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RESEARCH ARTICLE

Ethnomedicinal plants used by the people of Golaghat District, Assam, India

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Abstract: The present study was conducted in the Golaghat District, Assam, India to document the information related to the ethnomedicinal plants used by the people of the area. Intensive field work was carried out to obtain the detailed information on the plants and plant materials used by the ethnic people against the remedy of various ailments. In the present communication a total of 232 plant species and there ethnomedicinal uses have been recorded on the basis of ethnobotanical survey. Out of the 232 recorded taxa, 13 taxa belonged to pteridophytes and remaining 219 taxa belonged to angiosperms. These plants belong to 101 families; out of which 91 from angiosperms and remaining 10 families from pteridophytes.

Keywords: Ethnobotany; Medicinal plants; Medicinal uses.

Introduction

Human culture has been augmented by plants and plant products since time immemorial, perhaps Ethnobiology is the first science that originated with the evolution or existence of men in this planet (Rawat and Chowdhury 1998). The history of traditional practice of plants against the various ailments in India can be traced to remote past. Primitive tribes who still eke out their living as food gathered by dwelling in remote inaccessible forest areas far way from modern civilization possess quite good amount of knowledge of plants for curative purposes. Their knowledge gives excellent clues for modern drugs development programme (Brahmam 2000). The Rig Veda, written between 4500 and 1600 BC is probably the oldest record where we found some information on plant based medicine. Other ancient literatures like Atharba Veda, Sursuta Samhita and Saraka Samhita are to be worth mentioned where we get some remarkable scientific information on the plant based medicine and drugs used for therapeutic purposes. Any plant which harbours curative elements or properties in one or more of its organs may be termed as medicinal plant. Plants and plant based medicaments have been employed since dawn of civilization for prolonging life of man by combating various ailments. Ancient ethnic communities around the world have learnt to utilize their neighbourhood herbal wealth for curative as well as offensive purposes (Harshberger 1896). Medicinal plants continue to provide health security to rural people throughout the world. Now a days we have get more information on the plant based medicine which usually practiced by the people inhabited in remote areas of our vast Indian country; those have been contributed by different workers in time to time (Borthakur 1976, 1981, 1991; Gogoi 1981; Hyniewta 1987; Jain 1964, 1967, 1981, 1987, 1989; Jain and Borthakur 1980; Khanikar 2010; Mahanta and Gogoi 1988; Sarmah1990; Schultes 1962). From the ancient and current as well as up-to-date literatures it can be summarized that our forefathers performed experiments over thousands of years by trial and error method. The present day men having a broader insight and scientific expertise have a much greater opportunity to utilize the data left by our forefathers (Gogoi and Boissya 1984). However, one of the greatest difficulties confronting the research workers is the inadequate authentic information on the identification of the plants as recorded in those ancient literatures. To overcome this situation, the present investigation attempts to a scientific study by

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recording the data, collection, and preservation of the plants used by the peoples particularly the herbal practitioners among the different ethnic group inhabitants of the district Golaghat, Assam, India. The investigation in the line of ethnobotany has been found inadequate in the present study area i.e. Golaghat district of Assam.

Materials and methods

Study area

The district Golaghat of Assam is located in between 26 º 0'- 27 º 1' N and 93 º 0' - 94 º 18' E latitude and longitude respectively. The district occupies an area of 3,502 Km^2 and situated above ± 100 meter above mean sea level. The average annual rainfall is 2000 mm; relative humidity is 88.7%; minimum and maximum temperature is 14ºC and 38ºC respectively. The people inhabiting this district belong to different ethnic groups, mostly Mongolian origin. They have certain unique customs which are indifferent to the other tribes, clans and races. The study area includes a National Park, Reserve Forests, wildlife Sanctuary and some fragmented forest vegetation here and there.

Methods

Intensive field work has been carried out during 2005-2009 so as to obtain the detailed information on the plants and plant materials used by the different ethnic people's inhabitants in the present study area against the remedy of various ailments. Authors visited almost all villages of the district particularly in remote areas and collected the information in respect to medicinal uses of different plants consulting with the age old people and experienced herbal practitioner who have gathered excellent knowledge through traditionally from their fore- fathers and his/her own experience in remedy of various ailments. The information which was compiled with the statements of at least five ethnic groups was considered to be authentic. These people were taken to the forests to locate the plants in natural habits for the correct identification corresponding with the vernacular name and binomial nomenclature. During the interviews and consultations with them authors mainly stress on spot identification and the collection of the plant species as voucher specimen for preparing herbarium sheets. The information and data which were collected from the peoples checked accordingly and verified by consulting standard published literatures. The duly identified herbarium sheets have been deposited in Department of Botany, D. R. College, Golaghat, Assam, India.

