

Medicinal Plants In Wild Habitats At Gopegarh of Paschim Medinipur District

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Abstract- Gopegarh is situated in paschim Medinipur of Southwest Bengal in India which boosts varied topographical land mass i.e. from plain land to hillocks including undulated land mass of forest, degraded land and waste land in the whole territory. The forest is dominated by sal (*Shorea robusta*) trees but other land exhibited planted species *Anacardium occidentale* (Kashew) including *Kurchi* (*Holarrhena pubescens*) and *Acacias*, somewhere *Eucalyptus* spp. The land mass having a few herbs during summer but extensive leafless shrubby plants was seen in May which get flowers during March to May in presence of moisture governed by rains. In March rainy days are a few (6-7 days) followed by April (7-8 days) and in May, multiplication in April continued. So, depending upon the rainy days the vegetation flourishes and grow better harmony to change the pattern of succession in lieu of interactions of microorganisms found in the habitats. So, as a whole the site has high diversity of interaction and the degree of the plant composition is heterogeneous with the heterogeneity of the land mass i.e. habitats. The so called micro-sites boosts a various number of medicinal plants along with other plants makes a rigid but compact composition of forest elements that have a variety of importance for local people as well as of interests among the researchers and students. Therefore, the present paper deals with 145 plant species under 129 genera and 56 families which have been presented to discuss the vegetation composition at Gopegarh, West Bengal in May with special emphasis to conservation of the species to protect the ecosystem pristine.

Keywords- Medicinal plants, Gopegarh area, Management.

I. INTRODUCTION

Medicinal plants are those plants whose importance is to commemorate the ailments caused by different ways. It broadcasts readymade use or secondary use as active constituents available in local medicine or medicine formulated by companies. Recent day study revealed a large number of herbal drugs which have been screened from various plants and their products like fruits, flowers, seeds, bark of roots and stem, immature twigs, whole plants, buds or

so on. The collection and mode of preservation is different. A good example is *Cinchona* bark which is collected from plant grown in hills at Mongpoo. The said plant may be collected during morning or afternoon and then air-dried under shade house though the procedure is now not been active and the use of quinine plant bark is still pending at Mongpoo of Darjeeling District, West Bengal. But the fact is that, the raw form of medicinal plants or in the ayurvedic form, a large number of local medicine men and Ojhas always use the plants and plant products for their practice in different spheres. Other people of the lateritic southwest Bengal use the same for the economic purpose and sale them to local market and earn money. Examples are Kalmegh (*Andrographis paniculata*), Bahera (*Terminalia bellerica*), Hartuki (*Terminalia chebula*), Amlaki (*Phyllanthus emblica*), Kul (*Ziziphus jujuba*), Mahul (*Madhuca indica*) including various mushrooms from the floor of the forest during post monsoon. A large number of collectors over the district engage to collect 'Bidi leaf' (*Diospyros melanoxylon*) so called 'Tendu' for the purpose to rise local economy. A small herbaceous or shrubby plants get leaves which are marketed but the big trees bear large number of leaves but have no commercial value, as the leaves are thick and not up to the mark as quality leaf. The tract of Gopegarh, Paschim Medinipur district harbours various kinds of medicinal plants which have varied importance and ecological significance. The present study therefore is a study to record the plant elements available in March because it is the starting point to grow plants of various kinds after dry summer. So, the present paper has been made to broadcasts the vegetation composition at Gopegerah available in May with special emphasis to conservation of the medicinal plant species in near future.

II. STUDY AREA

Study area was Gopegarh, Paschim Medinipur in West Bengal which comprised of cultivated land at lower part of Gope and upper part nearer to Raja N L Khan Womens' College, Midnapore and Vidyasagar University, under Paschim Medinipur District. Three micro study sites were demarcated and study was conducted since 2012 till date. The land mass is bordered by river Kansai which makes a land

mass near 'nichu gope' a fertile land for agriculture and cultivation of paddy.

