Indian J.L.Sci. 5 (1) : 63-74, 2015

ISSN : 2277-1743 (Print)
ISSN : 2278-7879 (Online)

WILD EDIBLE PLANTS RECORDED FROM HOGALBARIA VILLAGE OF NADIA DISTRICT, WEST BENGAL, INDIA

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ABSTRACT

Considering documentation of wild edible plants of prime importance in addressing the issue of food security in future the present work was undertaken in Hogalbaria village of Nadia district, West Bengal which is inhabited mostly by economically challenged people dependent for food and medicines on uncared plants growing in the wilderness. In the present communication as many as 65 plant species belonging to 56 genera and 46 families of angiosperms have been enumerated along with their vernacular names, parts used, mode of utilization and medicinal uses.

KEYWORDS : Edible wild plants, Food security, Medicinal uses, Hogalbaria, Nadia

A resolution of phylogeny of civilization and agriculture reveals that the food plants with which we are acquainted today were discovered from their natural abodes in different places in wild forms from time to time. Still there are numerous wild and uncultivated or uncared plant species which are edible, especially among indigenous communities. Although the use of wild medicinal plants is well known, documented knowledge about the edible use of wild plants is rather inadequate. A scientific study of edible wild plants is important for ascertaining the potential food plants that can be utilized at the time of scarcity and cultivated to feed the growing population. In view of this, the present work was undertaken which documents such plants from Hogalbaria, a village under its own Gram Panchayt of Nadia district, West Bengal which is inhabited mostly by economically challenged people dependent for food and medicines on plants growing uncared.

Documentation of traditional uses of uncared plants as food have evoked interest in scientists especially in India (Singh and Singh, 1981; Saklani and Jain,1994; Sundryal et al., 1998; Sajem and Gosai, 2006; Yesodharan and Sujana,2007; Rathore,2009; Deb et al.,2013; Kar et al.,2013; Vijigiri and Shivraj, 2015, Singh et al.,2013), and abroad (Somnasang and Moreno-Black,2000; Ogle et al., 2003; Shrestha and Dhillon,2006; Afolayan and Jimoh,2009; De Caluwe et. al., 2010; Luczaj, 2010).

These plants, usually uncultivated, are consumed wholly or in parts, either cooked or raw and known to be delicious, refreshing and nutritious (Theophilus and Arulanantham, 1949; Zennie and Ogzewalla., 1977; Srivastava, 1990). Wild edible plants get preferred by local people of the semiarid regions of Ethiopia not only for their food value, but also for their availability during dry seasons and in periods of food shortage (Debela et. al 2011a,b,c).The nutritional and medicinal importance of wild edible plants are getting realized (Gopalan et al., 1971[1981, 2007, 2011], Grivetti and Ogle, 2000; Jaenicke and Hoschle-Zeledon, 2006). The work of Arora and Pandey (1996) and Pandey et al.,(2005) on wild edible plants of India pertaining to their diversity, conservation and use have generated interest in exploration of wild food plants prevalent in different regions of the country. However, there are many more regions, especially those rich in aboriginal communities, which need to be explored to find out the wild edible plants of local origin. In view of this the present work was undertaken in such a village where folk communities are still mostly dependent on wild plant-resources for food and medicines.

Study Site

Hogalbaria, a village in the Gram

Panchayat named after it, is located at the latitude22° 57' and longitude 88° 36' in the Karimpur-1 Block of Tehatta subdivision of the Nadia district of West-Bengal State, India. It has in its surroundings such villages as Harekrishnapur, Jamasherpur, Madhugari, Pipulbaria and Shikarpur.

The district of Nadia is bounded on the north and north-west by the district of Murshidabad, on the south-east and east by the Republic of Bangladesh, in the south and south-east by the district of North 24-Parganas. Being situated in the heart of the Bengal delta it is held within the

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arms of the Ganga, viz., the Bhagirathi on the West and Mathabhanga on the North. The Churni, Ichhamati and Jalangi are the other important rivers of the area.

The climate of the study site is like that of other places of Nadia district which is characterized by an oppressive hot summer; high humidity all the year round and rainfall well distributed during the monsoon season being annually on and average 1400mm. The cold season is from the end of November to the end of February. Mean minimum temperature of the area is 15.6°C and the mean maximum temperature is 35.0°C.

