

Preliminary screening of Medicinal plants growing in different habitats of Maldah district of West Bengal, India

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Abstract

The present article is focus on the wild medicinal plants that grown in different habitats of Maldah district of West Bengal. Two year extensive survey in Maldah district resulted in the record of around 281 species of potential medicinal plants.

Key words: Medicinal plants, Maldah, Conservation, Uses.

Introduction:

The district Maldah is situated on North-East bank of river *Ganga* and also located almost at the central part of the state of West Bengal. It is located between the 24° 40' 203" and 25° 32' 083" N latitude and between 87° 45' 503" and 88° 28' 103" E longitude and is covering 3733 sq km of total land area of West Bengal. The river *Mahananda* and *Kalindri* divided the district into three distinct topographic zones namely *Tal*, *Barind* and *Diara*. *Barind* constitutes the red and old alluvial soil with undulating topography with larger track of depression forming several small and large water bodies along with *Tangan* and *Punarbhaba* rivers and few streams. The Western part of *Mahananda* is again divided by the river *Kalindri* in to two smaller parts and the Northern part is referred as *Tal* which is a low land area composed of largest number and area of marshy wetlands. The soil of this region is new alluvial and fertile. The Southern part of *Kalindri* and Western part of *Mahananda* Rivers is referred as *Diara* which is old left-over channel of *Ganga* rich in fertile fluvial deposits. The most striking features is the continuous line of islands and accretions formed in the bed of *Ganga* by its ever changing currents. The large river island on *Ganga* is "*Bhutni Diara*" situated within the boundary of the district Maldah. The *Diara* are newly formed land with new alluvial soil which is more fertile than two other regions.

The district has no any conservatory and the wild

flora are restricted to grow in different fresh water wetlands, reserve forests, mango orchard, crop field and fragmented bushy scrubs. The district exhibits a typical tropical climatic set up with temperature ranging between 36°C – 41°C during May – June (summer) and winter temperature falling below 12°C and sometimes even dropping down to 3°C. The average mean yearly rainfall of the district is 1453.1 mm. The floral diversity of the district is suffering from various anthropological threats (Acharya, 1998; Chowdhury, 2009). A good number of plants were utilized as medicine by various tribal communities like *Santal*, *Oraon*, *Munda* and *Malpaharias* etc are the inhabitants in different remote areas of different block mainly Habibpur, Bamongola, Gazole, English Bazar and Old Malda. They people and some poor needy local peoples are using various botanicals in their daily livelihood. A good numbers of plant materials were found to be used as healing of various diseases and veterinary treatments (Chowdhury & Das, 2007; Chowdhury & Mukherjee, 2010, 2012). Several ethno-medicinal work and documentation were executed by different author (Tiwari *et al.*, 1979; Borthakur & Goswami, 1995; Rai & Bhujel, 1999; Chowdhury & Das, 2007) on various tribes from this state and North-East India.

Materials and Methods

The outcome of this work was a result of regular extensive survey that has been conducted in two consecutive years (2011 – 2013) in different tribal villages and bushy scrubs of remote areas (wetland,

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crop field and forest) of every corner of the Maldah district. Data on the medicinal use of various species were collected through direct interviews with local poor people of different remote areas and various literatures of medicinal plants (Kirtikar & Basu, 1935; R.N. Chopra *et al.*, 1956; Jain, 1991; Asolkar *et al.*, 1992). The plants also collected from the surveyed area and go through the entire procedure of most conventional herbarium technique followed by Jain and Rao (1977). The specimens are then studied and identified with the help of different literature and matched with the pre-identified specimens in the North Bengal University herbarium and Malda College herbarium. Doubtful specimens were taken to CAL and identified mostly by matching. Voucher specimens and field notebooks were deposited at Malda College Herbarium and few specimen at NBU herbarium.

Result and Discussion

The present work enlisted a total of 281 potential medicinal plant species of different taxonomic groups of angiosperms and pteridophytes from various aquatic and terrestrial habitats of Maldah district. The scientific names of those plants were arranged alphabetically along with their vernacular name, part used and uses are presented in table 1 (Plate 1). The tribal communities and poor needy peoples are regularly used various plants materials collected from natural habitat to healing their diseases and also applied for the treatment of domestic animals. Due to shrinkage of wilderness, tribal peoples planted some important medicinal plants in the periphery of their houses. Different part of those species like leaves, rhizomes or roots, fruits, bark, flowers, young twig, seeds etc are selected as medicinal uses. During this study germplasm of around hundreds different important medicinal plants were collected in the form of seedlings, rhizomes, seeds etc and were maintained alive presently at the garden of medicinal plants, Malda college, Malda. The tribal communities and rural poor people of this district use these plants in various formulations to cure several human diseases and their domestic animals. Apart from the locally ethno-medicinal plants, some potential medicinal plants were also enlisted due to its global medicinal

uses consulting various commonly available literatures (Kirtikar & Basu, 1935; R.N. Chopra *et al.*, 1956; Das & Mandal, 2003; Biswas & Chopra, 1940; Jain, 1991; Asolkar *et al.*, 1992; Pandey *et al.*, 2002; Misra & Dash, 2002; Dubey *et al.*, 2002; Rai & Bhujel, 2002, Bhakat et al 2007, Das et al, 2010)

Out of total recorded medicinal plants of different habitats of Maldah district, the species like *Abrus precatorius* L., *Abroma augusta* L. (L. f.), *Ampelocissus latifolia* (Roxb.) Planch., *Asperagus racemosus* Willd., *Calotropis procera* (Ait.) Dryand., *Crateva religiosa* Forst. f., *Cryptolepis buchananii* R. Br. ex Roem. & Schult., *Helminthostachys zeylanica* (L.) Hook., *Lasia spinosa* (L.) Thw., *Ocimum basilicum*, *Operculina turpethum* (L.) S. Manso, *Plumbago zeylanica* L., *Psoralea corylifolia* L., *Rouwolfia serpentina* Benth. ex Kurz., *Saraca indica* L., *Solanum suratensis* Burm. f., *Stephania glabra* (Roxb.) Miers. are found very rare and threatened. Three parasitic angiosperms i.e., *Cuscutta reflexa* Roxb., *Dendrophthoe pentandra* Bl. and *Dendrophthoe falcata* Bl. were used in veterinary treatment.

The rapid conversion of wilderness into cultivated land and urbanization throughout the district causes fast habitat loss for various important medicinal plant species. There are no such conservatories in the district except few reserve forest where the existing species of medicinal plants can survive for long time but species from other unprotected areas will be disappear in coming future drastically. To long term use of such medicinal plants along with other wild species need to conserve from right now for human welfare and future research. In terms of conservation of such medicinal plants authority should take proper conservation strategies and its strict implementation.

