A PRELIMINARY ASSESSMENT OF THE VEGETATION OF THE DZANGA SANGHA PROTECTED AREA COMPLEX, CENTRAL AFRICAN REPUBLIC

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EXECUTIVE SUMMARY

Effective management of the Congo Basin forest ecosystems needs to be based on models based on sound science and technical capacity to implemented sustainable management regimes. Unfortunately, not only is this scientific knowledge often lacking the major constraint is also that there is a shortage of well trained professionals. In addition, the absence of comparative data collected in a meticulous and standardised manner from the various ecological and geographic regions within and between the countries of the Congo Basin is also a limiting factor to a regional management approach.

To this effect and with funding from the Central African Regional Programme for the Environment (CARPE), the Smithsonian Institution assisted the park managers of the Dzanga Sangha Protected Area Complex (DSPAC) to set up five 1ha Biodiversity Plots (BDPs) adding to the network of BDPs already established in the Congo Basin according to the standardised 1 ha configuration described by Dallmeier (1990) and permitting long term monitoring of biological diversity at various levels.

The major objectives of this study were to evaluate the botanical diversity of the Dzanga sector of the DSPAC, and across different sectors, as well as to determine the impact of logging and the recuperation period on the biodiversity of the forests in the DSPAC.

The study found that the forests in the study area respond very well to disturbance from timber exploitation. It also found that when mean species richness per hectare is considered, these forests are amongst the richest studied so far in the Congo Basin. Furthermore, variations in species richness, diversity and distribution exist across sites, and comparisons of the sample sites according to each of these parameters all produced the same trends. Generally all diversity indicators were found to increase with number of rotations undergone, and to reduce with increased time of recuperation.

During this study a checklist of species found in the area was built up that is presented in the report annex together with a list of some vernacular names that was determined in association with the local Ba'Aka tribesmen.

INTRODUCTION

Given the natural fluctuations and high levels of biodiversity for which the Congo Basin is reknowned, effective management of its forest ecosystems need to be based on models based on sound science. Unfortunately this knowledge is very often lacking and this in no small way during most processes of design, implementation and evaluation of forest management models. The major constraints noted at the moment have been a shortage of well trained professionals, as well as the absence of comparative data collected in a meticulous and standardised manner from various ecological and geographic regions within the countries of the Congo Basin.

To this effect and with funding from the Central African Regional Programme for the Environment, the Smithsonian Institution has assisted park managers within several of the Central African countries to set up and coordinate a network of permanent Biodiversity Plots (BDPs) established according to the standardised 1 ha configuration described by Dallmeier (1990) and permitting long term monitoring of biological diversity at various levels. The Campo, Ejagham and Takamanda Forest Reserves in Cameroon, Nouabale Ndoki National Park in Congo, as well as Monte Mitra in Equatorial Guinea, Monts de Cristal and Waka National parks in Gabon have already benefited from these services with the establishment to date of a total 33 plots set up alongside a database of comparative data from the various regions and Parks surveyed.

Amongst the remaining Central African countries yet to join this network, the Central African Republic with its richly diverse forests to the south of the country is in serious need of scientifically collected baseline data for management of its forests and natural resources. With a long history of timber exploitation, the Dzangha Sangha Complex of Protected Areas (DSCPA) is located within the Sangha CARPE landscape at the South-Western tip of the country.

Currently in the process of designing a long term monitoring programme for its components, this complex was in need of technical and scientific support to strengthen the capacity of local technicians and staff to undertake forest inventories and ecological monitoring. It was therefore agreed upon between the Worldwide Fund for Nature (WWF) and the Smithsonian Institution (SI), under the banner of the latter's CARPE funded "Building Capacity for Science Based Conservation across the Congo Basin"

project, to establish five Biodiversity Plots within the DSCPA. These can serve as the basis for a long term ecological monitoring programme to be completed by field training of local technicians in forest inventory techniques. SI would as such provide the necessary scientific and technical support for the inventory and monitoring programmes of the DSCPA.

Based on this agreement, the objectives outlined for a joint SI – WWF field expedition undertaken within the month of March 2006 were the following;

1. Promote sub regional partnerships between researchers from Congo Basin countries in order to achieve better management of their forest resources according to the landscape approach adopted by CARPE.
2. Reinforce local capacity in inventory techniques and biological monitoring activities for the management of the DSCPA in the Central African Republic (CAR).
3. Contribute to the establishment of a database on the floristic composition of the DSCPA in view of its integration into the process of Park management.

The major activities undertaken were for this survey was as follows;

1. Acquisition of GIS images or maps of the area in order to facilitate the preliminary stratification of the forests in this area into exploited or unexploited forests, as well as into different periods of exploitation.
2. The establishment of 5 Biodiversity Plots (BDPs) within “representative” forest types selected on the basis of the above-mentioned information. Within each plot, trees measuring >10cm were identified, and tagged in a permanent manner.
3. On site training of local forestry technicians in plot layout, identification, enumeration and mapping of trees, as well as collection and management of voucher specimens.
4. Production of a survey report on the vegetation of the DSCPA describing the composition, and structure of the forest as a function of the stratification parameters defined previously.
5. Elaboration of recommendations for long term monitoring as well as for short, medium and long term management of the DSCPA.

Prior to the implementation of the study, the following research questions were elaborated:

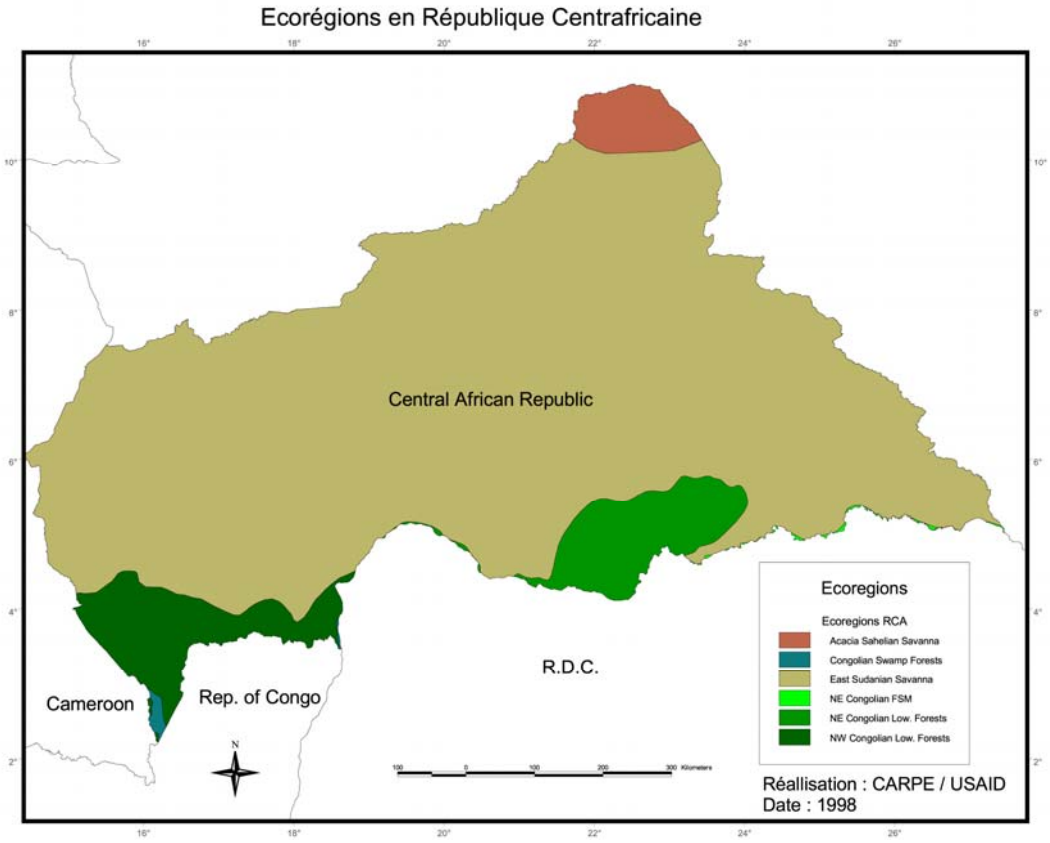
- Are there variations following a North –South transect or otherwise in the natural botanical diversity of the Dzanga Sector of the National park?
- What is the variation or similarity in terms of botanical diversity existing between the Dzanga sector of the National Park and the other components of the DSCPA?
- What is the impact on the botanical diversity of DSCPA of the mode and intensity of exploitation as well as that of the period of recuperation?

LOCATION AND DESCRIPTION OF THE STUDY AREA

The CAR is situated in Central Africa between latitudes 2º20' to 11ºN and longitudes 14º30' to 27º30'E covering a surface area of about 623.000 km^2 **(**Boulvert, 1986 in Bokoto 2004). Its northern neighbour is the Republic of Chad, while the republic of Congo and Democratic Republic of Congo (former Zaire) are its southern neighbours. It is bounded to the East by Sudan and to the West by Cameroon.

CAR comprises three major climatic zones with Sudan Sahel to the North west, a sub tropical humid climate to the south and an equatorial type climate to the South west. This last area has a very long rainy season covering the period of March to December and annual rainfall varies across the country from 700mm to the East to 1,700mm in the south and southwestern regions (Bokoto, 2004).

Figure 1. The main ecoregions of the Central African Republic (CAR)



The human population of the whole nation is estimated in 2004 to be ca.3.7 million with a population density of 6 people per km². The population growth rate stands at 2.6 % with the greater part of the population located in the western areas of the country. The northern and eastern areas of the country have a far lower density of about 1 inhabitant per km² and are characterized by lack of road and social infrastructure which are no doubt the causes of this uneven distribution (Bokoto 2004).

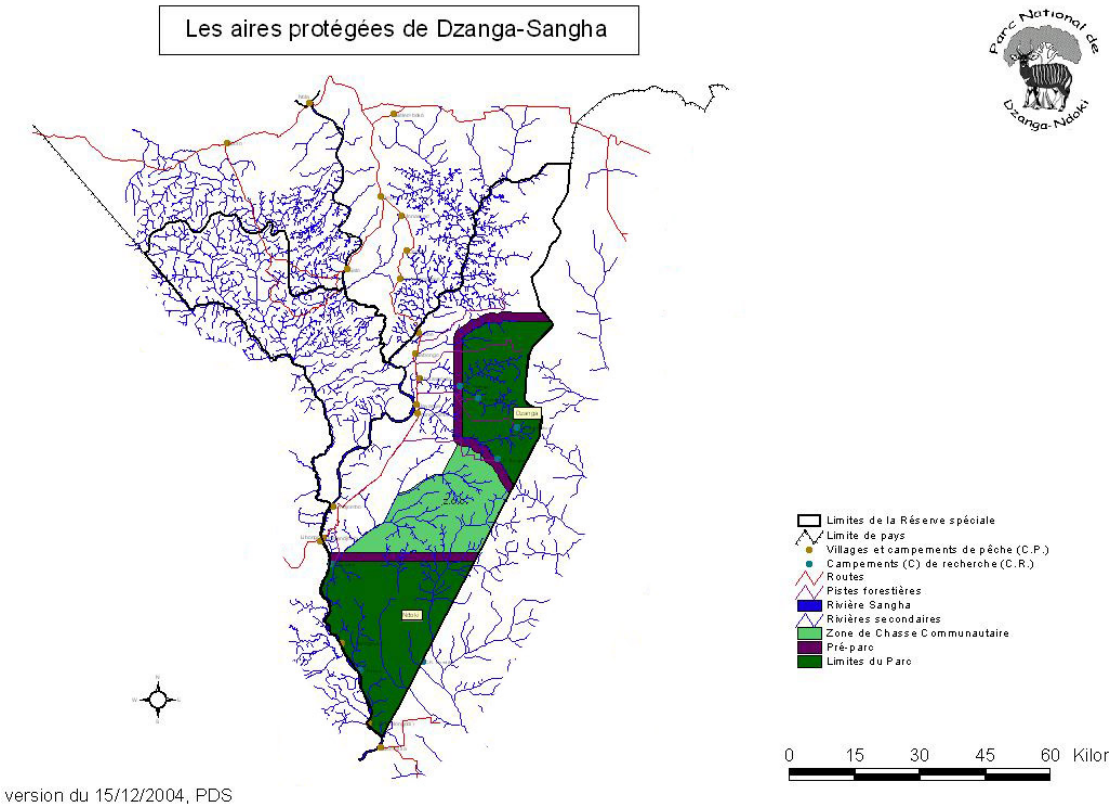
The vegetation study was carried out within the Dzanga Sanga National Park and the Special Reserve which together covered a surface area of 4200km² located between latitudes 02°13’26’’ to 3°24’37’’N; and longitudes 15°41’20’’ to 016°37’20’’E inside the Dzanga-Sangha Complex of Protected Areas (DSCPA).

Created in 1990, the DSCPA is itself located at the extreme southwest of CAR comprising a dense forest block of 4589km^2 divided into three management units,

namely; Dzanga National Park (DNP, 495km²), Ndoki National Park (NNP, 727km²), and the Dzanga-Sangha Special Reserve (SR, 3359km²). Dzanga-Sangha is adjacent to the Nouabalé-Ndoki National Park (Congo) and the Lobéké National Park (Cameroon), which together form a Tri-National conservation zone (MIKE 2004).

With an average annual rainfall of 1400mm this zone possesses vegetation dominated by semi deciduous, evergreen, swampy and flooded forests but also contains the mono-dominant forests of *Gilbetiodendron dewevrei* species, and patches of savannah towards the villages, and forest exploitation roads. These varied ecosystems provide a habitat for very high concentrations of elephants (*Loxodonta cyclotis*), gorillas (*Gorilla gorilla gorilla*), chimpanzees (*Pan troglodytes troglodytes*), bongos (*Boocerus eurycerus*) and buffalos (*Syncerus cafer nanus*) (Bokoto, 2004).

Figure 2: The Dzanga Sangha Complex of Protected Areas



Within the DSCPA, the two National Parks are strictly protected from all forms of exploitation except tourism and scientific research, but subsistence hunting is allowed in the special reserve (MIKE 2004). Commercial timber exploitation also occurred in the 1970's and 80's both within the reserve and in DNP. In the reserve, some selective logging of *Entadophragma spp* was carried out by "Slovenia-Bois" between 1975 and 1982 while the "Société d'Exploitation Forestière Sylvicole de Bayanga" harvested about 1 to 2 individuals per hectare between 1993 and 1997. More recently the logging activities have been carried out within and around the reserve by the "Société de Bois de Bayanga" (Bokoto, pers. comm.).

Timber and diamond exploitation have stimulated immigration to this region, and the principal village, Bayanga, only 12km from DNP has more than 2000 inhabitants. These activities and the resultant population influx have created a corresponding increase in demand for agricultural produce and bushmeat as well as increased use of firearms, wire snares and night hunting putting enormous pressure on the rich wildlife resources of the area (Melissa *et al*. 2002). As a result, the complex is today managed by the CAR Government with support from WWF and GTZ who serve as technical advisors and facilitators of research, management, environmental education and livelihood development initiatives.

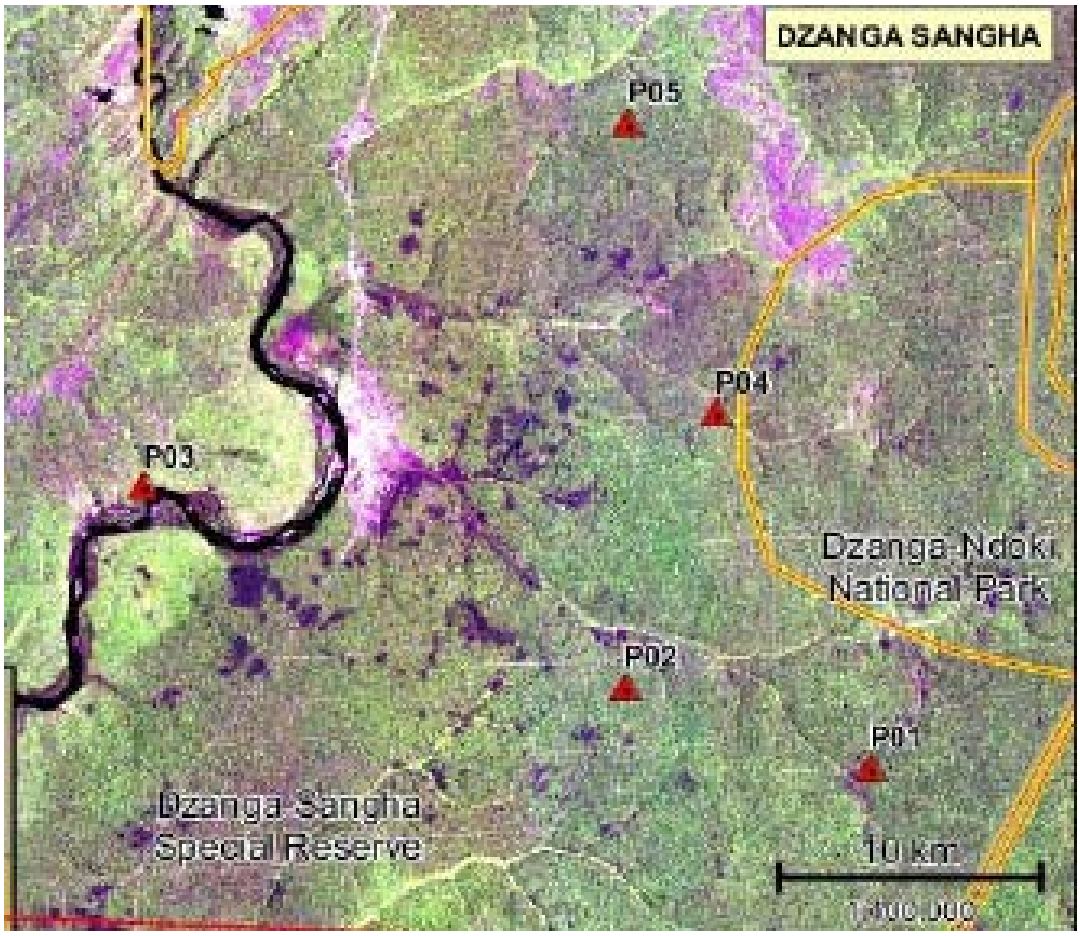
MATERIALS AND METHODS

Five 1 hectare Biodiversity Plots (BDPs) were established in the extreme Southwest of the Central African Republic. These forests were all set up within the Dzanga Sangha Protected Area Complex (DSPAC) but essentially in the special reserve and the Dzanga sector of the protected area complex.

In order to look at the impact of recuperation period on the biodiversity of the area, three plots were set up within the Dzanga sector of the National park in forests that had been exploited once but with varying periods of recuperation since. Another plot was set up in the Special reserve in forest that had been exploited three times and most recently. This was to provide comparative data for an analysis of the influence of higher levels of exploitation and reduced periods of recuperation on the biodiversity of the forest. Finally a control plot was set up in the Safari hunting zone where no exploitation was reported to have taken place. This would permit a comparison across several plots

of zero exploitation (minimum), once (intermediate) and three times (maximum) exploitation levels. At the same time it would also permit comparisons of the effect of recuperation ranging from 4 years to 32 years for exploited sites and an assumed period of 100 years without any major disturbance for the unexploited site.

Figure 3. Location of Biodiversity Plots in DSPAC
(Map generated by Dan Slayback, NASA)



The location of the plots were determined with the help of “Projet Dzanga Sangha” staff and on the basis of the maps provided by the GIS unit of the project and the plot location and characteristics are presented in Table 1 below.

