

FLORISTIC ASSESSMENT OF BURACHAPORI WILD LIFE SANCTUARY, ASSAM

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ABSTRACT

The paper gives a floristic account of Burachapori Wildlife Sanctuary of Assam. This includes 77 families, 203 genera, 254 species and 5 varieties of Angiosperms and 12 families, 12 genera and 12 species and one subspecies of Pteridophytes.

Keywords: Burachapori, Assam, Checklist, Floristic account.

INTRODUCTION

Burachapori Wildlife Sanctuary (WLS) of Assam was established vide notification no. FRW - 31/92/pt/15 dated 11th July 1995 under Wildlife Act 1972, and under the administrative control of the Divisional Forest Officer, Western Assam Wildlife Division (WAWLD), Tezpur. The sanctuary is situated on the southern bank of the river Brahmaputra. In north is bounded by Lawkhoo WLS of Nagaon District, east and west boundary also meets in Nagaon district. It is located between 26° 30' 32" 26° 33' 40" N latitudes and 92° 35' 54" - 92° 46' 07" E and situated in the subdivision Tezpur of Sonitpur district. Total area of the sanctuary is 44.06 sq.km.

The whole region falls under the flood plain of river Brahmaputra with rich alluvial deposits. During flood the sanctuary submerges upto the 70% of total area. Annual temperature in this region varies from 7°C to 36°C; rainfall receives in between 400 - 1100mm annually and relative humidity varies from 63% to 82%.

METHODOLOGY

Three field tours were conducted within the sanctuary in different seasons. About 450 field numbers totaling of 1400 specimens were collected in flowering or fruiting condition. The detailed field notes in particular to habitat phenology and colour of flowers were noted during the collection. All specimens are processed through standard herbarium technique and deposited in the Herbarium, Botanical Survey of India, Eastern regional centre (ASSAM) and Central National Herbarium (CAL), Kolkata. During the study, collections from Sonitpur and adjacent districts housed at Botanical Survey of India, Eastern regional centre Shillong were also taken into account.

VEGETATION

The dominant types of vegetation observed in the sanctuary are:

Low Alluvial Woodlands

These forest types are represented in patches where flood water retains for a period. The tree species represented here are *Streblus asper*, *Antidesma acidum*, *Bombax ceiba*, *Ziziphus mauritiana*, *Barringtonia acutangula* etc. In Lathimari chaponi a large patch of pure formation of *Barringtonia acutangula* was found. Among shrubby species and large grasses like *Schumannianthus dichotomus*, *Ziziphus mauritiana*, *Glochidion coccineum*, *Apluda mutica*, etc were seen. Herbaceous elements including climbers which covers the ground layer were *Costus speciosus*, *Leea asiatica*, *L. indica*, *Pouzolzia pentandra*, *Spilanthes acmella*, *Crotalaria pallida*. Epiphytes were least except a few pteridophytes like *Pyrrosia lanceolata*, etc. On way to Thulumokoli camp from Dhania some epiphytic orchids *Dendrobium aphyllum*, *Cymbidium aloifolium*, *Papilionthe teres* and *Gastrochilus dasypogon* were observed.

Riparian Fringing Forests

Major part of the sanctuary is represented by this type of forests. A large number of perennial water bodies, streams, semi permanent water logged areas represent diverse types of aquatic vegetation. This type of

vegetations are characterized by the presence of large number of hydrophytes. The common free floating hydrophytes were *Trapa bispinosa*, *Trapa quadrispinosa*, *Lemna minor*, *Spirodela polyrrhiza*, *Azolla pinnata*, *Salvinia natans*. Other species *Hydrilla verticillata*, *Potamogeton crispus*, *Vallisneria spiralis*, *Actinoscirpus grossus* and *Eichhornia crassipes* were also found. Peripheries of lakes and marshes altogether represent different species like *Glochidion coccineum*, *Bridelia stipularis*, *Rosa clinophylla*, *Crateva magna*, *Barringtonia acutangula*, *Phyllanthus reticulatus*, *Alpinia nigra*, *Vetiveria zizanioides*, *Alocasia fornicata*, *Alternanthera philoxeroides*, *Schumannianthus dichotomus*, *Ficus heterophylla* var. *assamica*, etc.

Grasslands

Grasslands are the most dominating habitat here. Some dominating species in grasslands were *Vetiveria zizanioides*, *Sclerostachya fusca*, *Scleria terrestris* *Tamarix dioica*, etc.

Some of the species like *Bombax ceiba*, *Albizzia lebbak*, *Dalbergia sisso*, *Gmelina arborea*, introduced under Burachapori Management plans (2003-2008) by the forest department are also growing well inside the sanctuary.

	Family	Genera	Species	Varieties/Subspecies
Dicot	58	139	171	5
Monocot	19	64	83	-
Pteridophytes	12	12	12	-

ENUMERATION OF TAXA

RANANCULACEAE

Naravelia zeylanica (L.) DC; *Atrogene zeylanica* L.

Chinimari Beal, 12.11.2005, Bhaumik 110131.

Ranunculus cantoniensis DC.

Basabari, 30.05.2005, Bhaumik 110088.

DILLENIACEAE

Dillenia indica L.

Lawkhoa Suti, 15.11.2005, Bhaumik 110212.

ANNONACEAE

Annona squamosa L.

Dhanias, 13.11.2005, Bhaumik 110185. Cultivated.

MENISPERMACEAE

Cocculus villosus DC.

On way to Chinimari Beal, 28.05.2005, Bhaumik 109959.

NYMPHEACEAE

Nymphaea lotus L. var. **pubescens** (Willd.) Hook.f. & Thoms.; *Nymphaea pubescens* Willd

Lawkhoa Suti, 31.05.2005, Bhaumik 110099.

PAPAVERACEAE

Argemone mexicana L.

Way to Chinimari beal, 28.05.2005, Bhaumik 109960; Dhanias range, 30.05. 2005, Bhaumik 110060.

