A report on

Campus Environment and Biodiversity

Department of Zoology
Department of Botany

ASSAM
DON BOSCO
UNIVERSITY

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1. Introduction

In its effort towards creating an eco-friendly campus, the University encourages its Faculty and Students to engage in conserving the Campus environment, its flora and fauna, through activities that include individual and collaborative research, conservation practices, activities and initiatives of the EcoClub and the University as a whole.

Since 2017, the School of Life Sciences has been on a constant endeavour to create a repository of information on the biodiversity of the Campus through documentation of indigenous flora and fauna in its three Campuses, particularly the Tapesia Campus, which harbours unique species of flora and fauna.

The Tapesia Campus is home to 296 species of fauna and 38 species of flora. Among the animal species, of mention is the incredible arachnid *Lyrognathus* saltator, the common Tarantula, which is found nesting among our vast expanse of greens. These numbers reveal the rich biodiversity of the Campus which summon for both admiration as well as protection and conservation. The name "Tapesia" itself comes from the fungus *Tapesia* which is characteristic of the tea plantations in the Tapesia region and yet another interesting area of research.

This document entails these species which have been documented so far as well as a note on the health status of their environment.

2. Methodology:

For water analysis, pH was measured using the digital pH meter, water temperature was measured using thermometer. The chemical properties of water were analyzed using standard procedures of Trivedy et al., 1986. Soil analysis was done taking samples from few sites (Tea garden and forested areas) of the Campus for testing the soil quality. Soil samples were collected from different sites in a zip-lock bag and brought to the laboratory and then sent to the Indian Council of Agriculture Research (ICAR) for chemical analysis. Physical analysis of soil samples was carried out in the Zoology laboratory of Assam Don Bosco University.

Studies on the faunal and floral diversity were performed in different seasons of the year. Point transect, quadrat sampling, belt transect, opportunistic surveys and listing encounters in fixed as well as random trails were performed. Data incorporated in the report as contains the list of birds observed during Campus Bird Count event (a sub-event of the global Great Backyard Bird Count event) and from the Nature Trails that are conducted by the University to expose the students to the wild.

3. Result

3. 1. Water analysis of ADBU lake

The lake surveyed is located between 26°07’33.75” N and 91°53’55.39” E surrounded by tea plantations with a gentle slope downhill from the tea plantations in Kamarkuchi, Sonapur, Assam

- **Physico-Chemical Parameters:**

Water Temperature: Water temperature ranges between 19°C - 21°C in winter season and between 26°C to-28°C in spring season.

pH: The pH value in winter season was within 4.5-5.5 while during spring season it was found to be slightly acidic

Nitrite: The nitrite value of DBU lake ranges from 2.3 mg/l - 2.5mg/l during winter season and 1 mg/l - 1.5 mg/l in spring.

Dissolved oxygen: DO values recorded during winter ranges between 14-19 mg/l While during spring the values recorded were ranged from 8-12 mg/l.

Free or dissolved Carbon dioxide: Dissolved carbon dioxide values recorded during winter ranged between 30-54 mg/l, while during the Spring season the values ranged between 39-62 mg/l.

Total alkalinity: The total alkalinity values of ADBU lake recorded for winter seasons were between 9-17 mg/l of Calcium carbonate. For Spring season, the recorded values were between 12-20 mg/l of Calcium carbonate.

Total Hardness: Total hardness values of ADBU lake recorded for winter were between 66-108 mg/l respectively, whereas for spring the values recorded ranged 62-103 mg/l respectively.

Chloride: The values of Chloride recorded for winter season were 6-9 mg/l and for Spring, the values recorded were 7-11 mg/l respectively.

Biological oxygen demand (BOD): BOD values recorded in ADBU lake during winters were 6-11 mg/l and for Spring 6-8 mg/l respectively.

Chemical oxygen demand (COD): The COD values recorded varied from an average of 10.67 to 26.67 mg/l during winter and during spring season it ranges from 16.00 – 24.00 mg/l.