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Table 1: List of potential medicinal plants recorded from different habitats of Maldah district of West Bengal
 [Abbreviation used: R = Root, L = Leaves, S = Stem, Se = Seed, Rh = Rhizome, B = Bark, G = Gum, La = Latex, Tu = Tuber, Cu = Culm, Rs = Root stock]

Sl. No.	Species	Family	Habit	Local name	Part used	Local status	Use as/in
1	<i>Abroma augusta</i> (L.) L. f.	Malvaceae	S	Ulaakambal	R/L	C	Menstrual disorder, antidote
2	<i>Abrus precatorius</i> L.	Leguminosae	C	Kuch	R/Se	R	Purgative, emetic, aphrodisiac
3	<i>Abutilon indicum</i> (L.) Sw.	Malvaceae	S	-	R/L/S	C	Diuretic, demulcent, laxative
4	<i>Acacia catechu</i> Wall. ex Thw.	Leguminosae	S	Supari	B	C	Astringent, digestive, Diarrhoea, stomache, piles
5	<i>Acacia nilotica</i> (L.) Willd. ex Del.	Leguminosae	T	Khair	BG	C	Syphilis, cholera, dysentery, leprosy
6	<i>Acalypha indica</i> L.	Euphorbiaceae	H	Babla	R/L/S	A	Ringworm, arthritis, rheumatism
7	<i>Achyranthus aspera</i> L.	Amaranthaceae	H	Apang	R/L/S	A	Diuretic, antirheumatic
8	<i>Achyranthus bidentata</i> Bl.	Amaranthaceae	H	Kakralatha	R/L/S	A	Hydrosyl, Join pain, headache
9	<i>Acmella calva</i> (DC.) Jansen	Asteraceae	H	-	L/R	A	Toothache, jaundice
10	<i>Acmella uliginosa</i> (Sw) Cass.	Asteraceae	H	-	L/R	A	Toothache
11	<i>Acorus calamus</i> L.	Acoraceae	H	Bach	Rh	R	Gastritis, stomach pain, tonsillitis and cough
12	<i>Adhatoda zeylanica</i> Medik.	Acanthaceae	S	Basak	L	C	Dermatitis, Abdominal pain,
13	<i>Aegle marmelos</i> (L.) Corr.	Rutaceae	T	Bel	R/L/F	A	Diarrhoea, dysentery, appetite
14	<i>Aerva lanata</i> (L.) Juss.	Amaranthaceae	H	Chaya	R/L/S	C	Antidote of snake bite
15	<i>Aerva sanguinolenta</i> (L.) Bl.	Amaranthaceae	H	Bisalakarani	L	C	Cut & bruises
16	<i>Ageratum conyzoides</i> L.	Asteraceae	H	-	R/L	A	Diarrhoea and dysentery, antidote for snakebite
17	<i>Albizia lebbek</i> Benth.	Asteraceae	T	Siris	B	A	Aphrodisiac, astringent, expectorant
18	<i>Alpinia nigra</i> (Gaertn.) Burt.	Zingiberaceae	S	Purundi	Rh/L	R	Fever
19	<i>Astonia scholaris</i> (L.) R. Br.	Apocyanaceae	T	Chatim	Bl	C	Gastritis, stomach pain, tonsillitis and cough
20	<i>Alternanthera pungens</i> H.B.K.	Amaranthaceae	C	-	R/L/S	C	Blood dysentery
21	<i>Alternanthera sessilis</i> (L.) DC.	Amaranthaceae	H	Khenchi	R/L/S	C	Galactic cholague, febrifuge, antidote of Snake bite, eye troubles, hair tonic.
22	<i>Amaranthus spinosus</i> L.	Amaranthaceae	H	Kata note	R/L/S	C	Boils and carbuncles
23	<i>Amaranthus viridis</i> L.	Amaranthaceae	H	Note	R/L/S	C	Purgative
24	<i>Ammannia baccifera</i> L.	Lythraceae	H	-	L	C	Raise blisters, in rheumatism, fever
25	<i>Amorphophallus campanulatus</i> (Roxb.) Bl. ex. Decne.	Araceae	H	Ban-ol	L	C	Piles, enlarged spleen, tumours, asthma, bronchitis, vomiting, elephantiiasis
26	<i>Ampelocissus barbata</i> (Wall.) Panch.	Vitaceae	C	Jangli angur	R/L/S	C	Pneumonia, bowel complains, wound

27	<i>Ampelocissus latifolia</i> (Roxb.) Planch.	Vitaceae	C	-	R/L/S	C	Muscular pain, sores, pneumonia and bone fracture
28	<i>Anagalis arvensis</i> L.	Primulaceae	H	-	L	C	Leprosy, dropsy, epilepsy, hepatic, renal complaints
29	<i>Andrographis paniculata</i> Wall. ex Nees.	Acanthaceae	H	Chirata	R/L/S	C	Gastritis & headache
30	<i>Anisomeles indica</i> (L.) Kuntz.	Lamiaceae	S	Gopali	R/L/S	C	Carminative, astringent, fever and whooping cough
31	<i>Argemone mexicana</i> L.	Papaveraceae	H	Sialkata		C	Piles, laxative, eczema
32	<i>Aristolochia indica</i> L.	Aristolochiaceae	T	Iswarmul	R/L	R	Malarial fever, intermittent fevers, joint pains, flatulence and dyspepsia
33	<i>Artocarpus lacucha</i> Buch.-Ham.	Moraceae	T	Dahua	L/R	C	Pneumonia, bowel complaints
34	<i>Asperagus racemosus</i> Willd.	Asperagaceae	H	Satamuli	Rh	R	Phrodisiac, antispasmodic, alterative, galactagogue, laxative, expectorant and anti-dysenteric
35	<i>Azadirachta indica</i> A. Juss.	Meliaceae	T	Neem	R/L/S	C	Leprosy, astringent, antihelminthic
36	<i>Bacopa monnieri</i> (L.) Penn.	Plantaginaceae	H	Bramhi	L/S	C	Brain tonic, antidote of snake bite
37	<i>Barleria strigosa</i> Willd.	Acanthaceae	S	Jiati	L/R	C	Bile and gastritis
38	<i>Barringtonia acutangula</i> (L.) Gaert.	Lecythidaceae	T	Hizal	B	C	Gum & Toothache
39	<i>Bauhinia variegata</i> L.	Leguminosae	T	Kanchan	R/L/S	C	Fever
40	<i>Bauhinia purpurea</i> L.	Leguminosae	T	Kanchan	R/L/S	C	Astringent, dropsy, stomachic
41	<i>Biophytum reinwardtii</i> (Zucc.) Klotzsch	Oxalidaceae	H	Rani lajjabati	L/S	C	Diuretic.
42	<i>Biophytum sensitivum</i> DC.	Oxalidaceae	H	Rani lajjabati	L/S	C	Diuretic.
43	<i>Bobax ceiba</i> L.	Bombaceae	T	Simul	R/L/S	C	Diuretic, laxative, stomach troubles, dropsy
44	<i>Boerhaavia diffusa</i> L.	Nyctaginaceae	H	Punarvaba	R/L/S	C	Menorrhagia
45	<i>Butea monosperma</i> (Lamk.) Taub.	Leguminosae	T	Palas	R/L/S	C	Astringent, dysentery, anathematic
46	<i>Caesalpinia bonduc</i> (L.) Roxb.	Leguminosae	S	Nata	Se	C	Filariasis
47	<i>Caesalpinia cuculata</i> Roxb.	Leguminosae	S	Ultra kata	L/S	C	Aphrodisiac
48	<i>Cajanus cajan</i> (L.) Druce	Leguminosae	S	Arahar	L/R	C	Jaundice
49	<i>Calotropis gigantea</i> (L.) Ait. f.	Apocynaceae	S	Akando	R/La	C	Muscular pain, anti-hemorrhage
50	<i>Calotropis procera</i> (Ait.) Dryand.	Apocynaceae	S	Akando	R/La	R	Muscular pain, carminative
51	<i>Canna indica</i> L.	Cannaceae	H	Srijal	R	C	Headache
52	<i>Cannabis sativa</i> L.	Euphorbiaceae	H	Bhang	R/L	C	Sedative, narcotic, anesthetic, appetizer
53	<i>Capparis zeylanica</i> L.	Capparidaceae	S	-	R	C	Scabis
54	<i>Cardamine hirsute</i> L.	Brassicaceae	H	-	R/L	C	Cold and cough
55	<i>Cardiospermum halicacabum</i> L.	Sapindaceae	C	-	L/R	C	Diuretic, laxative, stomachic, anti-inflammatory