Table 1: Location of the five BDPs within DSPAC

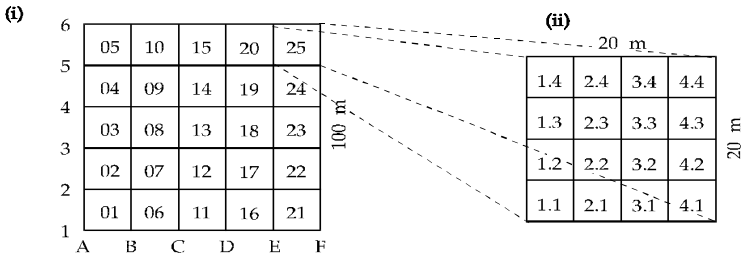
Locality	Coordinates	Plot No.	Intensity of Exploitation	Exploitation Period [1]	Recuperation period in years
Kongana	02^0 47,663 N 016^0 26,206 E	P 01	Once	1982	24
Meyan	02^0 49,342 N 016^0 21,185 E	P 02	Thrice	1981 1989 2002	4
Safaria	02^0 53,516 N 016^0 11,301 E	P03	Never	n.a. [2]	n.a.
Mongambe	02^0 55,042 N 016^0 23,085 E	P04	Once	1974	32
St Francois	03^0 00,959 N 016^0 21,264 E	P05	Once	1976	30

PLOT ESTABLISHMENT

The standardised methodology for the establishment of permanent BDP's follows that of Dhallmeier (1990). In the one-hectare configuration used for SI/MAB 1ha BDP's, the area is first geo-referenced using a GPS then it is usually surveyed in a horizontal plane using a forestry compass, a tape and a clinometer.

In the course of this fieldwork as in the other SI MAB plots within the network (see Sunderland 2005; Sunderland and Balinga 2005; Sunderland and Balinga 2006), a laser range finder was used in the establishment of the permanent sample plots. Because it provides slope corrected distance readings, angle and slope the range finder is an extremely efficient means of laying out a plot in forest with relatively undeveloped under storey.

Figure 3: One hectare Biodiversity Plot (BDP) layout



[1] N.B. The estimated dates were obtained from interviews with local project staff or ex workers with the timber companies and are still to be authenticated by documented statistics.
[2] Not applicable since there is no evidence that this area has ever been exploited.

Figure 4: Line sighting and horizontal distance measurement using a laser range finder.

Figure 5: Permanent marking of the BDP corners with PVC pipes

During the establishment, the one-hectare plot is divided into 25 quadrats, each 20 x 20 meters in size (Fig. 2). It should be noted that, generally, 20 meters is the longest distance that can be accurately surveyed in dense forest. The four corners of the 1 ha are permanently marked using PVC pipes, that are painted and buried in order to permit relocation of the plots for recensusing. All the quadrat corners are marked with stakes topped with flagging tape bearing their distance from the baseline.

Tree enumeration

Tree tagging and identification begins as soon as the corner stakes of the quadrats are set. The process includes locating all trees with a diameter 10 centimetres in diameter at breast height (dbh), then measuring, marking and identifying the species; these specific activities are elaborated upon below. During the enumeration process, a team of three to five individuals walks the quadrat, starting at the left corner baseline and moving in concentric clockwise circles of decreasing size, ending in the centre of the quadrat in order to systematically encounter and record all trees of appropriate size.

Tree measurement and marking

All trees >10cm diameter at breast height (dbh) are measured. The dbh is measured with a diametric tape at approximately 1.3m, avoiding any protrusions or lianas growing on the trunk. Trees with stilt roots and buttresses are measured at the lowest point at which the diameter of the bole can be accurately measured without the influence of these additional protuberances. Measuring above buttress and stilt roots

often requires the use of a skilled tree climber. The measurement of trees above the dbh point is known as the diameter at reference height (drh). The point of measurement is marked with an “X” with the sharp point of the dbh tape. At this exact point, a ring is then painted around the tree. This marking ensures that future measurements of the same tree are taken at exactly the same point.

Figure 6: Measuring tree diameter at breast height.

Numbering and tagging

Each individual tree is tagged with a different number consisting of a sequence of three double digits. Using (01-24-09) as an example, the first two numbers (01) correspond to the one-hectare plot within the zone, second pair (24) identifies the number of the quadrat and the last two (09) represent an individual tree within the quadrat. No other tree receives this unique number. The tree numbers start at 01 in each quadrat and continue until the last tree is labelled. Prior to all trees being permanently tagged with aluminium labels a temporary ribbon is tied to each tree with the number written in indelible ink. Once aluminium labels are produced with the correct numbers, they are

nailed to the tree 10cm above the point of measurement, and as marked by a ring of paint on the trunk. The aluminium label faces outwards and is oriented toward the baseline of the plot. The nail is driven to angle down and just far enough in so that it will not fall out when pulled or when bark falls off, leaving enough room for the tree to grow before "eating" the tag.

Figure 7: Teaching local technicians to produce and use tree tags in the field

Tree identification and voucher collection

As far as possible, individual trees within a BDP are identified in the field often using bark and slash characters. However, to verify the field determinations, voucher specimens are collected for each taxon encountered, whether the species has been identified with confidence or not. For problematic genera such as *Drypetes, Diospyros,* and *Bielschmeidia*, all individuals encountered were vouchered. Unidentified species were sorted into "morphospecies" and at least one voucher was collected for each. The use of a local (Baka) tree climber greatly facilitated access to the forest canopy and ensured that very few, if any, individual species were not represented in the voucher collections. The specimens are

Figure 8: Bark slash used in identification of *Entandrophragma* sp.

preserved in the field using a portable aluminium field dryer with kerosene stoves providing the heat source.

Voucher specimen management

During the plot enumeration, 197 vouchers, the majority of which were sterile, were collected. The first set of these vouchers have been deposited at the Herbier National in Bangui, a second set at the project headquarters in Bayanga and another set at the Herbier National in Yaounde (Cameroon). Duplicates of these vouchers will be kept in a sterile voucher collection at MBG and entered onto the TROPICOS database. This database provides taxonomic, ecological and geographical information on each accession and can be accessed via the internet (http://mobot.mobot.org/W3T/Search/vast.html). Unidentified plants have been sent to family specialists to complete the identification process and identify potential new species.

Figure 9: Preparation of voucher specimens

Tree mapping

In addition to measuring and identifying trees in the quadrats, SI/MAB researchers map each tree to the nearest centimetre. A mapping team of seven people uses automatic range finders to accomplish this task. The tree is located by one of two people person known as the "tree locators." The distance of the tree from one of the lines of the quadrat (1, 2, 3 or 4) where the corners are visible, is then taken using the range finders.

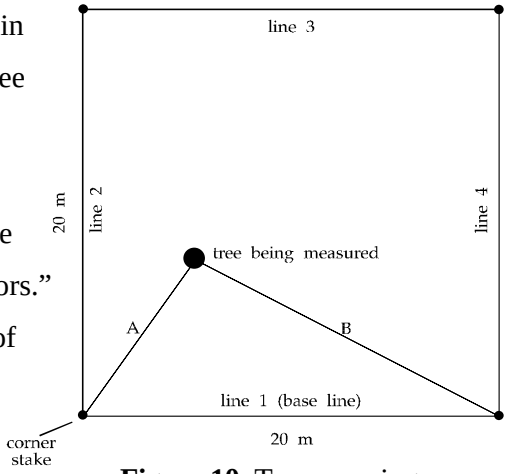


Figure 10: Tree mapping

These are recorded as "line A" and "line B". These lines denote the diagonal distance from a left quadrat corner (line A) to the tree being measured and from a right corner (line B) to the same tree. The lines also allow measurements from any of the four sides of the quadrat. The coordinate corners are denoted by their intersecting boundary lines (quadrat boundary lines are numbered in clockwise sequence from one to four, starting at the baseline). BIOMON (see below) automatically calculates the *x* and *y* coordinates of the distances mapped and maps each individual tree on the quadrats.

During the course of this expedition time constraints did not permit mapping of trees. Local technicians were however taken through a demonstration session and taught to use the mapping equipment in the field.

On-site training and capacity building

One of the main objectives of this field work was to bring together a wide range of local technicians (tree climbers, herbarium technicians, botanists, foresters) from a various recognised regional institutions to share professional experience and technical expertise and jointly evaluate the forest using their combined knowledge. By working on a standardized plot protocol, implemented in the field, and undertaking preliminary data analysis, the local capacity for monitoring the existing plots as well as that for extending the plot network to other national parks in the Congo Basin or comparing between sites, has been considerably enhanced.

One of the highlights of this phase of field work was the training of one male and one female student forestry technicians in field inventory and botanic collecting techniques. At the same time, the integration of local expertise from the Baka tree climbers who contributed their indigenous knowledge to the identification process also provided an opportunity for the Smithsonian botanist to teach scientific identification procedures and names to them as well as to other project staff.

By the end of the survey, 6 project staff, two student interns, two as yet unemployed forestry technicians, and two Baka natives were trained in various aspects of inventory. Their training consisted of the following aspects:

- Layout of 1 ha plots
- Inventory (enumeration, dbh measurement, tagging, painting and mapping).
- Field identification and collection of voucher specimens.
- Management of voucher specimens
- Initiation to data entry and preliminary analysis of inventory data using Biomon software.

Data analysis

The Smithsonian Institution's Monitoring and Assessment of Biodiversity Programme (SI/MAB) has developed a Windows driven computer programme that manages and analyses data collected on the 1ha BDP's. BIOMON[3] undertakes basic assessments based calculations of species numbers, frequencies, basal areas and mean dbh as well as on species "importance value index" (IVI) i.e. species with the highest IVI are referred to as the most "important" at that site. The IVI is calculated as follows:

$$\textit{Relative density} = \frac{\text{Number of individuals of a species} \times 100}{\text{Total number of individuals of all species}}$$

$$\text{Relative dominance} = \frac{\text{Total basal area of the species} \times 100}{\text{Total basal area of all species}}$$

[3] BIOMON can be downloaded at www.si.edu/simab

$$\text{Relative frequency} = \frac{\text{Frequency of species} \times 100}{\text{Sum of all frequencies}}$$

Frequency = Number of quadrats in which a species is found.

Cover value index (CVI) = Relative density + Relative dominance.

Importance value index (IVI) = CVI + Relative frequency.

SUMMARY OF RESULTS

A total of 2,053 individual trees representing 48 families, 151 genera and 208 species were enumerated on the DSPAC BDPs. The detailed breakdown of species composition, density, dominance and frequency within each BDP are presented in the annex to this report. A brief summary of results is presented below.

Table 2: A summary of the preliminary data gathered from each BDP.

	Families	**Genera**	**species**	**Trees**	**Stems**	**Mean dbh (cm)**	**Total BA (m)**
Plot 1	33	85	108	414	414	26.73	23.23
Plot 2	39	95	120	431	434	29.25	29.17
Plot 3	30	53	67	298	316	34.57	29.66
Plot 4	31	78	96	424	426	28.89	27.92
Plot 5	30	84	104	486	488	30.03	34.56
Mean	32.6	79	99	410.6	415.6	29.894	28.908

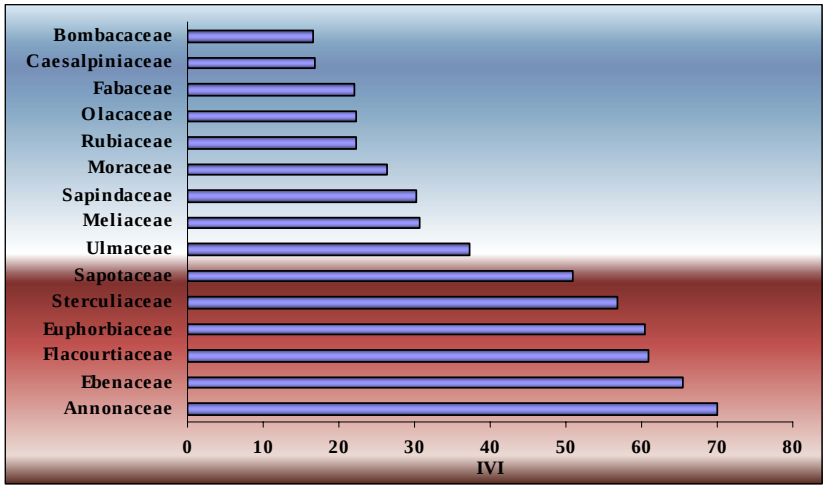
In terms of proportions of representative species, the most important families observed in DSPAC were the Euphorbiaceae followed by the Rubiaceae, Fabaceae and Annonnaceae respectively. Other well represented species were the Caeasalpiniaceae, Meliaceae, Sterculiaceae and Ebenaceae each represented by at least 10 species (Table 3). Evaluating family importance in terms of cumulative IVI however, relegates the Euphorbiaceae to fourth position with the Annonaceae, becoming the overwhelmingly dominant family followed closely by the Ebenaceae (see Figure 14) who were themselves 8th in terms of number of species.

The forests of DSPAC, are very rich in species of the Euphorbiaceae which are comparatively amongst the most important species (4th) even in terms of cumulative IVI. Conversely, the Annonaceae are 4th in terms of species but 1st in terms of IVI. The Flacourtiaceae are interesting in that although they are to a certain extent poorly represented in number of species, these few species are of capital importance to the forest when cumulative IVIs are compared.

Table 3: Summary of number of species per family

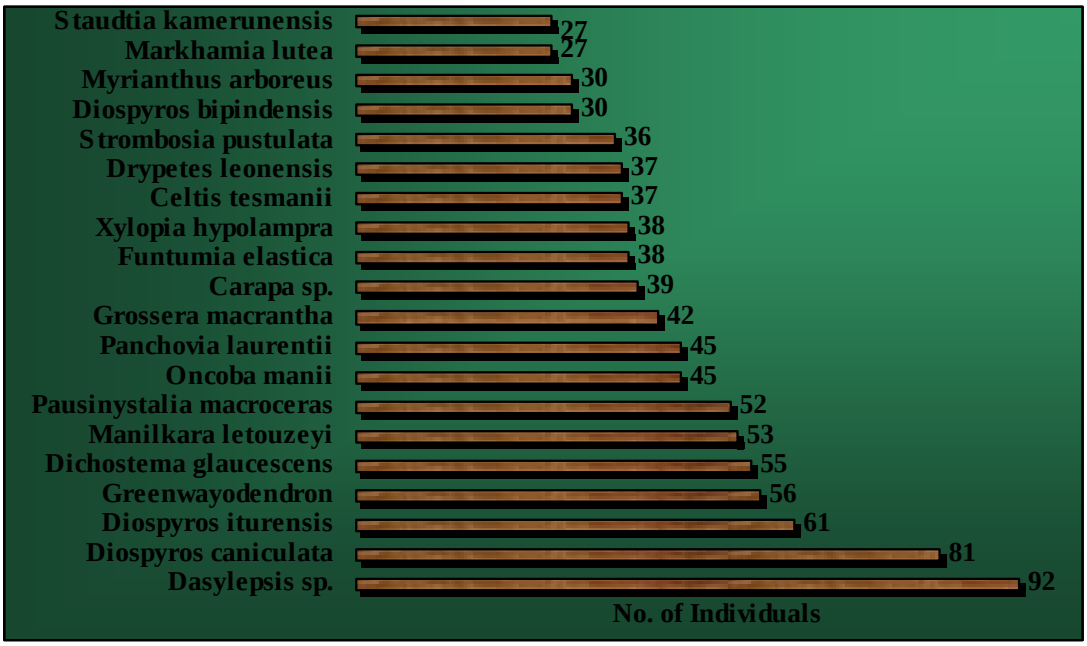
Family	No. of Species
Euphorbiaceae	21
Rubiaceae	16
Fabaceae	15
Annonaceae	14
Caesalpiniaceae	13
Meliaceae	13
Sterculiaceae	11
Ebenaceae	10
Sapindaceae	8
Sapotaceae	8
Tiliaceae	7
Apocynaceae	6
Clusiaceae	6
Flacourtiaceae	6
Irvingiaceae	5
Myristicaceae	5
Ulmaceae	5
Olacaceae	4
Moraceae	3
Rutaceae	3
Violaceae	3

Figure 11: Dominant families (IVI) of DSPAC (all trees >10cm dbh)



Overall, the most abundant species were *Dasylepis sp* (92 individuals), *Diospyros caniculata* (81 individuals), and *Diospyros iturensis* (61 individuals) individuals respectively, whereas fifty four species occurred only once.

Figure 12: Most abundant species across the five plots surveyed (individuals >10cm dbh)



In the same manner, *Dasylepis* sp. except for Plots 4 and 5 seemed consistently to be the most important species in terms of IVI rankings on each plot. Other species presented a much more erratic importance value across the different plots sampled. The detailed results of IVI rankings for the five plots can be observed in the figures below.

Figure 13: Dominant species by IVI in Plot 1 (all trees >10cm dbh)

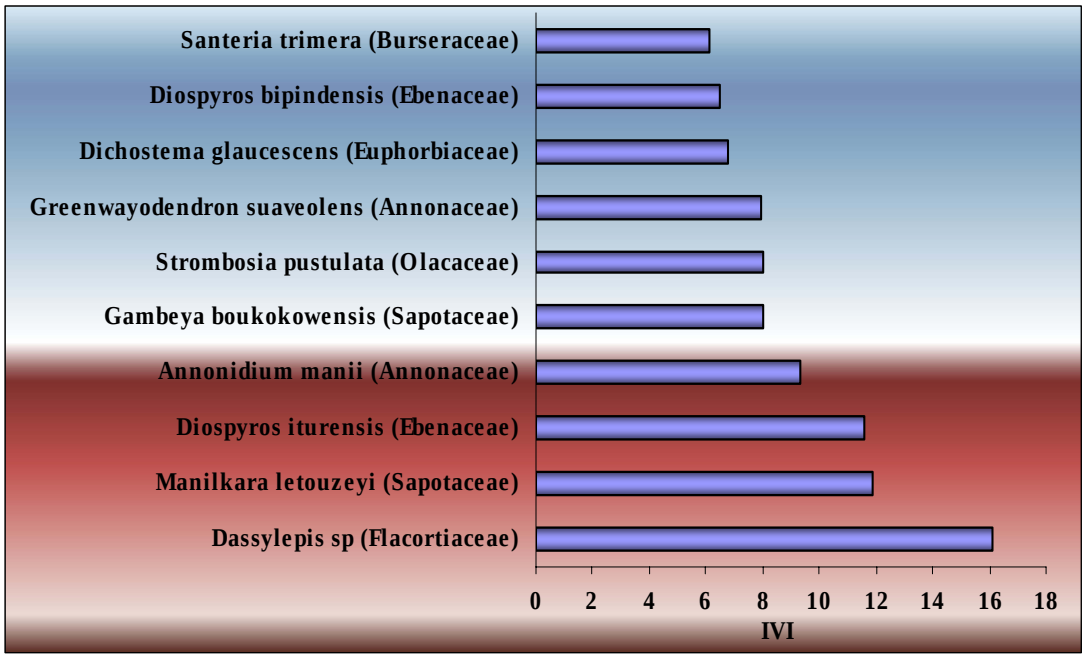


Figure 14: Dominant species by IVI in Plot 2 (all trees >10cm dbh)

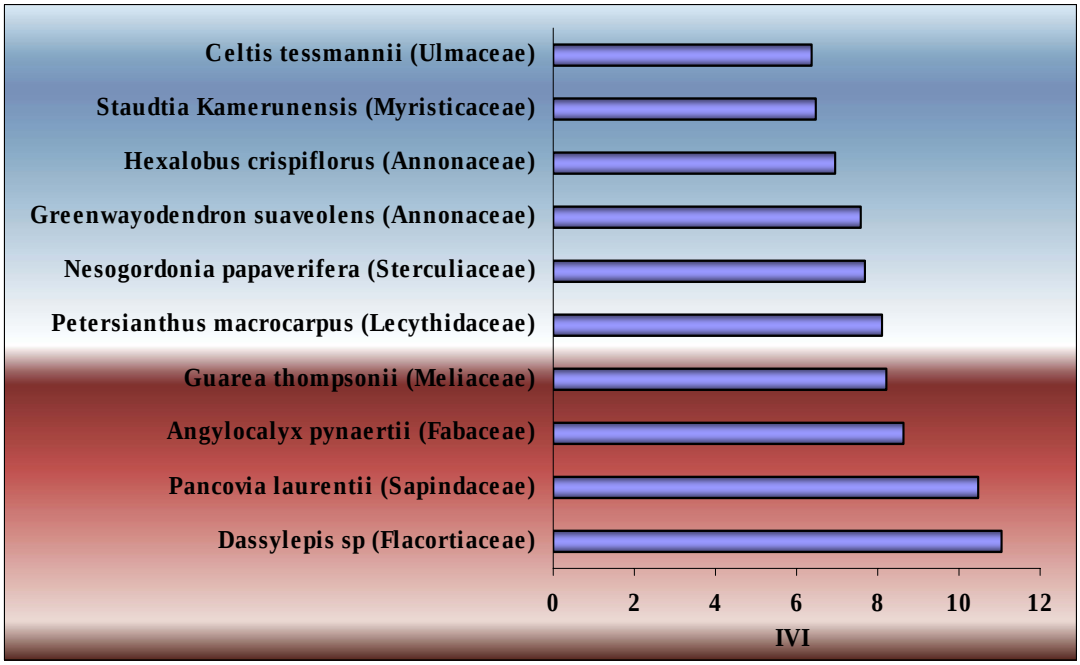


Figure 15: Dominant species by IVI in Plot 3 (all trees >10cm dbh)