3.2. Soil analysis:

- **Elemental analysis:** In the forested area, soil parameters were recorded as- 4.89- 5.44 pH , Soil organic carbon (SOC%) - 1.29-1.32 %, average nitrogen– 314-264 kg/h, Average Phosphorus (P) - 15-17 kg/h, Average Potassium (K)- 150-244 kg/h, Ca-Mg content **3.35-5** meq/100g.
- **Soil moisture content:** The moisture content in forest area with an average of 25.2% in winter season and moisture content of 30% in the pre-monsoon season and in the tea garden area the average moisture content in winter is18.7% and 27% in the pre-monsoon season.
- **Soil pH:** The pH in forest area in winter season ranges 7.2- 6.7 in pre monsoon season and in the tea garden area the average pH is 6.4 in the winter season and 6.0 in the pre monsoon season. Hence, the tea garden area was slightly acidic in comparison with the forest area.
- **SOIL TEMPERATURE:** The average temperature of soil in forest area is 170C in winter season and 25.20C in pre-monsoon season and the average temperature in tea garden area is 17.10C in winter season and 260C in the pre-monsoon season.
- **SOIL TEXTURE:** The soil texture in forest area, when hard clod was formed by dry soil, when pinched between thumb and index moist soil, this indicated the soil texture to be clay loam. In the tea garden area, when cast was formed in both dry and moist condition and could be handled without breaking, this indicated the soil texture to be silt loam.
- **SOIL COLOUR:** In the forest area the soil colour was found to bevenetian red and in the tea garden area as burnt sienna.

3.3. Faunal Diversity

i. Spider Diversity

30 species belonging to 25 genus and 13 families were recorded from Assam Don Bosco University, Tapesia Campus.

Sl. No.	Family	Species	Guild
1.	Araneidae	*Parawixia dehaani*	Orb web weavers
2.	Araneidae	*Gasteracantha hasselti* Thorell 1887	Orb web weavers
3.	Araneidae	*Argiope* sp.	Orb web weavers
4.	Araneidae	*Nephila pilipes* Fabricius 1793	Orb web weavers
5.	Araneidae	*Nephila kuhlii* Doleschall 1859	Orb web weavers
6.	Araneidae	*Gasteracantha* sp.	Orb web weavers
7.	Araneidae	*Gasteracantha kuhli* CL Koch 1837	Orb web weavers
8.	Araneidae	*Eriovixia sp.*	Orb web weavers
9.	Araneidae	*Gea* sp.	Orb web weavers
10.	Araneidae	*Araneus mitificus* Simon 1886	Orb web weavers
11.	Araneidae	*Herennia multipuncta*	Orb web weavers
12.	Araneidae	*Cyclosa* sp.	Orb web weavers
13.	Lycosidae	*Pardosa* sp.	Funnel webs
14.	Pholcidae	*Pholcus* sp.	Space web weavers
15.	Oxyopidae	*Oxyopes javanus* Thorell 1887	Specialists
16.	Oxyopidae	*Oxyopes birmanicus* Thorell 1887	Specialists
17.	Oxyopidae	*Oxyopes shweta* Tikader 1970	Specialists
18.	Oxyopidae	*Hamadruas* sp.	Specialists
19.	Salticidae	*Telamonia dimidiata*	Other hunters
20.	Salticidae	*Plexippus paykulli*	Other hunters
21.	Salticidae	*Phintella vittata*	Other hunters
22.	Salticidae	*Hyllus* sp.	Other hunters

23.	Theridiidae	*Argyrodes flavescens* OP Cambridge 1880	Scattered line weaver
24.	Corinnidae	*Castianeira* sp.	Ground runners
25.	Tetragnathidae	*Opadometa fastigata*	Orb web weavers
26.	Tetragnathidae	*Tylorida striata* Thorell 1877	Orb web weavers
27.	Tetragnathidae	*Guizygiella* sp.	Orb web weavers
28.	Tetragnathidae	*Leucauge* sp.	Orb web weavers
29.	Eutichuridae	*Cheiracanthium* sp.	Foliage runners
30	Theraphosidae	*Lyrognathus saltator*	Burrow dweller

Spider diversity

Lyrognathus saltator

Dendrolycosa sp.