Results

The present work is the result of a thorough investigation, exploration and study of the ethnomedicinal aspects of the Golaghat district which occupies an area of 3,502 Km^2. The observations and findings of this study are presented in the Table 1. In this documentation a total of 232 duly identified taxa are arranged in alphabetical order. The taxa indicated by asterisk (*) belongs to Pteridophytes and remaining are of angiosperms. These plants belong to 101 families; out of which 91 from angiosperms and remaining 10 families from pteridophytes. It is observed that the high humidity and heavy rainfall encourage the luxuriant growth of many ethnomedicinal plants (both pteridophytes and angiosperms) in the reserve forest, wildlife sanctuary, hillock areas, grassy land and in river banks of the study area. On the other hand during our field studies it has also noted that the occurrence and distribution of some documented plants become rare and even they are going to be endangered in near future. Therefore, people inhabitant of the study area should provide special protection, conservation as well as germplasm preservation of these plants at their own level, through NGOs or with the help of governmental agencies for their future use and to uplift the socio-economic scenario of the study area. The taxa which are to be taken special protection are *Angiopteris evecta, Cyathea spinulosa, Stenochlaena palustris, Abrus precotorius, Achasma loroglossum, Acorus calamus, Alpinia alughos, Andrographis paniculata, Aristilochia bracteata, Baccuarea sapida, Barringtonia acutangula, Blepharis persica, Caesalpinia bondac, Carissa carandas, Cissus quadriangularis, Cissus rependa, Cissus repens, Clauseana heptaphylla, Clerodendron glandulossum, Costus speciosus, Crataeva unilocula-*

ris, Curcuma amada, Curcuma zedoaria, Delima sarmentosa, Entada scandens, Garcinia cowa, Garcinia lanceaefolia, Garcinia pedunculata, Grewia hirsuta, Hodgsonia macrocarpa, Horsfieldia kingii, Houttuynia cordata, Hoya lanceolata, Kaemferia galanga, Lassia spinosa, Morinda angustifolia, Mucuna prurita, Orobanche aegyptica, Pogostemon benghalense, Rauvolfia serpentina, Rhynchostylis retusa, Sapindus mukrossi, Styrex serulatum, Tinospora cordifolia, Vangueria spinosa, Vitex nigondo, Zanthoxylum hamiltoninum, Zanthoxylum rhesta.

Table 1: Ethnobotanical aspects among the people of Golaghat District.

S.No.	Botanical Name	Family	Local (Assamese)/ Common Name	Plants Parts Used	Ethnomedicinal Aspects
1.	**Adiantum capillus-veneris* L.	Adiantaceae	Chuli dhekia	Fronds	Cut and wounds; tooth ache
2.	**Ampheneuron opulantum* (Kaulf.) Holtum.	Thelypteridaceae	Bihlongoni	Leaves	Possess insecticidal properties
3.	**Angiopteris evecta* (Frost.) Hoffm.	Angiopteridaceae	Hati Dhekia	Rachis	Used against jaundice
4.	**Blechnum orientale* L.	Blechnaceae	Bonoria dhekia	Fronds	Cuts and wound; tooth ache
5.	**Ceratopteris thalictroides* (L.) Brougn.	Parkeriaceae	Pani dhekia	Whole plant	Paste applied for effective blood clotting in fresh cut and wound
6.	**Cyathea spinulosa* Wall ex Hook.	Cyathaceae	Goch Dhekia	Rhizomes	Used in snake bite
7.	**Diplezium esculentum* (Retz.) Sw.	Athyriaceae	Khua Dhekia	Tender leaves	Used for constipation, digestion and heart ailment
8.	**Drymoglossum heterophyllum* (L.) Trimen.	Polypodiaceae	Rupchakalia	Leaves	Cut and wounds and fever
9.	**Marsilea minuta* L.	Marsileaceae	Pani tengechi	Whole plant	Juice applied on nostril for curing sinus and migraine
10.	**Pyrrosia lanceolata* (L.) Farwell	Polypodiaceae	Rupchakalia	Leaves	Cut and wounds
11.	**Pyrrosia nummularifolia* (Sw.) Ching.	Polypodiaceae	Rupchakalia	Leaves	Cut and wounds
12.	**Sphenomeris chinensis* (L.) Maxon	Lindsaeaceae	Bon dhekia	Rachis	Tooth and gum ache
13.	**Stenoechlaena palustris* (Burm.) Bedd.	Blechnaceae	Dhekia Lota	Rachis	Used as rope for tying different purposes
14.	*Abrus precotorius* L.	Papilionaceae	Latumoni	Roots, seeds	Roots edible, seeds are used as unit of weight by jewelry
15.	*Abutilon indicum* (L.) Sw.	Malvaceae	Japapetari	Roots, barks & fruits	Ulcer and arthritis
16.	*Achasma loroglossum* (Gagnep.) Larsen.	Zingiberaceae	Kor-Phul	Underground rhizome	Tooth and gum pain
17.	*Achyranthes aspera* L.	Amaranthaceae	Ubhuta Hoth	Roots	For safe delivery of pregnant women
18.	*Acorus calamus* L.	Araceae	Boch	Underground rhizome	Cold & Cough, Pneumonia, Fever, psychological disorder
19.	*Aegle mermelos* (L.) Corea.	Rutaceae	Bel	Leaves and fruits	Leaf juice is a tonic fruits edible and useful in dysentery.
20.	*Ageratum conyzoides* L.	Asteraceae	Gundhua Bon	Leaves & Tender Shoot	Cut & Wound
21.	*Allium cepa* L.	Liliaceae	Piyaj	Bulb	Used as stimulant.
22.	*Allium sativum* L.	Liliaceae	Naharu	Bulb	Cough and bronchitis
23.	*Aloe vera* L.	Liliaceae	Chal Kunowri	Leaves	Fever, anti inflammatory, burns, eczemas
24.	*Alpinia allughos* Roxb.	Zingiberaceae	Tora goch	Rhizome	Rheumatism, posses stomachic and stimulant properties
25.	*Alstonia scolaris* (L.) R. Br.	Apocynaceae	Chatiyana	Bark	Malaria
26.	*Alternanthera sessilis* (L.) R. Br.	Amaranthaceae	Mati Kanduri	Tender shoot	Used as vegetable for constipation
27.	*Amaranthus spinosus* L.	Amaranthaceae	Hati Khutara	Roots	Abortive properties
28.	*Andrographis paniculata* (Broom. f) Wall ex Nees.	Acanthaceae	Kalmegh	Entire plant	Stomachic tonic
29.	*Annanus comosus* (L.) Merrill.	Bromeliaceae	Mati Kothal	Tender Leaves & Fruit	Effective against worm
30.	*Aquilaria malacencis* Lamk.	Thymeliaceae	Sachi/ Agaru	Infected wood	Oil extracted from wood is effective in skin diseases
31.	*Areca catechu* L.	Arecaceae	Tamul	Fruit	Fibrous pericarp is used to prepare dye; nut masticatory.
32.	*Argemon maxicana* L.	Papaveraceae	Siyal kata	Seeds and roots	Laxative and expectorant and also used in curing leprosy.