Being the birth place of Sri Chaitanya Mahaprabhu, most of the people of the district, especially the villagers, are vegetarians. The main food of people of this region is rice taken with fried or cooked vegetables. The Hogalbaria village, being located in the border of India and Bangladesh, has an admixture of culture and traditional knowledge which it is richer than in places elsewhere. The indigenous knowledge concerns mainly the sustainable use of plant-resources for food and medicines which has been in vogue since remote past and surviving through intergenerational oral transmission and traditional practices. Most of the people of this area being economically challenged have to depend on plants growing in the wild to meet their requirements of food and medicines. They know the methods of excluding the harmful substances from the wild plants and preparing recipes for their meagre meals. This rich knowledge if put into scientific evaluation is likely to convey health benefits to the mankind in many ways.

MATERIALS AND METHODS

The present work is the outcome of extensive field surveys in different parts of the village undertaken in 2015. Besides the house- to- house survey, local market (haat) of the village was also visited to note availability and marketing of wild edible plants. The information about the wild edible plant species, their vernacular names and mode of utilizations were documented from local inhabitants, especially aged men and knowledgeable women through rigorous interviews. The process of cooking and forms of intake were also recorded. Information about the medicinal uses was also noted so as to substantiate their credentials as health-foods. For identification of the concerned plant species standard taxonomic methods were adopted. Field note book along with voucher specimens prepared in this context has been submitted to Burdwan University Herbarium (BURD) for preservation.

RESULTS

The present study records from Hogalbaria village no less than 65 species of 56 genera representing 46 families for having use as food plants (Table 1 & Figure 1).among which herbs are more commonly used (Figure 3). At the levels of family, genus and species consumption of dicots is to a much greater extent than monocots (Figure 2). Parts of