BRASSICACEAE

Rorippa indica (L.) Hiern; *Sisymbrium indicum* L.

On way to Cinimari beal, 28.05.2005, Bhaumik 119911.

CAPPARIDACEAE

Cleome hassleriana Wyss.- Chod.

Dhanja range, 30.05.2005, Bhaumik 110068.

Crateva magna (Lour.) DC.; *Capparis magna* Lour.

Chinimari beal, 12.07.2006, Bhaumik 110266.

FLACOURTIACEAE

Casearia vareca Roxb.

Baghmari camp, 15.11.2005, Bhaumik 110215 & 110333.

POLYGALACEAE

Polygala chinensis L.

Dhanja, 11.07.2006, Bhaumik 110258; Thulumokoli camp, 29.5.2005, Bhaumik 110021.

CARYOPHYLLACEAE

Polycarpon prostratum (Forssk.) Asch. & Schweing; *Alsine prostrata* Forssk.

Thulumokoli camp, 29.05.2005, Bhaumik 119996.

PORTULACACEAE

Portulaca oleracea L.

Dhanja, 12.11.2005, Bhaumik 110137.

TAMARICACEAE

Tamarix dioica Roxb. ex Roth

Thulumokoli camp, 29.05.2005, Bhaumik 110034 & 13.07.2006 Bhaumik 110292.

BOMBACACEAE

Bombax ceiba L.

Dhanja, 17.11.2005, Bhaumik 110230.

MALVACEAE

Gossypium herbaceum L.

Dhanja, 13.11.2005, Bhaumik 110184.

Sida rhombifolia L.

Chinimari beal, 28.05.2005, Bhaumik 119924; Chinimari beal, 12.11.2005, Bhaumik 110133.

Urena lobata L.

Basabari camp, 30.05.2005, Bhaumik 110078.

STERCULIACEAE

Melochia corchorifolia L.

Baghmari camp, 17.07.2006, Bhaumik 110339.

Pentapetes phoenicea L., Sp. Pl. 698. 1753.

Karaikhuti camp, 15.11.2005, Bhaumik 110288.

TILIACEAE

Grewia multiflora Juss.

Baghmari camp, 17.07.2006, Bhaumik 110347.

LINACEAE

Linum usitatissimum L.

Thulumokoli camp, 29.05.2005, Bhaumik 109995.

OXALIDACEAE

Oxalis corniculata L.

Basabari camp, 30.05.2005, Bhaumik 110051.

BALSAMINACEAE

Impatiens tripetala Roxb. ex DC.

Chinimari beal, 28.05.2005, Bhaumik 109907; Chinimari beal, 12.07.2006, Bhaumik 110261.

RUTACEAE

Micromelum integerrimum (Buch.-Ham. ex Roxb.) Wight & Arnott ex R. Roem.; *Bergera integerrima* Buch.-Ham. ex Roxb.

Lawkhoa Suti, 14.11.2005, Bhaumik 110204.

CELASTRACEAE

Celastrus paniculatus Willd.

Lawkhoa Suti, 14.11.2005, Bhaumik 110190.

RAMNACEAE

Ziziphus mauritiana Lam.

Dhanias, 12.11.2005, Bhaumik 110168.

VITACEAE

Cissus repens Lam.

Chinimari beal, 28.05.2005, Bhaumik 109967.

Tetrastigma bracteolatum (Wall.) Planch. *Vitis bracteolata* Wall.

Thulumokoli camp, 13.07.2006, Bhaumik 110294.

Tetrastigma dubium (M. A. Lawson) Planch; *Vitis dubia* M. A. Lawson

Lawkhoa Suti, 14.11.2005, Bhaumik 110207.

Tetrastigma thomsonianum Planch.

Chinimari beal, 28.05.2005, Bhaumik 109966.

Vitis heyneana Roem. & Schult.

Thulumokoli camp, 29.05.05, Bhaumik 110019.

LEEACEAE

Leea asiatica (L.) Ridsdale; *Phytolacca asiatica* L.

Baghmari camp, 31.05.2005, Bhaumik 110120.

Leea indica (Burm. f.) Merrill; *Staphylea indica* Burm. f.

Chinimari beal, 12.07.2006, Bhaumik 110265.

SAPINDACEAE

Cardiospermum halicacabum L.

Chinimari beal, 28.05.2005, Bhaumik 109935.

PAPILIONACEAE

Aeschynomene indica L.

Thulumokoli camp, 29.05.05, Bhaumik, 109992; Baghmari camp, 17.07.2006, Bhaumik 110337.

Crotalaria pallida Aiton.

Dhania, 13.11.2005, Bhaumik 110183.

Crotalaria striata DC.

Thulumokoli camp, 29.05.05, Bhaumik 110015.

Dalbergia sissoo Roxb. ex DC.

Thulumokoli camp, 29.05.05, Bhaumik 110028.

Dendrolobium triangulare (Retz.) Schindl.; *Hedysarum triangulare* Retzius

Kachodhara, 15.07.06, Bhaumik 110328; Karaiberia camp, 15.11.2005, Bhaumik 110214.

Deris cuneifolia Benth.

Chinimari beal, 28.05.05, Bhaumik 109976.

Desmodium laxiflorum DC.

Dhania, 12.11.2005, Bhaumik 110169.

Desmodium microphyllum (Thunb.) DC.; *Hedysarum microphyllum* Thunb.

Dhania, 12.11.05, Bhaumik 110163.

Flemingia macrophylla (Wild.) Kuntze ex Prain. *Corotalaria macrophylla* Willd.

Lathimari camp, 31.05.05, Bhaumik 110117.

Pueraria phaseoloides (Roxb.) Benth.; *Dolichos phaseoloides* Roxb.

Baghmari camp, 17.11.2005, Bhaumik 110232.

Senna tora (L.) Roxb.; *Cassia tora* L.

Chinimari beal, 12.7.2006, Bhaumik 110275.