33.	*Aristolochia bracteata* Retz.	Aristolochiaceae	Tula chaloni lota	Roots and leaves	Uterine diseases.
34.	*Asparagus racemosus* Wild.	Liliaceae	Sotmul	Underground Tuber	Used as demulcent and tonic.
36.	*Averrhoa cacambola* L.	Oxalidaceae	Kordoi	Fruit	Dysentery and diarrhea
37.	*Azadirachta indica* Adr. Juss.	Meliaceae	Maha Neem	Leaves & Fruit	Skin diseases
38.	*Baccopa monnieri* (L.) Pennell.	Scrophulariaceae	Brahmi	Whole Plant	Effective in memory
39.	*Baccuarea sapida* Muell.	Euphorbiaceae	Leteku	Fruit	Fruits are eaten
40.	*Barringtonia acuatangula* Gaertn.	Barringtoniaceae	Shingori	Stem bark	Syphilis, leprosy
41.	*Bauhinia variegata* L.	Caesalpiniaceae	Kurial	Leaves	Leaves are used as vegetable.
42.	*Blepharis persica* (Burm.) Kuntze	Acanthaceae	Borahu	Leaves, roots	Liver and urinary diseases
43.	*Boehmeria nevia* Hook & Arn.	Urticaceae	Riha Goch	Stem bark	Used as Thread, fiber
44.	*Boerhavia diffusa* L.	Nyctaginaceae	Panounua	Whole plant	Anti diabetic and anti asthmatic
45.	*Borreria hispda* (L.) Schumann	Rubiaceae	Dolicha Bon	Leaves	Tooth and gum disorder
46.	*Bryophyllum calycinum* Salisb.	Crassulacaceae	Dupor tenga	Leaves	Kidney stone
47.	*Butea monosperma* (Lamk.) Taub.	Papilionaceae	Palash	Leaves, barks and flowers	Leaf extract is used against pimples and tumors; bark powder is used orally for menstrual disorder and flower paste is applied externally in skin diseases.
48.	*Caesalpinia bonduc* (L.) Robx.	Caesalpiniaceae	Leta Guti	Seeds	Stomach ache
49.	*Calotropis gigantean* L.	Asclepiadaceae	Akon	Leaves	Latex used in burning wound
50.	*Canarium strictum* Roxb.	Bursariaceae	Dhuna	Resins	Air purifier and useful in snake bite.
51.	*Cannabis sativa* L.	Cannabinaceae	Bhang	Leaves	Narcotic
52.	*Cardiospermum halicacabum* L.	Sapindaceae	Kopal Phuta	Roots and fruits	Roots used in nervous diseases and fruits edible.
53.	*Carissa carandas* L.	Apocynaceae	Korja Tenga	Fruits and roots	Useful in bilious complaints.
54.	*Cassia alata* L	Caesalpiniaceae	Khor Pat	Leaves	Skin diseases particularly ring worm
55.	*Cassia fistula* L.	Caesalpiniaceae	Sunaru	Fruits	Seeds purgative.
56.	*Cassia occidentalis* L.	Caesalpiniaceae	Bor Medelua	Leaves and seeds	Cough
57.	*Cassia tora* L.	Caesalpiniaceae	Saru Medelua	Leaves and seeds	Skin diseases
58.	*Catharanthus roseus* (L.) G. Don.	Apocynaceae	Nayan Tora	Leaves	Anti diabetic.
59.	*Centipeda minima* (L.) A.B. and Asschers.	Asteraceae	Hachia Bon	Whole Plant	Mouth ulcer and sinusitis
60.	*Centrella asiatica* L.	Apiaceae	Bor Manimuni	Leaves	Anti dysenteric
61.	*Chenopodium album* L.	Chenopodiaceae	Jilmil Sak	Tender shoots	For stomach complain.
62.	*Chorcorus capsularis* L	Tiliaceae	Tita Mora	Leaves	Used for dyspepsia.
63.	*Chromolaena odorata* (L.) King & Robinson	Asteraceae	Germani Bon	Leaves	Cuts and wound.
64.	*Cinnamomum tamala* (Buch-Ham.) T. Nees & Eberm.	Lauraceae	Tejpat	Leaves	Used as spice; whopping cough
65.	*Cinnamomum zelanica* Breyn.	Lauraceae	Patihunda	Leaves	Cough and bronchitis
66.	*Cissampelos Pareri* L.	Menispermaceae	Tubuki Lota	Leaves	Anti diabetic
67.	*Cissus quadrangula* L.	Vitaceae	Harhjuralota	Stems	Effective in fracture bone
68.	*Cissus rependa* Vahl.	Vitaceae	Nol tenga	Tender leaves	Used as vegetable for stomachic troubles
69.	*Cissus repens* Lamk.	Vitaceae	Bogi Tenga	Tender leaves	Used as vegetable; remedy of muscular pain and also stomachic disorder
70.	*Clauseana heptaphylla* W. & A.	Rutaceae	Pan Mashala	Leaves	Masticatory
71.	*Clenogyne dichotoma* Salisb.	Zingiberaceae	Patidoi	Stem bark	Used in weaving mats
72.	*Clerodendrum glandulosum* Coleb. ex Wall	Verbenaceae	Nephaphu	Leaves & tender shoot	High Blood Pressure.
73.	*Clerodendrum serretum Spreng.*	Verbenaceae	Dhapat Tita	Leaves and roots	Used in febrile and catarrhal affection.
74.	*Clitoria ternatea* L.	Papilonaceae	Aparajita	Roots	Useful in fever, leprosy and curing impotency
75.	*Colocasia esculenta* (L.) Schott.	Araceae	Kachu	Petiole	Petiole juice is used in cuts and itching; tonsillitis
76.	*Commelina benghlensis* L.	Commelinaceae	Kona Simalu	Roots	As an antidote to snake bite
77.	*Costus speciosus* (Koen.) Smth.	Zingiberaceae	Jam Lakhuti	Rhizome	Jaundice and diabetic
78.	*Crataeva unilocularis* (Buch-Ham.)	Capparidaceae	Borun goch	Stem bark	Urinary diseases
79.	*Croton bonplandianum* Bailon.	Euphorbiaceae	Bonoria jaifal	Seeds	Purgative