III. MATERIAL AND METHODS

Frequent visits in field was done and plants samples, specimens, soils, photographs and other data like soil temperature, light intensity, micro propagules were recorded to make a study report for annual basis. A compilation of 5 years data was prepared with the help of computer and presented immediately to locate the situation for future study and research. A total 15 (5 in each micro-site) study points were fixed with the help of GPS and recorded points were demarcated with the help of colour (paints) and studied for the study of medicinal plants available there and to study the ecology of them for future study and research. Help of local people was taken to know the common names of the plants and then herbarium specimens were prepared with the help of manual available in website along with the knowledge received from Botanical Survey of India, Shibpore, Howrah, West Bengal during the tenure of research. Sample specimens were housed at herbarium section of Lalgah Govt. College, Binpur-I, Jhargram and Seva Bharati Mahavidyalaya, Kapgari, Jhargram for preservation and future study. Similarly, soils and rocks including mushrooms were collected and preserved in the Botany Department, Lalgah Govt. College for further study and research. Used references listed in bibliography⁽¹⁻²⁰⁾ part for further study.

IV. RESULTS AND DISCUSSION

The data on Gopegarh soil analysis showed that the soil p^H was mainly acidic in nature (6.8) and range varied from 6.5 to 6.8 i.e. low variations thereby, indicating a minor variation from one site to another as there were different management for agricultural land use practice (Table 1). These soils obviously affect the plant growth. Moisture content varied from 7-17% in different types of study soil starting from summer to late summer to early monsoon. The soil of cultivable land at Nichu Gope (NG) showed pH value ranged

in between 6.4 and 6.6 during summer. Moisture content of the same site showed 7-17%. The same at degraded land (DL) showed mean pH 6.8 and moisture content 4-4.5% in summer. Natural forest land showed the mean pH value 6.5 while the moisture content of soil in between 3.5 to 7%. This showed a great range due to different land sites from upper part of the degraded site to the lower tract of alluvial land via natural forest. Here we have recorded 145 plant species under 129 genera and 56 families during study (Table 2). Family Euphorbiaceae showed species dominance followed by Fabaceae and Caesalpiniaceae (Graph 1). The site also showed planted species like *Anacardium occidentale* (Cashew) that gets flowers and fruits (Plate 1, Fig. 3) during summer which is an economic plant in the said area. Abrupt plantation of *Cassia siamea* and *Eucalyptus* makes the degraded land more greenish followed by *Acacia auriculiformis*. Huge medicinal herbs, shrubs and some trees make the land covered with medicinal plants. Ground cover of the land in summer showed less to lesser number of plants while most of the tree species became leafless. The dry deciduous forest floor exhibits gregarious climbers and a few shrubs that show flowers (Fig. 22). Potentially the land shows good growth of bidi leaf (*Diospyros melanoxylon*) which is used widely by local people to generate income as the plant is commercially important and the demand is high. Similarly, green sal plates and leaves used widely by local people to generate economy at the village (Fig. 25).

Table 1 Moisture content and soil p^H of study soil samples at Nichu Gope, Degraded land and Natural Forest, West Bengal

Name of the study sites (Abbreviations used for names of study sites)	Range of soil moisture Content (%)	Mean Soil p ^H During summer
Nichu Gope, Cultivable land (NG)	7% to 17%	6.6
Degraded land (DL)	4% to 4.5%	6.8
Natural Forest Land (NF)	3.5%-7%	6.5

Table 2 Medicinal plants inventory at Gopegarh of Paschim Medinipur in West Bengal, India

Sl. No.	Scientific Name / (English Name)	Common Name	Family
1.	<i>Abutilon indicum</i> (Link) Sweet (INDIAN ABUTILON, INDIAN MALLOW)	Patari, Atibala	Malvaceae
2.	<i>Acacia auriculiformis</i> A. Cunn. ex Benth. (TAN WATTLE, EARLEAF ACACIA)	Akashmoni, Sonajhuri, Minjam	Fabaceae
3.	<i>Achyranthes aspera</i> L. (CHAFFY FLOWE, PRICKLY CHAFFY FLOWER)	Apang	Amaranthaceae
4.	<i>Aegle marmelos</i> (L.) correa (BENGAL QUINCE, GOLDEN APPLE, STONE APPLE, WOOD APPLE, JAPANESE BITTER)	Bael, Bel	Rutaceae