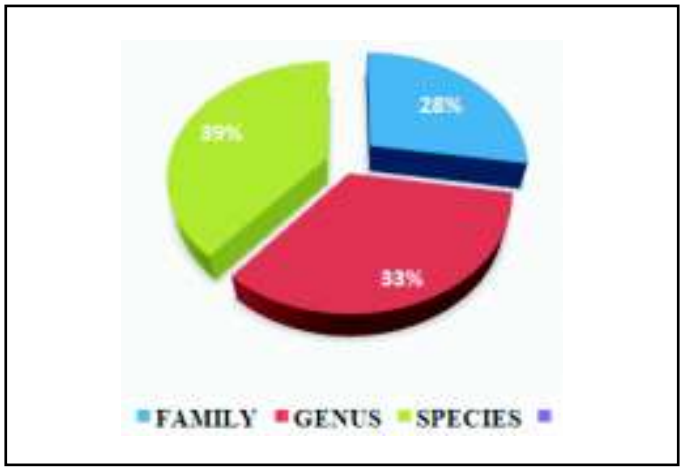

Figure 1 : Family, Genus and Species Ratio

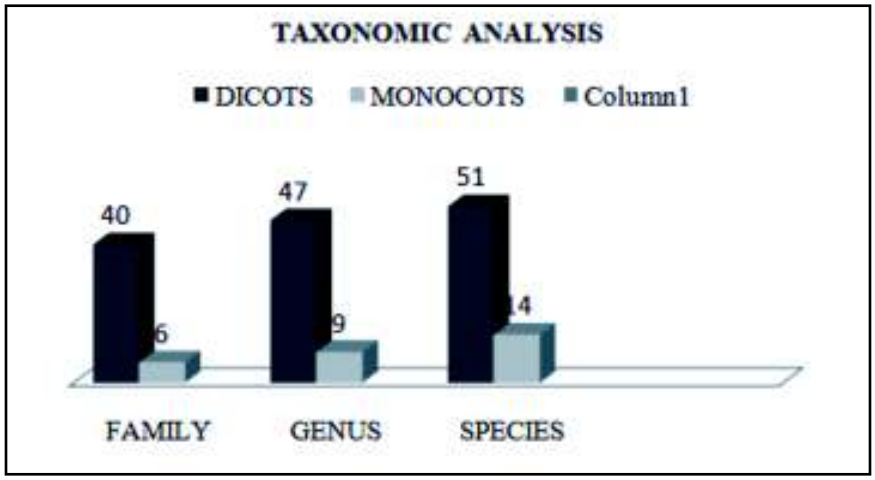

Figure 2 : Taxonomic Analysis of Concerned Taxa

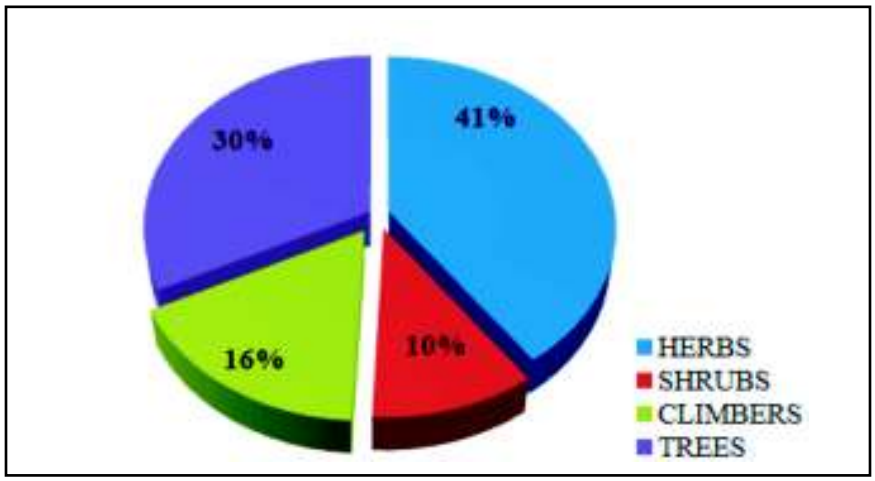

Figure 3 : Habit Characteristics of Wild Edible Plants of Hogalbaria

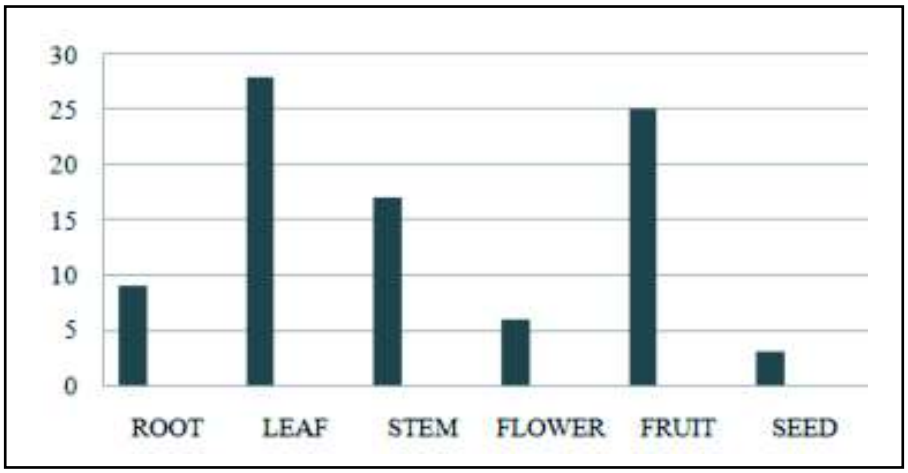

Figure 4 : Percentage of Species of Wild Edible Plants Contributing Usable Parts

Table 1 : An Enumeration of Wild Edible Plants and Their Uses

SL NO.	Name of the Plant [Family]	Local Name	Habit	Part(s) used	Mode of Consumption	Medicinal Use
1	*Abutilon indicum* (L.) Sw. [Malvaceae]	Petari	Under-shrub	Flowers	Fried and taken as vegetable.	Roots used in ameliorating fever, curing prolonged cough; leaves used in bleeding piles, inflammation of the bladder, fever, juice applied on forehead to reduce one sided headache, seed-oil applied to cure scabies.
2	*Aegle marmelos* Corr. ex Roxb [Rutaceae]	Bel	Tree	Ripe fruits	Eaten raw.	Roots used in fever, abdominal pain, palpitation of the heart, urinary troubles, root bark crushed with water and taken in case of snake bites; fresh leaves used to treat opthalmia; flowers used in dysentery; unripe fruits used to cure piles, ripe fruits as tonic, good for heart and brain.
3	*Alocasia indica* (Roxb.) Schott. [Araceae]	Mankochu	Robust herb	Tuber and young leaves.	Cooked as vegetable.	Rootstock used as diuretic; rhizomes with turmeric made into paste and applied to treat injury without bloodsh ed; leaves sap applied to stop bleeding; decaying petioles with coconut oil applied to cure burn wounds.
4	*Alternanthera philoxeroides*(Mart.) Griseb[Amaranthaceae].	Sanchishak	Herb	Twigs and leaves	Fried with salt and chilly.	Used to treat urinary tract infection, cold, clearing of blood.
5	*Alternanthera sessilis* DC. [Amaranthaceae]	Chotosanchi	Herb	Twigs and leaves	Fried with salt and chilly	Cooked juice given to lactating mothers to improve lactation and used to treat night blindness and indigestion.
6	*Amaranthus spinosus* L. [Amaranthaceae]	Kantanotey	Herb	Twigs and leaves	Fried with salt and chilly	Used in blood disease, piles. fresh decoction given to women to reduce the menstrual flow.
7	*Amaranthus viridis*L. [Amaranthaceae]	Bon notey	Herb	Twigs and leaves	Fried with salt and chilly	Used as diuretic.
8	*Amorphophallusca mpanulatus* Blume ex Decne. [Araceae]	Ol	Herb	Corm and petioles	Cooked as vegetable.	Corm used as liver tonic, paste with lime applied externally to heal bone fractures, juice with mustard oil cures earache; Leaves applied to cure worm infested sores of cattle.
9	*Annona reticulata* L. [Annonaceae]	Nona ata	Small tree	Ripe fruits	Eaten raw.	Fruits useful in blood complaints, dysentery and fever; bark used as tonic; leaves used as a maturant and as insecticides.