80.	*Croton tiglium* L.	Euphorbiaceae	Koni Bih	Seeds	Seed oil is used as counter irritant
81.	*Curcuma amada* Roxb.	Zingiberaceae	Am-Ada	Rhizomes	Edible
82.	*Curcuma aromatic* Salisb.	Zingiberaceae	Keturi	Rhizomes	Used as dye
83.	*Curcuma longa* L.	Zingiberaceae	Halodhi	Rhizomes	Juice blood purifier
84.	*Curcuma zedoaria* Rosc.	Zingiberaceae	Garuchata Halodhi	Rhizomes	Stimulant and carminative.
85.	*Cuscuta reflexa* Roxb.	Cuscutaceae	Akashilota	Whole plant and Seeds	Extracts used after menstruation for permanent sterility of women; seeds carminative
86.	*Cynodon dactylon* (L.) Pers.	Poaceae	Dubori Bon	Tender shoots	Used as tonic
87.	*Cyperus brevifolius* L.	Cyperaceae	Kenya Bon	Roots	Purgatives
88.	*Cyperus rotundus* L.	Cyperaceae	Mutha Bon	Roots	Anti poisonous and nervine tonic
89.	*Dalbergia sisso* Roxb.	Papilionaceae	Sishu	Stem bark	Diabetes
90.	*Dalhousea bracteata* Grah.	Papilionaceae	Puharichali	Stem bark	Masticatory
91.	*Datura metal* L.	Solanaceae	Dhatura	Leaves	Externally used for various pains and swelling.
92.	*Delima sarmentosa* L.	Dilleniaceae	Ou-Lota	Stem	For potable water
93.	*Dillenia indica* L.	Dilleniaceae	Ou tenga	Fruits	Placenta of the fruits useful for dandruffs and lice.
94.	*Dillenia pentagyna* Roxb.	Dilleniaceae	Baji ou	Leaves	Use for thatching purposes
95.	*Dioscorea bulbifera* L.	Dioscoreaceae	Tikor Alu	Bulbils	Posses anti fertility property
96.	*Drymaria cordata* Wild.	Carryophyllaceae	Marolia sak	Whole plant	The boiled plant inhale to cure headache
97.	*Eclipta alba* (L.) Hassk.	Asteraceae	Kenheraj	Tender shoots	Used as vegetable
98.	*Elephantopus scaber* L.	Asteraceae	Bon lai	Roots and leaves	Decoction of roots and leaves is given in dyslexia.
99.	*Eleusine indica* (L.) P. Beav.	Poaceae	Bobosa bon	Whole plant	Effective in fracture of bones of duck and hen.
100.	*Embelia nutans* Wall.	Myrsinaceae	Goch lota madhuri	Leaves	Used for fermenting country liquor
101.	*Entada scandens* Benth.	Mimosaceae	Makori Ghila	Seeds	Fever, dysentery, rheumatism
102.	*Erythrina variegata* L.	Papilionaceae	Madar	Leaves	Paste of leaves used for healing pains
103.	*Euphorbia hirta* L.	Euphorbiaceae	Gakhirati bon	Whole plant	Proprietary medicine
104.	*Euphorbia neriifolia* auct. Non L.	Euphorbiaceae	Hiju	Leaves	Latex useful in swelling of nails
105.	*Euryle ferox* Salisb.	Nymphaeaceae	Nikori/Utpal	Seeds	Raw and roasted seeds edible
106.	*Flacourtia catafracta* Roxb.	Flacourtiaceae	Poniol	Fruits	Edible
107.	*Flemingia involucrata* Benth.	Papilionaceae	Makhioti	Leaves and flower	Insects repellant
108.	*Fragaria indica* Andr.	Rosaceae	Gorukish	Fruits	Energetic
109.	*Garcinia cowa* Roxb.	Clusiaceae	Kuji thekera	Fruits	Digestive and anti dysenteric properties
110.	*Garcinia lanceaefolia* Roxb.	Clusiaceae	Rupahi thekera	Fruits	Effective in diarrhea
111.	*Garcinia pedunculata* Roxb.	Clusiaceae	Bor thekera	Fruits	Effective in jaundice
112.	*Garcinia xanthochymus* Hook.f ex Andr.	Clusiaceae	Mahi Thekera	Seeds	Useful in diarrhea
113.	*Genderusa vulgaris* Nees.	Acanthaceae	Jatra Hiddhi/Titakhari	Leaves	Useful for rheumatism
114.	*Glycosmis pentaphylla* Corr.	Rutaceae	Tulutha Poka	Roots	Decoction is given with sugar at fever and with milk in jaundice
115.	*Grewia hirsuta* Vahl.	Tilliaceae	Kukurhuta	Fruits	Edible and useful in dysentery
116.	*Heliotropium indicum* L.	Boraginaceae	Hati suria	Flowers	Used in irregular menstruation
117.	*Heydichium coronarium* Koen. ex. Retz.	Zingiberaceae	Pakkhilaphul	Rhizome	Used as anti rheumatic
118.	*Heydiotis pinnifolia* L.	Rubiaceae	Bon Jaluk	Whole plant	Useful in dysentery
119.	*Hibiscus rosa-chinensis* L.	Malvaceae	Joba	Flowers	Useful in epilepsy and menorrhagea
120.	*Hibiscus sabdorifa* L.	Malvaceae	Tenga mora	Leaves and fruits	Useful in bilious condition
121.	*Hodgsonia macrocarpa* (Bl.) Cogn.	Cucurbitaceae	Thopou lota / thopou guti / thebou	Seeds	Anti fertility; armament sterility
122	*Holarrrhena antidysentrica* Wall ex DC.	Apocynaceae	Kutaj	Bark and leaves	Bark juice is a remedy for dysentery and leaf juice is effective for bronchitis
123.	*Horsfieldia kingii* (Hook. f) Warb.	Myristicaceae	Amul	Fruits	Nuts edible, stimulant
124.	*Houttuynia cordata* Thunb.	Saururaceae	Mochundori	Leaves/tender Shoot	Used in dysentery
125.	*Hoya lanceolata* Wall.	Asclepiadaceae	Chagoli jibha / Bon Bokul	Leaves and latex	Paste with latex applied on boils, muscular pain

