

*Full Length Research Paper*

# Indigenous Angiosperm biodiversity of Olabisi Onabanjo University permanent site

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The conservation of the genetic variability of the indigenous angiosperm community is a *sine qua non*. A survey of indigenous angiosperm biodiversity of the Olabisi Onabanjo University permanent site was undertaken. Plants collected were dried, poisoned and mounted on herbarium sheets, proper identification and confirmation in recognized herbaria were carried out. A total number of one hundred and thirty-eight (138) plant species belonging to fifty-five (55) families were collected. Of these, one hundred and twenty-seven are dicotyledons and eleven are monocotyledons. Leguminosae is the largest family with thirteen plants followed by Rubiaceae with eleven and Euphorbiaceae with nine plants. Trees were found to have significantly contributed to the ecosystem with a total number of fifty-four species, while forty-three of shrubs were recorded, climbers ten, herbs twenty-eight, grasses and sedges three. From this study it is obvious that the University permanent site is not only rich in plant biodiversity but also very rich in socio-economic values. Consequently it is highly advisable that a representative sample of this vegetation is protected for posterity so that all the indigenous plants of the study area may not be lost to the development projects embarked upon by the University.

**Key words:** Conservation, indigenous angiosperm, biodiversity, Olabisi Onabanjo University.

## INTRODUCTION

One of the most important nonrenewable aspects of any vegetation, be it small or large is the gene pool. The genotypes of the angiosperm community within the area mapped out for the University has been fashioned by millions of years of natural selection. It is obvious that most of these genotypes will be lost due to University developmental projects. This gene pool may never be recreated. We simply do not know how to recreate a species once it has become extinct (Kimmlins, 1987). It is only wise for now to at least have an inventory of this indigenous (angiosperm) biodiversity and to make appropriate recommendation for the preservation of representative sample which will be large enough to encompass the local variation of genotypes and which

will ensure the survival of the angiosperm genetic diversity of this area. Although the question as to how large this representative sample will be in order to maintain this diversity of species has tremendous practical implications (Lovejoy and Oren, 1981).

The Olabisi Onabanjo University campus site (Figure 1) situated in Ago-Iwoye falls within the equatorial belt of Nigeria at longitude 3° 55" east of the Greenwich Meridian and latitude 6° 56", north of the equator. Ago-Iwoye is about 7 km from Oru and about 5 km from Ijebu-Igbo, which are the two major towns in the Ijebu North Local Government area. The town is about 100 km Southeast of Abeokuta, the Ogun State capital (Master plan, 1985). The site lies to the South-western part of Ago-Iwoye approximately 35 km from the centre of the town and is bounded on the North by Ijebu-Igbo/ Oru/ Ago-Iwoye/ Ijeshu-Ijebu/ Ilishan road and on the east by Ago-Iwoye/ Imodi-Imosan/ Ijebu-Ode road. The perimeter roads are connected to Lagos-Benin expressway and the

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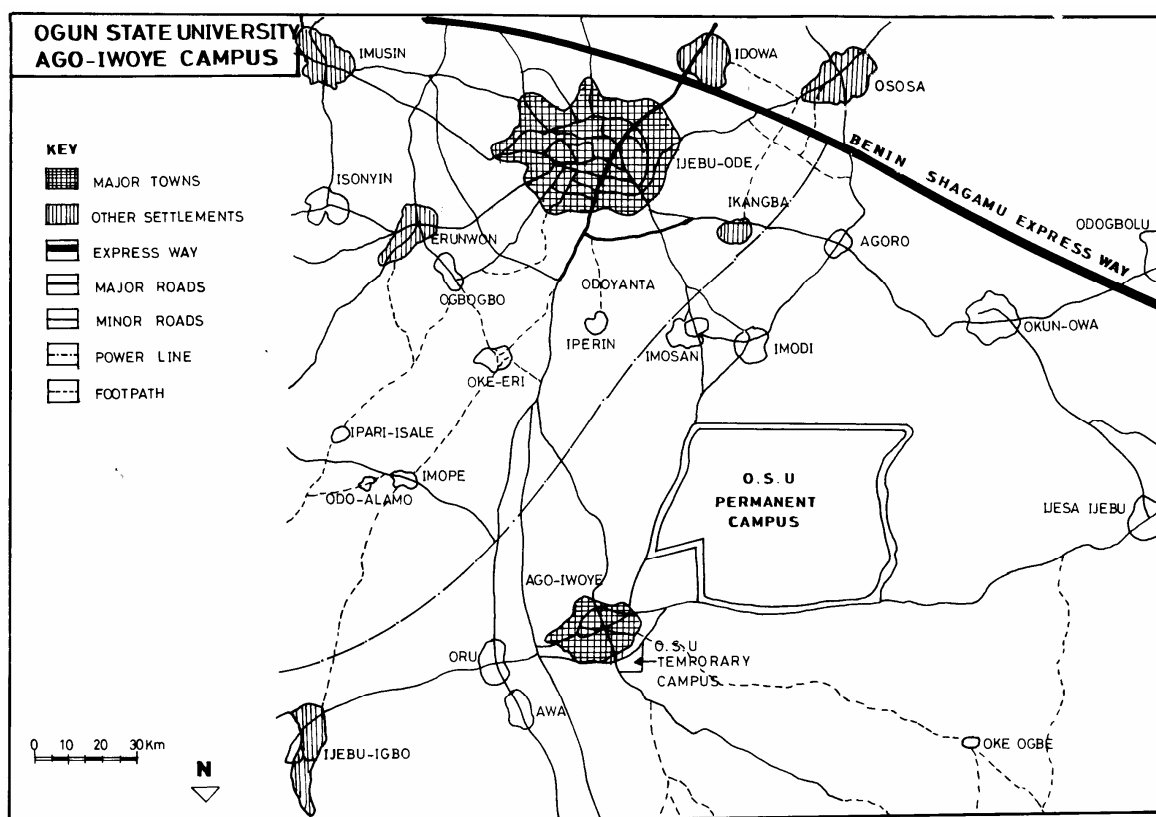