10	*Annona squamosa* L. [Annonaceae]	Atta	Small tree	Ripe fruits	Eaten raw.	Roots used as a drastic purgative, used in acute dysentery and spinal disease; ripe fruits applied on malignant tumours; seeds used as abortifacient and to remove hair lice.

cont.

11	*Antidesma ghaesembilla*[Phyllanthaceae]	Khudi-jam	Small tree	Ripe fruits	Eaten raw.	Leaves used to treat fever.
12	*Argemone mexicana* L. [Papaveraceae]	Sail kanta	Herb	Stems	Cooked with salt, chilly and mustard.	Seeds used as cathartic, used in bloody urine, seed -paste with mahua oil used to cure eczema; roots used in skin disease; yellow latex used to treat disease of urinary tract; plant juice used to treat eye disease; given with common salt to cure ringworms, juice with onion -paste applied to kill parasitic insects on the body of domestic animals; juice with turmeric paste applied to cure skin disease.
13	*Artocarpus lakoocha* Roxb. [Moraceae]	Dahua	Tree	Ripe fruits	Used for making pickles.	Bark paste used in small pimples; unripe fruits used to treat blood complaints and eye troubles; ripe fruits used to improve taste in fever.
14	*Asparagus racemosus*Willd.[Asparagaceae]	Satamuli	Under-shrub	Tuberous adventitious roots	Cooked as vegetable	Roots used in blood dysentery, bloody urine, dryness of mother's milk, root paste applied on wounds; leaves used to treat night blindness.
15	*Averrhoa carambola*L. [Averrhoaceae]	Kamranga	Tree	Ripe fruits	Eaten raw.	Ripe fruits used as tonic, useful in bleeding piles, fever, juice taken to cure diarrhoea, juice with water taken to treat biliary and liver colic; leaves used to treat chronic fever, scabies.
16	*Azadirachtaindica* A. Juss. [Meliaceae]	Neem	Tree	Leaves and flowers	Fried with salt and chilly.	Bark used in treatment of vomiting; leaf extract used as blood purifier and treat diabetes; young branches used in cough; unripe fruits used in skin diseases.
17	*Bacopa monnieri* L. [Scrophulariaceae]	Brahmishak	Sub aquatic herb	Whole plants	Fried in ghee and salt added	Whole plant used for improving memory; leaf juice boiled in ghee taken in the morning in empty stomach for immunizing against cold and cough.
18	*Basella alba* L. [Basellaceae]	Puin	Climbing herb	Leaves and stems	Cooked as vegetable.	Leaf-paste used for treating ulcers, treats boils; root - paste used for rheumatic pain.
19	*Basella alba* var. *rubra* L. [Basellaceae]	Bon-puin	Climbing herb	Leaves and stems	Cooked as vegetable	Used as appetizer.
20	*Boerhavia diffusa* L. [Nyctaginaceae]	Punarnova	Herb	Twigs and leaves	Fried with salt and chilly	Used in anaemia, plant decoction used to cure urinary troubles; leaf-paste with ginger given to children with liver enlargement

cont.