	ORANGE)		
5.	Ailanthus excelsa Roxb. (TREE OF HEAVEN)	Simarubi	Simaroubiaceae
6.	Alstonia scholaris (L.) R. Br. (Devil's Tree)	Chhatim, Saptaparni	Apocynaceae
7.	Alternanthera sessilis (L.) R. Br. ex DC. (SESSILE JOY WEED)	Mati Kanduri	Amaranthaceae
8.	Anacardium occidentale L. (CASHEW TREE)	Kaju	Anacardiaceae
9.	Andrographis paniculata (Burm f.) Wall. ex Nees (KING OF BITTERS, CREAT, GREEN CHIRAYTA)	Kalmegh	Acanthaceae
10.	Andropogon aciculatus Retz. (GOLDEN FALSE BEARD GRASS, GREEN STEM GRASS, BROOM SEDGE)	Chorkanta	Poaceae
11.	Anisomeles ovate W. T. Aiton (CATMINT)	Kalobhangra	Lamiaceae
12.	Anogeissus latifolia (Roxb. ex DC.) Wall ex Bedd. (AXLE WOOD TREE)	Dhaw	Combretaceae
13.	Antidesma ghaesembilla Gaertn. (BLACK CURRANT TREE)	Nonakul	Phyllanthaceae
14.	Argemone Mexicana L. (MEXICAL PRICKLY POPPY, PRICKLY POPPY OR MEXICAN POPPY)	Siyal-Kanta	Papaveraceae
15.	Aristolochia indica L. (SERPENT ROOT PLANT, INDIAN BIRTH WORT)	Iswarmul	Aristolochiaceae
16.	Asparagus racemosus Willd. (BUTTERMILK ROOT, WILD CARROT, HUNDRED ROOTS, INDIAN ASPARAGUS)	Satamuli, Satavari	Asperagaceae
17.	Atylosia scarabeoides (L.) Benth. (Not Available)	Banur Kalai, Thit Kalai	Fabaceae
18.	Azadirachta indica A. Juss. (MARGOSA TREE/INDIAN LILAC)	Neem, Nim	Meliaceae
19.	Barringtonia acutangula Gaertn. (INDIAN OAK, INDIAN PUTAT)	Hijal	Lecythidaceae
20.	Boerhaavia repens L. (SPREADING HOGWEED, RED HOGWEED)	Punarnava	Nyctaginaceae
21.	Borassus flabellifer L. (PALMYRA PALM, TODDY PALM, WINE PALM, TAL PALM)	Tal	Arecaceae
22.	Botrychium daucifolium Wall. ex. Hook. & f. (WESTERN GOBLIN, MOUNTAIN MOONWORT)	Chandni	Lygodiaceae
23.	Breynia vitis-idaea (Burm. f.) Fisch. (INDIAN SNOWBERRY)	Kali Sitki	Euphorbiaceae
24.	Buchanania lanzan Spreng. (CUDDAPAH TREE, ALMONDETTE TREE, CHERONJEE)	Piyal, Chiranji	Anacardiaceae
25.	Butea monosperma (Lam.) Taub. (FLAME OF THE FOREST, BUTEA KINO)	Kingshuk, Palas	Fabaceae
26.	Butea superba Roxb. (RED KWAO KRUA, CREEPING BUTEA)	Lat Palas	Fabaceae
27.	Caesalpinia sappan L.	Nata, Lata	Caesalpiniaceae