Figure1. Sample location Olabisi Onabanjo University, permanent campus.

Table 1. Identified key species.

S/N	Botanical name	Family	Local name
1	<i>Abrus precatorius</i> L.	Leguminosae	Oju ologbo, omisinmisin
2	<i>Ageratum conyzoides</i> L.	Compositae	Imi-esu, imi-ewure
3	<i>Albizia ferruginea</i> (Guill. & Perr.) Benth.	Leguminosae	Ayinre ogo
4	<i>Albizia lebeck</i> (L.) Benth.	Leguminosae	Igbagbo
5	<i>Alchornea cordifolia</i> (Schum & Thonn. Muell. Arg.	Euphorbiaceae	Ipa, esinyin
6	<i>Alstonia boonei</i> De Wild.	Apocynaceae	Awun
7	<i>Alstonia congensis</i> Engl.	Apocynaceae	Awun
8	<i>Amaranthus spinosus</i> L.	Amaranthaceae	Tete elegun, tete dagunro
9	<i>Anacardium occidentale</i> L.	Anacardiaceae	Kaju
10	<i>Anchomanes difformis</i> Engl.	Araceae	Igo, isu igo, okuku
11	<i>Aneilema umbrosum</i> (Vahl) Kunth.	Commelinaceae	-
12	<i>Anthocleista djalonenis</i> A. Chev.	Loganiaceae	Shapo, ishapo
13	<i>Anthocleista vogelii</i> Planch.	Loganiaceae	Shapo
14	<i>Aspilia africana</i> (Pers.) C.D. Adams	Compositae	Yun-yun, yunrinyun
15	<i>Asystasia gangetica</i> (L.) T. Anders	Acanthaceae	Lobiri
16	<i>Azadirachta indica</i> A. Juss.	Meliaceae	Eke-oyibo, dongo yaro
17	<i>Bambusa vulgaris</i> L.	Gramineae	Oparun
18	<i>Baphia nitida</i> Lodd.	Leguminosae	Irosun, owiwi, igiosun
19	<i>Bixa orellana</i> L.	Bixaceae	Osun buke
20	<i>Boerhaavia diffusa</i> L.	Nyctaginaceae	Etipase-eranla
21	<i>Bombax buonopozense</i> P. Beauv.	Bombacaceae	Ponpola, eso
22	<i>Borreria verticillata</i> G.F.N. Mey.	Rubiaceae	-
23	<i>Byrsocarpus coccineus</i> Schum & Thonn.	Connaraceae	-
24	<i>Calliandra portoricensis</i> (Jacq) Benth.	Leguminosae	-
25	<i>Calotropis procera</i> (Ait.) Ait. F.	Asclepiadaceae	Bomubomu

Table 1. contd.