21	*Borassus flabellifer* L. [Palmae /Arecaceae]	Tal	Tall unbranched tree.	Ripe fruits	Eaten raw.	Root used as anthelmintic and restorative; palm juice used as diuretic, as candy used in cough, ash of dry spadices useful as antacid and in heart burn, enlarged liver and spleen; fruits pulp used as cooling, diuretic, nutritive.
22	*Carissa carandus* L. [Apocynaceae]	Karamcha	Small tree	Ripe fruits	Eaten raw.	Fruits used as antiscorbutic, used to cure bilious complaints, blood impurities, bad taste, decoction ripe fruit taken to cure thirst and to increase metabolism of the body; leaves used to treat fever; roots used as stomachic and applied to itch.
23	*Cassia fistula* L. [Caesalpiniaceae]	Bandarlathi	Tree	Ripe fruits	Eaten raw.	Roots used to treat skin diseases; stem bark powder with leaf made into paste and applied to fistula, bark paste with black pepper given to cure night blindness; buds and flower used in cold and cough; pulp of seeds used in high blood pressure ; seed powder used to cure jaundice and diabetes.
24	*Cassia sophera* L. [Caesalpiniaceae]	Kalkasunda	Under-shrub	Flowers	Fried and taken as vegetable.	Plants used as diuretic to treat urinary troubles. boiled leaves fried with ghee taken to cure bad taste; flower powder with water used to cure acidity.
25	*Cassia tora* L. [Caesalpiniaceae]	Chakunda	Shrub	Leaves and flowers	Fried with salt and chilly	Leaves and seeds applied to skin disease, leprosy; pods used in eye disease; seed - powder taken to cure intestinal worms.
26	*Centella asiatica* (L.) Urban. [Umbelliferae/ Apiaceae]	Thankuni	Creeping herb	Leaves	Preparation of soup.	Leaf juice used in anaemia, weakness, constipation, loss of memory, cold and cough, jaundice, fever, mouth ulcer.
27	*Chenopodium album* L. [Chenopodiaceae]	Bethuashak	Herb	Twigs and leaves	Fried with salt and chilly	Leaf-juice used to expel worms.
28	*Cocciniaindica*Wight &Arn. [Cucurbitaceae]	Ban kundri	Climbing herb	Leaves and young fruits	Cooked with salt and chilly.	Roots and leaves used to treat cough asthma, diabetes; fruits used in blood disease.
29	*Colocasia nymphaeifolia* Kunth [Araceae]	Ban-kochu	Herb	Leaves	Cooked as vegetable	Corm used to cure body-ache and piles.
30	*Colocasiaesculenta* (L.) Schott.[Araceae]	Kochu	Herb	Tuber and young leaves.	Cooked as vegetable.	Leaves and croms used as laxative, stimulant, rubefacient and as remedy for body -ache, used in styptic, otalgia, internal haemorrhages, alopecia, congestion of the portal system.

cont.