Hyllus semicupreus

Argiope pulchella

Argiope aemula

ii. Orthopteran Diversity

10 Orthopteran species under **4 families** were recorded from Assam Don Bosco University, Tapesia Campus.

1. FAMILY : TETTIGONIDAE

- *Ducetia japonica* Thunberg, 1815
- *Tettigonia viridissima* Linnaeus, 1758
- *Euconocephalus broughton* Bailey, 1980
- *Conocephalus melanus* Haan, 1843

2. FAMILY: ACRIDIDAE

- *Melanoplus bivittatus* Say, 1825
- *Oxya hyla hyla* Serville, 1831
- *Xenocantatops humilis* Serville, 1838
- *Ceracris nigricornis* Walker, 1870

3. FAMILY: PYRGOMORPHIDAE

- *Atractomorpha crenulata* Fabricius, 1793

4. FAMILY: CHOROTYPIDAE

- *Erianthus serratus*

TABLE 2: Sytematic position of Grasshopper species present in ADBU, Tapesia campus

Order	Suborder	Family	Subfamily	Genera	Species
Orthoptera	Ensifera	Tettigoniidae	Phaneropterinae	*Ducetia*	*D.japonica*
			Tettigoniinae	*Tettigonia*	*T.viridissima*
			Conocephalinae	*Euconocephalus*	*E.broughton*
			Conocephalinae	*Conocephalus*	*C.melanus*
Orthoptera	Caelifera	Acrididae	Melanoplinae	*Melanoplus*	*M.bivittatus*
			Oxyinae	*Oxya*	*O.hyla hyla*
			Catantopinae	*Xenocatantops*	*X. humilis*
			Oedipodinae	*Ceracris*	*C.nigricornis*
Orthoptera	Caelifera	Pyrgomorphidae	Pyrgomorphinae	*Atractomorpha*	*A.crenulata*
Orthoptera	Caelifera	Chorotypidae	Erianthinae	*Erianthus*	*E. serratus*

iii. Avian Diversity

40 species of birds belonging to **28 families** were recorded from Assam Don Bosco University, Tapesia Campus.. The Campus celebrates the Campus Bird Count every year to assess the trends of Avian Diversity and is registered as

Family	Scientific name	Common name
Ardeidae	*Bubulcus ibis* *Ardea intermedia*	Cattle egret Intermediate egret
Cuculidae	*Hierococcyx varius* *Centropus sinensis*	Common hawk cuckoo Greater coucal
Corvidae	*Corvus macrorhynchos* *Cissa chinensis*	Jungle crow Common green magpie
Oriolidae	*Oriolus xanthornus*	Black-hooded oriole
Dicruridae	*Dicrurus bracteatus* *Dicrurus paradiseus* *Dicrurus macrocercus*	Spangled drongo Greater racket-tailed drongo Black drongo
Sturnidae	*Gracula religiosa* *Acridotheres tristis* *Sturnia malabarica*	Hill myna Common myna Chestnut-tailed starling
Bucerotidae	*Buceros bicornis*	Oriental-pied Hornbill
Psittaculidae	*Psittacula alexandri* *Psittacula krameri*	Red-breasted parakeet Rose- ringed parakeet
Pycnonotidae	*Pycnonotus cafer*	Red-vented bulbul
Phasianidae	*Gallus gallus*	Red jungle fowl
Meropidae	*Merops leschenaulti*	Chestnut-headed bee eater
Megalaimidae	*Psilopogon lineata* *Psilopogon asiatica*	Lineated barbet Blue-throated barbet
Alcedinidae	*Halcyon smyrnensis*	White-throated kingfisher
Paridae	*Parus major*	Great tit
Phalacrocoracidae	*Phalacrocorax fuscicollis*	Indian Cormorant
Strigidae	*Glaucidium cuculoides*	Asian barred owlet
Laniidae	*Lanius tephronotus*	Grey-backed shrike
Muscicapidae	*Copsychus saularis*	Oriental magpie robin
Parulidae	*Zosterops palpebrosus*	Oriental White eye
Dicaeidae	*Dicaeum cruentatum* *Anthus hodgsoni*	Scarlet-backed flower pecker
Coraciidae	*Coracias benghalensis* *Eurystomus orientalis*	Indian roller Oriental dollarbird

Ciconiidae	*Anastomus oscitans*	Asian open billed stork
Picidae	*Micropternus brachyurus*	Rufous woodpecker
Chloropseidae	*Chlropsis aurifrons*	Golden-fronted leafbird
Passeridae	*Passer domesticus*	House sparrow
Sittidae	*Sitta cinnamoventris*	Chestnut- bellied nuthatch
Columbidae	*Treron bicinctus* *Streptopelia orientalis* *Spilopelia chinensis*	Yellow-footed green pigeon Oriental turtle dove Spotted dove

Fig17:*Glaucidium cuculoides* (Asian barred owlet)

Fig18:*Psittacula alexandri* (Red-breasted parakeet)

Fig 19: *Cuculus canorus* (Common hawk cuckoo)