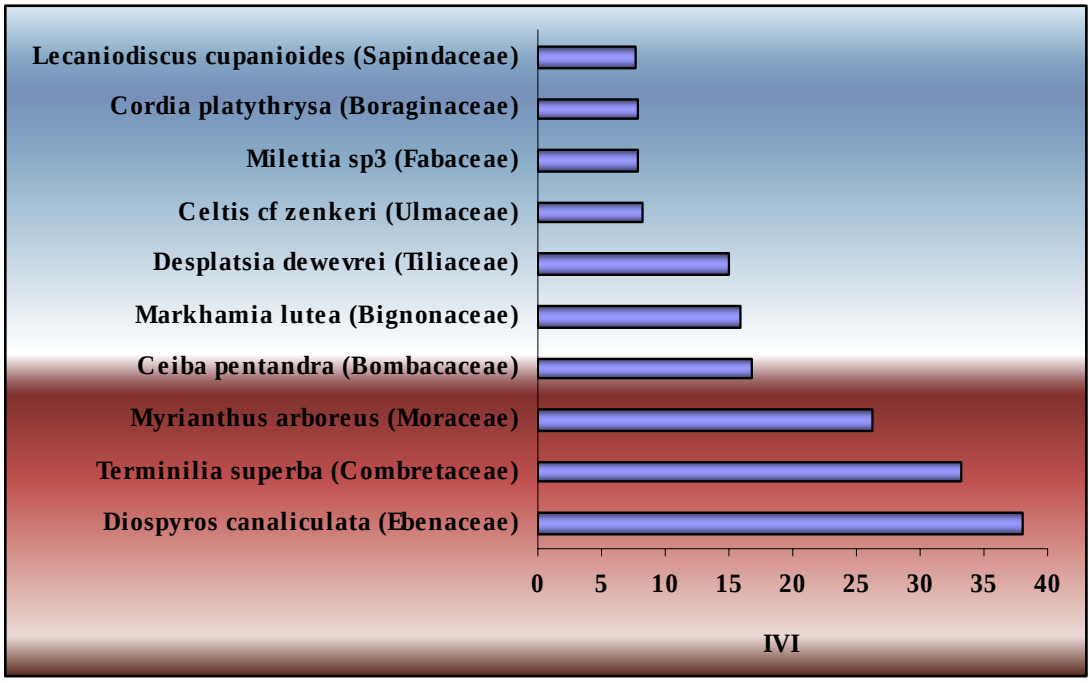


Figure 16: Dominant species by IVI in Plot 4 (all trees >10cm dbh)

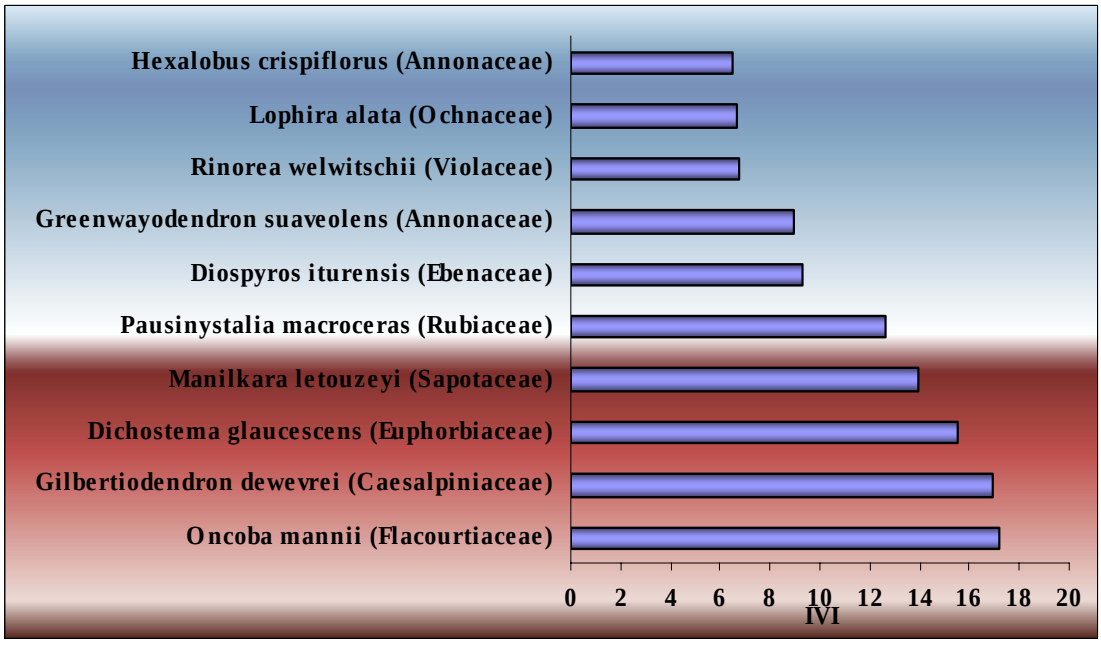
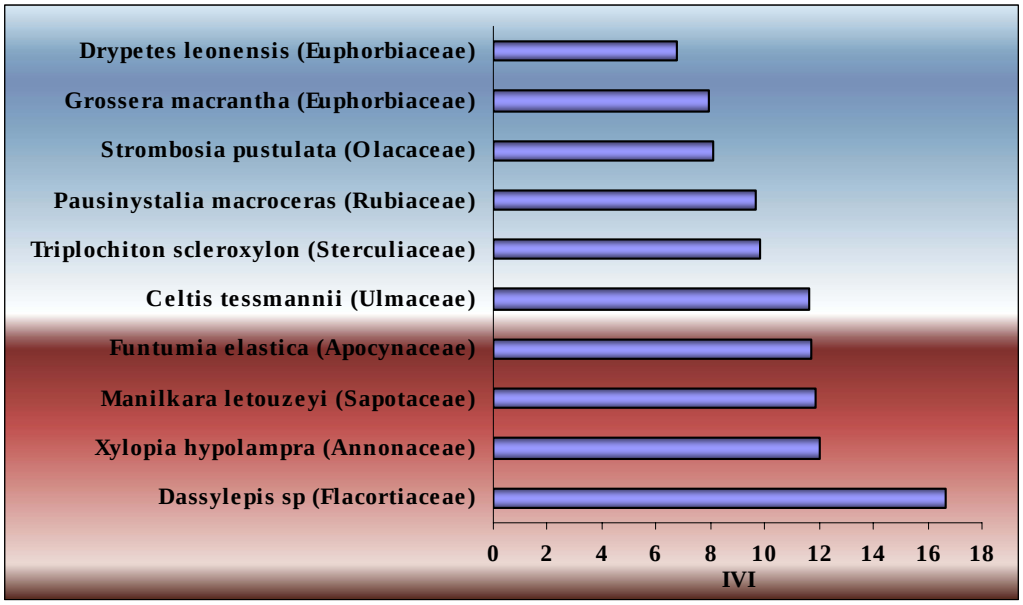


Figure 17: Dominant species by IVI in Plot 5 (all trees >10cm dbh)



Species richness, diversity and distribution

Analysis of the data acquired showed that general diversity patterns varied between the Park and the Special Reserve, but also within different zones of the park indicating that the scale of observation could be a major factor to consider in comparing biodiversity across sites and consequently in setting up a monitoring system for natural resources and biodiversity in the DSPAC.

Using Margalef's index (D) = (S-1)/ln N, as a measure of species richness, (where S= No. of species and N= No. of trees), Shannon for species diversity, and Pielou's index for evenness of species distribution within a site, the following results were obtained

1. There is a difference in species richness gradient (Figure 20) that reduces from the forest around Meyan (Plot 2) through Kongana (Plot 1), St. Francois (Plot 5) and Mongambe (Plot 4) respectively, and to a lowest value at Safaria. This tells us that the species richness varies across all the different sites sampled and is different as such within the park and in the different reserves. The same trend is observed for variation of Species diversity presented in Figure 21 as deterined using Shannon's index, and also for evenness of species distribution within sites (Figure 22) as determined using Pielou's index.

2. The trends observed along this gradient indicate that species richness, diversity and evenness of distribution were all highest where the forest had been exploited three times and lowest where no exploitation had ever occurred. The once exploited forests within the park were intermediately placed along this gradient. This would seem to imply that more intense exploitation increases the number of species within a given forest type and can be justified by the addition of fast growing secondary forest vegetation that is light loving.

   This gradient could not however be explained exclusively by the intensity of exploitation since the three plots located inside the park and exploited one time each, also display a variation in species richness between sites. For that reason another major factor was examined that was the period of recuperation for each site (see figure 20 below).

3. Considering the duration of recuperation for each exploited site[4], it is possible to see that once again a clear trend exists with reducing values for species richness, diversity and evenness of distribution as recuperation period increases. This can therefore explain to a great extent the variation in species richness within the plots that had undergone a single exploitation period (Figure 23).

4. Finally the variations observed can be ascribed to the natural or initial vegetation which could look similar at a larger scale but is actually different between sites at a lower scale with respect to canopy height, species composition, etc.

[4] Not knowing how far back if any exploitation had ever taken place, a minimum period of 100 years was considered throughout this study for analysis with respect to Safaria.

Figure 18: Comparison of species richness across sites

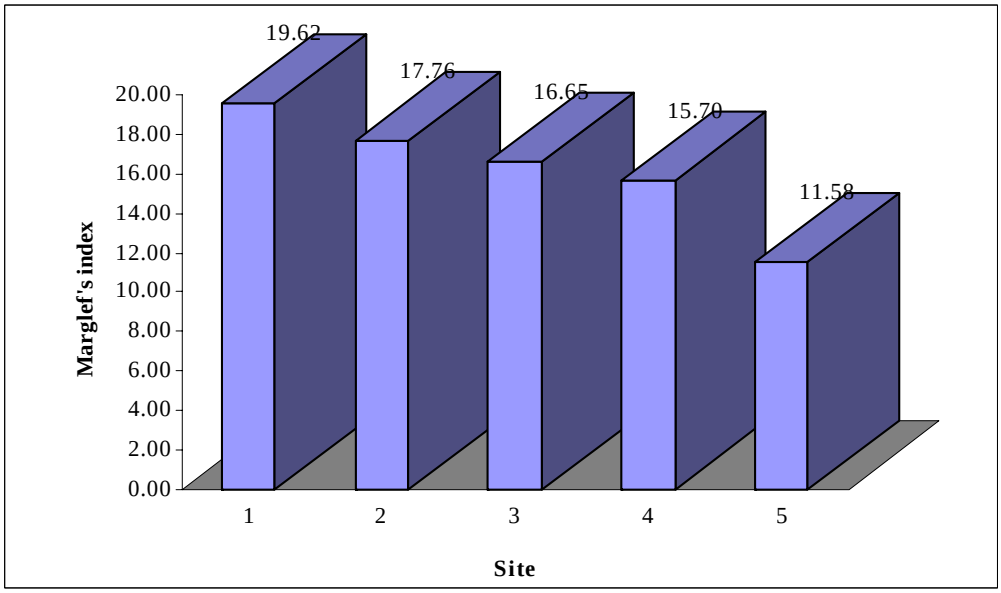


Figure 19: Comparison of species diversity across sites

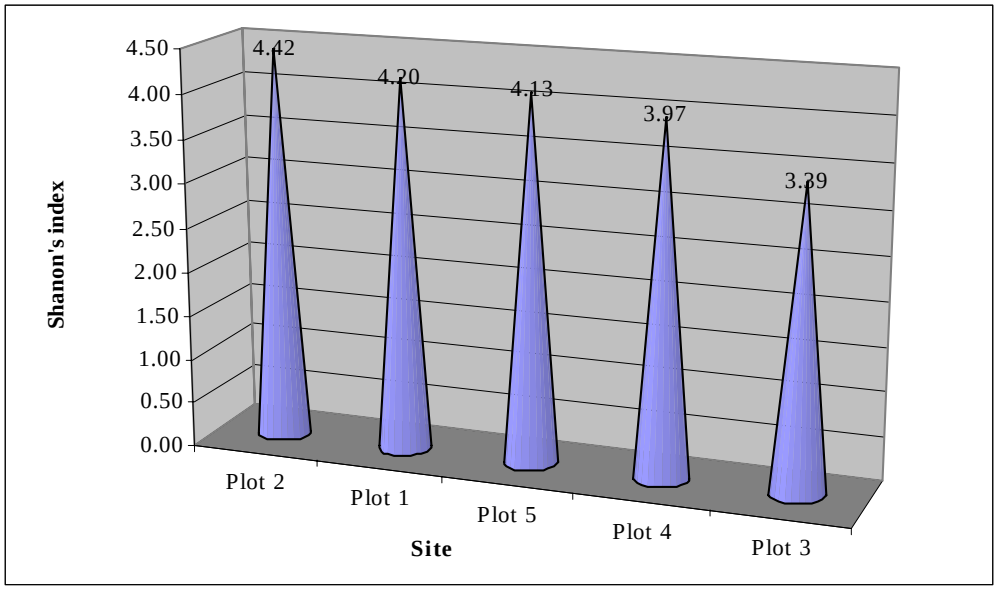


Figure 20: Comparison of evenness of species distribution across sites

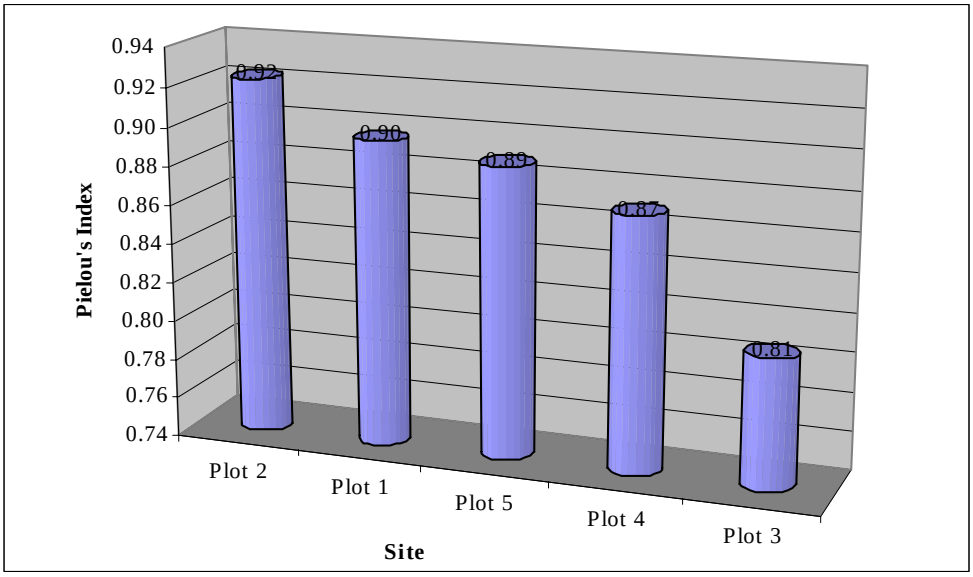
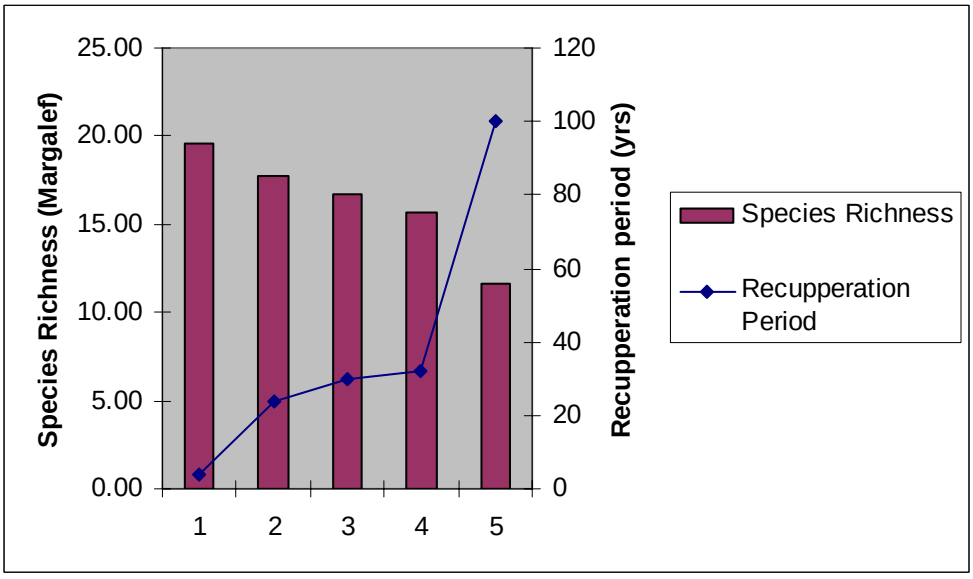


Figure 21: Variation of diversity indicators[5] with recuperation period across sites

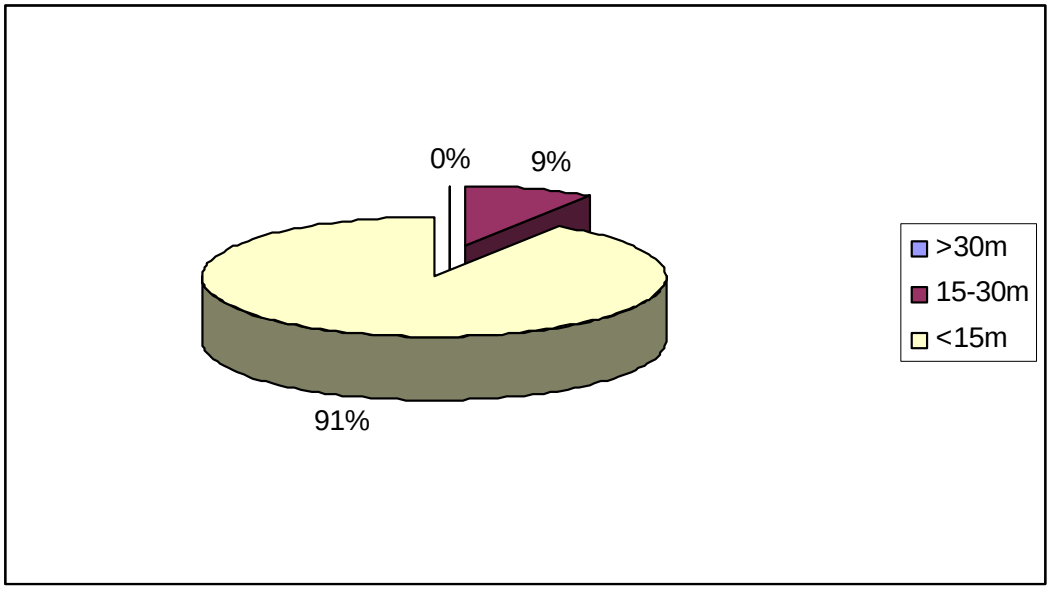


[5] NB. The trends observed are exactly the same for species richness, diversity and evenness of distribution. Even though the values plotted are those of species richness, this one figure therefore presents the trend for all three indicators.

Forest structure

One of the greatest impacts of long term timber extraction is the extraction of the tallest and largest logs, as well as the resultant opening of gaps in the canopy. All the sites sampled had less than 90% canopy cover and sometimes lower than 60%. As a result there is less competition for light and less incentive for trees to grow very tall. Canopy emergents were recorded up to 35m, and only 9% of the trees ranged between 15 and 35m.