26	<i>Canna bidentata</i> Bertoloni	Cannaceae	Ido, idoro
27	<i>Capsicum frutescens</i> L.	Solanaceae	Ata-jije, ata-eiye
28	<i>Carpolobia lutea</i> G. Don.	Polygalaceae	Oshun
29	<i>Cassia fistula</i> L.	Leguminosae	-
30	<i>Cassia obtusifolia</i> L.	Leguminosae	-
31	<i>Chassalia kolly</i> (Schum.)Hepper	Rubiaceae	Isepe agbe
32	<i>Chromolaena odorat</i> (L.) King & Robinson	Compositae	Awolowo, akintola
33	<i>Cissampelos owariensis</i> P.Beauv.	Menispermaceae	Jenjoko, jokoo-jee
34	<i>Cleome ciliata</i> Schum. & Thonn.	Capparidaceae	Akuya-ajaa, ekuya
35	<i>Clerodendron umbellatum</i> Poir	Verbenaceae	-
36	<i>Cnestis furruginea</i> DC.	Connaraceae	Omu-aja, akara-aja
37	<i>Cnestis longiflora</i> Schellenb.	Connaraceae	Ekayin
38	<i>Coix lacryma-jobi</i> Linn.	Gramineae	Aje, aka-ila
39	<i>Cola acuminata</i> (P.Beauv.) Schott & Endl.	Sterculiaceae	Obi-abata, obi-gidi
40	<i>Cola millenii</i> K. Schum	Sterculiaceae	Obi-edun, obi aya
41	<i>Cola nitida</i> (Vent.) Schott & Endl.	Sterculiaceae	Obi gbanja
42	<i>Combretum racemosum</i> P. Beauv.	Combretaceae	Ogan-ibule, ogan-pupa
43	<i>Crotalaria retusa</i> Linn.	Leguminosae	Koropo
44	<i>Culcasia scandens</i> P.Beauv.	Araceae	Aginmona
45	<i>Cymbopogon citratus</i> (DC) Stapf.	Gramineae	Oko oba, koriko oba
46	<i>Deinbollia pinnata</i> Schum & Thonn.	Sapindaceae	Ogiri-egba
47	<i>Dichapetalum madagascariense</i> Poir	Dichapetalaceae	Afere, afoforo, afee
48	<i>Dioclea reflexa</i> Hook. F.	Leguminosae	Ise, agbaarin
49	<i>Dombeya buettneri</i> K. Schum.	Sterculiaceae	Ewremo, ofo
50	<i>Duranta repens</i> Linn.	Verbenaceae	-
51	<i>Elaeis guineensis</i> Jacq.	Palmae	Idi-eyin, ope, igi ope
52	<i>Eleusine indica</i> Gaertn.	Gramineae	Ese-kanna kanna
53	<i>Emilia coccinea</i> (Sims) G. Don	Compositae	Odondon-okun, odundun
54	<i>Eugenia jambos</i> Linn.	Myrtaceae	-
55	<i>Eugenia malaccensis</i> Linn.	Myrtaceae	-
56	<i>Euphorbia heterophylla</i> Linn.	Euphorbiaceae	Egele
57	<i>Euphorbia hirta</i> Linn.	Euphorbiaceae	Emi-ile, egele
58	<i>Ficus benjamina</i> Linn.	Moraceae	-
59	<i>Ficus exasprata</i> Vahl.	Moraceae	Eepin
60	<i>Ficus mucuso</i> Welw. ex. Ficalho	Moraceae	Oguro
61	<i>Ficus sur</i> Forssk.	Moraceae	Opoto, opeya, abe-odan
62	<i>Funtumia africana</i> (Benth.)Sapf.	Apocynaceae	Ako-ire, ire
63	<i>Gossypium barbadens</i> Linn.	Malvaceae	Owu, ogodo
64	<i>Grewia carpinifolia</i> Juss.	Tiliaceae	Itakun okere
65	<i>Harungana madagascariensis</i> Lam. Ex. Poir.	Hypericaceae	Adenden
66	<i>Hedranthera bateri</i> (Hook. F.) Pichon	Apocynaceae	Agbo-omode
67	<i>Hippocratea velutina</i> Afzel.	Celastraceae	-
68	<i>Icacina tricantha</i> Oliv.	Icacinaceae	Gbegbe
69	<i>Indigofera macrophylla</i> Schum ( Thonn.	Leguminosae	Enise-ana
70	<i>Ipomoea mauritiana</i> Jacq.	Convolvulaceae	Tanpopo, ododo-oko
71	<i>Ixora coccinea</i> Linn.	Rubiaceae	-
72	<i>Jatropha curcas</i> Linn.	Euphorbiaceae	Botuje, lapalapa
73	<i>Jatropha gossypifolia</i> Linn.	Euphorbiaceae	Botuje-pupa
74	<i>Jussiaea abyssinica</i> (A. Rich.) Dandy & Bren.	Onagraceae	Ogbolo-eme-en
75	<i>Landolfia dulcis</i> var. <i>barteri</i> (Sapf.) Pichon	Apocynaceae	Ibo
76	<i>Lantana camara</i> Linn.	Verbenaceae	Ewon-adele, ewon agogo
77	<i>Lecaniodiscus cupanoides</i> Planch.	Sapindaceae	Aaika, aika
78	<i>Leptoderris micrantha</i> Dunn.	Leguminosae	Awo
79	<i>Luffa cylindrica</i> (L.) Roem.	Cucurbitaceae	Kankan-ayaba
80	<i>Macrosphyra longistyla</i> Hook.	Rubiaceae	Ikuuku-ekun
81	<i>Malacantha alnifonia</i> (Bak.) Pierre.	Sapotaceae	-

Table 1. contd.