Fig 20: *Gracula religiosa* (Hill myna)

Fig 21:*Eurystomus orientalis* (Oriental dollarbird)

Fig 11: *Lanius tephronotus* (Grey-backed shrike)

Fig 12: *Sitta cinnamoventris* (Chestnut bellied nuthatch)

Fig 13: *Psilopogon lineata* (Lineated barbet)

Fig 14: *Dicrurus bracteatus* (Spangled drongo)

Fig 15: *Treron bicinctus* (Yellow-footed green pigeon)

Fig 16: *Dicrurus paradiseus* (Greater racket-tailed drongo)

iv. **Odonate Diversity**

28 species of Dragonfly were recorded from Assam Don Bosco University, Tapesia Campus belonging to the families Aeshnidae, Gomphidae and Libellulidae. Family Libellulidae was represented by 17 genus, family Aeshnidae was represented by 2 genus and family Gomphidae was represented by 1 genus.

SL.NO	FAMILY	SCIENTIFIC NAME
1	Aeshnidae	*Anax ephippiger*
2		*Gyncantha sp.*
3	Libellulidae	*Acisoma panorpoides*
4		*Brachydiplax chalybea*
5		*Brachythemis contaminata*
6		*Bradinopyga geminata*
7		*Camacinia gigantica*
8		*Crocothemis servilia*
9		*Diplocodes nebulosa*
10		*Diplocodes travails*
11		*Neurothemis tullia*
12		*Neurothemis fulvia*
13		*Neurothemis intermedia*
14		*Orthretum glacum*
15		*Orthretum pruinosum*
16		*Orthretum sabina*
17		*Brachydiplax sobriba*
18		*Palpoleura sexmaculata*
19		*Pantala flavascenes*
20		*Potamarcha congener*
21		*Rhyothemis variegata*
22		*Tholymis tillarga*
23		*Tramea basilaris*
24		*Trithemis aurora*
25		*Trithemis festiva*
26		*Urothemis signata*
27		*Ryothemis fuliginosa*
28	Gomphidae	*Progomphus lineatus*

Fig.4.0.25: *Diplocodes trivialis* (F)

Fig.4.0.26: *Crocothemis servilia* (F)

Fig.4.0.27: *Acisoma panorpoides* (F)

Fig.4.0.28*Acisoma panorpoides* (M)

Fig.4.0.29:unidentified

Fig.4.0.30: *Trithemis festiva*

Fig.4.0.31:*Tholymis tillarga* (M)

Fig.4.0.32: *Rhyothemis variegata*

v. Ant Diversity

A total of **9 species** of ants belonging to 4 sub-families that is Formicinae, Psedomyrmicinae, Myrmicinae, Porinerae and Dolichorinae have been reported.

Serial No.		Scientific Name	Common Name
1	**FORMICIDAE**	*Componutus* sp	Carpenter ant
2		*Oecophylla smaragdina*	Weaver ant
3		*Paratrechina longicornis*	Black crazy
4		*Solenopsis geminata*	Fire ant
5		*Solenopsis invicta*	Red fire ant
6		*Pheidole* sp	Big headed ant
7		*Diacamma* sp	Queenless ant
8		*Tetraponera rufonigra*	Bi-coloured ant
9		*Tapinoma melanocephalum*	Ghost ant

vi. Terrestrial Beetle Diversity

A total of **24 species of terrestrial beetles** belonging to 6 families viz. Carabidae, Coccinellidae, Endomychidae, Chrysomelidae, Scarabaeidae and Tenebrionidae were recorded from Assam Don Bosco University, Tapesia Campus.

Serial No.	Scientific Name	Common Name
1	*Craspedophorus bonvouloiri*	Yellow-spotted Ground Beetle
2	*Micraspis discolor*	Spotless Lady Beetle
3	*Menochilus sexmaculatus*	-
4	*Coccinella bisellata*	-
5	*Coccinella transversalis*	Transverse Ladybird
6	*Xenomycetes laversi*	Handsome Fungus Beetle
7	*Harmonia manillana*	-
8	*Aspidimorpha sp.*	Golden Tortoise Beetle
9	*Neolema sexpunctata*	The six-spotted neolema
10	*Aulacophora frontalis*	Pumpkin Beetle
11	*Asiophrida marmorea*	Kadondong Beetle
12	*Oniticellus cinctus*	Bordered Dung Beetle
13	*Adoretus versutus*	Rose beetle
14	*Aspidolopha melanophthalma*	-
15	*Gonocephalum rusticum*	Darkling Beetle
16	*Apogonia expeditionis*	-
17	*Anomala orientalis*	Oriental Beetle
18	*Biltopertha orientalis*	-
19	*Epilachna sp.*	-
20	*Aulcophora indica*	Pumpkin Beetles
21	*Laccoptera quadrimaculata*	-
22	*Anomala sp.*	-
23	*Ontophagus sp.*	-
24	*Trichoton sp.*	-

