub found in forest area. Juvenile leaves cooked after boil to remove bitter taste and are eaten.

## Result and Discussion

A Total of 22 plant species from 21 genera and 18 families have been recorded as wild edible leaves in the study area. These 22 species belongs to

Amaranthaceae have 4 species, Caesalpiniaceae have 2 species, Basellaceae, Rubiaceae, Portulacaceae, Polygonaceae, Oxilidaceae, Moringaceae, Marsiliaceae, Plantaginaceae, Lamiaceae, Commelinaceae, Araceae, Chenopodiaceae, Apiaceae, Nyctaginaceae and Euphorbiaceae have one plant species each. In present study 22 wild leafy plants have been enumerated among them 15 are terrestrial herb, 2 are aquatic herbs, 1 shrub, 1 climber and 3 tree species (Hains, 1925 and Sundriyal, 2001).

The search for novel high quality but inexpensive sources of food has always remained a major concern of all who involved in providing adequate food and improving nutritional status of the population (Sinha, 2006). These wild edible plants play a significant role as food and medicine in their daily life along with food security of the tribal, but the traditional practices are declining because the tribal have started migratory towards the cities and are not willing and interested in the practice of traditional knowledge (Verma, 1981, Uperty et al 2008). In Hazaribag district tribal people have insufficient land and paucity of money are the main things to pressurized to dependent on the natural resources like edible leaves for their survival nutrition. These wild edible plants are integral part of their daily diet. Tribal people collect these wild plant species from agricultural land, forest area to supplement their staple food. Day by Day due to development of the district these valuable traditional becoming extinct along with the passing out of these tribes in the near future, it is therefore necessary to document the plants efficiency to conserve them while no systematic information is yet available.

## References

- Hains H.H., 1925. The botany of Bihar and Orissa BSI, Howrah, 1925, 1-4.
- Kanyang H., 2007. Tribal knowledge on wild edible plants of Meghalaya North east India, Indian Journal of Traditional knowledge, 2007; 6: 177-181.

Kujur A.A.,1989. The Oraon habitat:A study in cultural geography(The daughter of st.Anne,Ranchi) 1989,5-7

Panda T.,2007. Preliminary study of ethnomedicinal plants use to cure different disease in costal district of Orissa,Indian British Journal PharmacToxicol, 2007; 1:67-71.

Singh H.B. and Arora R.K.,1978.Wild edible plants of India ,ICAR, New Delhi, India : 88 . <http://www.censusindia.net/2001>

















Sinha R. and Lakra V., 2007.Edible weeds of tribals of Jharkhand Orissa and West Bengal.Indian Journal of Traditional knowledge,Vol 6(1) Jan 2007:217-222.

Sundriyal M, Sundrial R.C.,2001.Underutilized edible plants of the Sikkim Himalaya:Nutritive values of selected species, Economic Botany 2001; 85:377-390.

Uperty Y., Boon E.,Poudel R.C., 2008. Traditional use of plant resources by Bankariya ethnic group in Makawnapurdistrict,Central Nepal GRIN verlag,Germany2008,60.s

Verma S.K., 1981. An ethnobotanical study of Santhal Pargana, Bihar, Indian Forester 1981; 107:30-41.

**Table- Photographs Of Some Wild Edible Leaves Consumed By Tribal People In Hazaribag**

			
<i>Amaranthus viridis</i>	<i>Basella rubra</i>	<i>Bauhinia veriegata</i>	<i>Boerhaavia diffusa</i>
			
<i>Colocasia esculenta</i>	<i>Cassia tora</i>	<i>Centella asiatica</i>	<i>Chenopodium album</i>
			
<i>Commelina benghalensis</i>	<i>Moringa oleifera</i>	<i>Oxalis corniculata</i>	<i>Vangueria spinosa</i>
			
<i>Alternanthera sessilis</i>	<i>Celosia argentea</i>	<i>Amaranthus spinosus</i>	<i>Marsilia minuta</i>