Figure 22: Height Classes of trees in the DSPAC sample sites

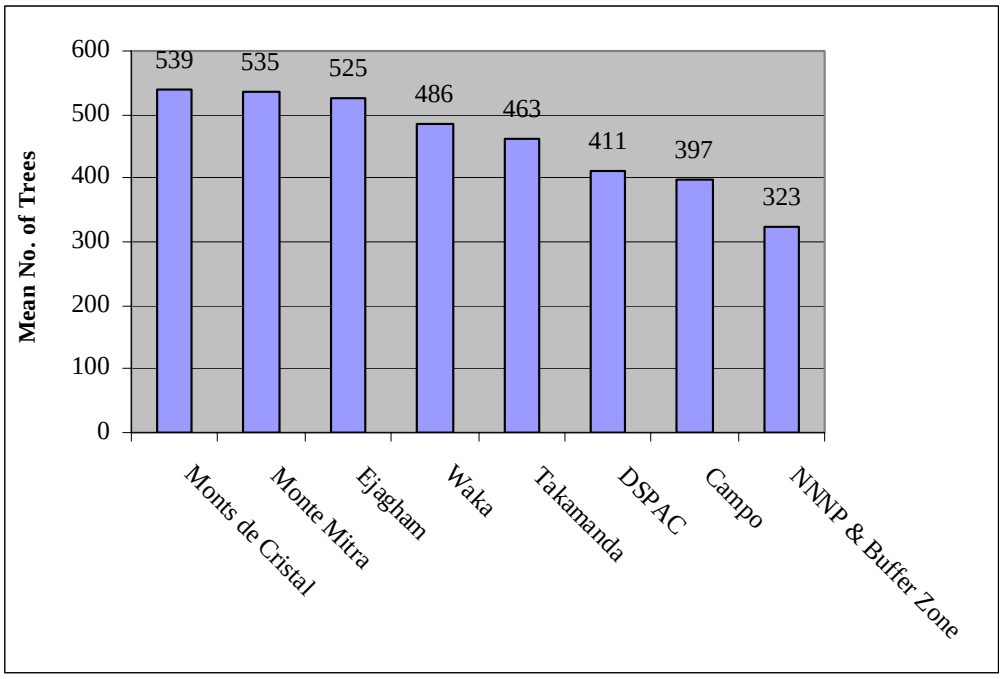


Comparison with other SI MAB sites in Central Africa

The forests around the Sangha River be they in Nouabale Ndoki National Park (Congo) or in the DSPAC are peculiar in their composition and structure in many ways. Not only are they characterised by the presence of monodominant patches of *Gilbertiodendron dewevrei* stands but they all seem to present relatively low values for the mean number of trees per hectare compared the majority of other sites assessed in the sub region using SI MABs standard 1 ha protocol. Conversely they seem from field observations to display some of the highest concentrations of animal species per hectare as compared to the other sites. This may be solely a result of unique bio-geographical, ecosystemic and climatic conditions or may or may also be due to similar modes of management and timber exploitation activities in the area over the years. Whatever the case, DSPAC, and

NNNP are quite similar and along with Campo (Cameroon) would probably not be rated very important in terms of number of individuals.

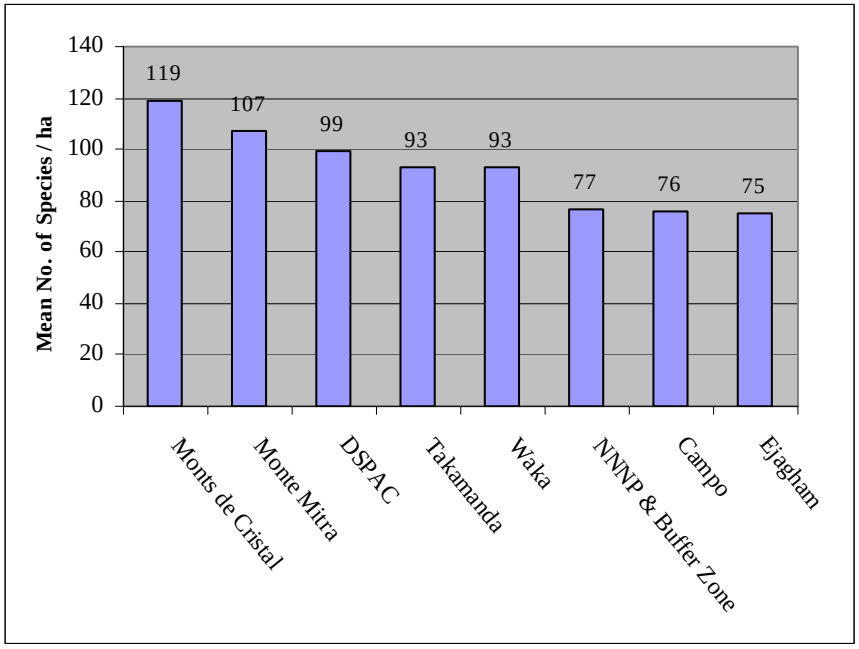
Figure 23: Comparison of mean number of trees/ha across SI MAB sites in Central Africa



On the other hand although much poorer in number of individuals, DSPAC is quite rich in plant species and this may be one of its greatest attractions as it comes third after Monts de Cristal and Monte Mitra and well ahead of Waka (Gabon) and Takamanda (Cameroon). Noteworthy species include *Okoubaca aubrevillea* which is very rare to find. Light loving and possessing reputedly mystical properties it is said never to have any other trees in its immediate surroundings wherever it grows.

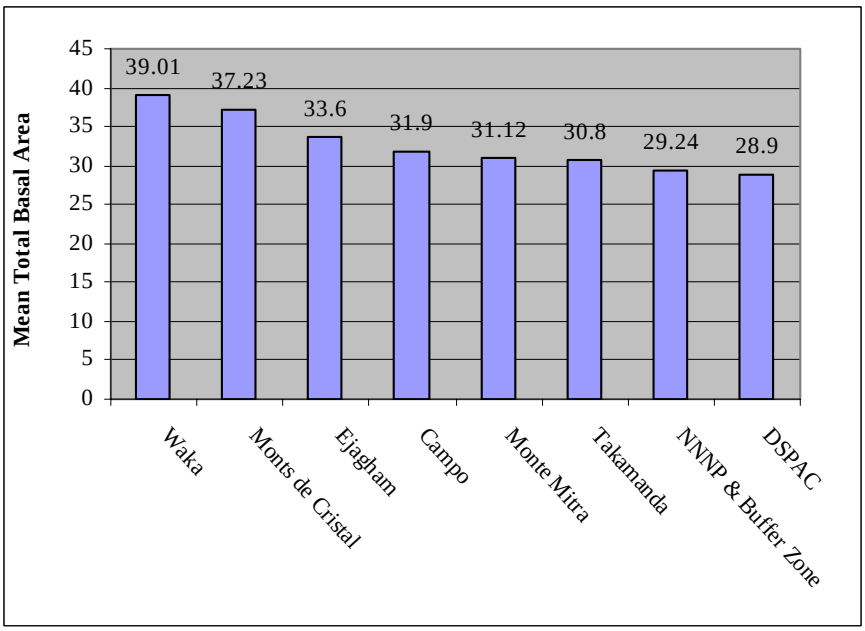
The high plant and animal diversity as well as the high animal density that is common to this landscape makes DSPAC one of the highest areas for biodiversity conservation in the Congo Basin. This is no doubt due to the presence of many open canopy species that have established themselves within this area

Figure 24: Comparison of Mean No. of species across SI MAB sites in Central Africa



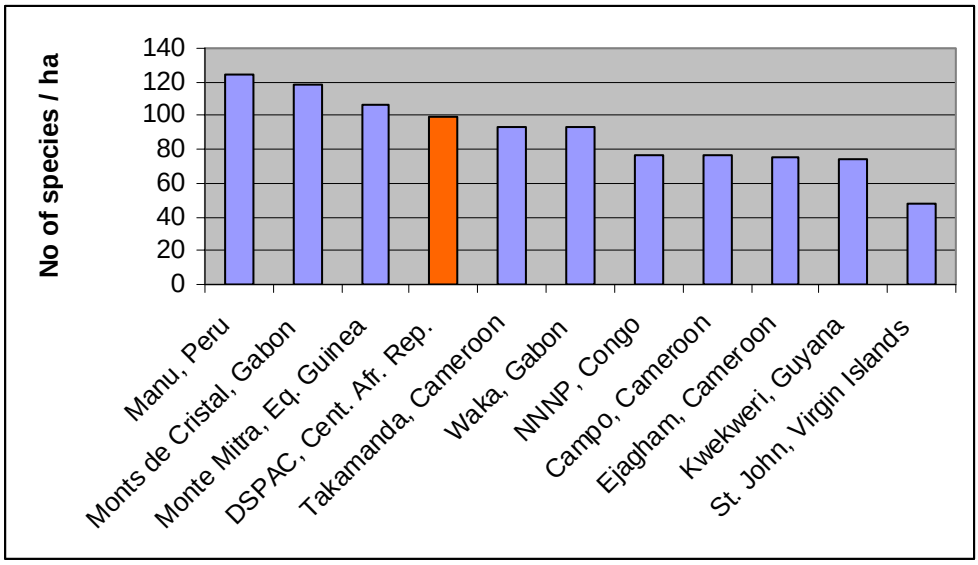
Unfortunately, even if the long history of timber extraction in this area has increased the relative number of species, it has also resulted in a reduction of the mean basal area as shown in Figure 25 below where DSPAC has the lowest value for this parameter.

Figure 25: Comparison of Mean Total Basal Area across SI MAB sites in Central Africa



The forests of the DSPAC are situated on the extreme fringe of the Congo Basin and at the very edge of savanah patches. The relatively low basal areas and canopy heights might be indicative of young forests resulting from the expansion of forests into savana areas. It is generally expected that such “pioneer” forests will be poorer in terms of the number of species present. Given its relatively abundant rainfall and proximity to the Sangha River, DSPAC compares quite favourably with other SI MAB sites in the humid tropics confirming that areas of higher humidity are generally richer in species as observed within the network of CTFS plots (Thomas 2004).

Figure 26: Comparison of SI/MAB assessment sites in the humid tropics in terms of species richness



CONCLUSIONS

The forests of the DSPAC have effectively been influenced by the duration and intensity of timber exploitation. These forests that possess natural variations in diversity at micro ecosystemic level were found to be more diverse with increase in intensity of exploitation and decrease in periods of recuperation. Field observations during the botanic assessment of these forests indicated more abundant signs of elephant, gorilla, duiker, etc. presence around the plots within the park than elsewhere. These observations can be ascribed to absence of current exploitation activities, increased protection levels and consequently reduced human pressure in these areas. It is also

evident that the sites where recuperation periods were above thirty years were closer in structure and composition to the unexploited forest, and relatively richer in signs of animal activities. The overall plant species richness remained however higher in the whole protected area system than in many other areas of the Congo Basin when the mean number of species per hectare is considered.

These results indicate that the forests of DSPAC are very dynamic and respond favourably to disturbances from selective logging. Furthermore, such disturbances are not necessarily bad for the plant diversity of a forest in that they actually increase the number of species and the evenness of their distribution. Ultimately they also increase the mean number of individuals encountered per hectare.

At the same time, these disturbances modify the natural patterns and dynamics of biodiversity in terms of relative proportions of different taxonomic groups; hence interrelations and processes as well as structure and potentially other factors of a given ecosystem would all be modified.

This observation is interesting because in terms of park management, such disturbances could also be the direct or indirect causes for fluctuations in animal or fish populations that depend on certain species for food or shelter. Even more importantly if these disturbances are allowed to go unchecked in terms of scale or intensity, they could in the long run cause permanent and potentially irreversible changes in the ranging patterns of certain animal species and in a cyclic manner to the natural regeneration processes that were inherent to that ecosystem.

The greatest impact however of repeated timber exploitation in the DSPAC would however be that of creating inroads into the otherwise pristine areas that associated to increased human settlements and higher even if sometimes short termed standards of living encourage greater human presence on the one hand and activities on the other hand putting much more pressure on the animal resources. These activities including farm extension and hunting are often irreversible once they have set into the habits of local populace and would require effective mitigation measures to be identified and possible agreements made to that effect with before any exploitation company is allowed to operate close to any protected area.

RECOMMENDATIONS

This study finds that there may be no need to restrict the number of rotations, but rather to ensure a minimum rotation period of about 30-35 years which would be of great direct benefit to the plant diversity, and even more so to the wildlife populations in the area.

In order to confirm and improve on the findings of this study, as well as for the orientation of future management decisions, it is necessary to increase the number of biodiversity plots (BDPs) that are laid out within the DSPAC. Each of the different identified vegetation types and land use zones would require at least two BDPs to be set up. It would be necessary to set up more plot in undisturbed forest within the safari zone as well as in the community hunting zone. Other priority areas would be the various logging concessions that are currently active. These plots would generate baseline data providing information on the structure, composition and health of the systems but also serving in the monitoring process of the impacts of management actions over the long term.

The results from these and future BDPs set up in the DSPAC should be collated to transect and other experimental setup results on abundance and diversity of other taxonomic groups (insects, birds, mammals, reptiles and amphibians) in order to obtain a much clearer picture of the spatial distribution and abundance of each group, as well as the interactions and processes going on between these groups in the different ecosystems. Such analysis is vital to effective management of the parks and protected area system and has been undertaken elsewhere in Takamanda , Cameroon (Comiskey *et al.* 2003) resulting in the design of a new management plan for the Takamanda National park and its neighbouring reserves.

Sites that contain rare species such as *Okoubaca aubrevillea* should be identified and set aside as priority areas of great conservation value. This will be greatly facilitated if botanical collections are continued and a herbarium set up to generate a more exhaustive checklist of plants and voucher specimens for the DSPAC. Another aspect of this study that could be followed up is the extension of the checklist of plants of DSPAC with particular emphasis on collating the local and scientific nomenclatures.

Considering that many Non Timber Forest Products were also identified during this work that could serve as opportunities for livelihood orientation of the local population, it is essential that future assessment and monitoring programmes should also look more specifically into identifying and assessing the presence, distribution and abundance of such species, and a development and management plan for them included in the overall goals and management plan of the protected area complex.

All these actions will require considerable capacity building of staff on the one hand who would benefit from on site as well as formal training programmes both within the Central African sub region (Gabon, and Cameroon especially) and overseas. On the other hand it is necessary for the park managers to acquire the necessary and up to date equipment for carrying out multi taxonomic assessments and monitoring which are a key component of adaptive park management. Developing regional partnerships and capacity building as happened during this work would be an excellent way of sharing expertise and hopefully lead to the continuation of a more standardised and comparable approach to biodiversity assessments throughout he Congo Basin.

Finally it is very important as a policy measure, that voucher specimens, raw data and reports of every study carried out within this area be made available by all researchers who work in the area. This will help to enrich existing databases, and develop the project library further so that managers and future researchers should have easier access to the much needed background and secondary information that is often absent, given the relative enclavement of the area.

ACKNOWLEDGEMENTS

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Annex 1: Ba'Aka vernacular names for tree species

AFRLEP	mogemba	Afrostyrax	lepidophyllus
AFRSP	yetengue	Afrostyrax	sp
AFZBIP	teemi	Afzelia	bipindensis
ALBADI	ebamba	Albizia	adianthifolia
ALLAFR	mobangombango	Allophylus	africanus
ALSCON	gouka	Alstonia	congensis
AMPPTE	molinde	Amphimas	pterocarpoides
ANGPYN	manjombe	Angylocalyx	pynaertii
ANOMAN	mobei	Anonidium	mannii
ANTMAC	epopolo	Anthonotha	macrophylla
AUTCON	banga / monganja	Autranella	congolensis
BARNIG	ngoumangouma	Barteria	nigritana
BEIFUL	ngala	Beilschmeidia	fulva
BEIOBS	ngala	Beilschmieda	obscura
BLISAP	maimbo	Blighia	sapida
BLIWEL	motokou	Blighia	welwitschii
BRACYN	nyakege	Brachystegia	cf. cynometroides
CANSCH	gbonga	Canarium	schweinfurthii
CANSP	mobangombago	Canthium	sp 2
CARSP	ngodjo / mogojou	Carapa	sp.
CASSP	mongondzo	Cassipourea	sp
CEIPEN	kela	Ceiba	pentandra
CELADO	kakala	Celtis	adolfi-friderici
CELTES	ngombe	Celtis	tessmannii
CELZEN	kakala / ngombe	Celtis	zenkeri
COLACU	goro	Cola	acuminata
COLBAL	goro	Cola	ballayi
COLCOR	popoko?	Cola	cordifolia
COLLAT	popoko	Cola	latericia

COLDEW	moloumba	Colletoecema	dewevrei
COPMIL	mondoumba	Copaifera	mildbraedii
CORPLA	ngbangbe	Cordia platythyrsa	
CROMAC	molinga	Croton macrostasyus	
DACEDU	baba / sene	Dacryodes	edulis
DASSP	moka / denye	Dasylepsis	sp
DESDEW	liamba	Desplatsia	dewevrei
DESSUB	boukou	Desplatsia	subericarpa
DIAPAC	mbaso	Dialium	pachyphyllum
DIAZEN	mokombe	Dialium	zenkeri
DICGLA	mongamba	Dichostema	glaucescens
DIOBIP	embaza	Diospyros	bipindensis
DIOCAN	mokombe / mbola	Diospyros	caniculata
DIOCRA	lembe	Diospyros	crassifolia
DIOITU	embaza / babango	Diospyrus	iturensis
DIOMAN	molombo	Diospyros	mannii
DIOMON	molombo	Diospyros	monbuttensis
DIOPSE	molombo	Diospyros	pseudomespilus
DIOSP3	molombo	Diospyros	cf mannii
DISCAL	moukassokasso	Discoglypremna	caloneura
DONUBA	bodoundou	Donella	ubangiensis
DRY1	mokoumbe	Drypetes	sp 1
DRYAFR	kembo	Drypetes	aframensis
DRYCAP	ekamg	Drypetes	capillipes
DRYGIL	gwongo	Drypetes	gilgiana
DRYGOS	ngoma	Drypetes	gossweileri
DRYINA	go'ongo	Drypetes	cf. inaequalis
DUBVIR	nguluma	Duboscia	viridiflora
ENTCAN	mokanga	Entandophragma	candollei
ENTCYL	boyo	Entandrophragma	cylindricum
ENTSP	etembekesso / edolia	Entandophragma	sp

ENTUTI	sapo / goy	Entandrophragma	utile
ERYMAN	moposoposo	Erythroxylum	mannii
FABINDET	ietengue	Fabaceae	indet
GAMBEG	mogange	Gambeya	beguei
GAMBOU	mandongue	Gambeya	boukokouensis
GAMLAC	mobambu	Gambeya	lacourtiana
GARPUN	mokata	Garcinia	punctata
GARSME	gole	Garcinia	smeathmannii
GILDEW	bemba	Gilbertiodendron	dewevrei
GRE	boukou	Grewia sp.	
GRESUA	motunga	Greenwayodendron	suaveolens
GROMAC	bodemba	Grossera	macrantha
GUATHO	mobeka	Guarea	thompsonii
HANKLA	ngondou	Hannoa	klaineana
HEXCRI	mobambou / potta	Hexalobus	crispiflorus
HEXSP	mobambou	Hexalobus	sp.
IRVGAB	payo	Irvingia	gabonensis
IRVROB	ekoubelli	Irvingia	robur
ISOSP	mondjioumbou	Isolona	sp
ISOTHO	moningo	Isolona	thonerii
KLAGAB	bokoko	Klainedoxa	gabonensis
LACPSE	maimbo	Laccodiscus	pseudostipularis
LECCUP	maimbo	Lecaniodiscus	cupanioides
LEPSTA	ndembe	Lepidobotrys	staudtii
LOPALA	mokote	Lophira	alata
LOVTRI	ngima	Lovoa	trichiloides
MACMON	mosomba	Macaranga	monandra
MACSPI	mossomba	Macaranga	spinosa
MAEEMI	londo	Maesopsis	eminii
MAMAFR	boutou	Mammea	africana
MANLET	mongueza	Manilkara	letouzeyi