31	*Commelina benghalensis* L. [Commelinaceae]	Kanchira, Khendra	Herb	Twigs and leaves	Fried with salt and chilly	Leaf juice given as an antidote to snakebite.
32	*Cucumis melo*L. [Cucurbitaceae]	Futi	Climber	Ripe fruits	Eaten raw.	
33	*D. bulbifera*L. [Dioscoreaceae]	Ban alu	climber	Tuber	Cooked into curry as a substitute of potato.	Tuber roots used in piles.
34	*D. esculenta* var. *spinosa* (Roxb.) Prain&Burkill. [Dioscoreaceae]	Kantaalu	climber	Tuber	Cooked into curry as a substitute of potato.	Tuber root paste applied to boils, to relief pain and taken to treat dysentery; grated tubers app lied on swellings.
35	*D. triphylla*L. Amoen. [Dioscoreaceae]	Kantaalu	climber	Tuber	Cooked into curry as a substitute of potato.	Used to treat vomiting; fresh tuber take as purgative.
36	*Dillienia indica* L. [Dilleniaceae]	Chalta	Medium sized tree.	Persistent sepals	Used for making pickles and chutnees.	Fruits used as laxative, useful in fever, cough, less flow of breast milk; mucilaginous sap of calyx applied on burn -wounds. Leaf - paste applied on carbuncles.
37	*Dioscorea alata* L. [Dioscoreaceae]	Kham alu	climber	Tuber	Cooked into curry as a substitute of potato.	Used as an anthelmintic; useful in leprosy, piles and gonorrhoea.
38	*Diospyros malabarica* (Desr.) Kostel.[Ebenaceae]	Gab	Tree	Ripe fruits	Eaten raw.	Bark used in boils and tumours; ripe fruits used in blood diseases.
39	*Echinochloa oryzoides*(Ard.) Fritsch [Poaceae]	Shymaghash	Herb	Caryopsis	Boiled for consumption as rice	Plant extract used in diseases of the spleen.
40	*Emblica officinalis* Gaerth. [Euphorbiaceae]	Amloki	Tree	Young fruits	Eaten raw with salt.	Fruits used to treat vomiting; fresh fruit and root paste used to cure jaundice, ripe fruit with common salt given to children to treat diarrhoea; seeds used in asthma.
41	*Enydra fluctans* Lour. [Compositae/Asteraceae]	Hinche, helencha	Aquatic or subaquatic herb	Leaves and stem	Fried with salt and chilly.	Leaves used as laxative, use to cure inflammations, leucoderma and small pox, juice taken in empty stomach as anti dysenteric decoction with black pepper to cure diabetes.
42	*Ficus hispida* (FH) L.[Moraceae]	Dumur	Small tree	Receptacles	Cooked as vegetable.	Leaf extract used to treat fever.
43	*Glycosmis pentaphylla* (Retz.) DC. [Rutaceae]	Datan-phal	Shrub	Ripe fruits	Eaten raw.	Bitter juice of leaves used for fever, liver complaints and intestinal worms of children; wood is used for snake bites; paste of leaves with a bit of ginger applied to eczema and skin diseases.

cont.

44	*Grewiasubinaequalis*DC. [Tiliaceae]	Phalsa	Large struggling shrub	Ripe fruits	Eaten raw.	Fresh fruits used to treat cough, fever; leaves applied to boils; stem bark used to cure urinary troubles; root bark applied to rheumatism.
r45	*Hygrophila schulli* (Buch. – Ham.) M. R. et. S. M. Almeida [Acanthaceae]	Kulekhara	Aquatic or subaquatic herb	Tender shoot and leaves	Boiled with salt then removed the boiled leaves. Only the extract eaten.	Plants used to treat sleepless, stone in kidney, to stop bleeding; roots used to treat body pain; warm leaves juice taken twice daily to treat anaemia, stems decoction with black pepper given to women to treat constitutional disorder.
46	*Ipomoea aquatica* Forssk [Convolvulaceae]	Kalmishak	Aquatic herb	Tender shoot and leaves	Fried with salt and chilly.	Whole plant used as anthelmintic, useful in leucoderma, fev er, juice applied to heprotic wounds; flowers juice given as drop to treat eye disease.
47	*Leucasplukenetii* (Roth.) Spreng Labiatae [Lamiaceae]	Shetdrone	Herb	Twigs and leaves	Fried with salt and chilly	Used as digestive and antibacterial agent; flowers with honey prescribed to treat cough and cold.
48	*Luffa cylindrica* (L.) M. Roem. [Cucurbitaceae]	Dhundul	Climber	Young fruits	Cooked as vegetable.	Leaves used in insect bite and piles; flowers used in sinusitis; dry fruit used as body scrub and exfoliator; seeds used as cathartic.
49	*Mimusops elengi*L. [Sapotaceae]	Bakul	Tree	Ripe fruits	Eaten raw.	Bark used to treat disease of gums and teeth, root bark used for washing septic wounds of cattle; flowers used to cure blood disease; fruits powder with cold water used to treat fever, headache and pain in neck region; leaves decoction taken to treat jaundice; latex applied to treat scabies; seeds paste ap plied to treat insect bites.
50	*Mollugospergula* L. [Molluginaceae]	Gimashak	Herb	Twigs and leaves	Fried with salt and chilly	Used to treat skin disease, vomiting due to acidity and the juice of fomented leaves used as eye drop in curing eye disease.
51	*Momordicadioica*Roxb.ex Wild. [Cucurbitaceae]	Kakrole	,,	Unripe fruits	Fried in ghee.	Used as anti-tumour.
52	*Moringa oleifera* Lam. [Moringaceae]	Sajina	Tree	Leaves, flowers and unripe fruits	,,	Root used as cardiac and circulatory tonic, juice useful in asthma and used in throat gargle; cooked leaves beneficial in influenza, control blood sugar; fruits used to treat diseases of liver.

cont.