82	<i>Malvastrum coromandelianum</i> (L.) Garcke.	Malvaceae	-
83	<i>Mangifera indica</i> Linn.	Anacardiaceae	Mangoro
84	<i>Manihot glaziovii</i> Muell. Arg.	Euphorbiaceae	Igi-isana
85	<i>Mariscus alternifolius</i> Vahl.	Cyperaceae	Alubosa eranko
86	<i>Microdesmis puberula</i> Hook. F. ex. Planch.	Pandaceae	Esunsun, aringi
87	<i>Milicia exelsa</i> (Welw.) C.C. Berg	Moraceae	Iroko
88	<i>Mimosa pudica</i> Linn.	Leguminosae	Patanmo aluro, patanmo
89	<i>Morinda morindoides</i> (Bak.) Milne-Redh.	Rubiaceae	Oju-ologbo
90	<i>Morinda lucida</i> Benth.	Rubiaceae	Oruwo
91	<i>Musanga cecropioides</i> R. Br.	Moraceae	Aga, agbawo
92	<i>Mussaenda elegans</i> Schum. & Thonn.	Rubiaceae	Ado, odo omode, ori ile
93	<i>Myrianthus arboreus</i> P.Beauv.	Moraceae	Ibishere
94	<i>Napoleona imperialis</i> P. Beauv.	Lecythiaceae	Abobidooyoo
95	<i>Nauclea latifolia</i> Smith	Rubiaceae	Egbesi
96	<i>Newbouldia laevis</i> Seem.	Bignoniaceae	Akoko, ogise
97	<i>Olox subscorpioidea</i> Oliv.	Olacaceae	Ifon, ifoon
98	<i>Oxyanthus formosus</i> Hook. F.	Rubiaceae	-
99	<i>Passiflora foetida</i> Linn.	Passifloraceae	-
100	<i>Paullinia pinnata</i> Linn.	Sapindaceae	Kakasenla, ogbe-okuje
101	<i>Peltophorum pterocarpum</i> (DC) Heyne	Leguminosae	-
102	<i>Phyllanthus amarus</i> Schum. & Thonn.	Euphorbiaceae	Eyin-olobe, dobi-sowo
103	<i>Physalis angulata</i> Linn.	Solanaceae	Koropo, papo
104	<i>Platyserum alcorni</i> (Willem) Oesv.	Polypodiaceae	Afomo
105	<i>Pleioceras barteri</i> Baill.	Apocynaceae	Abeji, ireno-kekere
106	<i>Polyalthia longiflora</i>	Annonaceae	-
107	<i>Psidium guajava</i> Linn.	Myrtaceae	Guaba, gilofa
108	<i>Quisqualis indica</i> Linn.	Combretaceae	Ogan funfun, ogan-igbo
109	<i>Rauvolfia vomitoria</i> Afzel.	Apocynaceae	Asofeyeje, adapopo
110	<i>Ricinodendron heudelottii</i> (Baill.) Pierre.	Euphorbiaceae	Erinmadon, ogbodo
111	<i>Rothmannia longiflora</i> Salisb.	Rubiaceae	Kakadika
112	<i>Rytigynia umbellulata</i> Robyns.	Rubiaceae	Oju-eja
113	<i>Sabicea calycina</i> Benth.	Rubiaceae	Jire, ogan apero
114	<i>Salacia pallescens</i> Oliv.	Celastraceae	Elewekan
115	<i>Scoparia dulcis</i> Linn.	Scrophulariaceae	Naruntantan
116	<i>Securinega virosa</i> (Roxb.) Baill.	Euphorbiaceae	Awewe, iranje
117	<i>Sida acuta</i> Burm. F.	Malvaceae	Esoketu
118	<i>Smilax kraussiana</i> Meisn.	Smilacaceae	Eha, ekanamagbo
119	<i>Solanum torvum</i> Swatz	Solanaceae	Igba-yanrin-elegun-un
120	<i>Sphenocentrum jollyanum</i> Pierre	Menispermaceae	Akerejupon, ajo
121	<i>Stachytarpheta cayennensis</i> (DC. Rich.) Schau.	Verbenaceae	Agogo igun, akitipa
122	<i>Stachytarpheta indica</i> (L.) Vahl	Verbenaceae	Ogan akuko, ogangan
123	<i>Stachytarpheta mutabilis</i> Jacq. Vahl.	Verbenaceae	Iru alangba
124	<i>Synsepalum dulciferum</i> (Schum & Thonn.) Daniell	Sapotaceae	Agbayun
125	<i>Talinum triangulare</i> (Jacq.) Willd.	Portulacaceae	Gure, gbure
126	<i>Terminalia randii</i> Bak. F.	Combretaceae	-
127	<i>Thaumatococcus daniellii</i> (Benn.) Benth.	Marantaceae	Eeran, katemfe
128	<i>Trema orientalis</i> (L.) Bl.	Ulmaceae	Afe, ofefe, ofoforo
129	<i>Triclisia subcordata</i> Oliv.	Menispermaceae	Alugbirin, alugbonran
130	<i>Tridax procumbens</i> Linn.	Compositae	Sabaruma, adegbile
131	<i>Triplochiton sclerexylon</i> K. Schum.	Sterculiaceae	Obeche, aifo, arere
132	<i>Tristemma incompletum</i> R.Br.	Melastomaceae	-
133	<i>Triumphetta cordifolia</i> A. Rich.	Tiliaceae	Itogbin, esua
134	<i>Triumphetta rhomboidea</i> Jacq.	Tiliaceae	Akeeri
135	<i>Urena lobata</i> Linn.	Malvaceae	Ilasa-oyinbo, ilasa-omode
136	<i>Vernonia amygdalina</i> Del.	Compositae	Ewuro, ewuro oko
137	<i>Voacanga africana</i> Stapf.	Apocynaceae	Sherenkpen, ako dodo
138	<i>Waltheria indica</i> Linn.	Sterculiaceae	Epa esure, ewe epo