MARLUT	mbongo	Markhamia	lutea
MASACU	dyede	Massularia	acuminata
MYRARB	ingoka	Myrianthus	arboreus
NESPAP	modouka	Nesogodornia	papaverifera
OCHAFR	mokoumbi	Ochthocosmus	africanus
ONCMAN	moangale	Oncoba	mannii
ONCWEL	issoko	Oncoba	welwitchii
ONGGOR	essolo	Ongokea	gore
ORIGLA	mbalanga	Oriciopsis	glaberrima
PACSTA	nguendi	Pachypodanthium	staudtii
PACTES	douma	Pachyelasma	tessmanii
PANLAU	ingoyo	Pancovia	laurentii
PANOLE	mokana	Panda	oleosa
PAUFLO	mobagobago	Pauridiantha	floribunda
PAUMAC	kangue	Pausinystalia	macroceras
PENMAC	ekombolo	Pentaclethra	macrophylla
PETMAC	mombalaka	Petersianthus	macrocarpus
PHYDIS	ekango/ ekongo	Phyllanthus	discoideus
PHYLET	moseke	Phyllanthus	cf. letouzeyanus
PICNIT	bambo	Picralima	nitida
PIPAFR	koungou	Piptadeniastrum	africanum
PLAEMA	motaka	Plagiosiphon	emarginatus
PTESOY	ebema	Pterocarpus	soyauxii
RAUMAC	sambo	Rauvolfia	macrophylla
RAUVOM	kouboula	Rauvolfia	vomitoria
RICHEU	ekoba	Ricinodendron	heudelotii
RINOBL	esandjabongne	Rinorea	oblongifolia
RINWEL	essandja	Rinorea	welwitschii
SANTRI	baba	Santiria	trimera
SCOCOR	mopambi	Scottellia	coriacea
SLOUSA	mokata	Sloetiopsis	usambarensis

STAKAM	malanga	Staudtia	kamerunensis
STEBEQ	efouboulou	Sterculia	bequaertii
STERCF	mofoudja	cf. Pterigota	sp.
STRGRA	njombe	Strombosia	grandifolia
STRPUS	ebongo	Strombosia	pustulata
STRTET	njobe	Strombosiopsis	tetrandra
SYNSTI	mokenjenje	Synsepalum	stipulatum
SYZSP	esosi	Syzygium	sp.
TABCRA	gombo	Tabernaemontana	crassa
TABPEN	tokoloko	Tabernaemontana	penduliflora
TERSUP	monganga	Terminalia	superba
TESAFR	mopaka	Tessmannia	africana
TETDID	apa	Tetrorchidium	didymostemon
TETTET	ekombolo	Tetrapleura	tetraptera
TREAFR	gousa	Treculia	africana
TRIHEU	ejoubou	Trichilia	heudelotti
TRIOMP	tomba	Tridesmostemon	omphalocarpoides
TRIPRI	kpomgba	Trichilia	prieuriana
TRITES	modjiali	Trichilia	tessmannii
XYLAET	mbamba	Xylopia	aethiopica
XYLPAR	sangi	Xylopia	cf. parviflora
ZANLEM	bologo	Zanthoxylum	lemairei
ZANTES	mbolongo	Zanthoxyllum	tessmannii

Annex 4: Plot data

PLOT 1

QUADRATS

Quadrat: 1

Tree No	Stem No	Dbh	Status	Height	Sp Code	Species
1	1	12	AS	12	DRYAFR	*Drypetes aframensis*
2	1	10.5	AS	10	GRESUA	*Greenwayodendron suaveolens*
3	1	15.5	AS	15	PAUMAC	*Pausinystalia macroceras*
4	1	39.1	AS	22	TRITES	*Trichilia tessmannii*
5	1	15.3	AS	7	DICGLA	*Dichostema glaucescens*
6	1	10.2	AS	6	GRESUA	*Greenwayodendron suaveolens*
7	1	57.8	AS	28	ONGGOR	*Ongokea gore*
8	1	49	AS	25	GAMLAC	*Gambeya lacourtiana*
9	1	29.3	AS	13	GUATHO	*Guarea thompsonii*
10	1	12.2	AS	11	BEIOBS	*Beilschmieda Obscura*
11	1	36.1	AS	15	LOPALA	*Lophira alata*
12	1	10.6	AS	7	DIOITU	*Diospyrus iturensis*
13	1	13.2	AS	6	DIOBIP	*Diospyros bipindensis*
14	1	17.5	AS	10	DASSP	*Dasylepsis sp*
15	1	12	AL	6	DIOITU	*Diospyrus iturensis*
16	1	12.4	AS	7	AFRLEP	*Afrostyrax lepidophyllus*
17	1	11.7	AL	5	DASSP	*Dasylepsis sp*
18	1	13	AS	7	DIOITU	*Diospyrus iturensis*
19	1	11.2	AL	8	DRYINA	*Drypetes cf. inaequalis*
20	1	33.5	AS	16	ISOTHO	*Isolona thonerii*
21	1	12	AL	5	DASSP	*Dasylepsis sp*
22	1	47.5	AS	13	GAMBOU	*Gambeya boukokowensis*
23	1	19.5	AS	7	ANOMAN	*Anonidium mannii*
24	1	19.4	AL	10	TETDID	*Tetrorchidium didymostemon*
25	1	43.2	AS	13	TETTET	*Tetrapleura tetraptera*
26	1	19.8	AS	15	ALSCON	*Alstonia Congensis*
		Quadrat: 2				
1	1	28.2	AS	15	DUBVIR	*Duboscia viridiflora*
2	1	12	AS	12	ANOMAN	*Anonidium mannii*
3	1	17.6	AS	16	OCHAFR	*Ochthocosmus africanus*

4	1	10.6	AS	8	PICNIT	*Picralima nitida*
5	1	11.8	AS	9	DIOCAN	*Diospyros caniculata*
6	1	28.9	AS	15	GAMBOU	*Gambeya boukokowensis*
7	1	16.6	AS	13	DACEDU	*Dacryodes edulis*
8	1	13.4	AS	19	DRYLEO	*Drypetes leonensis*
9	1	16.8	AS	15	PANLAU	*Panchovia laurentii*
10	1	34.2	AL	17	MARLUT	*Markhamia lutea*
11	1	18.5	AS	16	COLLAT	*Cola latericia*
12	1	15.2	AB	10	LOVTRI	*Lovoa trichiloides*
13	1	23.8	AS	15	GRESUA	*Greenwayodendron suaveolens*
14	1	104.5	AS	19	AUTCON	*Autranella Congolensis*
15	1	10.3	AL	7	LECCUP	*Lecaniodiscus cupanioides*
16	1	10.5	AL	7	ALLAFR	*Allophylus africanus*
17	1	17	AL	8	ONCWEL	*Oncoba welwitchii*
18	1	34.5	AL	21	STAKAM	*Staudtia kamerunensis*
19	1	13.1	AL	7	PANLAU	*Panchovia laurentii*
20	1	16.5	AL	5	DICGLA	*Dichostema glaucescens*
21	1	27.8	DS	5	ANOMAN	*Anonidium mannii*
22	1	15.2	AS	7	RAUVOM	*Rauvolfia vomitoria*

Quadrat: 3

1	1	11.1	AS	6	DICGLA	*Dichostema glaucescens*
2	1	15.6	AS	10	ENTSP	*Entandophragma sp*
3	1	17.3	AS	6	AFZBIP	*Afzelia bipindensis*
4	1	11	AS	5	STRPUS	*Strombosia pustulata*
5	1	12.5	AL	7	PANOLE	*Panda oleosa*
6	1	21.3	AS	10	DISCAL	*Discoglypremna caloneura*
7	1	13.3	AS	10	MACSPI	*Macaranga spinosa*
8	1	11.6	AS	6	DASSP	*Dasylepsis sp*
9	1	17.7	AL	11	MARLUT	*Markhamia lutea*
10	1	12.3	AS	6	ONCMAN	*Oncoba Manii*
11	1	18.5	AL	5	PANSP	*Pancovia sp*

Quadrat: 4

1	1	10.2	AS	6	MACSPI	*Macaranga spinosa*
2	1	17.3	AS	8	COLACU	*Cola acuminata*
3	1	12.5	AS	6	MACSPI	*Macaranga spinosa*
4	1	16.3	AS	8	ONCMAN	*Oncoba Manii*
5	1	20.9	AL	10	ISOSP	*Isolona sp*
6	1	17.3	AS	10	LECCUP	*Lecaniodiscus cupanioides*
7	1	25.3	AS	14	GUATHO	*Guarea thompsonii*
8	1	27.2	AS	18	MANLET	*Manilkara Letouzeyi*
9	1	12.2	AS	10	DIOITU	*Diospyrus iturensis*
10	1	57.7	AB	12	STRTET	*Strombosiopsis tetrandra*
11	1	11.8	AB	6	MANLET	*Manilkara Letouzeyi*

Quadrat: 5

1	1	10.2	AL	4	CELZEN	*Celtis zenkeri*
2	1	13.9	AB	5	CARSP	*Carapa sp*
3	1	27.4	AL	13	STRPUS	*Strombosia pustulata*
4	1	18	AL	10	MANLET	*Manilkara Letouzeyi*
5	1	16.5	AB	11	TESAFR	*Tessmannia africana*
6	1	10.2	AS	6	GROMAC	*Grossera macrantha*
7	1	14.9	AS	8	DIOBIP	*Diospyros bipindensis*
8	1	19.4	AL	10	ENTSP	*Entandophragma sp*
9	1	24.2	DS	8	DASSP	*Dasylepsis sp*
10	1	12.8	AL	6	STRTET	*Strombosiopsis tetrandra*
11	1	12.4	AS	6	DIOITU	*Diospyrus iturensis*
12	1	10.2	AL	6	GROMAC	*Grossera macrantha*
13	1	19	AS	8	ANOMAN	*Anonidium mannii*
14	1	19	AS	8	ANOMAN	*Anonidium mannii*
15	1	19.8	AS	14	BLISAP	*Blighia sapida*
16	1	16.8	AS	10	GROMAC	*Grossera macrantha*
17	1	11	AS	8	RINWEL	*Rinorea welwitschii*
18	1	11.7	AS	6	DASSP	*Dasylepsis sp*
19	1	11.3	AS	7	DIOBIP	*Diospyros bipindensis*
20	1	16.4	AS	6	LACPSE	*Laccodiscus pseudostipularis*

Quadrat: 6

1	1	13.8	AS	12	DRYLEO	*Drypetes leonensis*
2	1	19.8	AB	7	BEIOBS	*Beilschmieda Obscura*
3	1	11.1	AB	7	STRTET	*Strombosiopsis tetrandra*
4	1	13	AS	6	DIOBIP	*Diospyros bipindensis*
5	5	10.7	AS	8	CARSP	*Carapa sp*
6	1	14.6	AS	9	SCOCOR	*Scottellia coriacea*
7	1	14.2	AS	6	LEPSTA	*Lepidobotrys staudtii*
8	1	30.3	AS	7	MYRARB	*Myrianthus arboreus*
9	9	49.2	AS	14	TETTET	*Tetrapleura tetraptera*
10	1	10.8	AS	6	DIOBIP	*Diospyros bipindensis*
11	1	10.8	AS	6	ISOSP	*Isolona sp*
12	1	11.6	AS	7	DRYLEO	*Drypetes leonensis*
13	1	17.7	AS	10	PANLAU	*Panchovia laurentii*
14	1	10	AS	7	TABCRA	*Tabernaemontana crassa*
15	1	69.3	AS	35	PTESOY	*Pterocarpus soyauxii*
16	1	13.4	AS	8	DIOITU	*Diospyrus iturensis*
17	1	34.4	AS	18	TRIPRI	*Trichilia prieuriana*
18	1	53.5	AB	15	STRPUS	*Strombosia pustulata*
19	1	15	AS	6	DICGLA	*Dichostema glaucescens*
20	1	12.7	AS	8	BLISAP	*Blighia sapida*
21	1	21.9	AS	7	IRVGAB	*Irvingia gabonensis*
22	1	22.4	AS	9	FABINDET	*Fabaceae indet*
23	1	13.4	AS	5	DIOITU	*Diospyrus iturensis*

Quadrat: 7

1	1	49.1	AS	16	MACSPI	*Macaranga spinosa*

7	1	13	AS	6	GUATHO	*Guarea thompsonii*
13	1	25.5	AS	15	GUATHO	*Guarea thompsonii*
14	1	20.5	AS	8	DACEDU	*Dacryodes edulis*
15	1	49.5	AS	25	LOVTRI	*Lovoa trichiloides*
16	1	14.7	AS	12	CELZEN	*Celtis zenkeri*
17	1	13.5	AS	8	BEIOBS	*Beilschmieda Obscura*
18	1	16.2	AS	10	SCOCOR	*Scottellia coriacea*
19	1	21.4	AS	12	GRESUA	*Greenwayodendron suaveolens*
20	1	17.2	AS	10	IRVGAB	*Irvingia gabonensis*
21	1	39.5	AS	26	STAKAM	*Staudtia kamerunensis*
22	1	12.6	AS	8	DICGLA	*Dichostema glaucescens*

Quadrat: 8

1	1	26.3	AS	15	NESPAP	*Nesogodornia papaverifera*
2	1	11.2	AS	6	DASSP	*Dasylepsis sp*
3	1	23.2	AS	10	GAMLAC	*Gambeya lacourtiana*
4	1	15	AS	8	AFRLEP	*Afrostyrax lepidophyllus*
5	1	15.8	AS	10	GROMAC	*Grossera macrantha*
6	1	11.7	AS	10	GROMAC	*Grossera macrantha*
7	1	14.9	AS	7	XYLPAR	*Xylopia cf. parviflora*
8	1	10	AS	6	SANTRI	*Santiria trimera*
9	1	12.5	AS	4	SCOCOR	*Scottellia coriacea*
10	1	26.7	AL	7	ONCWEL	*Oncoba welwitchii*
11	1	18.2	AL	10	GARPUN	*Garcinia punctata*
12	1	36.2	AS	15	BEIOBS	*Beilschmieda Obscura*
13	1	29.2	AS	10	PANLAU	*Panchovia laurentii*
14	1	10.9	AS	5	DIOBIP	*Diospyros bipindensis*
15	1	68.9	AS	20	ONGGOR	*Ongokea gore*
16	1	10.9	AS	7	ONCGLA	*Oncoba glauca*
17	1	41.1	AS	17	MAMAFR	*Mammea africana*
18	1	29.2	AS	15	HEXSP	*Hexalobus sp*
19	1	19.8	AS	10	DRYGOS	*Drypetes gossweileri*
20	1	12.1	AS	12	BLISAP	*Blighia sapida*

Quadrat: 9

1	1	16.3	AS	8	GROMAC	*Grossera macrantha*
2	1	19	AS	10	SCOCOR	*Scottellia coriacea*
3	1	13	AL	10	DASSP	*Dasylepsis sp*
4	1	24.3	AS	14	SANTRI	*Santiria trimera*
5	1	19.7	AB	6	COLACU	*Cola acuminata*
6	1	18.9	AS	10	ONCMAN	*Oncoba Manii*
7	1	25.5	AS	13	GAMBOU	*Gambeya boukokowensis*
8	1	18.7	AL	7	SAPSP1	*Sapotaceae indet*
9	1	15.9	AS	11	ERYSUA	*Erythrophloeum suaveolens*
10	1	10.2	AB	5	DICGLA	*Dichostema glaucescens*
11	1	15.6	AS	6	TRIACU	*trichoscypha acuminata*
12	1	11.7	AS	8	DIOBIP	*Diospyros bipindensis*
13	1	10.3	AB	5	DACEDU	*Dacryodes edulis*

14	1	13.8	AS	8	CARSP	*Carapa sp*
15	1	30.5	AS	10	ANOMAN	*Anonidium mannii*
16	1	69	AS	18	CELTES	*Celtis tessmannii*
17	1	38.8	AS	11	GAMBOU	*Gambeya boukokowensis*
		Quadrat: 10				
1	1	32.9	AS	15	GAMBOU	*Gambeya boukokowensis*
2	1	10.5	AS	6	SANTRI	*Santiria trimera*
3	1	20.1	AS	10	CARSP	*Carapa sp*
4	1	17	AS	12	XYLPAR	*Xylopia cf. parviflora*
5	1	15.6	AS	10	MACSPI	*Macaranga spinosa*
6	1	47.8	AS	15	NESPAP	*Nesogodornia papaverifera*
7	1	14.7	AS	12	DIAPAC	*Dialium pachyphyllum*
8	1	13.3	AS	6	ONCMAN	*Oncoba Manii*
9	1	14.5	AS	7	ENDCAL	*Endodesmia callophylloides*
10	1	16.5	AB	6	GUATHO	*Guarea thompsonii*
11	1	17.6	AS	6	GROMAC	*Grossera macrantha*
		Quadrat: 11				
1	1	38	AS	20	GUATHO	*Guarea thompsonii*
2	1	18.8	AS	13	DASSP	*Dasylepsis sp*
3	1	12.8	AS	10	LACPSE	*Laccodiscus pseudostipularis*
4	1	47	AS	15	ALLFLO	*Allanblackii floribunda*
5	1	13.2	AS	8	DASSP	*Dasylepsis sp*
6	1	20.5	AB	6	TRIPRI	*Trichilia prieuriana*
7	1	14.7	AS	10	LACPSE	*Laccodiscus pseudostipularis*
8	1	10.8	AS	6	DRYGIL	*Drypetes gilgiana*
9	1	26.9	AS	12	GARPUN	*Garcinia punctata*
10	1	22.2	AS	13	PANLAU	*Panchovia laurentii*
11	1	51.6	AS	18	GAMBOU	*Gambeya boukokowensis*
12	1	40.6	AS	20	DRYLEO	*Drypetes leonensis*
13	1	25.8	AB	7	DACEDU	*Dacryodes edulis*
14	1	13.6	AL	5	RINWEL	*Rinorea welwitschii*
		Quadrat: 12				
1	1	13.1	DS	5	INDET	
2	1	11.8	AS	7	DASSP	*Dasylepsis sp*
3	1	17.9	AS	11	GAMBOU	*Gambeya boukokowensis*
4	1	24.8	AS	10	BLISAP	*Blighia sapida*
5	1	13.5	AS	5	DRYGOS	*Drypetes gossweileri*
6	1	11.2	AS	6	SANTRI	*Santiria trimera*
7	1	13.4	AS	10	PANLAU	*Panchovia laurentii*
8	1	14	AS	6	MANLET	*Manilkara Letouzeyi*
9	1	16.4	AL	9	DIOCAN	*Diospyros caniculata*
10	1	21.5	AL	12	GARPUN	*Garcinia punctata*
11	1	14.3	AL	6	DIOCAN	*Diospyros caniculata*
12	1	10.9	AS	10	RINWEL	*Rinorea welwitschii*

13	1	10.8	AL	6	FUNELA	*Funtumia elastica*
14	1	13.5	AS	7	TESAFR	*Tessmannia africana*
15	1	18.8	AS	10	PANLAU	*Panchovia laurentii*
16	1	78.4	AS	25	IRVGAB	*Irvingia gabonensis*
17	1	33.6	AS	12	CELTES	*Celtis tessmannii*

Quadrat: 13

1	1	32.1	AS	15	DIOITU	*Diospyrus iturensis*
2	1	14	AL	6	STRTET	*Strombosiopsis tetrandra*
3	1	31.5	AS	10	SYNSTI	*Synsepalum stipulatum*
4	1	15.2	AS	8	CARSP	*Carapa sp*
5	1	10	AS	7	DASSP	*Dasylepsis sp*
6	1	11.5	AL	6	ZANTES	*Zanthoxyllum tessmannii*
7	1	12.3	AS	3	ONCWEL	*Oncoba welwitchii*
8	1	108	AS	20	PYCMIC	*Picnanthus cf. microcephalus*