Senna septemtrionalis (Viv.) H. S. Irwin & Barneby; *Cassia septemtrionalis* Viv**Smithia sensitiva** Aiton.

Sheali camp, 18.11.2005, Bhaumik 110246.

Uraria picta (Jacq.) Desv. ex DC.; *Hedysarum pictum* Jacq.

Thulumokoli camp, 29.05.05, Bhaumik 109998.

MIMOSACEAE

Acacia farnesiana (L.) Willd.; *Mimosa farnesiana* L.

Basabari camp, 30.05.05, Bhaumik 110090.

Albizia procera (Roxb.) Benth.; *Mimosa procera* Roxb.

Jawani camp, 15.11.2005, Bhaumik 110213.

Mimosa pudica L.

Chinimari beal, 28.05.05, Bhaumik 109917.

CAESALPINIACEAE

Caesalpinia bonduc (L.) Roxb.; *Guilandina bonduc* L.

Dhania, 15.07.2006, Bhaumik 110324.

ROSACEAE

Duchesnea indica (Andrews) Focke; *Fragaria indica* Andrews.

Chinimari beal, 19.11.2005, Bhaumik 110253; Thulumokoli camp, 29.05.2005, Bhaumik 110012.

Rosa clinophylla Thory

Chinimari beal, 28.05.2005, Bhaumik 109968.

Rubus moluccanus L.

Baghmari camp, 17.11.2005, Bhaumik 110231.

MYRTACEAE

Barringtonia acutangula (L.) Gaertn.; *Eugenia acutangula* L.

Chinipani beal, 28.05.2005, Bhaumik 109929.

Psidium guajava L.

Chinimari beal, 12.11.2005, Bhaumik 110123. Escape from cultivation.

PASSIFLORACEAE

Passiflora foetida L.

Dhania, 12.07.2006, Bhaumik 110277.

LYTHRACEAE

Cuphea balsamona Cham. & Schltdl.

Chinimari beal, 28.05.2005, Bhaumik 109970 & 109923.

Lagerstroemia speciosa (L.) Pers.; *Munchausia speciosa* L.

Thulumokoli camp, 29.05.05, Bhaumik 110029. Social forestry plantation.

TRAPACEAE

Trapa bispinosa Roxb.

Chinimari beal, 12.11.2005, Bhaumik 110152.

Trapa quadrispinosa Roxb.

Boalmari beal, 30.05.2005, Bhaumik 110074.

CUCURBITACEAE

Coccinia grandis (L.) Voigt; *Bryonia grandis* L.

Dhania, 30.05.2005, Bhaumik 110070.

Cucumis melo L.

Basabari camp, 30.05.2005, Bhaumik 110077.

Melothria maderaspatana (L.) Cogn.; *Bryonia scabrella* L.

Sheali camp, 18.11.2005, Bhaumik 110250.

Momordica dioica Roxb. ex Willd.

Dhania range, 30.05.2005, Bhaumik 110096.

Trichosanthes tricuspidata Lour.

Basabari camp, 30.05.2005, Bhaumik 110091.

APIACEAE

Centella asiatica (L.) Urban; *Hydrocotyle asiatica* L.

Jingur beal, 14.07.2006, Bhaumik 110308; Dhania range, 28.05.2005, Bhaumik 109903.

Cnidium monnieri Cusson;

Boalmari beal, 30.05.2005, Bhaumik 110085.

Hydrocotyle sibthorpioides Lam.

Jingur beal, 14.07.2006, Bhaumik 110313.

Oenanthe javanica (Blume) DC.; *Sium javanicum* Blume

Chinimari beal, 12.07.2006, Bhaumik 110269, & 28.05.2005, 109922.

RUBIACEAE

Dentella repens (L.) J. R. Forst. & G. Forst.; *Oldenlandia repens* L.

Thulumokoli camp, 13.07.2006, Bhaumik 110291.

Dentella serpyllifolia Wall. ex Craib

Thulumokoli camp, 29.05.2005, Bhaumik 110027.

Hedyotis diffusa Willd

Chinimari beal, Bhaumik 110149, 12.11.2005; Dhania, Bhaumik 110318, 14.07.2006.

Morinda angustifolia Roxb.

Chinimari beal, 28.05.2005, Bhaumik 109930.

Neolamarckia cadamba (Roxb.) Bosser; *Nauclea cadamba* Roxb.

Jawani camp, 31.05.2005, Bhaumik 110119.

Paederia foetida L.

Dhania, 12.11.2005, Bhaumik 110165.

Catunaregam spinosa (Thunb.) Tirvengadam; *Gardenia spinosa* Thunb.

Chinimari beal, 28.05.2005, Bhaumik 109904; Thulumokoli camp, 29.05.2005, Bhaumik 110010.

ASTERACEAE

Ageratum conyzoides L.

Thulumokoli camp, 29.05.2005, Bhaumik 110008.

Artemisia japonica Thunb.

Dhania, 15.07.2006, Bhaumik 110330.

Breea arvensis (L.) Less.; *Serratula arvensis* L.

Thulumokoli camp, 29.05.2005, Bhaumik 110037.

Dichrocephala integrifolia (L.f.) Kuntze; *Hippia integrifolia* L.f.

Thulumokoli camp, 29.05.2005, Bhaumik 110036.

Eclipta prostrata (L.) L.; *Verbesina prostrata* L.

Dhania, 12.11.2005, Bhaumik 110144.

Conyza bonariensis (L.) Cronquist; *Erigeron bonariensis* L.

Basabari camp, 30.05.2005, Bhaumik 110044.

Crassocephalum crepidioides (Benth.) S. Moore; *Gynura crepidioides* Benth.

Dhania, 01.06.2005, Bhaumik 110122.

Eupatorium odoratum L.

Chinimari beal, 28.05.2005, Bhaumik 109937.

Gnaphalium indicum L.

Basabari camp, 30.05.2005, Bhaumik 110048.

Grangea maderaspatana (L.) Poir.; *Artemisia maderaspatana* L.