56	<i>Carica papaya</i> L.	Caricaceae	T	Pepe	R/L/S	C	Eczema, warts, bleeding haemorrhoids
57	<i>Cassia fistula</i> L.	Leguminosae	T	Badarliathi	R/L	C	Laxative, emetic, leprosy, gripping, dyspepsia
58	<i>Centella asiatica</i> (L.) Urban	Apiaceae	H	Thankuni	R/L	C	Skin diseases, leprosy, nervousness and blood diseases, amoebic dysentery, diarrhoea
59	<i>Ceratophyllum demersum</i> L.	Ceratophyllaceae	H	-	S/L	C	Cooling agent
60	<i>Ceratopteris thalictroides</i> (L.) Brongn.	Pruriaceae	H	-	L	C	Biliousness as cooling agent
61	<i>Chenopodium album</i> L.	Amaranthaceae	H	Bathua	R/L/S	C	Anthelmintic, dysentery
62	<i>Chenopodium ambrosioides</i> L.	Amaranthaceae	H	-	L	C	Against tapeworm
63	<i>Cissampelos pareira</i> L.	Menispermaceae	C	-	R/L	C	Astringent, carminative, diuretic, sedative
64	<i>Cissus quadrangularis</i> L.	Vitaceae	C	Harjora	L/S	C	Fracture of bone, asthma
65	<i>Citrus medica</i> L.	Rutaceae	T	Lebu	R/L/S	C	Anthelmintic, dysentery, diarrhoea
66	<i>Cleome rutidosperma</i> DC.	Cleomaceae	H	-	-	C	Jaundice
67	<i>Clerodendrum indicum</i> (L.) Kuntz.	Verbenaceae	S	-	R/L	C	Skin diseases
68	<i>Clerodendrum serratum</i> Spreng.	Verbenaceae	S	-	R/L	C	Asthma, dropsy, syphilis
69	<i>Clerodendrum viscosum</i> Vent.	Verbenaceae	S	Bhant	R/L	C	Fever
70	<i>Clitoria ternatea</i> Roxb.	Leguminosae	C	Aparajita	R/L/S	C	Anti-stress, anxiolytic, anti-depressant, anti-convulsant
71	<i>Coccinia grandis</i> Voigt.	Cucurbitaceae	C	Telakucha	R/L/S	C	Earache, ear diseases
72	<i>Cocculus hirsutus</i> (L.) W. Theob.	Menispermaceae	C	-	R/L/S	C	Laxative, alternate, emollient, demulcent, digestive, carminative, aphrodisiac, expectorant
73	<i>Coix lachryma-jobi</i> L.	Poaceae	S	-	Rs	C	Anthelmintic, wormifuge
74	<i>Coldenia procumbens</i> L.	Boraginaceae	H	-	L	C	Rheumatic swellings
75	<i>Colocasia esculenta</i> (L.) Schott.	Araceae	H	Kachu	Rh/La	C	Leprosy, wound
76	<i>Colocasia nyphephoides</i> Kunth.	Araceae	H	Kachu	Rh/La	C	Earache, ear diseases
77	<i>Commelina benghalensis</i> L.	Commelinaceae	H	-	L/R	C	Laxative, leprosy, constipations, headache.
78	<i>Commelina diffusa</i> Burm. f.	Commelinaceae	H	-	R/L/S	C	Burns, itches, boils, poulticing sores
79	<i>Commelina sylvaticosum</i> Bl.	Commelinaceae	H	-	R/L/S	C	Pain reliever
80	<i>Costus speciosus</i> (Koen. ex Retz.) Sm.	Costaceae	S	Orap	R/L/S	C	Astringent, purgative, depurative, stimulant, tonic and anathemantic
81	<i>Crateva religiosa</i> Forst. f.	Capparidaceae	T	Barun	L	R	Earache, ear diseases
82	<i>Crinum asiaticum</i> L.	Amaryllidaceae	H	Birpiaj	Tu	C	Vomiting, urinary discharges