Quadrat: 14

1	1	17.5	AS	10	GROMAC	*Grossera macrantha*
2	1	13.5	AS	10	DIOITU	*Diospyrus iturensis*
3	1	11.1	AS	10	STRPUS	*Strombosia pustulata*
4	1	46.1	AS	15	FUNELA	*Funtumia elastica*
5	1	52.3	AS	13	GAMBOU	*Gambeya boukokowensis*
6	1	19.5	DS	8	DASSP	*Dasylepsis sp*
7	1	22	AS	10	DESDEW	*Desplatsia dewevrei*
8	1	10	AS	4	RINWEL	*Rinorea welwitschii*
9	1	13.3	AS	9	GRESUA	*Greenwayodendron suaveolens*
10	1	27.9	AS	16	DRYLEO	*Drypetes leonensis*
11	1	10.1	AS	5	MASACU	*Massularia acuminata*
12	1	15.1	AS	7	CARSP	*Carapa sp*
13	1	27.3	AS	10	ONCWEL	*Oncoba welwitchii*
14	1	34.3	AS	14	SANTRI	*Santiria trimera*
15	1	10.4	DS	7	DASSP	*Dasylepsis sp*
16	1	18.7	AS	10	CELZEN	*Celtis zenkeri*
17	1	37.3	AS	17	ANOMAN	*Anonidium mannii*
18	1	38	AS	15	ANOMAN	*Anonidium mannii*
19	1	16.8	AS	10	ALLFLO	*Allanblackii floribunda*
20	1	10.6	AB	5	GROMAC	*Grossera macrantha*
21	1	15.5	AS	13	DIOBIP	*Diospyros bipindensis*
22	1	16.2	AS	10	SANTRI	*Santiria trimera*

Quadrat: 15

1	1	11.1	AS	7	DICGLA	*Dichostema glaucescens*
2	1	10.4	AS	6	RINWEL	*Rinorea welwitschii*
3	1	42	AS	12	DRYLEO	*Drypetes leonensis*
4	1	13.6	AS	6	DICGLA	*Dichostema glaucescens*
5	1	17.7	AS	8	ANOMAN	*Anonidium mannii*
6	1	11.7	AS	7	ENTSP	*Entandophragma sp*

7	1	13.1	AS	6	CELZEN	*Celtis zenkeri*
8	1	51.8	AS	20	STRPUS	*Strombosia pustulata*
9	1	34.6	AS	12	PANLAU	*Panchovia laurentii*
10	1	11.5	AS	5	DIOBIP	*Diospyros bipindensis*
11	1	22.5	AS	9	DASSP	*Dasylepsis sp*
12	1	12.4	AS	6	DIOITU	*Diospyrus iturensis*
13	1	12.6	AS	6	ENTSP	*Entandophragma sp*
14	1	10.8	AS	7	DIOITU	*Diospyrus iturensis*
15	1	10.9	AS	5	TRIPRI	*Trichilia prieuriana*
16	1	14.1	AS	6	DASSP	*Dasylepsis sp*
17	1	83.3	AS	27	PTESOY	*Pterocarpus soyauxii*
18	1	22	AS	8	DASSP	*Dasylepsis sp*
19	1	13.5	AS	7	DIOCAN	*Diospyros caniculata*
20	1	15.9	AS	9	DIOITU	*Diospyrus iturensis*

Quadrat: 16

1	1	26.5	AS	13	DASSP	*Dasylepsis sp*
2	1	10.2	AB	5	DASSP	*Dasylepsis sp*
3	1	15.9	AS	7	DASSP	*Dasylepsis sp*
4	1	11.3	AS	5	DASSP	*Dasylepsis sp*
5	1	29.3	AS	14	DASSP	*Dasylepsis sp*
6	1	13	AS	6	DASSP	*Dasylepsis sp*
7	1	12.3	AS	5	DASSP	*Dasylepsis sp*
8	1	28.3	AS	16	DRYGOS	*Drypetes gossweileri*
9	1	10.3	AS	6	MASACU	*Massularia acuminata*
10	1	15.2	AS	5	CARSP	*Carapa sp*
11	1	23.8	AL	6	ENT	*Entandophragma sp 1*
12	1	14.3	AS	5	CAR	*Carapa sp*
13	1	11.7	AS	5	ONCMAN	*Oncoba Manii*
14	1	28.6	AS	10	GRE	*Grewia sp*
15	1	14.1	AS	7	MANLET	*Manilkara Letouzeyi*

Quadrat: 17

1	1	14.6	AS	8	GROMAC	*Grossera macrantha*
2	1	18.8	AB	5	DASSP	*Dasylepsis sp*
3	1	16.5	AS	5	DASSP	*Dasylepsis sp*
4	1	20.4	AS	10	STRPUS	*Strombosia pustulata*
5	1	14.2	AS	7	DIOITU	*Diospyrus iturensis*
6	1	21.5	AS	7	DASSP	*Dasylepsis sp*
7	1	20.2	AS	6	DASSP	*Dasylepsis sp*
8	1	31	AS	10	DIOMAN	*Diospyros mannii*
9	1	41.9	AS	14	CELTES	*Celtis tessmannii*
10	1	13.5	AS	7	DIOITU	*Diospyrus iturensis*
11	1	14.8	AS	5	MASACU	*Massularia acuminata*
12	1	17.8	AS	5	DIOBIP	*Diospyros bipindensis*
13	1	120	AS	23	IRVROB	*Irvingia robur*
14	1	81.6	AS	24	MANLET	*Manilkara Letouzeyi*
15	1	15	AB	5	DRYGIL	*Drypetes gilgiana*

Quadrat: 18

1	1	21.1	AS	12	PANLAU	*Panchovia laurentii*
2	1	19.2	AS	9	DASSP	*Dasylepsis sp*
3	1	15	AS	10	DIOITU	*Diospyrus iturensis*
4	1	10.3	DS	7	DASSP	*Dasylepsis sp*
5	1	22.7	AL	10	DASSP	*Dasylepsis sp*
6	1	12.4	AL	5	DRYGIL	*Drypetes gilgiana*
7	1	12.1	AS	6	GRESUA	*Greenwayodendron suaveolens*
8	1	11.1	AL	7	SLOUSA	*Sloetiopsis usambarensis*
9	1	12.4	AL	7	DIOITU	*Diospyrus iturensis*
10	1	10.9	AL	4	SLOUSA	*Sloetiopsis usambarensis*
11	1	10	AS	5	DIOBIP	*Diospyros bipindensis*
12	1	50.3	AS	20	MAMAFR	*Mammea africana*
13	1	12.4	AS	7	BLISAP	*Blighia sapida*
14	1	14.4	AS	7	MANLET	*Manilkara Letouzeyi*
15	1	14	AS	17	GRESUA	*Greenwayodendron suaveolens*
16	1	26.6	AS	7	DASSP	*Dasylepsis sp*
17	1	10.8	AS	6	DIOCAN	*Diospyros caniculata*

Quadrat: 19

1	1	22.5	AS	16	GARPUN	*Garcinia punctata*
2	1	30	AS	13	UNKNOWN	*unknown unknown*
3	1	27.9	AS	0	NESPAP	*Nesogodornia papaverifera*
4	1	12.3	AL	6	CARSP	*Carapa sp*
5	1	23.3	AS	10	ZANTS	*Zanthoxylum ts*
6	1	14.8	AS	7	CAN1	*unknown unknown*
7	1	25.1	AS	8	PAN1	*unknown unknown*
8	1	10.4	AS	6	DICGLA	*Dichostema glaucescens*
9	1	19.9	AS	9	DASSP	*Dasylepsis sp*
10	1	11	AS	5	SLOUSA	*Sloetiopsis usambarensis*
11	1	10.1	AS	6	MASACU	*Massularia acuminata*
12	1	42.4	AB	10	DIOMAN	*Diospyros mannii*
13	1	79	AS	22	COPMIL	*Copaifera mildbraedii*
14	1	68.4	AS	14	DIAPAC	*Dialium pachyphyllum*
15	1	12.7	AB	3	MASACU	*Massularia acuminata*
16	1	13.7	AS	6	SANTRI	*Santiria trimera*

Quadrat: 20

1	1	11.3	AB	5	COPMIL	*Copaifera mildbraedii*
2	1	24	AF	15	SCOCOR	*Scottellia coriacea*
3	1	15.8	AS	10	GRESUA	*Greenwayodendron suaveolens*
4	1	51.2	AS	18	ANOMAN	*Anonidium mannii*
5	1	10.5	AS	5	STRPUS	*Strombosia pustulata*
7	1	11.7	AS	6	DICGLA	*Dichostema glaucescens*
8	1	20.1	DS	10	DASSP	*Dasylepsis sp*
9	1	10	AB	11	HEXCRI	*Hexalobus crispiflorus*

10	1	69.9	DS	11	DASSP	*Dasylepsis sp*
11	1	10.5	AS	4	RINWEL	*Rinorea welwitschii*
12	1	10.9	AS	8	DRYGIL	*Drypetes gilgiana*
13	1	12	AS	10	DRY1	*Drypetes sp 1*
14	1	46.2	AB	10	ANOMAN	*Anonidium mannii*

Quadrat: 21

1	1	10	AS	4	ANOMAN	*Anonidium mannii*
2	1	20.7	AB	6	GUATHO	*Guarea thompsonii*
3	1	13.16	AS	0	MANLET	*Manilkara Letouzeyi*
4	1	19.8	AS	10	TETDID	*Tetrorchidium didymostemon*
5	1	14.7	AS	6	GROMAC	*Grossera macrantha*
6	1	29.9	AS	13	SANTRI	*Santiria trimera*
7	1	10.6	AS	5	DIOBIP	*Diospyros bipindensis*
8	1	31.2	AS	14	MANLET	*Manilkara Letouzeyi*
9	1	23.5	AS	12	MANLET	*Manilkara Letouzeyi*
10	1	50.3	AS	16	SYNSTI	*Synsepalum stipulatum*
11	1	22.9	AS	12	PAUMAC	*Pausinystalia macroceras*
12	1	16	AS	10	DASSP	*Dasylepsis sp*
13	1	10	AS	2	RINWEL	*Rinorea welwitschii*
14	1	29.9	AL	10	CARSP	*Carapa sp*
15	1	12.8	AS	8	DIOITU	*Diospyrus iturensis*
16	1	12.5	AS	10	DRY1	*Drypetes sp 1*
17	1	13.9	AS	10	DIOITU	*Diospyrus iturensis*
18	1	12	AS	6	GRESUA	*Greenwayodendron suaveolens*
19	1	12.9	AS	6	DIOITU	*Diospyrus iturensis*
20	1	13.8	AS	7	DIOCAN	*Diospyros caniculata*
21	1	11.1	AS	5	DIOITU	*Diospyrus iturensis*
22	1	22	AS	12	MAMAFR	*Mammea africana*
23	1	80	AS	18	MANLET	*Manilkara Letouzeyi*
24	1	11.9	AS	7	GRESUA	*Greenwayodendron suaveolens*
25	1	47.6	AS	21	MANLET	*Manilkara Letouzeyi*
26	1	67.2	AS	25	NESPAP	*Nesogodornia papaverifera*
27	1	15.7	AS	6	GRESUA	*Greenwayodendron suaveolens*
28	1	22.9	AS	15	STEBEQ	*Sterculia bequaertii*
29	1	10.6	AS	5	CARSP	*Carapa sp*
30	1	42.5	DS	10	DASSP	*Dasylepsis sp*

Quadrat: 22

1	1	39.3	AS	12	STRGRA	*Strombosia grandifolia*
2	1	24.1	AS	12	ENDCAL	*Endodesmia callophylloides*
3	1	11.4	AS	6	GROMAC	*Grossera macrantha*
4	1	15.4	AS	7	DIOCAN	*Diospyros caniculata*
5	1	11.2	AS	6	CAN1	*unknown unknown*
6	1	74	AS	21	SYZ	*Syzigium sp*
7	1	11.8	AS	5	RAUVOM	*Rauvolfia vomitoria*
8	1	10.5	AL	5	SLOUSA	*Sloetiopsis usambarensis*
9	1	10.5	AL	8	DASSP	*Dasylepsis sp*

10	1	12.7	AS	5	DIOITU	*Diospyrus iturensis*
11	1	42.1	AB	17	INDET2	
12	1	21.7	AS	8	DASSP	*Dasylepsis sp*
13	1	17.7	AS	10	BLISAP	*Blighia sapida*
14	1	12.5	AS	5	TABPEN	*Tabernaemontana penduliflora*
15	1	18.8	AS	5	DIOITU	*Diospyrus iturensis*
16	1	11.9	AS	5	RINWEL	*Rinorea welwitschii*
17	1	21.6	AS	8	ANGPYN	*Angylocalyx pynaertii*
18	1	10.7	AS	5	ISO2	*Isolona sp*
19	1	14.6	AF	10	BEIOBS	*Beilschmieda Obscura*

Quadrat: 23

1	1	16	AS	8	ISOTHO	*Isolona thonerii*
2	1	36.8	AS	15	SANTRI	*Santiria trimera*
3	1	10.3	AS	5	LECCUP	*Lecaniodiscus cupanioides*
4	1	11.4	AS	8	PAUMAC	*Pausinystalia macroceras*
5	1	26.3	AS	10	DIOITU	*Diospyrus iturensis*
6	1	16.5	AS	10	PHYLET	*Phyllanthus cf. letouzeyanus*
7	1	11.9	AS	7	MANLET	*Manilkara Letouzeyi*
8	1	29.7	AS	13	PAUMAC	*Pausinystalia macroceras*
9	1	11.1	AS	5	GRESUA	*Greenwayodendron suaveolens*
10	1	10	AL	6	SLOUSA	*Sloetiopsis usambarensis*
11	1	13.4	DS	5	DASSP	*Dasylepsis sp*
12	1	20.1	AS	9	SYNSTI	*Synsepalum stipulatum*
13	1	26.7	AS	13	STRPUS	*Strombosia pustulata*
14	1	17.5	AS	10	TRIPRI	*Trichilia prieuriana*

Quadrat: 24

1	1	14.4	AS	5	MASACU	*Massularia acuminata*
2	1	18.5	AS	7	DISGLA	*Discoglypremna gla*
3	1	14.5	AS	6	RINOBL	*Rinorea oblongifolia*
4	1	20.1	AS	10	DASSP	*Dasylepsis sp*
5	1	11.2	AS	6	DRYLEO	*Drypetes leonensis*
6	1	17.3	AS	10	PAUMAC	*Pausinystalia macroceras*
7	1	10	AS	5	DRYGIL	*Drypetes gilgiana*
8	1	21.1	AS	10	GRESUA	*Greenwayodendron suaveolens*
9	1	20.5	AS	10	MAMAFR	*Mammea africana*
10	1	12.3	AS	7	GUATHO	*Guarea thompsonii*
11	1	37.8	AS	16	GRESUA	*Greenwayodendron suaveolens*
12	1	13	AS	10	DICGLA	*Dichostema glaucescens*
13	1	31.6	AS	10	ANOMAN	*Anonidium mannii*
14	1	18.1	AS	12	XYLPAR	*Xylopia cf. parviflora*
15	1	10.4	AB	5	SLOUSA	*Sloetiopsis usambarensis*
16	1	13.2	AS	7	SLOUSA	*Sloetiopsis usambarensis*
17	1	19.7	AS	11	DRYLEO	*Drypetes leonensis*
18	1	57.8	AS	20	CROMAC	*Croton macrostasyus*
19	1	23.1	AS	10	GRESUA	*Greenwayodendron suaveolens*
20	1	17	AS	11	DICGLA	*Dichostema glaucescens*

21	1	42.1	AS	14	PHYDIS	*Phyllanthus discoideus*
22	1	23.2	AS	9	LECCUP	*Lecaniodiscus cupanioides*
23	1	11.6	AS	7	TABCRA	*Tabernaemontana crassa*
24	1	10.1	AS	5	DICGLA	*Dichostema glaucescens*
25	1	14	AS	7	TRIPRI	*Trichilia prieuriana*
26	1	11.2	AS	10	PAUMAC	*Pausinystalia macroceras*
27	1	19.2	AL	6	CELTES	*Celtis tessmannii*

Quadrat: 25

1	1	39.5	AS	21	STAKAM	*Staudtia kamerunensis*
2	1	27.2	AS	12	XYLPAR	*Xylopia cf. parviflora*
3	1	20.4	AB	8	DIOITU	*Diospyrus iturensis*
4	1	41.6	AS	13	STRPUS	*Strombosia pustulata*

SPECIES FREQUENCY (PLOT 1)

Sp Code	Total Trees	Total Stems	Average DBH(cm)	Basal Area	Relative Density	Relative Dominance	Relative Frequency	IVI
DASSP	33	33	17.58	0.801	7.97	3.45	4.65	16.07
MANLET	13	13	38.2	1.49	3.14	6.41	2.33	11.88
DIOITU	24	24	15.619	0.46	5.8	1.98	3.78	11.56
ANOMAN	12	12	30.523	0.878	2.9	3.78	2.62	9.3
GAMBOU	8	8	38.807	0.946	1.93	4.07	2.03	8.04
STRPUS	9	9	32.507	0.747	2.17	3.22	2.62	8.01
GRESUA	15	15	18.386	0.398	3.62	1.71	2.62	7.95
DICGLA	13	13	13.099	0.175	3.14	0.75	2.91	6.8
DIOBIP	12	12	12.803	0.154	2.9	0.67	2.91	6.47
SANTRI	9	9	23.097	0.377	2.17	1.62	2.33	6.12
GROMAC	12	12	14.231	0.191	2.9	0.82	2.33	6.05
CARSP	10	10	16.583	0.216	2.42	0.93	2.62	5.96
PANLAU	9	9	21.828	0.337	2.17	1.45	2.03	5.66
GUATHO	8	8	24.015	0.362	1.93	1.56	2.03	5.53
DRYLEO	8	8	25.517	0.409	1.93	1.76	1.74	5.44
IRVROB	1	1	120	1.131	0.24	4.87	0.29	5.4
PTESOY	2	2	76.62	0.922	0.48	3.97	0.58	5.03
NESPAP	4	4	45.472	0.65	0.97	2.8	1.16	4.93
CELTES	4	4	44.761	0.629	0.97	2.71	1.16	4.84
RINWEL	8	8	11.095	0.077	1.93	0.33	2.33	4.59
PYCMIC	1	1	108	0.916	0.24	3.94	0.29	4.48
AUTCON	1	1	104.5	0.858	0.24	3.69	0.29	4.22
IRVGAB	3	3	48.035	0.544	0.72	2.34	0.87	3.94
DIOCAN	7	7	13.832	0.105	1.69	0.45	1.74	3.89
MAMAFR	4	4	35.789	0.402	0.97	1.73	1.16	3.86
ONGGOR	2	2	63.593	0.635	0.48	2.73	0.58	3.8
BLISAP	6	6	17.233	0.14	1.45	0.6	1.74	3.8
SLOUSA	7	7	11.056	0.067	1.69	0.29	1.45	3.43
BEIOBS	5	5	21.198	0.176	1.21	0.76	1.45	3.42
STRTET	4	4	30.872	0.299	0.97	1.29	1.16	3.42
MACSPI	5	5	24.865	0.243	1.21	1.05	1.16	3.42
TRIPRI	5	5	21.093	0.175	1.21	0.75	1.45	3.41
PAUMAC	6	6	19.155	0.173	1.45	0.74	1.16	3.36
COPMIL	2	2	56.43	0.5	0.48	2.15	0.58	3.22
MASACU	6	6	12.232	0.071	1.45	0.3	1.45	3.21
SCOCOR	5	5	17.714	0.123	1.21	0.53	1.45	3.19
STAKAM	3	3	37.907	0.339	0.72	1.46	0.87	3.05
ONCMAN	5	5	14.751	0.085	1.21	0.37	1.45	3.03
SYNSTI	3	3	36.177	0.308	0.72	1.33	0.87	2.92
DRYGIL	5	5	11.952	0.056	1.21	0.24	1.45	2.9
GARPUN	4	4	22.491	0.159	0.97	0.68	1.16	2.81
ONCWEL	4	4	21.786	0.149	0.97	0.64	1.16	2.77
DIAPAC	2	2	49.47	0.384	0.48	1.66	0.58	2.72
XYLPAR	4	4	19.865	0.124	0.97	0.53	1.16	2.66
DACEDU	4	4	19.154	0.115	0.97	0.5	1.16	2.63
TETTET	2	2	46.297	0.337	0.48	1.45	0.58	2.51