Thulumokoli camp, 29.05.2005, Bhaumik 110035; Jingur beal, 14.7.2006, Bhaumik 110314.

Mikania micrantha Kunth

Prati beal, Bhaumik 110062, 30.05.2005.

Parthenium hysterophorus L.

Dhania, 30.05.2005, Bhaumik 110095.

Spilanthes acmella L.

Thulumokoli camp, 29.05.2005, Bhaumik 109994.

Spilanthes paniculata Wall. ex DC.

Jingur beal, 14.07.2006, Bhaumik 110303.

Vernonia cinerea (L.) Less; *Conyza cinerea* L.

Thulumokoli camp, 29.05.2005, Bhaumik 110013.

Wedelia montana var. **wallichii** (Less.) H. Koyama; *W. wallichii* Less.

Chinimari beal, 28.05.2005, Bhaumik 109910 & 109951.

Xanthium indicum Koenig.

Chinimari beal, 28.05.2005, Bhaumik 109934.

APOCYNACEAE

Ichnocarpus frutescens (L.) W. T. Aiton; *Apocynum frutescens* L.

Dhania, 12.11.05, Bhaumik 110166.

Rauwolfia serpentina (L.) Benth. ex Kurz; *Ophioxylon serpentinum* L.

Chinimari beal, 28.05.2005, Bhaumik 109997 & 12.07.2006, Bhaumik 110259.

Thevetia peruviana (Pers.) K. Schum.; *Cerbera peruviana* Pers.

Dhania, 15.07.2006, Bhaumik 110326.

ASCLEPIDACEAE

Calotropis procera (Aiton) W. T. Aiton; *Asclepias procera* Aiton.

Dhania, 30.05.2005, Bhaumik 110071.

Dregea volubilis (L. f.) Benth. ex Hook.f.; *Asclepias volubilis* L. f.

Lawkhoa suti, 14.11.2005, Bhaumik 110200.

BUDDLEJACEAE

Buddleja asiatica Lour.

Dhania, 17.11.2005, Bhaumik 110233.

HYDROPHYLLACEAE

Hydrolea zeylanica (L.) Vahl; *Nama zeylanica* L.

Dhania, 12.11.2005, Bhaumik 110141.

BORAGINACEAE

Cynoglossum wallichii var. **glochidiatum** (Wall. ex Benth.) Kazmi; *Cynoglossum glochidiatum* Wall. ex Benth.

Chinimari beal, Bhaumik 109921, 28.05.2005; Dhania, Bhaumik 110278, 12.07.2006.

Heliotropium indicum L.

Chinimari beal, 28.05.2005, Bhaumik 109946.

CONVOLVULACEAE

Cuscuta reflexa Roxb.

Dhania, 17.11.2005, Bhaumik 110234; Sheali camp, 18.11.2005, Bhaumik 110247.

Ipomoea aquatica Forssk.

Lawkhoa suti, 31.05.2005, Bhaumik 110118.

Ipomoea carnea Jack.

Chinimari beal, 28.05.2005, Bhaumik 109925.

Ipomoea mauritiana Jacq.

Chinimari beal, 12.07.2006, Bhaumik 110287.

Ipomoea obscura (L.) Ker Gawl.; *Convolvulus obscurus* L.

Chinimari beal, 12.11.2005, Bhaumik 110134; Lawkhoa suti, 14.11.2005, Bhaumik 110189.

Ipomoea uniflora Benth & Hook. f. ex Drake

Chinimari beal, 12.11.2005, Bhaumik 110130.

SOLANACEAE

Datura metel L.

Dhania, 18.11.2005, Bhaumik 110241.

Datura suaveolens Humb. & Bonpl. ex. Willd.

Dhania, Bhaumik 110121, 1.06.2005. A native of Mexico now naturalized in India.

Nicotiana plumbaginifolia Viv.

Thulumokoli camp, 29.05.2005, Bhaumik 110016.

Physalis minima L.

Thulumokoli camp, 29.05.2005, Bhaumik 110007.

Solanum indicum L.

Dhania, 28.05.2005, Bhaumik 109901.

Solanum khasianum C. B. Clarke

Chinimari beal, 28.05.2005, Bhaumik 109938.

Solanum kurzii Brace ex Prain

Sheali camp, 18.11.2005, Bhaumik 110242.

Solanum nigrum L.

Chinimari beal, 28.05.2005, Bhaumik 109908.

SCROPHULARIACEAE

Limnophila indica (L.) Druce; *Hottonia indica* L.

Lawkhoa suti, 14.11.2005, Bhaumik 110210.

Mazus pumilus (Burm.f.) Steenis; *Lobelia pumila* Burm. f.

Dhania, 12.11.2005, Bhaumik 110138; Jingur beal, 14.07.2006, Bhaumik 110307.

Mecardonia procumbens Small

Thulumokoli camp, 29.05.2005, Bhaumik 110006.

Scoparia dulcis L.

Dhania, 12.11.2005, Bhaumik 110147.

ACANTHACEAE

Hygrophila polysperma (Roxb.) T. Anderson.; *Justicia polysperma* Roxb.

Chinimari beal, 12.11.2005, Bhaumik 110158; Lawkhoa suti, 14.11.2005, Bhaumik 110195.

Hygrophila salicifolia (Vahl) Nees; *Ruellia salicifolia* Vahl

Thulumokoli camp, 13.11.2005, Bhaumik 110176.

Justicia gendarussa Burm. f.

Jawani camp, 15.11.2005, Bhaumik 110222.

Rungia pectinata (L.) Nees; *Justicia pectinata* L.

Dhania, 13.11.2005, Bhaumik 110181.

VERBENACEAE

Clerodendrum viscosum Vent.

Chinimari beal, 28.05.2005, Bhaumik 109943.

Clerodendrum indicum (L.) Kuntze; *Siphonanthus indica* L.

Thulumokoli camp, 13.11.2005, Bhaumik 110174.

Gmelina arborea Roxb.