126.	*Hydrocotyle rotundifolia* Rox. ex DC.	Apiaceae	Saru manimuni	Whole Plant	Brain tonic
127.	*Hygrophila auriculata* (Schumach.) Heine.	Acanthaceae	Kakilakshya	Leaves, roots and seeds	Useful in cough and urethral discharge
128.	*Ipomea raptans* Poir.	Convolvulaceae	Kolmou	Tender shoots	Used as vegetable for stomach trouble
129.	*Ipomoea mauritiana* Jacq.	Convolvulaceae	Madhuri lota	Flower	Stimulant
130.	*Jatropha curcus* L.	Euphorbiaceae	Bongali Era	Stem	Used as tooth brush
131.	*Jatropha gossypifolia* L.	Euphorbiaceae	Bongali era / Bhut era	Stem	Used as tooth brush
132.	*Jussiea repens* L.	Onagraceae	Pani Khutara	Tender leaves	Used as vegetable
133.	*Justicia adhatoda* L	Acanthaceae	Bahak	Leaves & Tender Shoot	Cough
134.	*Kaemferia galanga* L	Zingiberaceae	Gathion	Rhizomes	Used as aromatic perfume in marriage costumes by Mongolian people
135.	*Kalanchoe pinnata (Lamk.) Pers.*	Crassulaceae	Pategoja	Leaves	Effective in digestive disorder
136.	*Lantana camera* L.	Verbinaceae	Gu ful	Leaves	Insect repellant
137.	*Lasia spinosa*Thwaites.	Araceae	Cheng mora	Tender leaves	Vegetable
138.	*Lawsonia inermis* L.	Lythraceae	Jetuka	Leaves	Extracts used as hair, nail and skin dyeing and curing dandruff and certain skin diseases
139.	*Leea asiatica* (L.) Rid.	Leeaceae	Kukur thengia	Roots	Ring worm
140.	*Leea indica* (Burm.f) Merr.	Leeaceae	Kukura Thengia	Fruits	Extracts used for purple dye
141.	*Leucas aspera* (Wild) Spreng.	Lamiaceae	Durun Bon	Tender leaves	Extracts used for appetite, digestion, sinusitis and snake bite
142.	*Lindernia bracheata* L.	Scrophulariaceae	Kachidoria	Whole Plant	Juice used in diabetes
143.	*Litsea cubeba* (Lour.) Pers.	Lauraceae	Mejangkori	Stem bark and fruits	Paste used in dizziness, hysteria
144.	*Litsea salicifolia* Roxb. ex Nees.	Lauraceae	Dighloti	Leaves	Possess insecticidal properties
145.	*Ludwigia parviflora* L.	Onagraceae	Longbon	Tender shoot	Cancer
146.	*Magnolia hodgsonii* (Hook. f & Th.) King.	Magnoliaceae	Borhomthuri	Latex	Used as dyeing of lip
147.	*Melastoma malabarthicum* L.	Melastomaceae		Stem	Tooth and gum diseases
148.	*Mikenia micrantha* H.B.K.	Asteraceae	Kolia lota	Whole Plant	Paste used externally on cuts, wounds, insect stinging etc.
149.	*Mimusa pudica* L.	Mimosaceae	Nilaji Bon	Roots	Root is used in tooth ache; leaf paste applied externally near naval portion of vagina of pregnant women for normal and easy delivery.
150.	*Mimusops elengii* Roxb.	Sapotaceae	Bokul	Stem bark and fruits	Stem bark is useful in tooth ache; fruits edible
151.	*Mirabilis jalapa* L.	Nyctaginaceae	Gadhuli Gupal	Roots	Roots paste is applied locally to cure piles
152.	*Momordica charantia* L.	Cucurbitaceae	Tita Kerela	Leaves and fruits	Useful in skin diseases
153.	*Morinda angustifolia* Roxb.	Rubiaceae	Achu Kath	Roots	Used as dye
154.	*Moringa oleifera* Lamk.	Moringaceae	Chajina	Flowers, fruits and bark	Used as vegetable and bark is useful in pains
155.	*Mucuna prurita* Hook.	Papilonaceae	Bandar Kekua	Fruits	Used as vermifuge
156.	*Murraya koenigii* Spreng.	Rutaceae	Narasingha	Leaves and roots	Leaves appetizer root juice is useful in pains
157.	*Nicotiana tobaccum* L.	Solanaceae	Dhopat	Leaves	Narcotic and leave juice used as insecticides
158.	*Nyctanthes arbori-stristis* L.	Oleaceae	Sewalee phul	Leaves and flowers	Leaf juice is used for fever and flowers yield a dye
159.	*Nymphaea nouchali* Burm. f.	Nymphaeaceae	Bhet	Seeds	Tonic
160.	*Ocimum sanctum* L.	Lamiaceae	Tulshi	Leaves	Used for cough and cold
161.	*Orobanche aegyptica* Pers.	Orobancaceae	Bonia Bou	Whole Plant	Used in hysteria
162.	*Oroxylum indicum* Vent.	Bignoniaceae	Bhat Ghila	Roots and bark	Applied in wounds and posses anti rheumatic
163.	*Oxalis corniculata* L.	Oxalidaceae	Haru Tengechi	Whole plant	Used against blood dysentery
164.	*Oxalis corymbosa* D. C.	Oxalidaceae	Bor Tengechi	Leaves and roots	Leaves eaten as sour and remedy of dysentery
165.	*Padaraea foetida* L.	Rubiaceae	Vedai Lota	Tender leaves	Juice is valued as a remedy for diarrhea and rheumatism
166.	*Pandanus fascicularis* Lam.	Pandanaceae	Kenya Kothal	Stem pulp	Pneumonia
167.	*Pandanus tectorius* Sol. ex Parkin.	Pandanaceae	Keteki	Stem pulp	Pneumonia