83	<i>Crotalaria retusa</i> L.	Leguminosae	S	Atasi	C							Astringent, digestive, diarrhoea, stomache
84	<i>Croton bonplandianum</i> Baillon	Euphorbiaceae	H	Maricha	C	R/L/La						Ant hemorrhagic
85	<i>Crozophora rotleri</i> (Geiseler) Juss. ex Spreng.	Euphorbiaceae	H	-	C	R/L/S						Gum & Toothache
86	<i>Cryptolepis buchamanii</i> R. Br. ex Roem. & Schult.	Apocynaceae	C	-	R	L						Bone fracture
87	<i>Cuscutta reflexa</i> Roxb.	Cuscutaceae	C	Sarnalata	A	S						Abdominal pain
88	<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	H	Durba	A	L/S						Antiseptic, liver cirrhosis, indigestion, burning sensation in urination
89	<i>Cyperus rotundus</i> L.	Cyperaceae	H	Muthaghas	A	Rs						Diarrhoea, leprosy, thirst, fever, blood diseases, pain, vomiting, stomach disorder, leprosy
90	<i>Dactyloctenium aegypticum</i> (L.) P. Beauv.	Poaceae	H	-	A	L/S						Pains in kidney, ulcers
91	<i>Datura stramonium</i> L.	Solanaceae	S	Dutura	A	R/F						Ear pain
92	<i>Dendrocalamus strictus</i> (Roxb.) Nees.	Poaceae	T	Kata banse	C	Cu						Astringent
93	<i>Dendrophthoe falcata</i> Bl.	Loranthaceae	S	-	A	R/L/S						Veterinary treatment
94	<i>Dendrophthoe pentandra</i> Bl.	Loranthaceae	S	-	A	R/L/S						Veterinary treatment
95	<i>Dentella repens</i> J. & G. Forster	Rubiaceae	H	-	A	R/L/S						Hypertension
96	<i>Desmodium gangeticum</i> (L.) DC.	Leguminosae	H	-	A	R/L/S						Astringent, fever, dysentery
97	<i>Desmodium triflorum</i> (L.) DC.	Leguminosae	H	-	C	L						Wound
98	<i>Dicliptera bulleroides</i> Nees.	Acanthaceae	H	-	R	R/L/S						Antidote of snake bite
99	<i>Dillenia indica</i> L.	Dilleniaceae	T	Chalta	R	Rh/L						Gastritis, colic pain, diarrhoea
100	<i>Dioschoria bulbifera</i> L.	Dioscoriaceae	C	Methealu	C	Rh/L						Diabetes, leprosy
101	<i>Diplazium esculentum</i> (Koeng. ex Retz.) Sw.	Athyriaceae	H	Dhekisak	C	L						Anthelmitic
102	<i>Discorea pentaphylla</i>	Dioscoriaceae	C	Khamalu	C	Rh/L						Pain reliever, gastritis, contraceptive
103	<i>Drymaria quercifolia</i> L.	Polypodiaceae	H	-	R	R/L/S						Sinus trouble
104	<i>Eclipta prostrata</i> Roxb.	Asteraceae	H	Kesut	C	R/L/S						Jaundice, hepatic and spleen enlargement, catarrhoea, hair tonic
105	<i>Elephantopus scaber</i> L.	Asteraceae	H	-	C	R/L/S						Antitumor
106	<i>Elusine indica</i> (L.) Gaert.	Poaceae	H	-	C	R/L						Anthelminthic
107	<i>Erythra fluctuans</i> Lour.	Asteraceae	H	Helenchu	C	R/L/S						Laxative, against hookworm and bile problem
108	<i>Erythrina stricta</i> Roxb.	Leguminosae	T	Madar	C	R/L/B						Injury, wound

109	<i>Eupatorium odoratum</i> L.	Asteraceae	H	-	R/L/S	C	Anti-inflammatory, and detoxifying functions
110	<i>Euphorbia heyneana</i> Spreng.	Euphorbiaceae	H	-	R/L/S	C	Anti-inflammatory
111	<i>Euphorbia hirta</i> L.	Euphorbiaceae	H	-	R/L/S	C	Eye sore
112	<i>Euphorbia hypericifolia</i> L.	Euphorbiaceae	H	-	R/L/S	C	Anti-inflammatory
113	<i>Euphorbia nerifolia</i> L.	Euphorbiaceae	H	-	L/La	R	Toothache
114	<i>Euphorbia tirucalli</i> Forsk.	Euphorbiaceae	H	Siblanka	L/La	C	Muscular pain, Mother milk production
115	<i>Euryale ferox</i> Salisb.	Nymphaeaceae	H	Makhana	Se/L	C	Dysmenorrhea, dysentery, rheumatism
116	<i>Ficus benghalensis</i> L.	Moraceae	T	Bat	R/L/La	C	Wound
117	<i>Ficus cunia</i> Ham.	Moraceae	T	Dumur	R/L/La	C	Wound
118	<i>Ficus hispida</i> L. f.	Moraceae	T	Khoksha	B/F	C	purgative
119	<i>Ficus religiosa</i> L.	Moraceae	T	Asatta	R/L/La	C	Asthma, boil, skin disease
120	<i>Flacourtia jangomas</i> (Lour.) Racusch.	Flacourtiaceae	S	Panial	R/L/S	R	Diaphoretic, astringent, stomachic, diarrhoea, piles, toothache and stomatitis
121	<i>Fumaria indica</i> (Hausk.) Pugsley	Fumariaceae	H	-	R/L/S	C	Purify the blood in Skin disease
122	<i>Glinus oppositifolius</i> (L.) A. DC.	Molluginaceae	H	Gima	R/L/S	C	Stomachic, aperients and antiseptic, skin diseases
123	<i>Glycosmis pentaphylla</i> (Retz.) DC.	Rutaceae	S	-	R/L/S	C	Cough, rheumatism, anemia and jaundice
124	<i>Gmelina arborea</i> Roxb.	Lamiaceae	S	Gamar	B	C	Jaundice
125	<i>Grangia medaraspata</i> (L.) Poir.	Asteraceae	H	-	R/L/S	C	Stomach trouble, irregular menses, hysteria, earache
126	<i>Heliotropium indicum</i> L.	Boraginaceae	H	Hatisura	R/L/S	C	Fever, ulcer
127	<i>Helminthostachys zeylanica</i> (L.) Hook.	Ophioglossaceae	H	-	R/L/S	C	Dysentery, catarrh, and early stage of phthisis
128	<i>Hemidesmus indicus</i> (L.) R. Br.	Apocynaceae	H	Anantamul	R/L/S	C	Blood purifier, skin disease
129	<i>Holarrhena pubescens</i> (Buch.-Ham) G. Don.	Apocynaceae	T	Kurchi	L/S	C	Dysentery
130	<i>Homalomena rubescens</i> (Roxb.) Kunth.	Araceae	H	Kadam	L	C	Skin disease
131	<i>Hydrolea zeylanica</i> (L.) Vahl.	Hydrophyllaceae	H	-	L	C	Antiseptic, poultice for ulcer
132	<i>Hygrocotyle sibthorpioides</i> Lam.	Apiaceae	H	-	R/L/S	C	Abscesses, colds, coughs, hepatitis, influenza, pruritus, sore throat
133	<i>Hygrophilla auriculata</i> (Schum.) Heine.	Acanthaceae	H	Kulekhara	R/L	C	Diuretic, dropsy, jaundice, diseases of urino-genital tracts.
134	<i>Hypericum japonicum</i> Murray	Hypericaceae	H	-	R/L/S	C	Astringent, alterative, styptic, vulnerary, asthma and dysentery

