# Campus Biodiversity Report

## CAMPUS BIODIVERSITY OF DIMORIA COLLEGE, KHETRI

### Introduction:

Biodiversity is the variety and variability of life on Earth. B is typically a measure of variations at the genetic, species and eco-system level. Biodiversity is important to most aspects of our lives. We value biodiversity both for what it provides to humans, and for the value it has in its own right. It provides many basic needs humans obtain from biodiversity such as food, fuel, shelter, and medicine. Further, ecosystems provide crucial services such as pollination, seed dispersal, climate regulation, water purification, nutrient cycling, and control of agricultural pests. Biodiversity also holds value for potential benefits not yet recognized, such as new medicines and other possible unknown services. Biodiversity has cultural value to humans as well, for spiritual or religious reasons for instance. The intrinsic value of biodiversity refers to its inherent worth, which is independent of its value to anyone or anything else. This is more of a philosophical concept, which can be thought of as the inalienable right to exist.

Over the last century, humans have come to dominate the planet with rapid population as well as developmental growth, causing rapid change to ecosystem and massive loss of biodiversity across the planet. Major direct threats to biodiversity include habitat loss and fragmentation, unsustainable resource use, invasive species, pollution, and global climate change.

### Dimoria College campus biodiversity:

Dimoria College is located at the eastern fringe of Kamrup (Metro) district of Assam. It lies between 92° 04′ 28′′ E to 92° 45′ 39′′ E Longitude and 26° 07′ 10′′ N to 26° 07′ 03′′ N Latitude. It has tropical climate, withaverage temperatureranging between 37° C maximum and 13° C minimum. Soil type is brown and redish sandy loam rich in both macro and micronutrients. The college campus is located in a biodiversity hotspot region. It is surrounded by hills, stream and agricultural fields.

The College has a land 8.9 Hector which is entirely in plains. Out of this area, nearly 40% area is covered by college playground. About 10% of the college campus is water body. A perennial stream, sourcing from the adjacent hills of the college campus, flows along the southern boundary of the campus. Besides, there is a pond right inside the campus which harbours many plant species and

Dimoria College Estd. 1979 Khetri

accommodating for various infrastructures of the college. The diverse physiography influenced by adjacent forested hilly terrain, helps the campus to harbour rich vegetation.

Area surrounding the campus is sparsely populated and the locality being a rural one, human intervention is relatively low. Lush green hills with thick forests of Meghalaya are also in close proximity to the college campus. The diverse physiography in the vicinity of the college campus like hills, plains and stream has considerable influence in the biodiversity of the area. The campus is endowed with terrestrial as well as aquatic vegetation. Most of the plant species are dicotyledonous. Some species are monocotyledonous, and some are gymnosperms. Plant species with their available local names are listed below:

**ANGIOSPERMS**

**Dicotyledons**

| Sl. | Name of species | Family | Local Name |
|---|---|---|---|
| 1 | *Ranunculus cantoniensis* DC. | Ranunculaceae | – |
| 2 | *Polyalthia longifolia* (Sonner) Thw. | Annonaceae | Debadaru |
| 3 | *Polyalthia var. pendula* (Sonner) Thw. | Annonaceae | Debadaru |
| 4 | *Nymphaea nouchali* Burm. F. | Nymphaeaceae | Boga Bhet |
| 5 | *Nymphaea rubra* Roxb. Ex Andrews | Nymphaeaceae | Ronga Bhet |
| 6 | *Nelumbo nicifera* Gaertn. | Nelumbonaceae | Podum |
| 7 | *Argemone mexicana* L. | Papaveraceae | Xilkata |
| 8 | *Cleome viscosa* L. | Cleomaceae | Hurhuria |
| 9 | *Mesua ferrea* L. | Clusiaceae | Naahor |
| 10 | *Abutilon indicum* (L.) Sweet | Malvaceae | Jopa |
| 11 | *Hibiscus rosa-sinensis* L. | Malvaceae | Rakta Joba |
| 12 | *Malvaviscus arborieus* Cav. | Malvaceae | Tikani-Joba |
| 13 | *Sida cordifolia* L. | Malvaceae | Sonborial |
| 14 | *Sterculia villosa* Roxb. | Sterculiaceae | Odal |
| 15 | *Elaeocarpus floribundus* BL. | Elaeocarpaceae | Jalphai |