Thulumokoli camp, 29.05.2005, Bhaumik 110032.

Lippia javanica Spreng.

Thulumokoli camp, 29.05.2005, Bhaumik 110000.

Phyla nodiflora (L.) Greene; *Verbena nodiflora* L.

Chinimari beal, 28.05.2005, Bhaumik 109914; Dhania, 11.07.2006, Bhaumik 110255.

Premna milleflora C. B. Clarke

Baghmari camp, Bhaumik 110332, 17.06.2006.

Verbena officinalis L.

Basabari camp, 30.05.2005, Bhaumik 110054; Baghmari camp, 28.05.2005, Bhaumik 110219.

Vitex glabrata F. Muell.

Thulumokoli camp, Bhaumik 110031, 29.5.2005 & Bhaumik 110289, 13.07.2006

Vitex negundo L.

Basabari camp, 30.05.2005, Bhaumik 110053.

LAMIACEAE

Anisomeles indica (L.) Kuntze; *Nepeta indica* L.

Chinimari beal, 12.11.2005, Bhaumik 110132.

Leonurus sibiricus L.

Dhania range, 30.05.2005, Bhaumik 110069.

Leucas indica (L.) R. Br. *Leonurus indicus* L.

Chinimari beal, 28.05.2005, Bhaumik 109915; Baghmari camp, 17.07.2006, Bhaumik 110341.

Ocimum tenuiflorum L.

Dhania, 15.07.2006, Bhaumik 110327.

AMARANTHACEAE

Achyranthes aspera L.

Dhania, 12.11.2005, Bhaumik 110143.

Alternanthera philoxeroides (Mart.) Griseb.; *Bucholzia philoxeroides* Mart.

Thulumokoli camp, 29.05.2005, Bhaumik 110018.

Alternanthera sessilis (L.) R. Br. ex DC.; *Gomphrena sessilis* L.

Chinimari beal, 28.05.2005, Bhaumik 109906 & 109965.

Amaranthus spinosus L.

Thulumokoli camp, 29.05.2005, Bhaumik 110042.

Amaranthus viridis L.

Baghmara camp, 31.05.2005, Bhaumik 110111.

CHENOPODIACEAE

Dysphania ambrosioides (L.) Mosyakin & Clemants; *Chenopodium ambrosioides* L.

Basabari camp, 30.05.2005, Bhaumik 110059.

POLYGONACEAE

Polygonum chinense L.

Lawkhoa suti, Bhaumik 110202, 14.11.2005; Karaikhuti camp, 15.11.2005, Bhaumik 110217.

Polygonum hydropiper L.

Lathimari camp, 31.05.2005, Bhaumik 110114.

Polygonum lapathifolium var. salicifolium Sibth.

Chinimari beal, 28.05.2005, Bhaumik 109971.

Polygonum orientale L.

Dhania range, 28.05.2005, Bhaumik s.n..

Polygonum posumbu Buch.-Ham. ex D. Don

Lawkhoa suti, 14.11.2005, Bhaumik 110198.

Polygonum strigosum R. Br.

Basabari camp, 30.5.2005, Bhaumik 110052.

Rumex maritimus L.

Thulumokoli camp, 29.05.2005, Bhaumik 110014.

PIPERACEAE

Piper longum L.

Baghmari camp, 15.11.2005, Bhaumik 110220 & 17.07.2006, 110348.

Peperomia pellucida (L.) Kunth; *Piper pellucidum* L.

Chinimari beal, 28.05.2005, Bhaumik 109927.

LORANTHACEAE

Helixanthera ligustrina (Wall.) Danser; *Loranthus ligustrinus* Wall.

Thulumokoli camp, 29.05.2005, Bhaumik 110004.

EUPHORBIACEAE

Antidesma acidum Retz.

Chinimari beal, 28.05.2005, Bhaumik 109916; Dhanias, 30.5.2005, Bhaumik 110092; Chinimari Beal, 12.07.2006, Bhaumik 110276.

Bridelia stipularis (L.) Blume; *Clusia stipularis* L.

Chinimari beal, 28.05.2005, Bhaumik 109931; Lawkhoa suti, 14.11.2005, Bhaumik 110201.

Euphorbia serpens Kunth

Prati beal, 30.05.05, Bhaumik 110064; Dhanias, 14.09.2006, Bhaumik 110309.

Glochidion coccineum (Buch.-Ham.) Muell. - Arg.; *Agyneia coccinea* Buch.-Ham.

Chinimari beal, 28.05.2005; Bhaumik 109948; Chinimari beal, 12.07.2006; Bhaumik 110262.

Jatropha curcas L.

Dhanias range, 30.05.2005, Bhaumik 110065.

Mallotus philippensis (Lam.) Muell. - Arg.; *Croton philippensis* Lam.

Chinimari beal, 12.11.2005, Bhaumik 110129; Dhanias, 12.11.2005, Bhaumik 110167; Thulumokoli camp, 13.07.2006, Bhaumik 110290.

Phyllanthus reticulatus Poir.

Chinimari beal, 28.05.2005, Bhaumik 109972.

Phyllanthus virgatus G. Forst.

Dhanias range, 13.11.2005, Bhaumik 110182.

Phyllanthus urinaria L.

Basabari camp, 30.5.2005, Bhaumik 110086; Baghmari camp, 15.11.2005, Bhaumik 110218; Bethani camp, 14.07.2006, Bhaumik 110300.

Ricinus communis L.

Dhanias, 18.11.2005, Bhaumik 110243.

Trevis nudiflora L.

Chinimari beal, 28.05.2005, Bhaumik 109902.

URTICACEAE

Pouzolzia pentandra (Roxb.) Benn.; *Urtica pentandra* Roxb.

Thulumokoli camp, 29.05.2005, Bhaumik 110025 & 11.07.2006, Bhaumik 110257.

Pouzolzia zeylanica (L.) Benn.; *P. indica* L.

Chinimari beal, 28.05.2005, Bhaumik 109950.