	(SAPPAN WOOD / INDIAN REDWOOD)		
28.	<i>Calotropis gigantea</i> (L.) W. T. Aiton (CROWN FLOWER/GIANT MILKWEED, BOWSTRING HEMP)	Bara Akanda	Asclepiadaceae
29.	<i>Cardiospermum heliacabum</i> L. (BALLOON VINE)	Sibjhul	Sapindaceae
30.	<i>Carya arborea</i> Roxb. (WILD GUAVA/CEYLON OAK/PATANA OAK)	Kumbhi	Lecythidaceae
31.	<i>Cascabela thevetia</i> (L.) Lippold Syn.- <i>Thevetia peruviana</i> (Pers.) K. Schum. (LUCKY NUT/YELLOW OLEANDER)	Kolke	Apocynaceae
32.	<i>Casearia elliptica</i> Willd. (Toothed leaf Chilla)	Chilla	Salicaceae
33.	<i>Cassia alata</i> L. (CANDLE BUSH/CHRISTMAS CANDLE)	Dadmari	Caesalpiniaceae
34.	<i>Cassia fistula</i> L. (GOLDEN SHOWER TREE)	Bandar Lathi, Sonali	Caesalpiniaceae
35.	<i>Cassia occidentalis</i> L. (COFFEE WEED/MOGDAD COFFEE)	Kalkasunda	Caesalpiniaceae
36.	<i>Cassia siamea</i> Lam. (SIAMESE CASSIA/KASSOD TREE/CASSIA TREE)	Minziri/Kasunde	Caesalpiniaceae
37.	<i>Cassia tora</i> L. = <i>Senna tora</i> (L.) Roxb. (SICKLE SENNA)	Jhunjhuni	Caesalpiniaceae
38.	<i>Cassytha filiformis</i> L. (LOVE-VINE)	Akashbel	Cassythaceae
39.	<i>Catharanthus roseus</i> (L.) G. Don. (MADAGACAR PERIWINKLE/ROSE PERIWINKLE)	Nayantara	Apocynaceae
40.	<i>Celastrus paniculatus</i> Willd. (INTELLECT PLANT/CLIMBING STAFF TREE/BLACK OIL PLANT)	Kijri, Malkagni, Jyotismati	Celastraceae
41.	<i>Cephalandra indica</i> Naudin (IVY GOURD/SCARLET FRUIT)	TelaKuncha/Bankundar i	Cucurbitaceae
42.	<i>Cleistanthus collinus</i> (Roxb.) Benth. ex. Hook. f. (GARARI)	Parasi	Euphorbiaceae
43.	<i>Clerodendrum indicum</i> (L.) Kuntze (TUBE FLOWER/SKY ROCKET/BOWING LADY/TURK'S TURBIN)	Bamunhati	Verbenaceae
44.	<i>Clerodendrum viscosum</i> Vent. (HILL GLORY BOWER)	Ghentu	Verbenaceae
45.	<i>Cnicus arvensis</i> (L.) Hoffm. (CALIFORNIA THISTLE, CANADA THISTLE, FIELD THISTLE)	Biral kanta	Asteraceae
46.	<i>Cocculus hirsutus</i> (L.) Diels (BROOM CREEPER)	Dadaya/Doipata	Menispermceae
47.	<i>Combretum decandrum</i> Jacq. (RANGOON CREEPER, BURMA CREEPER)	Atang/Atur	Combretaceae
48.	<i>Costus speciosus</i> (J. Koenig.) Sm. (CREPE-GINGER, CANE REED, SPIRAL GINGER)	Keon, Keo, Keu, Kemuk	Costaceae