Dhmorie College Estd. 1979 Khetri

Alee Sam.

| Sl. | Name of species | Family | Local Name |
|---|---|---|---|
| 16 | *Biophytum sp* | Oxalidaceae | |
| 17 | *Oxalis corniculate* L. | Oxalidaceae | Tengechi |
| 18 | *Oxalis corymbosa* L. | Oxalidaceae | Bor tengechi |
| 19 | *Averrhoa carambola* L. | Averrhoaceae | Kordoi |
| 20 | *Impatiens balsamina* L. | Balsaminaceae | Keruphool |
| 21 | *Aegle marmelos* (L.) Correa | Rutaceae | Bel |
| 22 | *Citrus reticulata* Blanco. | Rutaceae | Sumothira |
| 23 | *Murrya koenzii* (L.) Spreng. | Rutaceae | Narasingha |
| 24 | *Murrya paniculata* (L.) Jack | Rutaceae | Kaaminikanchan |
| 25 | *Azadirachta indica* A. Juss. | Meliaceae | Maha neem |
| 26 | *Melia azedarach* L. | Meliaceae | Ghora neem |
| 27 | *Ziziphus mauritiana* Lamk. | Rhamnaceae | Bogori |
| 28 | *Mangifera indica* L. | Anacardiaceae | Aam |
| 29 | *Moringa oleifera* Lamk. | Moringaceae | Sajina |
| 30 | *Acacia auriculiformis* A. Cunn. ex Benth. | Fabaceae | Australian acacia |
| 31 | *Albizia lebbek* Benth. | Fabaceae | Sirish |
| 32 | *Butea monosperma* (Lam) Kuntz. | Fabaceae | Palash |
| 33 | *Caesalpinia pulcherrima* (L.) Sw. | Fabaceae | Radhachura |
| 34 | *Cassia fistula* L. | Fabaceae | Sonaru |
| 35 | *Cassia sophera* L. | Fabaceae | Medelua |
| 36 | *Cassia tora* L. | Fabaceae | Saru medelua |
| 37 | *Crotolaria pallida* Ait. | Fabaceae | Junjunia |
| 38 | *Dalbergia sisoo* Roxb. | Fabaceae | Sishu |
| 39 | *Desmodium heterophyllum* (Willd.) DC. | Fabaceae | |
| 40 | *Desmodium trifolium* (L.) DC. | Fabaceae | |

| Sl. | Name of species | Family | Local Name |
|---|---|---|---|
| 41 | *Mimosa pudica* L. | Fabaceae | Lajukilata |
| 42 | *Pterocarpus santalinus* L. | Fabaceae | Ronga chandan |
| 43 | *Samanea saman* (Jacq.) Merr. | Fabaceae | |
| 44 | *Saraca asoca* (Roxb.) de Wilde | Fabaceae | Ashok gas |
| 45 | *Senna siamea* (Lam.) Irwin et Barneby | Fabaceae | |
| 46 | *Rosa damascena* Mill. | Rosaceae | Golap |
| 47 | *Terminalia arjuna* (DC) W. & A. | Combretaceae | Arjun Gos |
| 48 | *Terminalia chebula* Retz. | Combretaceae | Xilikha |
| 49 | *Eucalyptus maculata* Hook. | Myrtaceae | |
| 50 | *Psidum guajava* L. | Myrtaceae | Madhuriaam |
| 51 | *Syzygium cumini* (L.) Skeels. | Myrtaceae | Kalajamu |
| 52 | *Melastoma malabathricum* L. | Melastomataceae | Futuka |
| 53 | *Ladwigia adscendens* (L.) H. Hara | Onagraceae | Halosee |
| 54 | *Centella asiatica* (L.) Urban | Apiaceae | Bor-Manimuni |
| 55 | *Hydrocotyle sibthorpioides* Lamk. | Apiaceae | Saru-Manimuni |
| 56 | *Anthocephalus cadamba* Miq. | Rubiaceae | Kadam |
| 57 | *Mussaenda philippica* A. Rich. | Rubiaceae | |
| 58 | *Ageratum conyzoides* L. | Asteraceae | Gendheli bon |
| 59 | *Eclipta alba* Hassk | Asteraceae | Keheraj |
| 60 | *Parthenium hysterophorus* L. | Asteraceae | |
| 61 | *Sonchus wightianus* DC. | Asteraceae | |
| 62 | *Tridax procumbens* L. | Asteraceae | |
| 63 | *Vernonia cinerea* (L.) Less. | Asteraceae | |
| 64 | *Xanthium indicum* Koenig | Asteraceae | Agara |
| 65 | *Mimusops elengi* Roxb. | Sapotaceae | Bakul |