vii. Butterfly diversity

30 species of butterflies belonging to five families i. e Nymphalidae, Papilionidae, Lycaenidae, Pieridae and Hesperiidae were recorded from Assam Don Bosco University, Tapesia Campus.

Serial No.	Family	Scientific Name	Common Name
1.	**NYMPHALIDAE**	*Junonia almaria*	Peacock pansy
2.		*Neptis hylas*	Common sailer
3.		*Cirrochroa tyche*	Common yeoman
4.		*Tanaecia lepidea*	Grey count
5.		*Ypthima baldus*	Common five ring
6.		*Lethe mekara*	Common red forester
7.		*Junonia atlites*	Grey pansy
8.		*Melanitis phedima*	Dark evening brown
9.		*Parantica aglea*	Glassy tiger
10.		*Junonia lemonias*	Lemon pansy
11.		*Danaus genutia*	Striped tiger
12.		*Euploea core*	Common crow
13.		*Doleschallia bisaltide*	Autumn leaf
14.		*Acraea issoria*	Yellow coster
15.		*Ypthima huebneri*	Common four ring
16.		*Junonia iphita*	Chocolate soldier
17.	**PAPILIONIDAE**	*Papilio polytes*	Common Mormon
18.		*Papilio mermon*	Great Mormon
19.		*Triodes helena*	Common bird wing
20.		*Graphium sarpedon*	Common bluebottle
21.		*Papilio nephelus*	Yellow Helen
22.		*Papilio demoleus*	Lime
23.	**LYCAENIDAE**	*Loxura atymnus*	Yamfly
24.		*Castalius rosimon*	Common pierot
25.		*Heliophorus indicus*	Purple sapphire
26.	**PIERIDAE**	*Leptosia nina*	Psyche
27.		*Eurema andersonii*	One spot grass yellow
28.		*Eurema hecabe*	Common grass yellow
29.	**HESPERIIDAE**	*Aeromachus jhora*	Grey scrub hopper
30.		*Tagiades gana*	Suffused snow flat


Common yeoman
Common fiver ring
Dusk evening brown
Autumn leaf
Common fiver ring
Yellow caster
Chocolate soldier
Glassy tiger
Striped tiger
Common bluebottle
Yellow Sulan
Common birdwing
Lime
Yamfly
Common parrot

viii. Soil Arthropods

Arthropods belonging to **10 orders and 19 families** were recorded from Assam Don Bosco University, Tapesia Campus.

10 orders: *Dermaptera,Coleoptera, Hemiptera, Hymenoptera, Blattodea, Trombidiformes, Embioptera, Araneae, Pseudoscorpiones, Isopoda*

19 Families: *Acariformes, Staphylinidae, Silvanidae, Hydrophilidae, Anticidae, Formicidae, Carabidae, Pentatomidae, Coccinellidae, Dytiscidae, Rhyparochromidae, Lycosidae , Chthoniidae, Salticidae, Coreidae ,Geocoridae, Oxyopidae, Lygaeidae, Tetranychidae,Porcellionidaewere*

Coccinellidae

Brumoides suturalis

Coccinellidae

Hydrophilidae

Carabidae

Ahasverus advena

Anthicidae

Unidentified specimen

Paederus littoranus

Coleopteran larva

ix. Plankton diversity

18 species of planktons were recorded from the Lakes of Assam Don Bosco University, Tapesia Campus.