49.	<i>Cretava religiosa</i> G. Forst. (SACRED GARLIC PEAR, TEMPLE TREE)	Barun	Capparaceae
50.	<i>Croton bonplandianum</i> Baill. (THREE LEAVES CRAPER)	Ban tulsi, Banlank, Chrchuri	Euphorbiaceae
51.	<i>Croton oblongifolus</i> Roxb. (CEYLON AROMATIC CROTON)	Putli, Chuka, Baragachi	Euphorbiaceae
52.	<i>Cryptolepis buehneri</i> Roem. & Schult. (INDIAN SARSAPARILLA)	Shyamlata	Anacardiaceae
53.	<i>Curculigo orchioides</i> Gaertn. (GOLDEN EYE GRASS)	Kali musli, Talamuli, Tali)	Hypoxidaceae
54.	<i>Cuscuta reflexa</i> Roxb. (COMMON /GIANTDODDER)	Swarnalata	Convolvulaceae
55.	<i>Dalbergia latifolia</i> Roxb. (INDIAN ROSE-WOOD)	Satisal	Fabaceae
56.	<i>Dalbergia sissoo</i> Roxb. (NORTH INDIAN ROSE-WOOD)	Sishu	Fabaceae
57.	<i>Datura metel</i> L. (DEVIL'S TRUMPET)	Datura	Solanaceae
58.	<i>Deeringia amaranthoides</i> (Lam.) Merr. (SHRUBBY DERINGIA)	Rongoli lata, Gol muhuni, Gol mohani.	Amaranthaceae
59.	<i>Delonix regia</i> (Hook.) Raf. (ROYAL POINCIANA)	Gulmohar	Caesalponiaceae
60.	<i>Dendrophthoe falcata</i> (L. f.) Ettingsh. (HONEY SUCKLE MISTLETOE)	Bara Manda	Loranthaceae
61.	<i>Desmodium triflorum</i> (L.) DC. (CREEPING TICK TREFOIL)	Kudaliya, Kulaliya	Fabaceae
62.	<i>Dicliptera bupleuroides</i> Nees (ROXBURGH'S FOLDWING)	Lal jhnati, Lalsira	Acanthaceae
63.	<i>Diospyros melanoxylon</i> Roxb. (COROMANDEL EBONY, EAST INDIAN EBONY)	Kend, Tendu	Ebenaceae
64.	<i>Diospyros sylvatica</i> Roxb. (MOTTLED EBONY, MOUNTAIN PERSSIMON, BOMBAY EBONY)	Bisgab, bistendu	Ebenaceae
65.	<i>Eragrostis tenella</i> (L.) P. Beauv. (LOVE GRASS, FEATHER LOVEGRASS, JAPANESE LOVEGRASS)	Shada fulka	Poaceae
66.	<i>Eranthemum nervosum</i> (Vahl) R. Br. ex Roem. & Schult. (BLUE ERANTHEMUM , BLUE SAGE)	Gulson	Acanthaceae
67.	<i>Eucalyptus</i> sp. (TASMANIAN BLUE GUM, BLUE GUM, SOUTHERN BLUE GUM)	Eucalyptus	Myrtaceae
68.	<i>Eupatorium odoratum</i> L. (BITTER BUSH, TONKA BEAN)	Bankarpur, Banmara, Bhutbhairabi	Asteraceae
69.	<i>Euphorbia hirta</i> L. (ASTHMA WEED)	Dudhi, Lalkeru, Barokarni	Euphorbiaceae
70.	<i>Euphorbia trigona</i> Mill. (AFRICAN MILK TREE, CATHEDRAL CACTUS, ABYSSINIAN EUPHORBIA)	Bajbaran	Euphorbiaceae
71.	<i>Evolvulus alsinoides</i> (L.) L. (DWARF MORNING-GLORY)	Shanapushpi, Sankhapuspi	Convolvulaceae