135	<i>Ichnocarpus frutescens</i> (L.) R. Br.	Apocynaceae	C	Dudh lahara	R/L	C	Aphrodisiac, fever, convulsion
136	<i>Imperata cylindrica</i> (L.) Rauschel	Poaceae	H	Kush			Wormifuge
137	<i>Ipomoea aquatica</i> Fossk.	Convolvulaceae	C	Kolmi	L/S	C	Purgative, purify blood, emetic
138	<i>Ipomoea carnea</i> var. <i>fistulosa</i> (Choisy) D. Austin	Convolvulaceae	S	-	S	C	Pain reliever
139	<i>Jatropha curcus</i> L.	Euphorbiaceae	S	Lal verenda	L/S/La	C	Eczema, rheumatism
140	<i>Jatropha gossypifolia</i> L.	Euphorbiaceae	S	Verenda	L/S/La	C	Purgative, stomach ache, toothache
141	<i>Justicia genáarussa</i> Burm.f.	Acanthaceae	S	-	R/L/S	C	Chronic bronchitis, skin eruptions.
142	<i>Kalinga nemoralis</i> (Forst.) Dandy ex Hutch.	Cyperaceae	H	-	R/L/S	C	Arthritis, bronchitis
143	<i>Lasta spinosa</i> (L.) Thw.	Araceae	S	Kata kachu	Rh/L	R	Asthma
144	<i>Launea coromondelica</i> (Hout.) Merr.	Anacardiaceae	T	Jiwal	R/L/S	C	Ulcer, toothache, healing wound
145	<i>Leea indica</i> (Burm.) Merr.	Leeaceae	H	-	R/L/B	A	Analgesic
146	<i>Lemna perpusilla</i> Torrey	Lemnaceae	H	Takapana	L	C	Astringent, diuretic, skin diseases, ophthalmic wash.
147	<i>Leonurus sibiricus</i> L.	Lamiaceae	H	-	R/L/S	A	Rheumatism, bronchitis
148	<i>Leucas cephalotes</i> (Roth) Spreng.	Lamiaceae	H	Dorpi	Se/L	A	Stimulant, laxative, antiseptic
149	<i>Leucas indica</i> (L.) R. Br. ex Vatke	Lamiaceae	H	Dorpi	R/L/S	A	Antipyretic, insecticides, cough and cold
150	<i>Limnophila heterophylla</i> (Roxb.) Benth.	Plantaginaceae	H	-	R/L/S	A	Chronic bronchitis, skin eruptions.
151	<i>Limnophila indica</i> (L.) Druce	Plantaginaceae	H	-	R	A	Antiseptic, elephantiasis, fevers, dysentery.
152	<i>Lindenbargia indica</i> (L.) Kuntz.	Linderniaceae	H	-	R/L/S	A	Bronchitis
153	<i>Lindernia crustacea</i> (L.) F. Muell.	Linderniaceae	H	-	R/L/S	A	Dysentery, poultices for boils, ringworms and itches.
154	<i>Lippia javanica</i> (Burm. f.) Spreng	Verbenaceae	S	-	R/L/S	C	Stomachic and nervine
155	<i>Ludwigia adscendens</i> (L.) Hara	Onagraceae	H	-	L/S/F	A	Fever, cystitis, dysuria and hemorrhagic dysentery.
156	<i>Luffa aegyptica</i> Mill	Cucurbitaceae	C	-	R/L/S	C	Diarrhoea of cattle
157	<i>Lygodium flexusum</i> (L.) Sw.	Lygodiaceae	C	-	R/L/S	R	Rheumatism, sprains, scabies, ulcers, eczema
158	<i>Madhuca indica</i> Gmel.	Sapotaceae	T	Mahua	R/L/FI	A	Laxative, skin disease
159	<i>Mallotus philippensis</i> (Lam.) Muell. Arg.	Euphorbiaceae	T	Sindure	R/L/S	R	Anthelmintic, constipation, ulcer, skin disease
160	<i>Mallotus repandus</i> (Willd.) Müll. Arg.	Euphorbiaceae	T	Pithali	R/L/S	C	Antibilious, antifatulent, anti- inflammatory
161	<i>Mangifera indica</i> L.	Anacardiaceae	T	Aam	R/L/S	C	Astringent, rheumatism, stomach

162	<i>Marsilea minuta</i> L.	Marsileaceae	H	Susni	L/S	A	Cough, bronchitis
163	<i>Medicago lupulina</i>	Leguminosae	H	-	R/L/S	A	Laxative
164	<i>Melia azedarach</i> L.	Meliaceae	T	-	R/L/B/F	C	Anthelmintic
165	<i>Melochia corchorifolia</i> L.	Malvaceae	H	-	R/L/S	C	Ulcers, abdominal swelling, and headache
166	<i>Meyna spinosa</i> Link.	Rubiaceae	S	Mayna	R/L/S	C	Anthelmintic
167	<i>Michelia champaca</i> L.	Magnoliaceae	T	Chapa	R/L/S	R	Diuretic, rheumatism
168	<i>Mikania micrantha</i> Kunth in HBK	Asteraceae	C	-	R/L/S	C	Heal cuts and stop minor external bleeding
169	<i>Mimosa himalayana</i> Gamble	Leguminosae	S	-	R/L/S	R	Boils to discharge the pus
170	<i>Mimosa pudica</i> L.	Leguminosae	H	Lajjabati	R/S	C	Piles, fistula, hydrocele and blood dysentery
171	<i>Mollugo pentaphylla</i> L.	Molluginaceae	H	-	R/L/S	A	Anticancer, antitoxic and diuretic
172	<i>Momordica charantia</i> L.	Cucurbitaceae	C	-	R/L/S	C	Leprosy, purgative, piles, jaundice
173	<i>Momordica cochinchinensis</i>	Cucurbitaceae	C	-	R/L/S	C	Eye treatment
174	<i>Monochoria hastata</i> (L.) Solms	Pontaderiaceae	H	-	R	C	Cooling agent, applied in boils, toothache.
175	<i>Morinda angustifolia</i> Roxb.	Rubiaceae	T	-	R/L/S	C	Pruritus on toes
176	<i>Moringa oleifera</i> Lam.	Moringaceae	T	Sajne	R/L/La	C	Abortifacient, aphrodisiac, anti pox, stimulant
177	<i>Morus alba</i> L.	Moraceae	T	Tunt		C	Fever, heart disease
178	<i>Mucuna pruriens</i> (L.) DC.	Leguminosae	C	Alkushi	R/L/S	C	Astringent, dropsy, seminal weakness
179	<i>Mukia madaraspata</i> (L.) Roem.	Cucurbitaceae	C	-	R/L/S	C	Headache
180	<i>Murdannia nudiflora</i> (L.) Brenan	Commelinaceae	H	-	R/L/S	C	Leprosy, headache, asthma, piles, stomach and Kidney trouble
181	<i>Murraya koenigii</i> Spreng.	Rutaceae	S	Karipata	R/L	C	Febrifuge, antidotes of poisonous animals
182	<i>Murraya paniculata</i> (L.) Jack.	Rutaceae	S	Kamini	R/L	R	Rheumatism, hysteria, astringent
183	<i>Nelumbo nucifera</i> Gaertn.	Nelumbonaceae	H	Padma	Rh/F	C	Dysentery, diarrhoea and piles.
184	<i>Neolamarckia cadamba</i> (Roxb.) Bosser	Rubiaceae	T	Kadam	B	C	Cholera, dysentery, skin disease
185	<i>Nerium indicum</i> Mill.	Apocynaceae	T	Karabi	R/L/S	C	Anthelmintic, dysentery, cardiac
186	<i>Nyctanthus arbot-tritis</i> L.	Nyctaginaceae	T	Seuli	R/L/S	C	Laxative, diuretic
187	<i>Nymphaea nouchali</i> Burm. f.	Nymphaeaceae	H	Sapla	Rh/F	C	Dyspepsia, diarrhoea and piles
188	<i>Nymphaea pubescens</i> Willd.	Nymphaeaceae	H	Sapla	Rh/Se	C	Astringent and cardio-tonic, cutaneous diseases
189	<i>Nymphaea rubra</i> Roxb. ex Salisb.	Nymphaeaceae	H	Lal Sapla	R/L/S	C	Blood dysentery and piles
190	<i>Nymphoides hydrophylla</i> (Lour.) Kuntz.	Menyanthaceae	H	-	L/Se	C	Ulcers, insect bites, skin affections.