53	*Nelumbo nucifera* Gaertn. [Nelumbonaceae]	Padma	Aquatic herb	Peduncle, seeds and rhizome	Peduncle and rhizome cooked as vegetable. Seeds are eaten raw or after roasting.	Roots used in piles, flowers use as cardiac tonic; seeds use to treat vomiting; filaments used to cure burning sensation of the body; decoctions from rhizome with sugar given during menstrual period to treat menstrual disorders, leaf paste with lime used as plaster on bone fracture.
54	*Nyctanthes arbortristis*L. [Oleaceae]	Seuli	Small tree	Leaves	Fried with salt and chilly	Fritter made with salt, chilly and onion used to treat fever, Juice taken to treat inflammation of the body; seeds pounded and mixed with fried coconut oil applied on scalp to treat dandruff.
55	*Nymphaea alba* L. [Nymphaeaceae]	Shaluk	Aquatic herb	Peduncle	Cooked as vegetable.	Roots and stocks used in dysentery, use to treat blood disease, bleeding piles, and bloody urine; flowers decoction used as cardiac tonic; seeds used in diabetes.
56	*Oxalis corniculata* L. [Oxalidaceae]	Amrulshak	Creeping herb	Green shoot	Used in fish curry to get a sour taste.	Fresh juice mixed with oil and applied as massage to remove cough; juice taken to treat low back pain, urinary troubles and applied to treat itch.
57	*Paederia scandens* (Lour.) Merrill. [Rubiaceae]	Gandhal, Gandhabhadal	Climbing herb	Green shoot	Making soup with salt and chilly.	Fresh juice taken as antirheumatic; use to cure piles, dysentery and as blood purifier.
58	*Phoenix sylvestris* Roxb. [Palmae /Arecaceae]	Khejur	A very graceful plum.	Ripe fruits	Fruits eaten raw and Stem sap fermented into toddy, used to make molasses and candy.	Candy made from stem sap used for throat problems; fruits used as tonic for relief from sore throat, cough and liver complaints; kernel -paste along with seeds of *Achyranthes aspera* folded in betel leaves and given to cure malaria.
59	*Portulaca oleraeca* L. [Portulaceae]	Santishak	Small tree	Twigs and leaves	Fried with salt and chilly	Used to treat high blood pressure.
60	*Rumex dentatus* L. [Polygonaceae]	Ban-palang	Herb	Tender green shoot	Cooked with salt and chilly.	Used in anaemia, plant -broth used to cure urinary troubles, leaf paste with ginger given to children to treat enlargement of liver.
61	*Sesbania grandiflora* Pers. [Papilionaceae/ Fabaceae]	Bok-phul	A tall slender tree.	Flowers	Fried and taken as vegetable.	Flowers used to treat small pox, dry cough, headache; leaf juice used to cure night blindness; roots applied on painful swelling.
62	*Spondias pinnata*(L.F.) Kurz. [Anacardiaceae]	Amrah	Tree	Both young and ripe fruits	Used for making pickles. Also eaten raw.	Roots used to regulate menstruation; bark -paste applied on the part bitten by to snake; gum used as demulcent; fruits used as antidysenteric, its juice taken as diuretic.

cont.

63	*Tamarindus indica* L. [Ceasalpiniaceae]	Tentul	Tree	Both young and ripe fruits	Used for making pickles; also eaten raw.	Leaf-juice used in bleeding piles, ulcer and rheumatic pain; stem bark used as antipyretic; ripe fruits used as liver tonic, used to cure kidney problems; seeds used in diabetes.
64	*Typhonium trilobatum* (L.) Schott. [Araceae]	Ghetkachu, Khanman	Herb	Leaves	Fried with salt, chilly and black cumin seeds.	Juice applied as antidote to snake bite; tuber paste applied as a poultice on scirrhous tumours.
65	*Ziziphusoenoplia*[Rhamnaceae]	Kul	Shrub	Ripe fruits	Fruits eaten raw.	Roots and root bark use to treat hyper acidity; fruits used in stomach ache.