LECCUP	4	4	16.2	0.082	0.97	0.35	1.16	2.48
CELZEN	4	4	14.504	0.066	0.97	0.28	1.16	2.41
SYZ	1	1	74	0.43	0.24	1.85	0.29	2.38
unknown	4	4	21.648	0.147	0.97	0.63	0.58	2.18
ENTSP	4	4	15.128	0.072	0.97	0.31	0.87	2.15
DRYGOS	3	3	21.41	0.108	0.72	0.46	0.87	2.06
GAMLAC	2	2	38.336	0.231	0.48	0.99	0.58	2.06
DIOMAN	2	2	37.14	0.217	0.48	0.93	0.58	2
LOVTRI	2	2	36.615	0.211	0.48	0.91	0.58	1.97
ALLFLO	2	2	35.293	0.196	0.48	0.84	0.58	1.91
FUNELA	2	2	33.48	0.176	0.48	0.76	0.58	1.82
CROMAC	1	1	57.8	0.262	0.24	1.13	0.29	1.66
MARLUT	2	2	27.23	0.116	0.48	0.5	0.58	1.57
ISOTHO	2	2	26.251	0.108	0.48	0.47	0.58	1.53
LACPSE	3	3	14.707	0.051	0.72	0.22	0.58	1.53
ENDCAL	2	2	19.888	0.062	0.48	0.27	0.58	1.33
TETDID	2	2	19.601	0.06	0.48	0.26	0.58	1.32
COLACU	2	2	18.539	0.054	0.48	0.23	0.58	1.3
ISOSP	2	2	16.635	0.043	0.48	0.19	0.58	1.25
TESAFR	2	2	15.075	0.036	0.48	0.15	0.58	1.22
AFRLEP	2	2	13.762	0.03	0.48	0.13	0.58	1.19
RAUVOM	2	2	13.607	0.029	0.48	0.13	0.58	1.19
DRY1	2	2	12.253	0.024	0.48	0.1	0.58	1.17
TABCRA	2	2	10.83	0.018	0.48	0.08	0.58	1.14
PHYDIS	1	1	42.1	0.139	0.24	0.6	0.29	1.13
INDET2	1	1	42.1	0.139	0.24	0.6	0.29	1.13
STRGRA	1	1	39.3	0.121	0.24	0.52	0.29	1.05
TRITES	1	1	39.1	0.12	0.24	0.52	0.29	1.05
LOPALA	1	1	36.1	0.102	0.24	0.44	0.29	0.97
MYRARB	1	1	30.3	0.072	0.24	0.31	0.29	0.84
HEXSP	1	1	29.2	0.067	0.24	0.29	0.29	0.82
GRE	1	1	28.6	0.064	0.24	0.28	0.29	0.81
DUBVIR	1	1	28.2	0.062	0.24	0.27	0.29	0.8
ENT	1	1	23.8	0.044	0.24	0.19	0.29	0.72
ZANTS	1	1	23.3	0.043	0.24	0.18	0.29	0.72
STEBEQ	1	1	22.9	0.041	0.24	0.18	0.29	0.71
FABINDET	1	1	22.4	0.039	0.24	0.17	0.29	0.7
DESDEW	1	1	22	0.038	0.24	0.16	0.29	0.7
ANGPYN	1	1	21.6	0.037	0.24	0.16	0.29	0.69
DISCAL	1	1	21.3	0.036	0.24	0.15	0.29	0.69
ALSCON	1	1	19.8	0.031	0.24	0.13	0.29	0.66
SAPSP1	1	1	18.7	0.027	0.24	0.12	0.29	0.65
DISGLA	1	1	18.5	0.027	0.24	0.12	0.29	0.65
PANSP	1	1	18.5	0.027	0.24	0.12	0.29	0.65
COLLAT	1	1	18.5	0.027	0.24	0.12	0.29	0.65
OCHAFR	1	1	17.6	0.024	0.24	0.1	0.29	0.64
AFZBIP	1	1	17.3	0.024	0.24	0.1	0.29	0.63
PHYLET	1	1	16.5	0.021	0.24	0.09	0.29	0.62
ERYSUA	1	1	15.9	0.02	0.24	0.09	0.29	0.62
TRIACU	1	1	15.6	0.019	0.24	0.08	0.29	0.61

RINOBL	1	1	14.5	0.017	0.24	0.07	0.29	0.6
CAR	1	1	14.3	0.016	0.24	0.07	0.29	0.6
LEPSTA	1	1	14.2	0.016	0.24	0.07	0.29	0.6
PANOLE	1	1	12.5	0.012	0.24	0.05	0.29	0.59
TABPEN	1	1	12.5	0.012	0.24	0.05	0.29	0.59
DRYAFR	1	1	12	0.011	0.24	0.05	0.29	0.58
ZANTES	1	1	11.5	0.01	0.24	0.04	0.29	0.58
DRYINA	1	1	11.2	0.01	0.24	0.04	0.29	0.57
ONCGLA	1	1	10.9	0.009	0.24	0.04	0.29	0.57
ISO2	1	1	10.7	0.009	0.24	0.04	0.29	0.57
PICNIT	1	1	10.6	0.009	0.24	0.04	0.29	0.57
ALLAFR	1	1	10.5	0.009	0.24	0.04	0.29	0.57
HEXCRI	1	1	10	0.008	0.24	0.03	0.29	0.57
	414	414	2940.722	23.221	99.89	99.95	99.88	299.99

SPECIES LIST (PLOT I)

Sp Code	Genus	Species	
AFRLEP	*Afrostyrax*	*lepidophyllus*	1
AFZBIP	*Afzelia*	*bipindensis*	2
ALLAFR	*Allophylus*	*africanus*	3
ALLFLO	*Allanblackii*	*floribunda*	4
ALSCON	*Alstonia*	*Congensis*	5
ANGPYN	*Angylocalyx*	*pynaertii*	6
ANOMAN	*Anonidium*	*mannii*	7
AUTCON	*Autranella*	*Congolensis*	8
BEIOBS	*Beilschmieda*	*Obscura*	9
BLISAP	*Blighia*	*sapida*	10
CARSP	*Carapa*	*sp*	11
CELTES	*Celtis*	*tessmannii*	12
CELZEN	*Celtis*	*zenkeri*	13
COLACU	*Cola*	*acuminata*	14
COLLAT	*Cola*	*latericia*	15
COPMIL	*Copaifera*	*mildbraedii*	16
CROMAC	*Croton*	*macrostasyus*	17
DACEDU	*Dacryodes*	*edulis*	18
DASSP	*Dasylepsis*	*sp*	19
DESDEW	*Desplatsia*	*dewevrei*	20
DIAPAC	*Dialium*	*pachyphyllum*	21
DICGLA	*Dichostema*	*glaucescens*	22
DIOBIP	*Diospyros*	*bipindensis*	23
DIOCAN	*Diospyros*	*caniculata*	24
DIOITU	*Diospyrus*	*iturensis*	25
DIOMAN	*Diospyros*	*mannii*	26
DISCAL	*Discoglypremna*	*caloneura*	27
DISGLA	*Discoglypremna*	*glabra*	28
DRY1	*Drypetes*	*sp 1*	29
DRYAFR	*Drypetes*	*aframensis*	30
DRYGIL	*Drypetes*	*gilgiana*	31
DRYGOS	*Drypetes*	*gossweileri*	32
DRYINA	*Drypetes*	*cf. inaequalis*	33
DRYLEO	*Drypetes*	*leonensis*	34
DUBVIR	*Duboscia*	*viridiflora*	35
ENDCAL	*Endodesmia*	*callophylloides*	36
ENT	*Entandophragma*	*sp 1*	37
ENTSP	*Entandophragma*	*sp*	38
ERYSUA	*Erythrophloeum*	*suaveolens*	39
FABINDET	*Fabaceae*	*indet*	40
FUNELA	*Funtumia*	*elastica*	41
GAMBOU	*Gambeya*	*boukokowensis*	42
GAMLAC	*Gambeya*	*lacourtiana*	43
GARPUN	*Garcinia*	*punctata*	44
GRE	*Grewia*	*sp*	45
GRESUA	*Greenwayodendron*	*suaveolens*	46
GROMAC	*Grossera*	*macrantha*	47

GUATHO	*Guarea*	*thompsonii*	48
HEXCRI	*Hexalobus*	*crispiflorus*	49
HEXSP	*Hexalobus*	*sp*	50
INDET	*INDET*	*INDET*	51
INDET2	*INDET2*	*INDET2*	52
IRVGAB	*Irvingia*	*gabonensis*	53
IRVROB	*Irvingia*	*robur*	54
ISOSP2	*Isolona*	*sp2*	55
ISOSP	*Isolona*	*sp*	56
ISOTHO	*Isolona*	*thonerii*	57
LACPSE	*Laccodiscus*	*pseudostipularis*	58
LECCUP	*Lecaniodiscus*	*cupanioides*	59
LEPSTA	*Lepidobotrys*	*staudtii*	60
LOPALA	*Lophira*	*alata*	61
LOVTRI	*Lovoa*	*trichiloides*	62
MACSPI	*Macaranga*	*spinosa*	63
MAMAFR	*Mammea*	*africana*	64
MANLET	*Manilkara*	*Letouzeyi*	65
MARLUT	*Markhamia*	*lutea*	66
MASACU	*Massularia*	*acuminata*	67
MYRARB	*Myrianthus*	*arboreus*	68
NESPAP	*Nesogodornia*	*papaverifera*	69
OCHAFR	*Ochthocosmus*	*africanus*	70
ONCGLA	*Oncoba*	*glauca*	71
ONCMAN	*Oncoba*	*Manii*	72
ONCWEL	*Oncoba*	*welwitchii*	73
ONGGOR	*Ongokea*	*gore*	74
PANLAU	*Panchovia*	*laurentii*	75
PANOLE	*Panda*	*oleosa*	76
PANSP	*Pancovia*	*sp*	77
PAUMAC	*Pausinystalia*	*macroceras*	78
PHYDIS	*Phyllanthus*	*discoideus*	79
PHYLET	*Phyllanthus*	*cf. letouzeyanus*	80
PICNIT	*Picralima*	*nitida*	81
PTESOY	*Pterocarpus*	*soyauxii*	82
PYCMIC	*Picnanthus*	*cf. microcephalus*	83
RAUVOM	*Rauvolfia*	*vomitoria*	84
RINOBL	*Rinorea*	*oblongifolia*	85
RINWEL	*Rinorea*	*welwitschii*	86
SANTRI	*Santiria*	*trimera*	87
SAPSP1	*Sapotaceae*	*indet*	88
SCOCOR	*Scottellia*	*coriacea*	89
SLOUSA	*Sloetiopsis*	*usambarensis*	90
STAKAM	*Staudtia*	*kamerunensis*	91
STEBEQ	*Sterculia*	*bequaertii*	92
STRGRA	*Strombosia*	*grandifolia*	93
STRPUS	*Strombosia*	*pustulata*	94
STRTET	*Strombosiopsis*	*tetrandra*	95
SYNSTI	*Synsepalum*	*stipulatum*	96
SYZ	*Syzigium*	*sp*	97

TABCRA	*Tabernaemontana*	*crassa*	98
TABPEN	*Tabernaemontana*	*penduliflora*	99
TESAFR	*Tessmannia*	*africana*	100
TETDID	*Tetrorchidium*	*didymostemon*	101
TETTET	*Tetrapleura*	*tetraptera*	102
TRIACU	*trichoscypha*	*acuminata*	103
TRIPRI	*Trichilia*	*prieuriana*	104
TRITES	*Trichilia*	*tessmannii*	105
XYLPAR	*Xylopia*	*cf. parviflora*	106
ZANTES	*Zanthoxyllum*	*tessmannii*	107
unknown	*unknown*	*unknown*	108

PLOT 2

QUADRATS

Quadrat 1

Tree No	Stem No	Dbh	Status	Height	Sp Code	*Species*
1	1	23	AS	7	COLBAL	*Cola ballayi*
2	1	19	AS	7	DASSP	*Dasylepsis sp*
3	1	17	AS	8	GROMAC	*Grossera macrantha*
4	1	18	AL	10	GROMAC	*Grossera macrantha*
5	1	17	AS	8	DIOITU	*Diospyrus iturensis*
6	1	13	AS	7	DASSP	*Dasylepsis sp*
7	1	18	AS	10	ENTSP	*Entandophragma sp*
8	1	53	AS	15	DRYGRO	*Drypetes gro*
9	1	17	AS	10	CARSP	*Carapa sp*
10	1	14	AS	8	PANLAU	*Panchovia laurentii*
11	1	35	AS	12	BLIWEL	*Blighia welwitschii*
12	1	69	AS	17	IRVGAB	*Irvingia gabonensis*
13	1	14	AS	6	GROMAC	*Grossera macrantha*
14	1	23	AS	9	DASSP	*Dasylepsis sp*
15	1	18	AS	8	DASSP	*Dasylepsis sp*
16	1	34	AS	12	DRYLEO	*Drypetes leonensis*

Quadrat 2

1	1	44	AL	13	ANOMAN	*Anonidium mannii*
2	1	91	AS	21	GAMLAC	*Gambeya lacourtiana*
3	1	23	AS	11	GRESUA	*Greenwayodendron suaveolens*
4	1	77	AS	15	MACSPI	*Macaranga spinosa*
5	1	50	AS	13	TRIHEU	*Trichilia heudelotti*

Quadrat 3

1	1	18	AS	7	DASSP	*Dasylepsis sp*
2	1	24	AB	10	DIAZEN	*Dialium zenkeri*
3	1	37	AS	14	MANLET	*Manilkara Letouzeyi*
4	1	25	AS	15	PTESOY	*Pterocarpus soyauxii*
5	1	12	AS	6	STRPUS	*Strombosia pustulata*
6	1	45	AS	12	DUBVIR	*Duboscia viridiflora*
7	1	12	AS	7	GARPUN	*Garcinia punctata*
8	1	37	AS	14	SCOCOR	*Scottellia coriacea*
9	1	30	AS	8	PANOLE	*Panda oleosa*
10	1	36	AS	11	STRTET	*Strombosiopsis tetrandra*
11	1	13	AS	6	DRY1	*Drypetes sp 1*
12	1	26	AS	10	AFRLEP	*Afrostyrax lepidophyllus*
13	1	16	AB	4	DICGLA	*Dichostema glaucescens*

Quadrat 4

1	1	53	AS	15	AFRLEP	*Afrostyrax lepidophyllus*
2	1	11	AS	28	GARPUN	*Garcinia punctata*
3	1	36	AS	20	GRESUA	*Greenwayodendron suaveolens*
4	1	21	AS	16	DASSP	*Dasylepsis sp*
5	1	10	AS	5	GARPUN	*Garcinia punctata*
6	1	30	AS	12	PANLAU	*Panchovia laurentii*
7	1	21	AS	10	DASSP	*Dasylepsis sp*
8	1	55	AS	13	STRPUS	*Strombosia pustulata*
9	1	13	AS	10	DRYLEO	*Drypetes leonensis*
10	1	11	AS	7	PANLAU	*Panchovia laurentii*
11	1	20	AS	14	GARPUN	*Garcinia punctata*
12	1	20	AS	8	ENTCYL	*Entandrophragma cylindricum*
13	1	12	AS	7	DASSP	*Dasylepsis sp*
14	1	27	AS	12	DIAZEN	*Dialium zenkeri*
15	1	40	AS	15	DRYGOS	*Drypetes gossweileri*
16	1	11	AS	6	GRESUA	*Greenwayodendron suaveolens*
17	1	20	AS	10	PAUMAC	*Pausinystalia macroceras*
18	1	62	AS	16	HEXCRI	*Hexalobus crispiflorus*
19	1	15	AS	8	ANGPYN	*Angylocalyx pynaertii*
20	1	56	AS	20	MANLET	*Manilkara Letouzeyi*
21	1	13	AS	13	GARPUN	*Garcinia punctata*

Quadrat 5

1	1	16	AL	6	STAKAM	*Staudtia kamerunensis*
2	1	11	AS	5	HEXCRI	*Hexalobus crispiflorus*
3	1	106	AS	22	INDET4	
4	1	20	AS	7	PANLAU	*Panchovia laurentii*
5	1	21	AS	8	NESPAP	*Nesogodornia papaverifera*
6	1	21	AS	10	GUATHO	*Guarea thompsonii*
7	1	55	AS	17	INDET5	
8	1	15	AS	8	STAKAM	*Staudtia kamerunensis*
9	1	14	AS	7	DRYGOS	*Drypetes gossweileri*
10	1	23	AL	8	BLISAP	*Blighia sapida*
11	1	14	AS	10	GUATHO	*Guarea thompsonii*
12	1	12	AS	5	PANLAU	*Panchovia laurentii*
13	1	10	AS	5	PANLAU	*Panchovia laurentii*
14	1	15	AS	9	ANGPYN	*Angylocalyx pynaertii*
15	1	23	AS	10	PENMAC	*Pentaclethra macrophylla*

Quadrat 6

1	1	20	AS	12	CROMAC	*Croton macrostasyus*
2	1	16	AS	10	TETDID	*Tetrorchidium didymostemon*
3	1	28	AS	12	NESPAP	*Nesogodornia papaverifera*
4	1	13	AS	7	CELTES	*Celtis tessmannii*
5	1	13	AS	6	CARSP	*Carapa sp*
6	1	26	AS	10	ONCMAN	*Oncoba Manii*
7	1	17	AS	13	SANTRI	*Santiria trimera*
8	1	13	AS	7	STAKAM	*Staudtia kamerunensis*

9	1	17	AS	13	SANTRI	*Santiria trimera*
10	1	24	AS	15	TETDID	*Tetrorchidium didymostemon*
11	1	20	AS	8	PANLAU	*Panchovia laurentii*
12	1	56	DS	10	DASSP	*Dasylepsis sp*
13	1	26	AS	12	DASSP	*Dasylepsis sp*
14	1	14	AS	0	DIOITU	*Diospyrus iturensis*
15	1	11	AS	6	GROMAC	*Grossera macrantha*
16	1	25	AS	10	CELTES	*Celtis tessmannii*
17	1	37	AS	13	ANGPYN	*Angylocalyx pynaertii*
18	1	17	AS	10	DASSP	*Dasylepsis sp*
19	1	12	AS	8	TETDID	*Tetrorchidium didymostemon*
20	1	61	AS	15	PACSTA	*Pachypodanthium staudtii*
21	1	12	AS	9	DASSP	*Dasylepsis sp*
22	1	80	AS	25	PETMAC	*Petersianthus macrocarpus*

Quadrat 7

1	1	16	AS	10	ENTSP	*Entandophragma sp*
2	1	24	AS	13	TESAFR	*Tessmannia africana*
3	1	11	AS	7	SANTRI	*Santiria trimera*
4	1	50	AS	13	XYLAET	*Xylopia aethiopica*
5	1	58	AS	18	INDET4	
6	1	13	AS	29.3	MARLUT	*Markhamia lutea*
7	1	10	AS	6	DICGLA	*Dichostema glaucescens*
8	1	14	AS	8	DIOCAN	*Diospyros caniculata*
9	1	28	AS	10	CELTES	*Celtis tessmannii*
10	1	15	AS	10	DASSP	*Dasylepsis sp*
11	1	15	AS	11	TRIOMP	*Tridesmostemon omphalocarpoides*
12	1	15	AS	6	GUATHO	*Guarea thompsonii*
13	1	12	AS	7	SANTRO	*unknown unknown*
14	1	15	AS	6	COLLAT	*Cola latericia*
15	1	17	AS	5	GUATHO	*Guarea thompsonii*
16	1	10	AS	6	DICGLA	*Dichostema glaucescens*

Quadrat 8

1	1	29	AS	12	PENMAC	*Pentaclethra macrophylla*
2	1	16	AL	6	CELTES	*Celtis tessmannii*
3	1	18	AS	8	GARPUN	*Garcinia punctata*
4	1	17	AS	8	ZANTS	*Zanthoxylum ts*
5	1	18	AS	12	CELTES	*Celtis tessmannii*
6	1	16	AS	6	DASSP	*Dasylepsis sp*
7	1	14	AS	8	STAKAM	*Staudtia kamerunensis*
8	1	25	AS	7	HEXCRI	*Hexalobus crispiflorus*
9	1	4	AS	14	PENMAC	*Pentaclethra macrophylla*
10	1	10	AS	6	DIOITU	*Diospyrus iturensis*
11	1	13	AS	6	DICGLA	*Dichostema glaucescens*
12	1	44	AS	14	PANOLE	*Panda oleosa*
13	1	16	AS	6	DASSP	*Dasylepsis sp*
14	1	12	AS	5	DRY1	*Drypetes sp 1*