CANABINACEAE

Cannabis sativa L.

Dhanias range, 30.05.2005, Bhaumik 110061.

MORACEAE

Ficus heterophylla var. **assamica** (Miq.) Corner ex. A.O. Chater

Chinimari beal, 28.05.2005, Bhaumik 109945; Boalmari beal, 30.05.2005, Bhaumik 110079; Chinimari beal, 12.07.2006, Bhaumik 110263 & 110267.

Ficus hispida L. f.

Dhanian range, 17.11.2005, Bhaumik 110229.

Ficus lamponga Miq.

Thulumokoli camp, 29.05.2005, Bhaumik 110043.

Ficus racemosa L.

Chinimari beal, 12.07.2006, Bhaumik 110272.

Streblus asper Lour.

Way to chinimari, 28.05.2005, Bhaumik 109936.

HYDROCHARITACEAE

Ottelia alismoides (L.) Pers.; *Statiotetes alismoides* L.

Chinimari beal, 12.11.2005, Bhaumik 110151.

Vallisneria spiralis L.

Lawkhoa suti, 31.05.2005, Bhaumik 110098 & 17.11.2005, Bhaumik 110238; Karaikhuti camp, 15.11.2005, Bhaumik 110227.

Hydrilla verticillata (L.f.) Royle; *Serpicula verticillata* L. f.

Chinimari beal, 12.11.2005, Bhaumik 110156 & 13.11.2005, Bhaumik 110178.

ORCHIDACEAE

Cymbidium aloifolium (L.) Sw.; *Epidendrum aloifolium* L.

Thulumokoli camp, 29.05.2005, Bhaumik 109986.

Dendrobium aphyllum (Roxb.) C. E. C. Fisch.; *Limodorum aphyllum* Roxb.

Thulumokoli camp, 29.05.2005, Bhaumik 109987.

Gastrochilus dasypogon (J. E. Sm.) Kuntze; *Aerides dasypogon* J. E. Sm.

Thulumokoli camp, May 2005, Bhaumik s.n. Plants collected in vegetative, flowered in BSI, EC, Shillong in November.

Habenaria digitata Lindl.

Baghmari camp, 15.11.2005, Bhaumik 110216.

Papilionanthe teres (Roxb.) Schltr. *Dendrobium teres* Roxb.

Thulumokoli camp, 29.05.2005, Bhaumik 110030.

Zeuxine nervosa (Wall. ex Lindl.) Trimen; *Monochilus nervosus* Wall. ex Lindl.

Chinimari beal, 19.11.2005, Bhaumik 110254.

ZINGIBERACEAE

Alpinia nigra (Gaertn.) B.L. Burtt; *Zingiber nigrum* Gaertn.

Lawkhoa suti, 14.11.2005, Bhaumik 110191 & 110194; Chinimari beal, 12.07.2006, Bhaumik 110279.

Curcuma longa L.

Baghmari camp, 17.07.2006, Bhaumik 110349. Escape from forest dweller.

Schumannianthus dichotomus (Roxb.) Gagnep.; *Phrynium dichotomum* Roxb.

Chinimari beal, 15.11.2005, Bhaumik 110223 & 17.07.2006, Bhaumik 110342.

Zingiber rubens Roxb.

Boalmari beal, 30.5.2005, Bhaumik 110072; Baghmari camp, 31.05.2005, Bhaumik 110108; Chinimari beal, 12.07.2006, Bhaumik 110270.

CANNACEAE

Canna indica L.

Baguihati camp, 17.07.2006, Bhaumik 110331.

COSTACEAE

Costus speciosus (J. Koenig) Sm; *Banksea speciosa* J. Koenig

Chinimari beal, 28.05.2005, Bhaumik 109913.

HYPOXIDACEAE

Curculigo orchioides Gaertn.,

Karaikhuti camp, 15.11.2005, Bhaumik 110225.

DIOSCOREACEAE

Dioscorea bulbifera L.

Thulumokoli camp, 29.05.2005, Bhaumik 110024; Lawkhoa suti, 14.11.2005, Bhaumik 110193; Kachodhara, 15.7.2006, Bhaumik 110024.

SMILACACEAE

Smilax ovalifolia Roxb.

Basabari camp, 30.05.2005, Bhaumik 110055.

Smilax perfoliata Lour.

Chinimari beal, 28.05.2005, Bhaumik 109941; Thulumokoli camp, 29.05.2005, Bhaumik 110038.

LILIACEAE

Asparagus racemosus Willd.

Baghmara camp, 31.05.2005, Bhaumik 110109.

PONTEDERIACEAE

Eichhornia crassipes (Mart.) Solms; *Pontederia crassipes* Mart.

Chinimari beal, 28.05.2005, Bhaumik 109947.

COMMELINACEAE

Commelina paludosa Bl.

Chinimari beal, 28.05.2005, Bhaumik 109982 & 12.07.2006, Bhaumik 110285.

Floscopa scandens Lour.

Chinimari beal, 12.11.2005, Bhaumik 110124.

Murdannia nudiflora (L.) Brenan; *Commelina nudiflora* L.

Dhania, 12.11.2005, Bhaumik 110160 & 13.11.2005, Bhaumik 110175.

TYPHACEAE

Typha elephantina Roxb.

Prati beal, 30.05.2005, Bhaumik 110066.

ACORACEAE

Acorus calamus L.

Dhania, 18.11.2005, Bhaumik 110244.

ARACEAE

Alocasia fornicata (Roxb.) Schott; *Arum fornicatum* Roxb.

Chinimari beal, 28.5.2005, Bhaumik 109919; Thulumokoli camp, 29.05.2005, Bhaumik 109990; Jingur beal, 14.07.2006, Bhaumik 110322.

Lasia spinosa (L.) Thwaites.; *Dracontium spinosum* L.

Dhania, 14.11.2005, Bhaumik 110186.

Pistia stratiotes L.

Dhania, 30.05.2005, Bhaumik 110093.

LEMNACEAE

Lemna minor L.