168.	*Phlogacanthus thysiflorus* (Hardew.) Mabberlay	Acanthaceae	Titaphul	Inflorescence	Used for vermicide and also remedy of cough
169.	*Phlogacanthus tubiflorus* Nees.	Acanthaceae	Titaphul	Inflorescence	Used for vermicide and also remedy of cough
170.	*Phyllanthus emblica* L.	Euphorbiaceae	Amlokhi	Fruits	Anaemia, jaundice, appetite
171.	*Phyllanthus niririi* L.	Euphorbiaceae	Bon Amlokhi	Tender shoot	Dysentery and urinary trouble
172.	*Plantago erosa* Wall.	Plantaginaceae	Singa Pat	Leaves	Used in dysentery and also in pains
173.	*Plumbago zeylanica* L.	Plumbaginaceae	Agiachit	Root	Cut & Wound
174.	*Pogamia pinnata* (L.) Pirre.	Caesalpiniaceae	Koroch	Stem branch	Tooth ache
175.	*Pogostemon benghalense* (Burm.) Kuntze	Lamiaceae	Sukloti	Roots and leaves	Healing wound particularly after child birth
176.	*Polygonum chinense* L.	Polygonaceae	Madhu Huleng	Tender leaves	Used in diarrhea
177.	*Polygonum hydropiper* L.	Polygonaceae	Patharua Bihlongoni	Entire plant	Insect repellant and pneumonia
178.	*Polygonum plebejum* L.	Polygonaceae	Bon Jaluk	Entire plant	Pneumonia
179.	*Pothos scandens* L.	Araceae	Hati denkiya	Leaves	Pains
180.	*Pouzolzia hirta* Hassk.	Urticaceae	Sial Kotahi	Roots	Used for hair wash/ shampoo
181.	*Pouzolzia zeylanica* (L.) Benn.	Urticaceae	Borali bakua	Whole plant	Burn, urinary disorder, carbuncles and diabetes
182.	*Protulaca oleracea* Prain.	Portulacaceae	Malbhog Khutora	Whole plant	Burns, ulcers, urinary disorder
183.	*Prunus domestica* L.	Rosaceae	Ahom Bogori	Fruits	Fruits appetizing
184.	*Prunus persica* Batsd.	Rosaceae	Nara Bogori	Fruists and Leave	Fruits edible, paste of leaves are used to cure carbuncles
185.	*Ranunculus scleratus* L.	Ranunculaceae	Pani Narzi	Leaves	Juice is effective in skin diseases and in gastric
186.	*Rauvolfia serpentina* (L.) Benth. Ex Curz.	Apocynaceae	Sarpagandha	Roots	Useful in snake bite, insomnia
187.	*Rhynchostylis retusa* (L.) Bl.	Orchidaceae	Kopou Phul	Aerial roots	Ear ache
188.	*Riccinus communis* L.	Euphorbiaceae	Era Goch	Leaves	Paste used in rheumatism and muscular pain
189.	*Roydsia suaveolens* Roxb.	Capparidaceae	Madhoimaloti	Flowers and fruits	Dried flowers grind to powder and used in piles; fruits edible and appetizer
190.	*Rubus moluccanus* L.	Rosaceae	Jetulipoka	Leaves and fruits	Leaves posses insecticidal properties, fruits edible, stimulant
191.	*Rungia stolonifera* Clarke.	Acanthaceae		Whole plant	Tooth and gum disorder
192.	*Sapindus mukrossi* Gaertn.	Sapindaceae	Monichal	Fruits	Pericarp used as detergent.
193.	*Saraca indica* L.	Rubiaceae	Ashuk	Stem bark	Used in uterine infection
194.	*Sarochlamys pulcherrima* Gaud.	Urticaceae	Mechaki	Tender leaves	Used as vegetables along with pork to prevent tapeworm infection
195.	*Scoparia dulcis* L.	Scrophulariaceae	Chenibon	Whole Plant	Cough, bronchitis and kidney troubles
196.	*Sida cordifolia* L. (Burm.f) Borss.	Malvaceae	Sonboriyal	Roots	Taken orally to help child birth
197.	*Smilax perfoliata* Lour.	Smilacaceae	Tikoni Borual	Tender leaves and roots	Tender leaves used as vegetable and root paste use locally for healing wound
198	*Solanum ferox* L.	Solanaceae	Kutahi bengena	Fruitsand roots	Fruits appetizer, roots extract is anti asthmatic
.199.	*Solanum indicum* L.	Solanaceae	Bhekuri tita	Fruits	Effective in cough
200.	*Solanum nigrum* L.	Solanaceae	Latkochi	Tender shoot and fruits	Used as vegetables
201.	*Solanum torvum* Swartz.	Solanaceae	Hati Bhekuri	Fruits	Taken orally for enlarged spleen
202.	*Solanum xanthocarpum* S & W.	Solanaceae	Bihmona guti	Roots	Juice is diuretic in bronchial diseases
203.	*Spilanthes paniculata* DC.	Asteraceae	Huhoni guti	Inflorescence	Used for remedy of mouth and tongue ulcer
204.	*Spondius pinnata* (L.) Kurz.	Anacardiaceae	Amora	Fruits	Dysentery and posses anti fungal properties
205.	*Stephanea harnandifolia* Walp.	Menispermaceae	Bor Tubuki Lota	Leaves	Extracts used for remedy of uterine stone, curing for impotence, paste is used externally on forehead to control fever.
206.	*Sterculia villosa* Roxb.	Sterculliaceae	Udal	Stem	Bark used as fiber
207.	*Streblus asper* Lour.	Moraceae	Saura Goch	Stem and leaves	Stem used as toothbrush; leaf juice is used in dysentery
208.	*Styrex serulatum* Roxb.	Styeaceae	Lota madhuri	Tender shoot	Posses anti bacterial properties
209.	*Tabernaemontana divericata* (L.) R. Br.	Apocynaceae	Kathana	Flower	Juice applied in eye diseases
210.	*Tephrosia purpurea* L.	Fabaceae	Bon nil	Roots	Act as tonic and laxative