Sl no.	Species
1	*Daphnia*
2	*Phormidium*
3	*Spirogyra*
4	*Cladophora*
5	*Chaetophora*
6	*Astasia*
7	*Nostoc*
8	*Gonatozygon*
9	*Cyclops*
10	*Anabaena*
11	*Rivularia*
12	*Diaptomus*
13	*Canthocampus*
14	*Microspora*
15	*Limnocalanus*
16	*Spirulina*
17	*Nauplius*
18	*Nitzchia*

Fig 1: Diaptomus

Fig 2: Phormidium

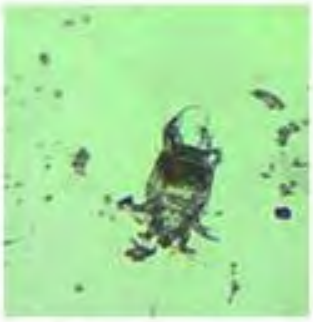

Fig 3: Nauplius

Fig 4: Cyclops

Fig 5: Limnocalanus

Fig6: Spirogyra

Fig 7: Cladophora

Fig 8: Daphnia

Fig 9: Canthocampus

x. Aquatic Insect diversity

10 species of Aquatic insect were recorded from the Lakes of Assam Don Bosco University, Tapesia Campus.

Sl no.	Order	Family	Scientific name
1	Hemiptera	Notonectidae	*Anisops* sp.
2		Nepidae	*Ranatra* sp.
3		Gerridae	*Limnogonus nitidus*
4			*Gerris gracilicornis*
5			*Neogerris parvula*
6		Hydrometridae	*Hydrometra greeni*
7	Odonata		Dragonfly larvae
8			Damselfly larvae
9	Diptera	Culicidae	Mosquito larvae
10			*Chironomus* larvae

Fig 8(a): *Anisops* sp.

Fig 8(b): *Neogerris* sp.

Fig 8(c): *Gerris gracilicornis*

Fig 8(d): *Anisops* sp.

xi. Cockroach diversity

5 species are recorded from the campus namely, *Blattela orientalis*, *Pleriplanata brunnae* , *Pycnoscelus surinamensis*, *Pleriplanata americana* and *Blattela asahinai* were recorded from Assam Don Bosco University, Tapesia Campus.

xii. Amphibian diversity

The results of the current study revealed that there are **11 species of Anurans** and belongs to five families of Anurans; Bufonidae, Microhylidae, Rhacophoridae, Ranidae and Dicroglossidae. Family Bufonidae was represented by 1 genus, family Microhylidae was represented by 1 genus, family Rhacophoridae was represented by 1 genus, family Ranidae was represented by 2 genus and family Dicroglossidae by 2 genus. Family Bufonidae consists of only 1 species, family Microhylidae consists of 1 species, family Rhacophoridae consists of 1 species, family Ranidae consist 2 species and family Dicroglossidae consist of 6 species. The family Dicroglossidae shows the highest proportion of (55%) total amphibians present within the study area.

Species	Family	Common Name	IUCN Status
Duttaphrynus melanostictus	Bufonidae	Common Asian Toad	LC
Microhyla ornata	Microhylidae	Ant Frog	LC
Polypedates teraiensis	Rhacophoridae	Common tree frog	DD
Humerana humeralis	Ranidae	Bhamo frog	LC
Hydrophylax leptoglossa		Cope's Assam Frog	LC
Euphlyctis cyanophlyctis	Dicroglossidae	Indian Skipping Frog	LC
Fejervarya nepalensis		Nepal Wart Frog	LC
Fejervarya pierrei		Pierre's Wart Frog	LC
Fejervarya syhadrensis		Long legged Cricket Frog	LC
Fejervarya teraiensis		Terai Wart Frog	LC
Hoplobatrachus tigerinus		Indian Bull frog	LC

Amphibian diversity

Duttaphrynus melanostictus

Polypedates teraiensis

Humerana humeralis

Hydrophylax leptoglossa

xiii. Moth Diversity

27 species of Moths belonging to **8 families** were recorded from Assam Don Bosco University, Tapesia Campus.

Family	Species
Sphingidae	*Theretra nessus* *Agrius convolvuli* *Xylophanes tersa* *Macroglossum corythus*
Erebidae	*Panopoda carneicosta* *Syntomoides imaon* *Calliteara pudibunda* *Ischyja ferrifracta* *Spargaloma sexpunctata* *Perina nuda* *Ercheia cyllaria* *Culasta indecisa*
Noctuidae	*Ctenoplusia albostriata* *Paectes abrostoloides* *Anticarsia gemmatalis* *Penicillaria jocosatrix* *Progonia oileusalis*
Crambidae	*Palpita vitrealis*
Pyralidae	*Galleria mellonella*
Drepanidae	*Cyclidia substigmaria*
Geometridae	*Idaea rusticata* *Pleuroprucha insulsaria* *Declana floccosa* *Peribatodes rhomboidaria* *Choroclytis filata* *Probole amicaria*
Notodontidae	*Nadata gibbosa*

xiv. Reptile diversity

19 species of reptiles were recorded from Assam Don Bosco University, Tapesia Campus.