ljebu-Ode/ Ibadan road. The tropical rain forest to which the vegetation of the campus belongs constitutes an evergreen plant community rich in trees, shrubs and herbs. The climate is characterized by high temperature and a bimodal rainfall pattern. The annual rainfall ranges from 1250 to 2190 mm beginning from mid-March to mid-November, with the peak in July and September. The mean annual minimum and maximum temperatures are about 20°C and 30°C respectively, while relative humidity is approximately 60% in the dry season and 90% in the rainy season.

The present study aims at the conservation of the indigenous angiosperm genetic variability of the Olabisi Onabanjo University permanent site.

## MATERIALS AND METHODS

The survey involved several visits to the site for collection of samples. Specimens were collected across the undisturbed and disturbed vegetation of the campus. Samples were dried, poisoned and mounted in accordance with conventional herbarium practice. Solvents used in poisoning include methylated spirit, Para dichlorobenzene (PCDB), 2% mercuric chloride, cyanide gas and naphthalene (Okoli et al., 1992). Identification of the specimens was done by experts by comparison with herbarium specimens in Elikaf herbarium of the Olabisi Onabanjo University (not listed in Holmgren and Keuken, 1998), the Forest Herbarium, Ibadan (FHI) and the University of Ibadan herbarium (UIH). Specimens collected were deposited at the Elikaf herbarium.

## RESULTS

One hundred and thirty-eight (138) plant species (Table 1) belonging to fifty-five families were identified as constituting the major part of the vegetation of the site. The Leguminosae has the largest number of species (thirteen) followed by Rubiaceae (eleven) and Euphorbiaceae having nine species (Table 2). The preponderance of the occurrence of species of the Euphorbiaceae and in particular Rubiaceae could be due to the climatic condition, soil type and the seed dispersal mechanism of the members of the family. Fifty-four tree species (Table 3, Figure 2) were collected on the whole showing the dominant role played by trees in the vegetation of the site. Most of the plants collected have simple leaves this is an indication of primitiveness as simple leaves are believed to have evolved earlier than the compound leaves (Radford et al., 1974). Also the solitary inflorescence was observed in many cases. More than 85% of the ecosystem is constituted by the dicotyledons (Figure 3). Plants like *Chromolaena odorata* (L.) King and Robinson and *Aspilia africana* (Pers.) C.D. Adams were found in almost all areas of the site. This supports the fact that weeds are notorious and inevitable in all vegetation types. *Musanga cecropioides* R. Br. provides shade and comfort in quite a number of portions in the site.