211.	*Terminalia arjuna* Bedd.	Combretaceae	Arujun	Bark	Juice is used as tonic and ailment of heart diseases
212.	*Terminalia belerica* (Gaertn.) Roxb.	Combretaceae	Bhumura	Fruits	Posses narcotic properties
213.	*Terminalia chebula* Retz.	Combretaceae	Hilikha	Fruits	Digestive and used in bleeding of gums
214.	*Thunbergia grandiflora* (Rotlb.) Roxb.	Thunbergiaceae	Kauri phul	Leaves	Bone fracture
215.	*Tinospora cordifolia* (Wild) Meirs.	Menispermaceae	Amor Lota	Aerial roots	Juice is used as tonic
216.	*Trapa bispinosa* Roxb.	Trapaceae	Pani hingori	Fruit shell and Seeds	Backache
217.	*Tridax procumbens* L.	Asteraceae	-	Leaves	Cut and wound; eye diseases
218.	*Trigonella foenum graceum* L.	Apiaceae	Methi guti	Leaves and seed	Leaves used as vegetable, seeds are used as spice
219.	*Triumfetta rhomboidea* Jacq.	Tilliaceae	Bon Agora	Whole plant/ Leaf	Insect repellent and leaf paste effective in carbuncle
220.	*Uncarria sessilifructus* Roxb.	Rubiaceae	Lata Chali	Stem bark	Masticatory
221.	*Urena lobata* L.	Malvaceae	Bon Agora	Roots	Diuretic
222.	*Vangueria spinosa* Roxb.	Rubiaceae	Kutkura	Fruit	Anti fertility
223.	*Vernonea cinerea* (L.) Less.	Asteraceae	Bon Kapah	Leaves	Used in piles
224.	*Vigna mungo* L.	Fabaceae	Mati Mah	Seeds	Grinded seeds mixed with zinger is given orally in rheumatism
225.	*Viscum album* L.	Viscaceae	Raghumala	Leaves	Piles; healing cuts and wound
226.	*Vitex negondo* L.	Verbenaceae	Pochatia	Leaves	Used for stomach troubles
227.	*Willoughbea edulis* Roxb.	Apocynaceae	Laleng tenga	Fruit	Edible
228.	*Withania somnifera* (L.) Donal	Solanaceae	Aswagandha	Roots	Useful in cough and in weakness
229.	*Wrightia tomentosa* R. & S.	Apocynaceae	Dodh Kori	Stem bark	Juice used for stomach ailment and chronic dysentery
230.	*Xanthium strumerium* L.	Malvaceae	Agora	Whole Plant	A good diuretic
231.	*Zanthoxylum hamiltoninum* Wall.	Rutaceae	Tejmui	Stem /Bark	Tooth ache/ Mouth ulcer
232.	*Zanthoxylum rhesta* (Roxb.) DC.	Rutaceae	Bojormoni	Leaves and stem bark	Leaf extracts is stimulant and digestive; bark used to manufacture of certain ornaments.