191	<i>Nymphaoides indica</i> (L.) Kuntz.	Menyanthaceae	H	-	R/L/S	C	anthelmintic
192	<i>Ocimum basilicum</i> L.	Lamiaceae	H	Ban Tulsi	R/L/S	R	Fever and jaundice. Antibacterial, antifungal, antispasmodic, carminative, diaphoretic, digestive, expectorant, Fever, gastric irritation and nervous depression Jaundice, liver diseases and as anthelmintic.
193	<i>Oldenlandia biflora</i> L.	Rubiaceae	H	-	R/L/S	C	Cough, blood purifier
194	<i>Oldenlandia corymbosa</i> L.	Rubiaceae	H	-	R/L/S	C	Purgative
195	<i>Oldenlandia diffusa</i> (Willd.) Roxb.	Rubiaceae	H	-	R/L/S	C	Skin disease
196	<i>Operculina turpethum</i> (L.) S. Manso	Convolvulaceae	C	-	R/L/F	C	Dysentery, astringent
197	<i>Ophioglossum reticulatum</i> L.	Ophioglossaceae	H	-	R/L/S	R	Dyspepsia, piles, anemia and tympanias.
198	<i>Oroxylum indicum</i> (L.) Vent.	Bignoniaceae	T	-	R/L/S	C	Dysentery, piles, fever
199	<i>Oxalis corniculata</i> L.	Oxalidaceae	H	Amrul	R/L/S	C	Dysentery
200	<i>Paederia scandens</i> (Lour.) Merril.	Rubiaceae	C	-	R/L/S	C	Dysentery
201	<i>Peltophorum pterocarpum</i> (DC.) K. Heyne.	Leguminosae	T	Radhachura	R/B	C	Astringent
202	<i>Pentapetes phoenicea</i> L.	Malvaceae	S	-	R	C	Wound, purgative, expectorant
203	<i>Pergularia daemia</i> (Forssk.) Chio.	Apocynaceae	C	-	R/L/S	C	Astringent, cooling agent, gripping pains of colic.
204	<i>Persicaria barbata</i> (L.) Hara	Polygonaceae	H	-	R/L/S	C	Antihelmintic, diuretic, carminative
205	<i>Persicaria hydropiper</i> L.	Polygonaceae	H	-	R/L/S	C	Good tonic, healing wounds
206	<i>Persicaria orientalis</i> (L.) Spach.	Polygonaceae	S	-	R/L/S	C	Dropsy, dysentery, ulcer, wound
207	<i>Phyllanthus amarus</i> Sch. & Thonning	Euphorbiaceae	H	bhui amlaki	R/L/S	C	Digestive, diabetes, dysentery, piles
208	<i>Phyllanthus embelica</i> L.	Euphorbiaceae	T	-	R/L/S	C	Jaundice, stomachache, dysentery
209	<i>Phyllanthus fraternus</i> Web.	Euphorbiaceae	H	-	R/L/S	C	Jaundice, diuretic
210	<i>Phyllanthus urinaria</i> L.	Euphorbiaceae	H	Bhui amlaki	R/L/S	C	Skin disease
211	<i>Physalis minima</i> L.	Solanaceae	H	-	R/L/S	C	Stimulant, carminative, malaria
212	<i>Piper longum</i> L.	Piperaceae	C	Jagji pan	R/L/S	C	Antiseptic, antidyenteric,
213	<i>Pistea stratiotes</i> L.	Araceae	H	Taka-pana	L	C	antitubercular, insecticidal
214	<i>Plumbago zeylanica</i> L.	Plumbaginaceae	H	-	R/L/S	R	Dyspepsia, piles, diarrhoea
215	<i>Polygonum plebeium</i> R. Br.	Polygonaceae	H	-	L	C	Pneumonia, bowel complaints
216	<i>Pongamia pinnata</i> (L.) Pierre	Fabaceae	T	-	R/L/S	C	Diabetes, epilepsy, dyspepsia, leprosy
217	<i>Portulacca oleracea</i> L.	Portulacaceae	H	-	R/L/S	C	Dysuria, dysentery, gonorrhoea
218	<i>Pouzolzia zeylanica</i> (L.) Benn. & R. Br.	Urticaceae	H	-	R/L/S	C	Dysentery
219	<i>Psoralea corylifolia</i> L.	Malvaceae	S	-	R/L/S	R	Leucoderma