Table 2 : Taxonomic Analysis of Concerned Species of Food Plants

Taxa	Dicot	Monocot	Total
Family	40	6	46
Genus	47	9	56
Species	51	14	65

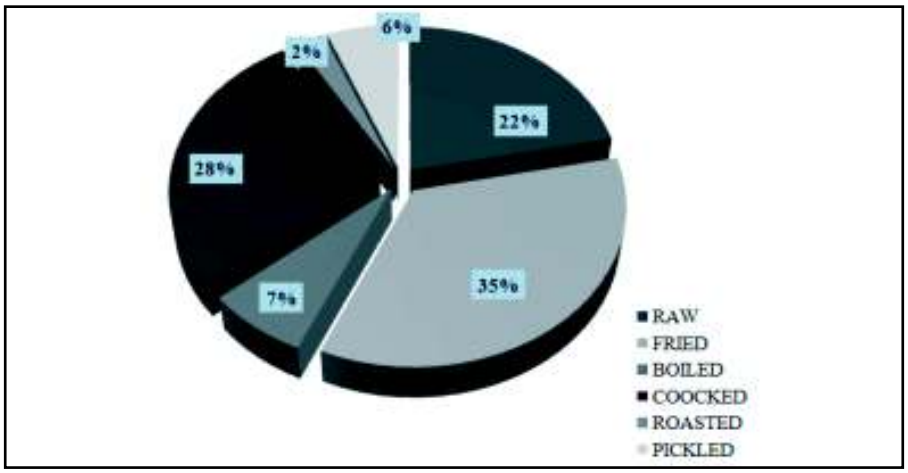

Figure 5 : Percentage of Species as Per Their Mode of Utilization

30 % of trees, 10 % of shrubs, 41 % herbs and 16% of climbers were found having edible uses (Figure 3). Analysis of plant parts used (Table1 & Figure 4) reveals that in maximum cases leaves (28 species) are consumed followed by fruits (25 species), stems (17 species), roots (9 species), flowers (6 species) and seeds (3 species).

DISCUSSION

It is interesting to note that in some cases more than one plant parts of a single species get utilised. While in maximum cases they consume the leaves, flowers and seeds are used to a lesser extent (Fig.4). An analysis of the mode of consumption shows that parts of 18 species are eaten raw, 29 species fried, 6 boiled, 23 cooked, 2 roasted and 5 pickled (Figure 5). All the species recorded from the study area have important medicinal uses. It has been also been noted during the field survey that *Aegle marmelos*, *Azadirachta indica*, *Bacopa monnieri*, *Centella asiatica*, *Hygrophilla schulli*, *Paedaria scandens* etc. are generally consumed for restoration of broken health. The villagers depend to a

greater extent on *Alternanthera philoxeroides*, *Artocarpus lacucha*, *Colocasia esculenta*, *Typhonium trilobatum* etc. for their own consumption and sometimes they sell these in the local market. On the other hand, fruits of *Ziziphus oenoplia*, *Grewia subinaequalis*, *Mimusops elengi* etc. are commonly consumed by the children for partial fulfilment of their hunger.The wild edible plants are closely related with the socio-economic conditions of the villagers. The proximate principles of these edible wild plants need scientific evaluation not only to address issues of food security but also to cater our own nutritional needs. Moreover, the wild plants can contribute beneficial traits to crop plants (Pandey et al., 2012).The roles and values of wild foods in agricultural systems is under realization (Bharucha and Pretty, 2010) Realizing the fact, the use and conservation of wild edible plants in India have been emphasized (Arora and Pandey, 1996).

Moreover, study of nutritional as well as medicinal value of wild edible plants can prove useful to overcome food crisis with health benefits. The present work is a contribution in this direction.

Although the local people presently have enough knowledge inherited from their forefathers for using the plants growing in their natural habitats as the source of food and medicine including those species covered in the present work, the ongoing developmental programmes and contemporary changes in socio-economic conditions have been eroding the traditional knowledge and impoverishing the plant diversity in wild. As such, immediate attention is needed to document the traditional knowledge about food plants and popularize among the people sustainable use of indigenous cuisines with local wild plants. This work is a preliminary approach which needs to be followed up in future by scientific research so that nutritional and medicinal values of the wild edible plants are well proved, established and their conservation through cultivation gets fostered.

ACKNOWLEDGMENTS

The authors are very much thankful to Biswanath Biswas, Shrabani Poria, Shila Biswas, Subhadra Sarkar, Nrityagopal Samadder, Subodh Sarkar, Madhumita Swarnakar, Prohallad Mondal, Alo Basak, Shipra Podder and many others of Hogalbaria village for giving valuable information and coperation during field work. The authors are also grateful to the Head and other teachers of the Department of Botany, Burdwan University for their kind inspiration and cooperation.

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