Alee Sarma.

| Sl. | Name of species | Family | Local Name |
|---|---|---|---|
| 66 | *Nyctanthus arbor-tristis* L. | Oleaceae | Xewali |
| 67 | *Cascabela thevetia* (L.) Lippold | Apocynaceae | Karabi |
| 68 | *Catharanthus roseus* (L.) G. Don. | Apocynaceae | Nayantora |
| 69 | *Rauvolfia canascens* L. | Apocynaceae | Sarpagandha |
| 70 | *Tebernaemontana divericata* (L.) R. Br. | Apocynaceae | Kathanda |
| 71 | *Calotropis gigantea* (L.) Roxb. | Asclepiadaceae | Aakon |
| 72 | *Cuscuta reflexa* Roxb. | Convolvulaceae | Raghumola |
| 73 | *Evolvulus nummularius* (L.) L. | Convolvulaceae | |
| 74 | *Ipomoea aquatica* Forssk. | Convolvulaceae | Kalmou |
| 75 | *Datura metal* L. | Solanaceae | Dhatura |
| 76 | *Solanum indicum* L. | Solanaceae | Katahi Bengena |
| 77 | *Solanum nigrum* L. | Solanaceae | Kaisi |
| 78 | *Solanum torvum* L. | Solanaceae | Haati Bhekuri |
| 79 | *Solanum viarum* Dunal | Solanaceae | Bhekuri Tita |
| 80 | *Bacopa monnieri* (L.) Pennel | Scrophulariaceae | Brahmisaak |
| 81 | *Justicia adhatoda* L. | Acanthaceae | Boga Bahok |
| 82 | *Clerodendrum* serratum (L.) Spreng | Verbinaceae | Nangal bhanga |
| 83 | *Duranta erecta* L. | Verbaneceae | |
| 84 | *Gmelina arborea* Roxb. | Verbanaceae | |
| 85 | *Lantana camera* L. | Verbanaceae | |
| 86 | *Leucas plukentii* (Roth) Spreng | Lemiaceae | Doron |
| 87 | *Ocimum tenuiflorun* L. | Lemiaceae | Kaltulashi |
| 88 | *Ocimum basilicum* L. | Lamiaceae | Ram tulashi |
| 89 | *Boerhavia diffusa* L. | Nyctaginaceae | Purnanoba |
| 90 | *Achyranthes aspera* L. | Amaranthaceae | Obhat kata |

Dimoria College Estd. 1979 Khetri

| Sl. | Name of species | Family | Local Name |
|---|---|---|---|
| 91 | *Alternanthera philoxeroides* (Martius) Grisebach | Amaranthaceae | Neuthoni- Sak |
| 92 | *Alternanthera sessilis* (L.) R. Brown | Amaranthaceae | Maati Kaduri |
| 93 | *Amaranthus spinosus* L. | Amaranthaceae | Kata Khutura |
| 94 | *Amaranthus viridis* L. | Amaranthaceae | Khutura |
| 95 | *Persicaria barbata* (L.) Hara | Polygonaceae | |
| 96 | *Persicaria hydropiper* (L.) Spach. | Polygonaceae | Bihalongoni |
| 97 | *Polygonum plebeium* Roxb. | Polygonaceae | |
| 98 | *Rumex maritimus* L. | Polygonaceae | |
| 99 | *Rumex nepalensis* Spreng | Polygonaceae | Tarboura |
| 100 | *Santalum album* L. | Santalaceae | Boga Chandan |
| 101 | *Codiaeum variegatum* (L.) Bl. | Euphorbiaceae | Patbahar |
| 102 | *Euphorbia hirta* L. | Euphorbiaceae | Gakhirati bon |
| 103 | *Euphorbia pulcherrima* Willd. | Euphorbiaceae | Lalpata |
| 104 | *Jatropha gossypifolia* L. | Euphorbiaceae | Bhatera |
| 105 | *Phyllanthus acidus* Skeel | Euphorbiaceae | Poramlakhi |
| 106 | *Phyllanthus emblica* L. | Euphorbiaceae | Aaamlokhi |
| 107 | *Ricinus communis* L. | Euphorbiaceae | Eragos |
| 108 | *Ficus benghalensis* L. | Moraceae | Batgos |
| 109 | *Ficus benjamina* L. | Moraceae | Jarigos |