72.	<i>Evolvulus nummularius</i> (L.) L. (ROUND LEAF BINDWEED)	Bhnui-Akra	Convolvulaceae
73.	<i>Ficus benghalensis</i> L. (BANYAN, BANYAN FIG, INDIAN BANYAN)	Bot	Moraceae
74.	<i>Ficus hispida</i> L. f. (HAIRY FIG, DEVIL FIG)	Kak damur, Khoksha dumur	Moraceae
75.	<i>Ficus religiosa</i> L. (PEEPAL TREE, ASWATHA TREE, BODHI TREE)	Aswatha	Moraceae
76.	<i>Flacourtia cataphracta</i> Roxb. ex Willd. (SPIKED FLACOUTIA, PUNEALA PLUM)	Tali	Salicaceae
77.	<i>Gmelina arborea</i> Roxb. ex Sm. (BEECH WOOD TREE, MALAY BEECHWOOD)	Gamar	Verbenaceae
78.	<i>Gomphrena globosa</i> L. (GLOBE AMARANTH)	Golkamal, Botamphul, Golmakhmal	Amaranthaceae
79.	<i>Gymnema sylvestre</i> R. Br. (PERIPLOCA OF THE WOODS)	Gurmar, Merasinghi	Asclepiadaceae
80.	<i>Haldinia cordifolia</i> (Roxb.) Ridsdale = <i>Adina cordifolia</i> (Roxb.) Brandis (YELLOW TEAK OR HALDU)	Haldu/Karam	Rubiaceae
81.	<i>Hemidesmus indicus</i> (L.) R. Br. (INDIAN SARSAPARILLA)	Anantamul	Asclepiadaceae
82.	<i>Hemigraphis hirta</i> T. Anderson (HAIRY HEMIGRAPHIS)	Musakani	Acanthaceae
83.	<i>Hibiscus vitifolius</i> L. (GRAPE LEAVED MALLOW)	Ban Kapas	Malvaceae
84.	<i>Holarrhena pubescens</i> Wall. ex G. Don (EASTER TREE)	Kurchi	Apocynaceae
85.	<i>Holoptelea integrifolia</i> (Roxb.) Planch. (INDIAN ELM TREE/JUNGLE CORK TREE)	Challa	Ulmaceae
86.	<i>Hyptis suaveolens</i> (L.) Poit. (AMERICAN MINT)	Bilati Tulsi	Lamiaceae
87.	<i>Ichnocarpus frutescens</i> (L.) W. T. Aiton. (BLACK CREEPER)	Shama Lata	Apocynaceae
88.	<i>Ipomoea obscura</i> (L.) Ker Gawler (LESSER GLORY)	Chaggalkuri	Convolvulaceae
89.	<i>Indigofera linifolia</i> (L. f.) Retz.	Bhangra/Motiyari	Fabaceae
90.	<i>Inga dulcis</i> (Roxb.) (MALINA TAMARIND)	Ban Tetul, Kich mich, Jilapiphal	Mimosaceae
91.	<i>Ipomoea aquatic</i> Forsskal (SWAM CABBAGE, WATER MORNING GLORY)	Jal Kalmi	Convolvulaceae
92.	<i>Ipomoea carnea</i> Jace. (BUSH MORNING GLORY)	Bera Kalmi	Convolvulaceae
93.	<i>Jatropha gossypifolia</i> (L.) (BELLYACHE BUSH)	Lal Bherenda	Euphorbiaceae
94.	<i>Kalanchoe pinnata</i> (Lam.) Pers. (LIFE PLANT)	Patharkuchi	Crassulaceae
95.	<i>Lannea coromandelica</i> (Hout.) Merr. (GURJON TREE/INDIAN ASH TREE)	Jiyal	Anacardiaceae
96.	<i>Lantana camara</i> L. (BIG-SAGE, WHITE-SAGE, RED-SAGE)	Chotra/Putus/Chatra	Verbenaceae
97.	<i>Limonia acidissima</i> L.	Kot bel	Rutaceae