**Table 2.** Species distribution according to families.

Family	Number of species
Acanthaceae	1
Amaranthaceae	1
Anacardiaceae	2
Annonaceae	1
Apocynaceae	8
Araceae	2
Asclepidaceae	1
Bignoniaceae	1
Bixaceae	1
Bombacaceae	1
Cannaceae	1
Capparidaceae	1
Celastraceae	2
Combretaceae	3
Commelinaceae	1
Compositae	6
Connaraceae	3
Convolvulaceae	1
Cucurbitaceae	1
Cyperaceae	1
Dichapetalaceae	1
Euphorbiaceae	9
Gramineae	4
Hyperaceae	1
Icacinaceae	1
Lecythidaceae	1
Leguminosae	13
Longaniaceae	2
Malvaceae	4
Maranthaceae	1
Ulmaceae	1
Melastomaceae	1
Meliaceae	1
Menispermaceae	3
Moraceae	7
Myrtaceae	3
Nyctaginaceae	1
Olacaceae	1
Onagraceae	1
Palmaceae	1
Pandaceae	1
Passifloraceae	1
Polygalaceae	1

Table 2. contd.

Polypodiaceae	1
Portulacaceae	1
Rubiaceae	11
Sapindaceae	3
Sapotaceae	2
Scrophulariaceae	1
Smilacaceae	1
Solanaceae	3
Sterculiaceae	6
Tiliaceae	3
Verbenaceae	7

Table 3. Habit of species.

Botanical name	Habit
<i>Abrus precatorius</i>	Twining herb
<i>Ageratum conyzoides</i>	Hispid herb
<i>Albizia ferruginea</i>	Tree
<i>Albizia lebeck</i>	Tree
<i>Alchornea cordifolia</i>	Shrub/smalltree
<i>Alstonia boonei</i>	Tree
<i>Alstonia congensis</i>	Tree
<i>Amaranthus spinosus</i>	Herb
<i>Anacardium occidentale</i>	Tree
<i>Anchomanes difformis</i>	Herb
<i>Anelma umbrosum</i>	Straggling herb
<i>Anthocleista djalonenis</i>	Tree
<i>Anthocleista vogelii</i>	Tree
<i>Aspilia africana</i>	Herb
<i>Asystasia gangetica</i>	Herb
<i>Azadirachta indica</i>	Shrub/smalltree
<i>Bambusa vulgaris</i>	Shrub
<i>Baphia nitida</i>	Shrub
<i>Bixa orellana</i>	Small tree
<i>Boerhaavia diffusa</i>	Herb
<i>Bombax buonopozense</i>	Tree
<i>Borreria verticillata</i>	Herb
<i>Byrsocarpus coccineus</i>	Climber / shrub
<i>Calliandra portoricensis</i>	Shrub
<i>Calotropis procera</i>	Small tree
<i>Canna bidentata</i>	Herb
<i>Capsicum frutescens</i>	Under shrub
<i>Carpolobia lutea</i>	Shrub

Table 3. contd.

<i>Cassia fistula</i>	Small tree
<i>Cassia obtusifolia</i>	Small tree
<i>Chassalia kolly</i>	Shrub
<i>Chromolaena odorata</i>	Shrub
<i>Cissampelos owariensis</i>	Climber
<i>Cleome ciliata</i>	Herb
<i>Clerodendronumbellatum</i>	Shrub
<i>Cnestis furruginea</i>	Climber
<i>Cnestis longiflora</i>	Climber
<i>Coix lacryma-jobi</i>	Grass
<i>Cola acuminata</i>	Tree
<i>Cola millenii</i>	Tree
<i>Cola nitida</i>	Tree
<i>Combretum racemosum</i>	Shrub
<i>Crotalaria retusa</i>	Herb
<i>Culcasia scandens</i>	Climbing herb
<i>Cymbopogon citratus</i>	Grass
<i>Deinbollia pinnata</i>	Small tree
<i>Dichapetalum madagascariense</i>	Shrub/tree
<i>Dioclea reflexa</i>	Climber
<i>Dombeya buettneri</i>	Shrub/smalltree
<i>Duranta repens</i>	Shrub
<i>Elaeis guineensis</i>	Tree
<i>Eleusine indica</i>	Grass
<i>Emilia coccinea</i>	Herb
<i>Eugenia jambos</i>	Small tree
<i>Eugenia malaccensis</i>	Tree
<i>Euphorbia heterophylla</i>	Herb
<i>Euphorbia hirta</i>	Herb
<i>Ficus benamina</i>	Tree
<i>Ficus exasprata</i>	Tree
<i>Ficus mucuso</i>	Tree
<i>Ficus sur</i>	Small tree
<i>Funtumia africana</i>	Tree
<i>Gossypium barbadens</i>	Shrub
<i>Grewia carpinifolia</i>	Shrub
<i>Harungana madagascariensis</i>	Tree
<i>Hedranthera bateri</i>	Shrub
<i>Hippocratea velutina</i>	Shrub
<i>Icacina tricantha</i>	Shrub
<i>Indigofera macrophylla</i>	Shrub
<i>Ipomea mauritiana</i>	Climber (liane)
<i>Ixora coccinea</i>	Shrub
<i>Jatropha curcas</i>	Shrub

Table 3. contd.