* Indicates pteridophytes

Discussion

Though Gogoi, 1981 and Sarmah, 1990 wrote a note on the ethnobotany of the present study area in their floristic work (Ph. D. Thesis), yet a complete ethnomedicinal survey and documentation is still infancy. On the other hand, the folk practitioner like Khanikar, 2010 who is an inhabitant of the district wrote a few books on "Bon Dorob' (Herbal medicine) in vernacular language- Assamese in last few years; but he only described about the folk medicinal use of some plants by Assamese people in various ailments without mentioning their place of occurrence as well as availability and conservation. Keeping in view, it was aimed to study about the ethnomedicinal plants used by the people of present study area to throw more light on the understanding of the hitherto unknown ethnomedicinal plant species lying neglected in the area.

Documenting the indigenous knowledge through ethnobotanical studies is important for both conservation and utilization of biological resources. Today, there is an urgent need to ethnobotanical studies in trapping the fore-fathers traditional knowledge as well as in search of new documentation of drugs, foods etc. for mankind. Ethnobotanical information among the people of different ethnic groups inhabitants of Golaghat district against the remedy of various ailments may not be mere coincidence; but may be an indication of some useful properties of the plants if they are to be chemically analyzed and clinically tested. The authenticity of information verified by free discussion with the herbal practioners have revealed that such knowledge have gathered traditionally from their fore fathers. The ethnic groups belonging to Mongolian origin have their traditional knowledge but became fragmented with addition and deletion of such knowledge in due course of time.

Conclusions

It is high time to documentation, proper identification and conservation of their traditional knowledge about the medicinal plants which might give us some modern drug if clinical and bio-chemical test have to be done. In-

ventory and documentation of medicinal plants at local level is a pre-requisite for the development of Indian system of medicine and homeopathy drugs at the pharmaceutical industry. Ethnobotanists, bio-chemists, and other experts in this field should be made due intensive attention to pursue active trials and biological screenings on such records.

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