	(WOOD APPLE/ELEPHANT VAPPLE)		
98.	<i>Luffa aegyptiaca</i> Mill. (SPONGE GOURD)	Purul chal	Cucurbitaceae
99.	<i>Lygodium japonicum</i> L. (JAPANESE CLIMBING FERN)	Berajal	Lygodiaceae
100.	<i>Madhuca longifolia</i> (J. Kong) J.F. Macbr. (INDIAN BUTTER TREE)	Mohua/Mohul	Sapotaceae
101.	<i>Mikania micrantha</i> Kunth. (BITTER VINE, AMERICAN ROPE)	Taralata, Rabonlata(Ravan lata)	Asteraceae
102.	<i>Mimosa pudica</i> L. (SENSITIVE PLANT/HUMBLE PLANT)	Lajjwati	Mimosaceae
103.	<i>Mimosa rubicaulis</i> Lam. (HIMALAYAN MIMOSA)	Shiakanta, Chirchitkanta	Mimosaceae
104.	<i>Mitragyna parviflora</i> (Roxb.) Korth. (KAIM, TRUE KADAMB)	Dharakadamb/Gulikada mb	Rubiaceae
105.	<i>Momordica charantia</i> L. (BITTER GOURD, BITTER MELON))	Karela	Cucurbitaceae
106.	<i>Morinda citrifolia</i> L. (CHEESE FRUIT)	Nani/Hurdi	Rubiaceae
107.	<i>Oldenlandia corymbosa</i> L. Syn.- <i>Hedyotis diffusa</i> Willd. (DIAMOND FLOWER)	Khetpapa	Rubiaceae
108.	<i>Passiflora foetida</i> L. (STINKING PASSION FLOWER)	Ban Jhumkolata	Passifloraceae
109.	<i>Peltophorum pterocarpum</i> (DC.) K. Heyne (COPPER POD / YELLOW FLAME)	Radhachura	Caesalpiniaceae
110.	<i>Pergularia daemia</i> (Forssk.) Chiov. (TRELLIS-VINE)	Chagalbati	Asclepiadaceae
111.	<i>Phyllanthus simplex</i> Retz. (SEED UNDER LEAF)	Bhuiamla	Euphorbiaceae
112.	<i>Plumbago zeylanica</i> L. (CEYLON LEADWORT/DOCTOR BUSH)	Sada Chita	Plubaginaceae
113.	<i>Pongamia pinnata</i> (L.) Pierre (HONGE TREE/PONGAM TREE)	Karanja	Caesalpiniaceae
114.	<i>Premna latifolia</i> Roxb. (ARARI)	Agnimantha/Jaya/Gohara	Verbenaceae
115.	<i>Pterocarpus marsupium</i> Roxb. (MALABAR KINO /INDIAN KINO)	Bijasal/Piyasal	Sterculiaceae
116.	<i>Pterospermum acerifolium</i> (L.) Willd. (DINNER PLATE TREE/BAYUR TREE)	Kanakchampa	Sterculiaceae
117.	<i>Ricinus communis</i> L. (CASTOR BEAN/CASTOR OIL PLANT)	Reri	Euphorbiaceae
118.	<i>Schleichera oleosa</i> (Lour.) Oken (CEYLON OAK, LAC TREE)	Kusum	Sapindaceae
119.	<i>Sebastiania chamaelea</i> (L.) Mull.-Arg. (CREEPING SEBASTIANA)	Sebastin	Euophorbiaceae
120.	<i>Semecarpus anacardium</i> L. (MARKING NUT TREE)	Vela	Anacardiaceae
121.	<i>Shorea robusta</i> Gaertn. f. (SAL)	Sal	Dipterocarpaceae
122.	<i>Smilax macrophylla</i> Roxb.	Kumarika	Smilacaceae

	(INDIAN WILD SARSAPARILLA, ROUGH BINDWEED)		
123.	Spermacoe hispida L. (SHAGGY PUTTONWEED)	Madanbata	Rubiaceae
124.	Stachytarpheta indica (L.) Vahl (BLUE POTTER WEED/BLUE SNAKE WEED)	Nilkanthi	Verbenaceae
125.	Stephania japonica (Thunb.) Miers (SNAKE VINE)	Tejomala	Menispermaceae
126.	Sterculia foetida L. (JAVA OLIVE TREE/WILD ALMOND TREE)	Jangli Badam	Sterculiaceae
127.	Streblus asper Lour. (TOOTH BRUSH TREE)	Ash seora	Moraceae
128.	Strychnos nux-vomica L. (NUX VOMICA / POISON NUT TREE)	Kuchla	Loganiaceae
129.	Tectona grandis L. f. (TEAK TREE)	Segun	Verbenaceae
130.	Tephrosia purpurea (L.) Pers. (WILD INDIGO/PURPLE TEPHROSIA)	Ban nil	Fabaceae
131.	Terminalia arjuna (Roxb.) Wight & Arn. (ARJUN)	Arjun	Combretaceae
132.	Terminalia bellerica Roxb. (Bastard Myrobolan)	Bahera	Combretaceae
133.	Terminalia chebula Retz. (BLACK OR CHEBULIC MYROBOLAN)	Harituki	Combretaceae
134.	Tiliacora racemosa Colebr. (SILVER LIME)	Telilata	Menispermaceae
135.	Trewia nudiflora L. (FALSE WHITE TEAK)	Pitali	Euphorbiaceae
136.	Tylophora asthmatica (EMETIC SWALLOW-WORT)	Antamul	Araceae
137.	Vanda roxburghii R. Br. (VANDA ORCHID)	Banda, Alokellata	Orchidaceae
138.	Viscum articulatum Burm.f. (LEAFLESS OR JOINTED MISSTLETOE)	Mandala	Loranthaceae
139.	Vitis pedata (Lam.) Wall. ex Wight (SORREL VINE)	Goalelata	Vitaceae
140.	Vitis trifoliata (L.) Morales (POSSUM-GRAPE)	Amal lata, Bundal	Vitaceae
141.	Wendlandia heyneana (Roxb.) DC. (TILAK I)	Minri, Tilki	Rubiaceae
142.	Woodfordia fruticosa (L.) Kurz. (FIRE FLAME BUSH)	Dhatrighul, Dhari	Lythraceae
143.	Zanthoxylum armatum DC. (WINGED PRICKLY ASH)	Tambul, Gaira	Rutaceae
144.	Ziziphus jujuba Mill. (INDIAN DATE, KOREAN DATE, CHINESE DATE, JUJUBE, RED DATE.)	Kul	Rhamnaceae
145.	Ziziphus oenoplia (L.) Mill. (WILD JUJUBE, JACKAL JUJUBE)	Kan Kul	Rhamnaceae