Ramphotyphlops brahminus, Xenochrophis piscator, Amphiesma stolatum, Lycodon aulicus, Chrysopalea ornata, Enhydris enhydris, Coelognathus radiatus, Ptyas mucosa, Calotes versicolor, Sphenomorphus maculatus, Eutropis multifasciata, Lygosoma albopunctata, Hemidactylus frenatus,Hemidactylus aquilonius, Hemidactylus platyurus, Gekko gecko, Oliophagus hannah, Trimeresurus alborabris and Ptyctolaemus gularis

Oliophagus hannah (King Cobra)

Trimeresurus alborabris (White lipped pit Viper)

xv. Mammalian Diversity

- Rhesus macaque (*Macaca mulatta*)
- Hoary bellied squirrel (*Callosciurus pygerythrus*)
- Asian Elephant(*Elephas maximus*)
- Capped langur (*Trachypithecus pileatus*)
- Bengal Slow Loris (*Nycticebus bengalensis*)
- Dog: *Canis lupus*

Bengal Slow Loris

Hoary-bellied squirrel *Callosciurus pygerythrus*

Asian Elephant

Capped langur (*Trachypithecus pileatus*)

Rhesus macaque (*Macaca mulatta*)

3.4 Floral Diversity

Sl. No.	Common Name	Botanical Nomenclature	Family
1	Aparajita	*Clitoria ternatea*	Leguminosae
2	Great Bougainvillea	*Bougainvillea spectabilis*	Nyctaginaceae
3	Plumed cockscomb	*Celosia argentea*	Amaranthaceae
4	Flame of the woods	*Ixora coccinea*	Rubiaceae
5	Bangkok rose	*Mussaenda philippica*	Rubiaceae
6	Tropical dogwood	*Mussaenda erythrophylla*	Rubiaceae
7	Mexican Heather	*Cuphea hyssopifolia*	Lythraceae
8	Basil	*Ocimum basilicum*	Lamiaceae
9	Guava	*Psidium guajava*	Myrtaceae
10	Gulmohar	*Delonix regia*	Fabaceae
11	Simolu	*Bombax ceiba*	Malvaceae
12	Fish pole bamboo	*Phyllostachys aurea*	Poaceae
13	Jambolan	*Syzygium cumini*	Myrtaceae
14	Coleus	*Plectranthus scutellariodes*	Lamiaceae
15	Black pea	*Lathyrus niger*	Fabaceae
16	Bengal trumpet	*Thunbergia grandiflora*	Acanthaceae
17	Chinese privet	*Ligustrum lucidum*	Oleaceae
18	Jambos	*Syzygium jambos*	Myrtaceae
19	Japanese Cedar	*Cryptomeria japonica*	Cupressaceae
20	Tengamora/Mesta Tenga/Roselle	*Hibiscus saddariffa*	Malvaceae
21	Gerbera	*Gerbera jamesonii*	Asteraceae
22	Joseph's coat	*Alternanthera ficoidea*	Amaranthaceae
23	Areca palm	*Dypsis lutescens*	Arecaceae
24	Trumpet flower	*Tecoma stans*	Bignoniaceae
25	False indigo	*Amorpha fructicosa*	Leguminosae
26	Marigold	*Tagetes* sp	Asteraceae
27	Crepe jasmine	*Tabernaemontana divaricata*	Apocynaceae
28	Weeping fig	*Ficus benjamina*	Moraceae
29	Portuguese Laurel Cherry	*Prunus lusitanica*	Rosaceae
30	Mountain ebony	*Bauhinia variegata*	Fabaceae
31	Papaya	*Carica papaya*	Caricaceae
32	Moss rose	*Protulaca grandiflora*	Protulacaceae
33	Giant reed	*Arundo donax*	Poaceae
34	Sewali	*Nyctanthes arbor-tristis*	Oleaceae
35	Ribbon Plant	*Chlorophytum comosum*	Asparagaceae
36	Basket plant	*Callisia fragrans*	Commelinaceae
37	Moses-in-cradle	*Tradescantia spathacea*	Commelinaceae
38	Inch plant	*Tradescantia zebrina*	Commelinaceae