				T	-	R/L/S	R	
220	<i>Pterospermum acerifolium</i> (L.) Willd.	Malvaceae						Laxative, anthelmintic; used in leucorrhoea, gastralgia, ulcers, tumours, leprosy.
221	<i>Putranjiva roxburghii</i> Wall.	Putranjivaceae		T	Pitania	R/L/S	R	Myocardial weakness, hypertension, cardiotoxic
222	<i>Ranunculus scleratus</i> L.	Ranunculaceae		H	-	R/L/Se	C	Rheumatism, dysuria, asthma, and pneumonia
223	<i>Ricinus communis</i> L.	Euphorbiaceae		S	-	R/L/S	C	Diuretic, gastritis, dysentery
224	<i>Rouwolfia serpentina</i> Benth. ex Kurz.	Apocyanaceae		H	Sarpagandha	R/L/S	R	Hypertension, insomnia
225	<i>Rumex dentatus</i> L.	Polygonaceae		H	-	S	A	Astringent, cutaneous disorders
226	<i>Rungia pectinata</i> (L.) Nees.	Acanthaceae		H	-	L	C	Smallpox, cooling effect
227	<i>Sagittaria sagittifolia</i> L.	Alismataceae		H	-	R/L/S	C	Antiseptic
228	<i>Saraca indica</i> L.	Leguminosae		T	Ashok	R/L/S	R	Dysentery, astringent, uterine sedative
229	<i>Schoenoplectus articulatus</i> (L.) Palla	Cyperaceae		H	Chirchiri	R/L/S	C	Diarrhoea, purgative
230	<i>Scindopsus officinalis</i> (Roxb.) Schott.	Araceae		C	Gajpipul	R/L/S	C	Asthma, dysentery and problems of throat
231	<i>Scoparia dulcis</i> L.	Plantaginaceae		H	Jastimadhu	Rs	C	Diabetes, leprosy
232	<i>Senna alata</i> (L.) Roxb.	Leguminosae		S	Dadari	R/L/S	C	Diuretic, skin disease, constipation
233	<i>Senna occidentalis</i> (L.) Link.	Leguminosae		T	-	R/L	C	Diarrhoea
234	<i>Senna sophera</i> (L.) Roxb.	Leguminosae		T	-	R/L/S	C	Blood dysentery
235	<i>Senna tora</i> (L.) Roxb.	Leguminosae		H	-	R/L/S	C	Leprosy, psoriasis, ulcer
236	<i>Seseli diffusum</i> (Roxb. ex Sm.) Sant. & Wangh	Apiaceae				L/F	C	Stimulant, stomachic, and for expelling round worms
237	<i>Shorea robusta</i> Gaertn. f.	Dipterocarpaceae		T	Sal	R/L/S	C	Astringent, dysentery
238	<i>Sida acuta</i> Burm. f.	Malvaceae		H	Chipchirip	R/L/S	C	Blood dysentery.
239	<i>Sida cordifolia</i> L.	Malvaceae		H	-	R/L/S	C	Fever, nervous disorder
240	<i>Sida rhombifolia</i> L.	Malvaceae		S	-	R/L/S	C	Fever, leucoderma
241	<i>Smilax zeylanica</i> L.	Smilacaceae		C	-	R/L/S	C	Diabetes
242	<i>Solanum myriacanthum</i> Dunal	Solanaceae		S	-	R/F	R	Anti-inflammatory and anthelmintic
243	<i>Solanum nigrum</i> L.	Solanaceae		H	Handikundi	R/L/S	C	Pharyngitis and toothache
244	<i>Solanum suratensis</i> Burm. f.	Solanaceae		S	Henje	R/F	C	Cold and cough
245	<i>Solanum torvum</i> Sw.	Solanaceae		S	Bangerbata	R/L/S	C	Body pain and ear pain.
246	<i>Solanum virginianum</i> L.	Solanaceae		S	-	R/L/S	C	Cough, asthma and chest pain
247	<i>Sonchus oleraceus</i> L.	Asteraceae		H	-	R/L/S	C	Anti-inflammatory, blood purifier
248	<i>Sphaeranthus indicus</i> L.	Asteraceae		H	-	R/S/L	C	Diuretic, laxative, stomach troubles.
249	<i>Spondius pinnata</i> (L. f.) Kurtz.	Anacardiaceae		T	Amra	L/R/B	C	Piles, rheumatism,
250	<i>Stebius asper</i> Lour.	Moraceae		T	Sahara	R/S	C	Dermatitis

251	<i>Stellaria media</i> (L.) Vill.	Caryophyllaceae	H	-	R/L/S	C	Eye infection and haemorrhoids
252	<i>Stephania glabra</i> (Roxb.) Miers.	Menispermaceae	C	Bhi Alu	Rh/L	R	Hernia,
253	<i>Stephania japonica</i> (Thunb.) Miers.	Menispermaceae	C	Tjumala	Rt	C	Stomach pain, fever, diabetes
254	<i>Synedrella nudiflora</i> (L.) Gaertn.	Asteraceae	H	-	R/L/S	C	Anti-proliferative
255	<i>Syzizium cumini</i> (L.) Skeels.	Myrtaceae	T	Jam	R/L/B	C	Bronchitis, asthma, ulcer, dysentery
256	<i>Syzygium jumbos</i> (L.) Alston	Myrtaceae	T	-	R/L/B	C	Astringent, antiseptic
257	<i>Tectona grandis</i> Linn.f.	Verbenaceae	T	Segun	R/B		Astringent, anti-inflammatory, expectorant
258	<i>Terminalia indica</i> L.	Leguminosae	T	Tetul	R/L/S	C	Astringent, appetite
259	<i>Tephrosia purpurea</i> (L.) Pers.	Leguminosae	H	-	R/L/S	C	Laxative, bladder trouble
260	<i>Terminalia arjuna</i> Steud.	Combretaceae	T	Arjun	R/L/S	C	Astringent, febrifuge, dysentery, blood pressure
261	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae	T	Bohera	R/L/S	R	Astringent, pungent, laxative
262	<i>Terminalia chebula</i> Retz.	Combretaceae	T	Haritaki	R/L/S	C	Purgative, astringent, piles, dysentery
263	<i>Thevetia nerifolia</i> Juss. (Lamk.) Hook.f. & Thoms.	Apocyanaceae	T	Kolkaphul	R/L/S	C	Febrifuge, fever
264	<i>Tiliacora acuminata</i>	Menispermaceae	C	-	R	C	Antidote of snake bite
265	<i>Tonningia axillaries</i> (L.) Kuntz. Makino	Commelinaceae	H	Kechla	S	C	Paronychia
266	<i>Trapa natans</i> L. var. <i>bispinosa</i> (Roxb.)	Lythraceae	H	Paniphal	L	SL	Blood dysentery.
267	<i>Trema orientalis</i> (L.) Bl.	Ulmaceae	T	-	R/L/S	C	Limb pain
268	<i>Trichosanthes tricuspidata</i> Lour.	Cucurbitaceae	C	-	R/L/S	C	Asthma, earache and ozoena
269	<i>Triumfetum rhomboidea</i> Jacq.	Tiliaceae	H	-	R/L/S	C	Tumors, gonorrhoea and leprosy
270	<i>Typha angustifolia</i> Chaub.	Typhaceae	S	Dhadda	Rs		Astringent and diuretic
271	<i>Typhonium trilobatum</i> (L.) Schott.	Araceae	H	-	R/L/S	C	Stimulant, poultice in tumours, antihemorrhoids
272	<i>Urena lobata</i> L.	Malvaceae	S	-	R/L/S	C	Expectorant, diuretic
273	<i>Vallisneria spiralis</i> L. var. <i>denseserrulata</i> Mikino	Asteraceae	H	Jhaji	R/L/S		Leucorrhoea, haemotherima, giddiness, morbid thrust, rheumatism.
274	<i>Vanda tessellata</i> (Roxb.) HBK ex D. Don	Orchidaceae	H	-	R/L/S	C	Rheumatism, fever
275	<i>Vernonia cinerea</i> (L.) Less	Asteraceae	H	-	R/L/S	C	Fever, anthelmintic
276	<i>Veitveria zizanioides</i> (L.) Nash.	Poaceae	H	-	Rs		Febrifuge, stimulant, expectorant, heart tonic.
277	<i>Vitex negundo</i> L.	Lamiaceae	S	Nishindra	L	C	Cardio-tonic, purgative, diuretic
278	<i>Wattakaka volubilis</i> (L.f.) Stapf.	Asclepiadaceae	C	-	R/L/S	C	Skin diseases, diabetes, poison bites
279	<i>Xanthium strumarium</i> L.	Asteraceae	S	-	R/L/S	C	Diuretic, anti pox
280	<i>Ziziphus mauritiana</i> Lam.	Rhamnaceae	T	Kul	R/L/S	C	Aphrodisiac, dysentery
281	<i>Ziziphus oenoplia</i> (L.) Mill.	Rhamnaceae	S	Ban kul	R/L/S	C	Pills, stomachache