PHOTO PLATE 1. PLANTS OF GOPEGARH AREA IN PASCHIM MEDINIPUR, W.B.



Fig. 1 Bombax ceiba, Fig. 2 Flacourtia ramontchii, Fig. 3 Girl chewing Edible Cashew apple



Fig. 4 Combretum decandrum, Fig. 5 Terminalia bellerica, Fig. 6 Borassus flabellifer



Fig. 7 Cassytha filiformis, Fig. 8 Cassytha filiformis (on ground), Fig. 9 Bombax ceiba (floss)



Fig. 10 Azadirachta indica, Fig. 11 Cretaea religiosa, Fig. 12 Pterospermum acerifolium



Fig. 13 Ipomoea aquatica, Fig. 14 Schleicheria oleosa, Fig. 15 Thevetia peruviana (Flowers)

PHOTO PLATE 2. PLANTS OF GOPEGARH AREA IN PASCHIM MEDINIPUR, W.B.



Fig. 16 Jatropha gossypifolia, Fig. 17 Lantana camara, Fig. 18 Diospyros melanoxylon

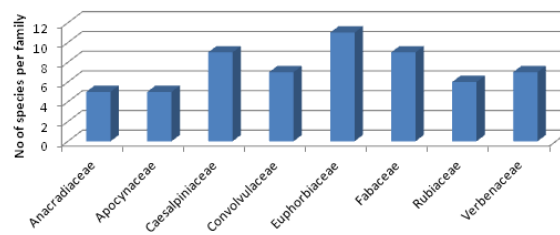


Fig. 19 Acacia auriculiformis, Fig. 20 Cassia fistula, Fig. 21 Anacardium occidentale

Fig. 22 Holarrhena pubescens, Fig. 23 Soil collecting for p^h study, Fig. 24 Soil collecting for VAM

Fig. 25 Green Sal plates, Fig. 26 Evolvulus alsynoides, Fig. 27 Cassia siamea (Yellow flowers)

Family wise species representation in May at Gopegarh area of Paschim Medinipur



Eight dominant families at Gopegarh of Paschim Medinipur, West Bengal, India

Graph 1. Family wise species representation at Gopegarh area in Paschim Medinipur, West Bengal, India

V. CONCLUSIONS

The present study showed important medicinal plants found in the Gopegarh area of Medinipur Sadar under Paschim Medinipur District, West Bengal. Here, abnormal activities like huge collection of fuel and leafy materials from forest and degraded land is going on that degraded the ecosystem continuously. The illegal felling and unwanted forest fire loss the forest at a higher rate which ultimately increasing eco-degradation process. To postpone the process need local management that might be made or demarcated using scientific means. This includes study on flow of biomass, study of soil loss, forest fire and rate of loss of local flora as well as fauna i.e. insects, butterflies and birds which are main agents for dispersal of propagules even act as pollinating agents. Government departments should take care to make it pristine rather than degraded in near future.

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