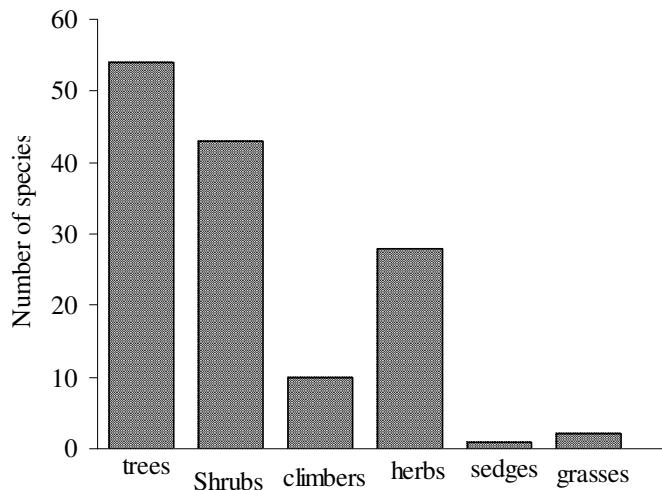
<i>Jatropha gossypifolia</i>	Shrub
<i>Jussiaea abyssinica</i>	Herb
<i>Landolfia dulcis</i> var. <i>barteri</i>	Climber
<i>Lantana camara</i>	Woody herb
<i>Lecaniodiscus cupanoides</i>	Shrub
<i>Leptoderris micrantha</i>	Shrub
<i>Luffa cylindrica</i>	Climber
<i>Macrosphyra longistyla</i>	Shrub
<i>Malacantha alnifornia</i>	Tree
<i>Malvestrum coromandelianum</i>	Woody herb
<i>Mangifera indica</i>	Tree
<i>Manihot glaziovii</i>	Shrub
<i>Mariscus alternifolius</i>	Sedge
<i>Microdesmis puberula</i>	Small tree
<i>Milicia exelsa</i>	Tree
<i>Mimosa pudica</i>	Shrub
<i>Morinda lucida</i>	Tree
<i>Morinda morindoides</i>	Shrub
<i>Musanga cecropioides</i>	Tree
<i>Mussaenda elegans</i>	Shrub
<i>Myrianthus arboreus</i>	Tree
<i>Napoleona imperialis</i>	Small tree
<i>Nauclea latifolia</i>	Small tree
<i>Newbouldia laevis</i>	Tree
<i>Olax subscorpioidea</i>	Small tree
<i>Oxyanthus formosus</i>	Tree
<i>Passiflora foetida</i>	Twining herb
<i>Paullinia pinnata</i>	Woody climber
<i>Peltophorum pterocarpum</i>	Tree
<i>Phyllanthus amarus</i>	Herb
<i>Physalis angulata</i>	Annual herb
<i>Platyserum alcicorne</i>	Fern allies
<i>Pleioceras barteri</i>	Shrub
<i>Polyalthia longiflora</i>	Tree
<i>Psidium guajava</i>	Small tree
<i>Quisqualis indica</i>	Shrub
<i>Rauvolfia vomitoria</i>	Small tree
<i>Ricinodendron heudelottii</i>	Tree

Table 3. contd.