Lawkhoa suti, 31.05.2006, Bhaumik 110097A.

Spirodela polyrrhiza (L.) Schleid; *Lemna polyrrhiza* L.

Lawkhoa suti, 31.05.2005, Bhaumik 110097.

NAJADACEAE

Najas indica (Willd.) Cham.

Lawkhoa suti, Bhaumik 110211, 14.11.2005.

POTAMOGETONACEAE

Potamogeton crispus L.

Chinimari beal, Bhaumik 110154, 12.11.2005.

CYPERACEAE

Actinoscirpus grossus (L. f.) Goetgh. & D. A. Simpson; *Scirpus grossus* L. f

Chinimari beal, 28.05.2005, Bhaumik 109963; Jingur beal, 14.07.2006, Bhaumik 110312.

Bulbostylis densa (Wall.) Hand-Mazz.; *Scirpus densus* Wall.

Chinimari beal, 28.05.2006, Bhaumik 109933.

Cyperus compressus L.

Baghmari camp, 31.05.2005, Bhaumik 110107; Bethani camp, 14.07.2006, Bhaumik 110319.

Cyperus cyperoides (L.) Kuntze; *Scirpus cyperoides* L.

Boalmari beal, 30.05.2005, Bhaumik 110082.

Cyperus distans L. (L.) Kuntze; *Scirpus cyperoides* L.

Baghmari camp, 31.05.2005, Bhaumik 110110, & 17.07.2006, Bhaumik 110335.

Cyperus imbricatus Retz.

Thulumokoli camp, 29.05.2005, Bhaumik 110017; Jingur beal, 14.07.06, Bhaumik 110317.

Cyperus iria L.

Dhania, 12.11.2005, Bhaumik 110148.

Cyperus rotundus L.

Dhania, 30.05.2005, Bhaumik 110087.

Cyperus silletensis Nees

Chinimari beal, 12.11.2005, Bhaumik 110125.

Cyperus thomsoni Boeckeler

Chinimari beal, Bhaumik 109955 & 109961, 28.5.2005.

Fimbristylis biumbellulata Boeckeler

Thulumokoli camp, 29.05.2005, Bhaumik 110005.

Fimbristylis dichotoma (L.) Vahl; *Scirpus dichotomus* L.

Chinimari beal, 28.05.2005, Bhaumik 109905 & 109964; Thulumokoli camp, 29.05.2005, Bhaumik 110040; Jingur beal, 14.07.2006, Bhaumik 110316.

Fimbristylis griffithii Boeckeler

Thulumokoli camp, 29.05.2005, Bhaumik 110039.

Fimbristylis littoralis Gaud.

Dhania, 12.11.2005, Bhaumik 110146.

Fimbristylis schoenoides (Retz.) Vahl.; *Scirpus schoenoides* Retz.

Thulumokoli camp, 29.05.2005, Bhaumik 110020; Dhania, 11.07.2006, Bhaumik 110256.

Kyllinga brevifolia Rottb.

Prati beal, 30.05.2005, Bhaumik 110075.

Kyllinga nemoralis (Forst.) Dandy ex Hutch. & Dalziel; *Thryocephalon nenorale* Forst.

Chinipani beal, 28.05.2005, Bhaumik 109909 & 109920; Bethani camp, 14.07.2006, Bhaumik 110295.

Pycnus pumilus (L.) Nees ex C. B. Clarke; *Cyperus pumilus* L.

Dhania, 12.11.2005, Bhaumik 110140.

Scirpus michelianus L.

Dhania, 12.11.2005, Bhaumik 110159.

Scleria terrestris (L.) Fassett

Thulumokoli camp, 13.11.2005, Bhaumik 110171; Chinimari beal, 12.07.2006, Bhaumik 110281.

POACEAE

Acroceras munroanum (Balansa) Henrard; *Panicum munroanum* Balansa

Baghmari camp, 17.07.2006, Bhaumik 110336.

Acroceras zizanioides (Kunth) Dandy; *Panicum zizanioides* Kunth

Chinimari beal, 28.05.2005, Bhaumik 109969.

Apluda mutica L.

Prati beal, 30.05.2005, Bhaumik 110089; Sheali camp, 18.11.05, Bhaumik 110251; Chinimari beal, 12.07.2006, Bhaumik 110282.

Bambusa jaintiana R. B. Majumder

Dhania, 18.11.2005, Bhaumik 110240; Kachodhara beal, 15.07.2006, Bhaumik 110323.

Brachiaria mutica (Forssk.) Stapf; *Panicum muticum* Forssk.

Lawkhoa suti, 14.11.2005, Bhaumik 110192.

Chrysopogon aciculatus (Retz.) Trin.; *Andropogon aciculatus* Retz.

Chinimari beal, 28.05.2005, Bhaumik 109926.

Coix lacryma-jobi L.

Baghmara camp, 31.05.2005, Bhaumik 110116.

Cyrtococcum patens (L.) A. Camus; *Panicum patens* L.

Boalmari beal, 30.05.2005, Bhaumik 110083.

Echinochloa colona (L.) Link

Dhania, 12.11.2005, Bhaumik 110161.

Echinochloa crus-galli (L.) P. Beauv.; *Panicum crus-galli* L.

Chinimari beal, 28.05.2005, Bhaumik 109962.

Eleusine indica (L.) Gaertn.

Baghmari camp, 17.07.2006, Bhaumik 110334.

Eragrostis gangetica (Roxb.) Steud ; *Poa gangetica* Roxb.

Sheali camp, 18.11.2005, Bhaumik 110249.

Eragrostis tenella (L.) P. Beauv; *Poa tenella* L.

Dhania, 12.11.2005, Bhaumik 110136.

Hemarthria compressa (L. f.) R. Br.; *Rottboellia compressa* L. f.

Baghmari camp, 17.07.2006, Bhaumik 110346.

Hemarthria vaginata Buse

Chinimari beal, 12.07.2006, Bhaumik 110284.