**Monocotyledons**

| | | | |
|---|---|---|---|
| 1 | *Hydrilla verticillata* (L.f.) Royle | Hydrochaaritaceae | |
| 2 | *Rhyncostylis retusa* (L.) Bl. | Orchidaceae | Kopou phool |
| 3 | *Curcuma caesia* Roxb. | Zingiberaceae | |
| 4 | *Ravenala madagascariensis* J.F. Gamble | Sterlitziaceae | Traveller's tree |



Alee Sam.

| Sl. | Name of species | Family | Local Name |
|---|---|---|---|
| 5 | *Sterlitzia reginae - juncea* | Strelitziaceae | |
| 6 | *Canna indica* L. | Cannaceae | Parijat |
| 7 | *Crinum asiaticum* L. | Amaryllidaceae | Bon Naharu |
| 8 | *Yucca gloriosa* L. | Asparagaceae | Dagger plant |
| 9 | *Eichhornia crassipes* (Mart.) Solms. | Pontedarniaceae | Meteka |
| 10 | *Commelina benghalensis* L. | Commelinaceae | Kona shimolu |
| 11 | *Cocos nucifera* L. | Arecaceae | Naarikol |
| 12 | *Crysalidocarpus lutescens* | Arecaceae | Momaitamul |
| 13 | *Roystonea regia* (Kunth) O. F. Cook. | Arecaceae | |
| 14 | *Alocasia fornicate* (Roxb.) Schott | Araceae | Kachu |
| 15 | *Colocasia esculenta* (L.) Schott | Araceae | Kala kochu |
| 16 | *Pistia stratioetes* L. | Araceae | Bar puni |
| 17 | *Lemna perpurilla* Torrui | Lemnaceae | Saru puni |
| 18 | *Cyperus cephalotes* Vahl. | Cyperaceae | |
| 19 | *Cyperus compressus* L. | Cyperaceae | Muthi bon |
| 20 | *Cyperus natans* Vahl. | Cyperaceae | |
| 21 | *Cyperus pilosus* Vahl. | Cyperaceae | |
| 22 | *Cyperus platystylis* Roxb. | Cyperaceae | |
| 23 | *Cyperus rotundus* L. | Cyperaceae | Keyanbon |
| 24 | *Fimbristylis globulosa* (Retz.) Kunth | Cyperaceae | |
| 25 | *Coix lacryma-jobi* L. | Poaceae | Kauri moni |
| 26 | *Cymbopogon nardaus* (L.) Rendle | Poaceae | Chitrnella |
| 27 | *Cynodon dactylon* (L.) Pers. | Poaceae | Duboribon |
| 28 | *Digitaria ciliaris* L. | Poaceae | |
| 29 | *Panicum repens* L. | Poaceae | |



Alee Sarma.

| | | | |
|---|---|---|---|
| 29 | *Panicum repens* L. | Poaceae | |

## Gymnosperm

| Sl. | Name of species | Family | Local Name |
|---|---|---|---|
| 1 | *Cycas pectinata*Buch-Ham. | Cycadaceae | |
| 2 | *Pinus Khasiana*Hook. f. | Pinaceae | Saralgos |
| 3 | *Araucaria heterophylla* (Salisb.) Franco. | Araucariaceae | |
| 4 | *Cryptomeria japonica* (L. f.) D. Don | Cupressaceae | |
| 5 | *Thuja occidentalis* | Cupressaceae | |
| | | | |

Presence of 143 species of Angiospermic taxa representing 120 genera under 61 families,with many valuable and economically important plants, makes the Dimoria College campus with rich biodiversity.

Alee Sarma.

Dr. Alee Sarma, Associate Prof.

Co-ordinator

Department of Botany

Dimoria college.

Principal
Dimoria College,Khetri

Dimoria College Estd. 1979 Khetri