Plate - I



A. Plant collection during field works B. Malda College Medicinal Plant garden C. Tribal man demonstrating plant utilization as medicine D. *Rauwolfia serpentina* E. *Calotropis gigantea* F. *Mucuna pruriens* G. *Azadirachta indica* H. *Murraya Koenigii* I. *Acorus calamus* J. *Asparagus racemosus* K. *Costus speciosus* L. *Hemidesmus indicus* M. *Lasia spinosa* N. *Erydra fluctuens* O. *Bacopa monniera*

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References

- Acharyya A (1998) Studies on the distribution, phenology and reproductive potential of some crop field weeds of Maldah district, West Bengal, India. Ph.D. Thesis, North Bengal University.
- Asolkar IV, Kakkar KK and Chakre OJ (1992) Glossary of Indian Medicinal Plants with Active Principles. Part – I. (A – K). (1965 – 1981). Publications & Information Directorate, CSIR, New Delhi.
- Banerjee A (1999) Ethnobotany of some trees in the Santhal villages of Birbhum, West Bengal. J. Econ. Taxon. Bot. 23(2): 531-534.
- Bhakat RK, Pandit PK and Maity PP (2007) Conservation of local ethnomedicinal trees of Midnapore district, West Bengal through a sacred grove. Indian Forester 133(9): 1167-1172.
- Biswas K and Chopra RN (1956) Common Medicinal plants of Darjeeling and Sikkim Himalayas. (Reprinted 1982) Soni Reprint, New Delhi.
- Borthakur SK and Goswami N (1995) Herbal remedies from Dimasa of Kamruo district of Assam in North-Eastern India. Filoterabia 66(4): 333 – 339.
- Chowdhury M. (2009) Plant Diversity and Vegetation Structure in the Wetlands of Malda District of West Bengal, India. Ph.D. Thesis, North Bengal University.
- Chowdhury M and Das AP (2007) Folk Medicine Used by the Rabha Tribe in Coochbehar District of West Bengal: a preliminary Report. In Advances in Ethnobotany, ed. A.P. Das & A. K. Pandey, Bishen Singh Mahendra Pal Singh, Dehradun. Pp. 289-296.
- Chowdhury M and Das AP (2009) Inventory of some ethno – medicinal plants in wetlands areas in Maldah district of West Bengal. Pleione 3(1): 83 – 88.
- Chowdhury M and Mukherjee R (2010) Ethno-Medicinal Survey of Santal tribe of Malda District of West Bengal, India. J. Econ. Taxon. Bot. 34(3): 602-606.
- Chowdhury M and Mukherjee R (2012) Wild Edible Plants Consumed by Local Communities of Maldah District of West Bengal, India. Indian J. Sci. Res. 3(2) : 163 – 170, 2012.
- Das AP and Mandal S (2003) Some Medicinal Plants of Darjeeling Hills. WWF-India & Projektwerkstatt Teekampagne, Kolkata & Berlin.
- Das AP, Ghosh C, Sarkar A, Biswas R, Biswas K, Choudhury A, Lama, A, Moktan S and Choudhury A (2010) Preliminary report on the Medicinal Plants from three MPCAs in Terai and Duars of West Bengal. Pleione 4(1): 90 – 101.
- Dubey G, Sahu P and Sahu TR (2002) Indigenous medicine and methods used as antidote by tribals of Noradehi wildlife sanctuary, Sagar, M.P. Pers. of plant biodiversity. Bisen singh mahendra pal sing publication, Dehra Dun. 632: 2002.
- Jain SK and Rao RR (1977) A Handbook of Field and Herbarium Methods. Today & Tomorrow's Printers and Publishers, New Delhi. 157 pp.
- Jain SK (1981) Glimpses of Indian Ethnobotany. Oxford & IBH Publishing Co., New Delhi. 218-232.
- Jain SK (1991) Dictionary of Indian Folk Medicine and Ethnobotany. Deep Publications, New Delhi.
- Kirtikar RB and Basu BD (1935) Indian Medicinal Plants, Vol. I - IV. Allahabad. 2123 pp.
- Misra MK and Dash SS (2002) Ethnomedicinal plants of Koraput District, Orissa and their conservation. Pers. of plant biodiversity. Bisen singh mahendra pal sing publication, Dehra Dun. 621:2002.

- Pandey AK, Rout SD and Pandit N (2002) Medicinal plants of simlipal Biosphere reserve-I. Pers. of plant biodiversity. Bisen Singh Mahendra Pal Sing publication, Dehra Dun. 681: 2002.
- Rai SK and Bhujel RB (1999) Note on some less known ethnomedicinal plants from the Darjeeling Himalayas. J. Hill Res. 12(2): 160 - 163.
- Rai SK and Bhujel RB (2002) Ethnic uses of some monocotyledonous plants in the Darjeeling Himalayan region. Pers. of plant biodiversity. Bisen Singh Mahendra Pal Sing Publication, Dehra Dun. 634 pp.
- Tiwari KC, Majumder R and Bhattacharjee S (1979) Folklore medicine from Assam & Arunachal Pradesh (district Tirap) Intern. J. Crud. Drug. Res. 17: 61-67.