Hygroryza aristata (Retz.) Nees; *Pharus aristatus* Retz.

Thulumokoli camp, 29.05.2005, Bhaumik 109988; Chinimari beal, 12.11.2005, Bhaumik 110126.

Hymenachne assamica (Hook.f.) Hitchc.; *Panicum assamicum* Hook. f.

Lawkhoa suti, 14.11.2005, Bhaumik 110206.

Leersia hexandra Swartz.

Dhania, 14.11.2005, Bhaumik 110188.

Oplismenus burmannii (Retz.) P. Beauv; *Panicum burmannii* Retz.

Dhania, 12.11.2005, Bhaumik 110145.

Oplismenus compositus (L.) P. Beauv.; *Panicum compositum* L.

Lawkhoa suti, 14.11.2005, Bhaumik 110203.

Ottochloa nodosa (Kunth) Dandy; *Panicum nodosum* Kunth

Chinimari beal, 12.07.2006, Bhaumik 110274; Baghmari camp, 17.07.2006, Bhaumik 110340 & 10344.

Paspalidium flavidum (Retz.) A. Camus; *Panicum flavidum* Retz.

Baghmara camp, 31.05.2005, Bhaumik 110112; Dhania, 14. 07.2006, Bhaumik 110302.

Paspalum conjugatum Berg.

Chinimari beal, 28.05.2005, Bhaumik 109942.

Paspalum scrobiculatum L.

Chinimari beal, 28.05.2005, Bhaumik 109983; Jingur beal, 14.07.2006, Bhaumik 110321; Baghmara camp, 17.07.2006, Bhaumik 110345.

Pennisetum glaucum (L.) R. Br.; *Panicum glaucum* L.

Thulumokoli camp, 29.05.2005, Bhaumik 109999; Basabari camp, 30.05.2005, Bhaumik 110050.

Phragmites karka (Retz.) Trin. ex Steud.; *Arundo karka* Retz.

Dhanias, 30.05.2005, Bhaumik 110094.

Polytoca digitata (L. f.) Henrard; *Apluda digitata* L. f.

Boalmari beal, 30.05.2005, Bhaumik 110049.

Sclerostachya fusca (Roxb.) A. Camus; *Saccharum fuscum* Roxb.

Jingur beal, 14.07.2006, Bhaumik 110306.

Setaria pumila (Poir.) Roem. & Schult.; *Panicum pumilum* Poir.

Boalmari beal, 30.05.2005, Bhaumik 110076.

Vetiveria zizanioides (L.) Nash; *Phalaris zizanioides* L.

Thulumokoli camp, 29.05.2005, Bhaumik 110002; Boalmari beal, 30.05.2005, Bhaumik 110073; Dhanias, 12.11.2005, Bhaumik 110164; Chinimari beal, 12.07.2006, Bhaumik 110271.

PTERIDOPHYTES

AZOLLACEAE

Azolla imbricata (Roxb.) Nakai; *Salvania imbricata* Roxb. ex Griff.

Chinimari beal, 12.11.2005, Bhaumik 110155; Kachodhara beal, 13.11.2005, Bhaumik 110179.

PARKERIACEAE

Ceratopteris thalictroides (L.) Brongn; *Acrosticum thalictroides* L.

Chinimari beal, 28.05.2005, Bhaumik 109952 & 12.11.2005, Bhaumik 110127; Jingur beal, 14.07.2006, Bhaumik 110310.

POLYPODIACEAE

Colysis hemionitidea (Wall. ex Mett.) Presl; *Polypodium hemionitidea* Wall.

Lawkhoa suti, 15.11.2005, Bhaumik 110226.

ATHYRIACEAE

Diplazium dilatatum Bl.

Thulumokoli camp, 29.05.2005, Bhaumik 110023 & 13.11.2005, Bhaumik 110172; Lawkhoa suti, 14.11.2005, Bhaumik 110209.

DRYNARIACEAE

Drynaria quercifolia (L.) J. Sm.; *Polypodium quercifolium* L.

Baghmara camp, 31.05.2005, Bhaumik 110113.

EQUISETACEAE

Equisetum ramosissimum ssp. **debile** (Roxb.) Hauke; *Equisetum debile* Roxb. ex Vouch.

Thulumokoli camp, Bhaumik 110026, 29.5.2005; Sheali camp, Bhaumik 110284, 18.11.2005.

HELMINTHOSTACHYACEAE

Helminthostachys zeylanica (L.) Hook; *Osmunda zeylanica* L.

Thulumokoli camp, 29.05.2005, Bhaumik 109997.

LYGODIACEAE

Lygodium flexuosum (L.) Sw; *Ophioglossum flexuosum* L.

Thulumokoli camp, 29.05.2005, Bhaumik 110022.

Lygodium japonicum (Thunb.) Sw; *Ophioglossum japonicum* Thunb.

Thulumokoli camp, 13.07.2006, Bhaumik 110293.

MARSILEACEAE

Marsilea quadrifolia L.

Lawkhoa suti, Bhaumik 110103, 31.05.2005.

OPHIOGLOSSACEAE

Ophioglossum reticulatum L.

Dhania, 12.11.2005, Bhaumik 110162.

POLYPODIACEAE

Pyrrosia lanceolata (L.) Farwell; *Acrostichum lanceolatum* L.

Thulumokoli camp, 29.05.2005, Bhaumik 109993.

SALVINIACEAE

Salvinia natans (L.) Allioni; *Mersilea natans* L.

Chinimari beal, 12.11.2005, Bhaumik 110153.

ACKNOWLEDGEMENTS

Authors are grateful to the Director and Additional Director, Botanical Survey of India, Kolkata and Joint Director, Botanical Survey of India, Eastern Regional Centre, Shillong for providing necessary facilities and encouragements to complete this work. Authors are also thankful to the PCCF, Government of Assam and Divisional Forest Officer of Western Assam Wildlife Division, Tezpur for necessary permission and providing forest staff members during field survey work.

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