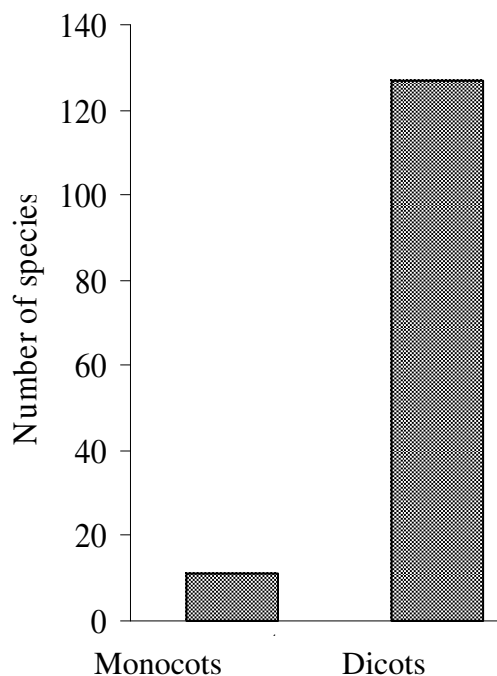
<i>Rothmannia longiflora</i>	Small tree
<i>Rytigynia umbellulata</i>	Shrub
<i>Sabicea calycina</i>	Shrub
<i>Salacia pallescens</i>	Shrub
<i>Scoparia dulcis</i>	Shrub
<i>Securinega virosa</i>	Shrub
<i>Sida acuta</i>	Shrub
<i>Smilax kraussiana</i>	Shrub
<i>Solanum torvum</i>	Shrub
<i>Sphenocentrum jollyanum</i>	Shrub
<i>Stachytarpheta cayennensis</i>	Shrub
<i>Stachytarpheta indica</i>	Herb
<i>Stachytarpheta mutabilis</i>	herb
<i>Synsepalum dulciferum</i>	Small tree
<i>Talinum triangulare</i>	Herb
<i>Terminalia randii</i>	Tree
<i>Thaumatococcus daniellii</i>	Herb
<i>Trema orientalis</i>	Small tree
<i>Triclisia subcordata</i>	Woody climber
<i>Tridax procumbens</i>	Low herb
<i>Triplochiton sclerexylon</i>	Tree
<i>Tristemna incompletum</i>	Shrub
<i>Triumphetta cordifolia</i>	Shrub
<i>Triumphetta rhomboidea</i>	Shrub
<i>Urena lobata</i>	Woody shrub
<i>Vernonia amygdalina</i>	Small tree
<i>Voacanga Africana</i>	Tree
<i>Waltheria indica</i>	Herb

## DISCUSSION

The disappearance of many plant species due to human activities is depleting the world's genetic resources and is putting man's heritage of biodiversity under serious threat. There is therefore the urgent need to preserve genetic diversity including plant resources of known and unknown economic importance which will guarantee the availability of all potentials for use in the benefit of our children and grandchildren (Olowokudejo,



**Figure 2.** Chart showing the percentage distribution of plants in relation to their habit.



**Figure 3.** Chart showing the distribution of plant species in relation to their major plant groups

1987). The human race in their quest for economic development and improvement of their conditions of life must come to terms with the realities of resource limitations and the carrying capacity of ecosystem must also take account of the needs of future generation. This

is the central message to modern conservation. Biological diversity must be treated seriously as a global resource, be indexed, used and above all preserved. Three circumstances make it imperative for this to be given an unprecedented urgency particularly in West Africa. Firstly, exploding human populations are seriously degrading the environment at an alarming rate in the sub region. Secondly, science is discovering new uses for biological diversity in ways that relieve both human suffering and environmental destruction. Thirdly, much of the diversity is being irreversibly lost through extinction caused by the destruction of natural habitats, which occurs more in Africa than elsewhere (Wilson, 1988). Dasmana et al., (1973) agreed that forest exploitation leads to the extinction of animals and plants whose genetic resources are of considerable value to future generations (Round Table, 1969). Forest depletion has destabilized the natural environment and eroded genetic resources throughout the southern part of Nigeria in order to meet the sustenance of the population and financial requirements of government i.e. the social, economic, demographic and political needs of the people. Exploitation of forests therefore appears to be inevitable considering the above. Opinions are however split about vegetation depletion which is considered as a loss of natural heritage. According to some scientists (Harvey and Hallet, 1977) it may not be beneficial to conserve resources for future generation at all costs because the future demands, aspirations, lifestyles and needs of rural people cannot be adequately defined now. Must we then wait for the needs to be defined before we conserve? Definitely not because all of these genetic resources would have disappeared before the needs are identified. As such, conservation is basic to human welfare and indeed to human survival (Allen, 1980). Lack of conservation measures will amount to an increase in the number of endangered species and this will ultimately result in extinction, which is the gradual but sure elimination of taxa (Allaby, 1998). Many of the species that are already endangered are faced with the risk of eventual extinction if human activities such as land development, logging and pollution are not checked.

Gbile et al. (1981, 1984) revealed that about four hundred and eighty plant species of the Nigerian flora have been described as endangered or rare, out of which many of these are being studied at the Forestry Research Institute of Nigeria, Ibadan. Apart from the gradual loss of biodiversity, the devastating environmental disasters in urban and rural areas of Nigeria indicate that these environments are under stress and require urgent intervention (Oguntala, 1993).

Exploitation of forest around the permanent site of the University continues unabated. Encroachment on University land stopped since 1982 allowing for the vegetation to revert to climatic climax status. The forest of the University at present serves as a refuge for both plants and animals especially birds and games escaping



from local hunters. While developmental activities continue on the campus it will be a sound scientific judgment to protect a representative sample of vegetation for posterity. This is the practice in most developed countries of the world. The International Institute for Tropical Agriculture (IITA) at Ibadan, Nigeria has such an area which now serves as an example of a typical tropical Rain forest in south Western Nigeria.

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