15	1	46	AS	17	STAKAM	*Staudtia kamerunensis*
16	1	42	AS	16	GRESUA	*Greenwayodendron suaveolens*

Quadrat 9

1	1	20	AS	12	AFRLEP	*Afrostyrax lepidophyllus*
2	1	11	AS	5	MANLET	*Manilkara Letouzeyi*
3	1	11	AS	6	MANLET	*Manilkara Letouzeyi*
4	1	15	AS	8	PAUMAC	*Pausinystalia macroceras*
5	1	18	AS	10	HANKLA	*Hannoa klaineana*
6	1	14	AS	0	MACMON	*Macaranga monandra*
7	1	12	AS	0	PAUFLO	*Pauridiantha floribunda*
8	1	22	AS	0	NESPAP	*Nesogodornia papaverifera*
9	1	11	AS	0	TRITES	*Trichilia tessmannii*
10	1	53	AS	0	MARLUT	*Markhamia lutea*
11	1	14	AS	0	TRIPRI	*Trichilia prieuriana*
12	1	35	AS	0	ZANTES	*Zanthoxyllum tessmannii*
13	1	55	AS	0	STERCF	*cf Pterigota sp*
14	1	19	AS	0	COLLAT	*Cola latericia*
15	1	13	AS	0	DIOITU	*Diospyrus iturensis*
16	1	11	AS	0	DASSP	*Dasylepsis sp*
17	1	71	AS	0	PYCMIC	*Picnanthus cf. microcephalus*
18	1	11	AS	0	PHYDIS	*Phyllanthus discoideus*
19	1	28	AS	0	CELTES	*Celtis tessmannii*
20	1	14	AS	0	STAKAM	*Staudtia kamerunensis*

Quadrat 10

1	1	65	AS	15	PETMAC	*Petersianthus macrocarpus*
2	1	11	AS	6	SANTRI	*Santiria trimera*
3	1	32	AB	10	INDET	
4	1	20	AS	13	TESAFR	*Tessmannia africana*
5	1	65	AS	9	DISCAL	*Discoglypremna caloneura*
6	1	17	AS	5	ANGPYN	*Angylocalyx pynaertii*
7	1	16	AS	9	HANKLA	*Hannoa klaineana*
8	1	17	AL	7	BARNIG	*Barteria nigritana*
9	1	44	AS	8	MYRARB	*Myrianthus arboreus*
10	1	33	AS	12	CELTES	*Celtis tessmannii*
11	1	11	AS	6	CELTES	*Celtis tessmannii*
12	1	19	AS	10	CELADO	*Celtis adolfi-friderici*

Quadrat 11

1	1	16	AS	13	MANLET	*Manilkara Letouzeyi*
2	1	20	AS	15	BARNIG	*Barteria nigritana*
3	1	39	AS	16	GUATHO	*Guarea thompsonii*
4	1	24	AS	10	DASSP	*Dasylepsis sp*
5	1	14	AS	7	DIOITU	*Diospyrus iturensis*
6	1	32	AS	12	PANLAU	*Panchovia laurentii*
7	1	13	AS	8	DRYLEO	*Drypetes leonensis*

8	1	55	AS	22	CELTES	*Celtis tessmannii*
9	1	16	AS	8	BLISAP	*Blighia sapida*
10	1	12	AS	7	COLLAT	*Cola latericia*
11	1	14	AS	8	DIOCAN	*Diospyros caniculata*
12	1	20	AS	10	GUATHO	*Guarea thompsonii*
13	1	39	AS	17	CLEPAT	*cleistopholis patens*
14	1	15	AS	8	HEXCRI	*Hexalobus crispiflorus*
15	1	11	AS	10	ENTCYL	*Entandrophragma cylindricum*
16	1	32	AS	14	DASSP	*Dasylepsis sp*

Quadrat 12

1	1	20	AS	7	COLSP	*cf. colletoecema sp*
2	1	28	AS	9	PANLAU	*Panchovia laurentii*
3	1	117	AS	20	IRVGRA	*Irvingia grandifolia*
4	1	10	AS	7	SANTRI	*Santiria trimera*
5	1	38	AS	16	PYCMIC	*Picnanthus cf. microcephalus*
6	1	23	AS	15	CROMAC	*Croton macrostasyus*
7	1	14	AS	10	PHYDIS	*Phyllanthus discoideus*
8	1	50	AS	8	STRGRA	*Strombosia grandifolia*
9	1	44	AS	12	STRTET	*Strombosiopsis tetrandra*
10	1	17	AS	9	DISGLA	*Discoglypremna gla*
11	1	11	AS	7	MANLET	*Manilkara Letouzeyi*
12	1	11	AL	6	DIOCRA	*Diospyros crassifolia*

Quadrat 13

1	1	41	AS	16	GRESUA	*Greenwayodendron suaveolens*
2	1	12	AS	8	DASSP	*Dasylepsis sp*
3	1	11	AS	6	ISOTHO	*Isolona thonerii*
4	1	24	AS	13	STAKAM	*Staudtia kamerunensis*
5	1	14	AS	7	DASSP	*Dasylepsis sp*
6	1	63	AS	21	INDET6	
7	1	12	AS	10	ENTSP	*Entandophragma sp*
8	1	35	AS	13	NESPAP	*Nesogodornia papaverifera*
9	1	19	AS	9	GARPUN	*Garcinia punctata*
10	1	17	AB	6	GARKOL	*Garcinia kola*
11	1	15	AS	6	TETDID	*Tetrorchidium didymostemon*
12	1	15	AS	10	DIAPAC	*Dialium pachyphyllum*
13	1	12	AS	5	MANLET	*Manilkara Letouzeyi*
14	1	12	AS	5	DIOITU	*Diospyrus iturensis*
15	1	19	AS	11	NESPAP	*Nesogodornia papaverifera*
16	1	25	AS	12	SCOCOR	*Scottellia coriacea*
17	1	17	AS	8	CROMAC	*Croton macrostasyus*

Quadrat 14

1	1	15	AS	6	NESPAP	*Nesogodornia papaverifera*
2	1	51	AS	17	STRPUS	*Strombosia pustulata*
3	1	120	AS	20	ANGPYN	*Angylocalyx pynaertii*

4	1	38	AS	15	PIPAFR	*Piptadeniastrum africanum*
5	1	11	AS	5	DIOITU	*Diospyrus iturensis*
6	1	17	AS	11	INDET6	
7	1	40	AL	16	LEUCUP	*leucaniodiscus cupanioides*
8	1	22	AS	9	SANTRI	*Santiria trimera*
9	1	10	AS	7	GUATHO	*Guarea thompsonii*
10	1	21	AS	8	ANGPYN	*Angylocalyx pynaertii*
11	1	11	AS	5	PANLAU	*Panchovia laurentii*
12	1	14	AS	7	TRITES	*Trichilia tessmannii*
13	1	12	AS	6	PAUMAC	*Pausinystalia macroceras*
14	1	72	AS	12	HEXCRI	*Hexalobus crispiflorus*
15	1	19	AS	8	ISOTHO	*Isolona thonerii*
16	1	71	AS	16	INDET7	
17	1	22	AS	7	DASSP	*Dasylepsis sp*
18	1	19	AS	7	GARPUN	*Garcinia punctata*
19	1	18	AS	10	DRYGOS	*Drypetes gossweileri*
20	1	15	AS	9	DRYLEO	*Drypetes leonensis*
21	1	11	AS	6	TETDID	*Tetrorchidium didymostemon*
22	1	23	AS	8	MAEEMI	*Maesopsis eminii*
23	1	16	AS	6	CROMAC	*Croton macrostasyus*
24	1	12	AS	5	DIOBIP	*Diospyros bipindensis*
25	1	53	AS	17	GRESUA	*Greenwayodendron suaveolens*
26	1	25	AS	8	DASSP	*Dasylepsis sp*
27	1	11	AS	5	DIOBIP	*Diospyros bipindensis*
28	1	13	AS	5	DIOBIP	*Diospyros bipindensis*
29	1	29	AS	13	CELTES	*Celtis tessmannii*
30	1	18	AS	10	GARPUN	*Garcinia punctata*
31	1	13	AS	9	BEIOBS	*Beilschmieda Obscura*

Quadrat 15

1	1	15	AB	6	OCHAFR	*Ochthocosmus africanus*
2	1	12	AS	5	CARSP	*Carapa sp*
3	1	10	AS	4	FUNELA	*Funtumia elastica*
4	1	20	AB	7	OKOAUB	*Okoubaka aubrevillei*
5	1	11	AS	6	GRESUA	*Greenwayodendron suaveolens*
6	1	38	AS	10	PANLAU	*Panchovia laurentii*
7	1	14	AS	6	TRITES	*Trichilia tessmannii*
8	1	67	AS	14	PETMAC	*Petersianthus macrocarpus*
9	1	10	AS	5	DISGLA	*Discoglypremna gla*
10	1	10	AS	5	BARNIG	*Barteria nigritana*
11	1	54	AS	13	ENTCYL	*Entandrophragma cylindricum*
12	1	20	AS	10	GRESUA	*Greenwayodendron suaveolens*
13	1	23	AS	7	STRTET	*Strombosiopsis tetrandra*
14	1	16	AS	5	ENTSP	*Entandophragma sp*
15	1	11	AL	5	CARSP	*Carapa sp*
16	1	14	AL	5	CARSP	*Carapa sp*
17	1	51	AS	16	PACTES	*Pachyelasma tessmanii*

Quadrat 16

1	1	21	AS	11	SANTRI	*Santiria trimera*
2	1	23	AS	12	PETMAC	*Petersianthus macrocarpus*
3	1	13	AS	8	CARSP	*Carapa sp*
4	1	14	AS	7	PANLAU	*Panchovia laurentii*
5	1	21	AB	6	ALLAFR	*Allophylus africanus*
6	1	14	AS	7	PANSP	*Pancovia sp*
7	1	66	AS	23	NESPAP	*Nesogodornia papaverifera*
8	1	14	AS	11	DACEDU	*Dacryodes edulis*
9	1	12	AS	7	DESDEW	*Desplatsia dewevrei*
10	1	21	AS	16	CELZEN	*Celtis zenkeri*
11	1	31	AS	14	TRIPRI	*Trichilia prieuriana*
12	1	26	AS	15	KLAGAB	*Klainedoxa gabonensis*
13	1	12	AS	6	LEPSTA	*Lepidobotrys staudtii*
14	1	61	AB	16	DIAZEN	*Dialium zenkeri*
15	1	25	AS	10	PANLAU	*Panchovia laurentii*
16	1	13	AS	8	LOVTRI	*Lovoa trichiloides*
17	1	26	AS	10	PENMAC	*Pentaclethra macrophylla*
18	1	12	AS	8	STEBEQ	*Sterculia bequaertii*
19	1	11	AS	10	ANTMAC	*Anthonotha macrophylla*
20	1	11	AS	10	ALSCON	*Alstonia Congensis*
21	1	11	AS	9	BLIWEL	*Blighia welwitschii*

Quadrat 17

1	1	14	AS	11	DASSP	*Dasylepsis sp*
2	1	16	AS	8	PANLAU	*Panchovia laurentii*
3	1	23	AS	16	BEIOBS	*Beilschmieda Obscura*
4	1	15	AS	14	CELZEN	*Celtis zenkeri*
5	1	13	AS	12	DASSP	*Dasylepsis sp*
6	1	13	AS	7	SLOUSA	*Sloetiopsis usambarensis*
7	1	21	AS	14	SANTRI	*Santiria trimera*
8	1	15	AS	10	TRITES	*Trichilia tessmannii*
9	1	14	AS	8	PANLAU	*Panchovia laurentii*
10	1	58	AS	16	CANSCH	*Canarium schweinfurthii*
11	1	21	AS	22	CELADO	*Celtis adolfi-friderici*
12	1	65	AS	28	SYZSP	*Syzygium sp*
13	1	18	AS	11	DIAPAC	*Dialium pachyphyllum*
14	1	63	AS	28	GUATHO	*Guarea thompsonii*
15	1	12	AS	11	CARSP	*Carapa sp*
16	1	19	AL	29	GROMAC	*Grossera macrantha*
17	1	24	AS	16	COLBAL	*Cola ballayi*
18	1	63	AS	28	GUATHO	*Guarea thompsonii*
19	1	10	AS	7	TESAFR	*Tessmannia africana*
20	1	24	AS	16	ANGPYN	*Angylocalyx pynaertii*
21	1	15	AS	14	GRESUA	*Greenwayodendron suaveolens*

Quadrat 18

1	1	11	AS	9	GRESUA	*Greenwayodendron suaveolens*

2	1	12	AS	9	GAMBOU	*Gambeya boukokowensis*
3	1	25	AS	16	DISCAL	*Discoglypremna caloneura*
4	1	13	AB	11	DICGLA	*Dichostema glaucescens*
5	1	24	AS	10	ONCWEL	*Oncoba welwitchii*
6	1	16	AS	9	COLLAT	*Cola latericia*
7	1	12	AS	7	ENTCYL	*Entandrophragma cylindricum*
8	1	13	AS	10	DICGLA	*Dichostema glaucescens*
9	1	47	AS	29	HANKLA	*Hannoa klaineana*
10	1	19	AS	10	MACMON	*Macaranga monandra*
11	1	13	AS	8	DICGLA	*Dichostema glaucescens*
12	1	11	AS	10	DICGLA	*Dichostema glaucescens*
13	1	13	AS	11	DICGLA	*Dichostema glaucescens*
14	1	22	AS	16	HANKLA	*Hannoa klaineana*
15	1	18	AS	12	STAKAM	*Staudtia kamerunensis*
16	1	16	AS	9	STAKAM	*Staudtia kamerunensis*
17	1	15	AS	11	ANTMAC	*Anthonotha macrophylla*
18	1	18	AS	12	ENTCYL	*Entandrophragma cylindricum*
19	1	18	AS	12	LOVTRI	*Lovoa trichiloides*
20	1	13	AS	11	MACMON	*Macaranga monandra*
21	1	16	AS	6	ALLAFR	*Allophylus africanus*

Quadrat 19

1	1	29	AS	13	XYLPAR	*Xylopia cf. parviflora*
2	1	44	AS	16	STAKAM	*Staudtia kamerunensis*
3	1	18	AS	8	TESAFR	*Tessmannia africana*
4	1	15	AS	7	DRYLEO	*Drypetes leonensis*
5	1	23	AS	8	PANLAU	*Panchovia laurentii*
6	1	11	AL	5	OXYSPE	*Oxyanthus speciosus*
7	1	50	DS	14	DASSP	*Dasylepsis sp*
8	1	23	AS	13	PANLAU	*Panchovia laurentii*
9	1	11	AS	8	STRPUS	*Strombosia pustulata*
10	1	10	AS	6	TRIPRI	*Trichilia prieuriana*
11	1	21	AS	6	HANKLA	*Hannoa klaineana*
12	1	10	AS	4	TABPEN	*Tabernaemontana penduliflora*
13	1	11	AS	5	LECCUP	*Lecaniodiscus cupanioides*
14	1	38	AS	13	PHYDES	*cf Phyllanthus sp*
15	1	11	AS	5	DISGLA	*Discoglypremna gla*
16	1	15	AS	4	HANKLA	*Hannoa klaineana*
17	1	12	AS	4	CARSP	*Carapa sp*
18	1	13	AS	5	MACMON	*Macaranga monandra*
19	1	13	AS	6	MACMON	*Macaranga monandra*

Quadrat 20

1	1	23	AS	7	HEXCRI	*Hexalobus crispiflorus*
2	1	12	AS	4	ONCWEL	*Oncoba welwitchii*
3	1	22	AS	10	GUATHO	*Guarea thompsonii*
4	1	31	AS	14	CROMAC	*Croton macrostasyus*
5	1	27	AS	15	XYLPAR	*Xylopia cf. parviflora*

6	1	13	AS	4	MACMON	*Macaranga monandra*
7	1	28	AS	13	MACSPI	*Macaranga spinosa*
8	1	13	AS	8	TESAFR	*Tessmannia africana*
9	1	29	AB	9	PANLAU	*Panchovia laurentii*
10	1	14	AS	5	MARLUT	*Markhamia lutea*
11	1	10	AS	4	AFRLEP	*Afrostyrax lepidophyllus*
12	1	11	AS	5	DASSP	*Dasylepsis sp*

Quadrat 21

1	1	10	AS	3	ONCWEL	*Oncoba welwitchii*
2	1	15	AS	4	ONCWEL	*Oncoba welwitchii*
3	1	10	AS	4	DISGLA	*Discoglypremna gla*
4	1	16	AS	4	FUNELA	*Funtumia elastica*
5	1	14	AS	3	HANKLA	*Hannoa klaineana*
6	1	13	AS	6	TESAFR	*Tessmannia africana*
7	1	20	AS	7	ENTSP	*Entandophragma sp*
8	1	10	AS	4	TRIOMP	*Tridesmostemon omphalocarpoides*
9	1	23	AS	7	PANLAU	*Panchovia laurentii*
10	1	59	AS	15	ALBADI	*Albizia adianthifolia*
11	1	103	AS	16	RICHEU	*Riccinodendron heudelotii*

Quadrat 22

1	1	11	AB	4	CAR	*Carapa sp*
2	1	11	AS	5	ALLAFR	*Allophylus africanus*
3	1	14	AS	6	HANKLA	*Hannoa klaineana*
4	1	37	AS	9	MYRARB	*Myrianthus arboreus*
5	1	16	AB	5	ZANTS	*Zanthoxylum ts*
6	1	21	AS	8	NESPAP	*Nesogodornia papaverifera*
7	1	24	AS	12	LOVTRI	*Lovoa trichiloides*
8	1	19	AS	7	PETMAC	*Petersianthus macrocarpus*
9	1	11	AS	7	TRITES	*Trichilia tessmannii*
10	1	12	AS	4	STEBEQ	*Sterculia bequaertii*
11	1	22	AS	6	ANGPYN	*Angylocalyx pynaertii*
12	1	12	AS	4	CARSP	*Carapa sp*
13	1	12	AS	5	TRITES	*Trichilia tessmannii*
13	2	14	AS	5	TRITES	*Trichilia tessmannii*
14	1	14	AS	7	PANOLE	*Panda oleosa*
15	1	10	AF	5	GUATHO	*Guarea thompsonii*
16	1	11	AL	6	STAKAM	*Staudtia kamerunensis*
17	1	16	AS	8	COLDEW	*Colletoecema dewevrei*
18	1	14	AS	8	ONCMAN	*Oncoba Manii*
19	1	36	AS	14	XYLPAR	*Xylopia cf. parviflora*

Quadrat 23

1	1	17	AS	8	GUATHO	*Guarea thompsonii*
2	1	19	AS	7	ENTSP	*Entandophragma sp*
3	1	33	AS	13	DISCAL	*Discoglypremna caloneura*

4	1	12	AS	7	MANLET	*Manilkara Letouzeyi*
5	1	13	AS	6	CELZEN	*Celtis zenkeri*
6	1	14	AS	7	DACEDU	*Dacryodes edulis*
7	1	26	AS	15	DRYLEO	*Drypetes leonensis*
8	1	13	AS	6	CARSP	*Carapa sp*
9	1	17	AS	9	TRIOMP	*Tridesmostemon omphalocarpoides*
10	1	68	AB	10	PYCMIC	*Picnanthus cf. microcephalus*
11	1	13	AS	5	PAUMAC	*Pausinystalia macroceras*
12	1	11	AS	5	ONCWEL	*Oncoba welwitchii*
13	1	11	AS	4	ZANTES	*Zanthoxyllum tessmannii*
14	1	22	AS	7	STERCF	*cf Pterigota sp*
15	1	16	AS	5	LACPSE	*Laccodiscus pseudostipularis*
16	1	13	AS	6	DISGLA	*Discoglypremna gla*
17	1	13	AS	6	BARNIG	*Barteria nigritana*
18	1	13	AS	7	TRITES	*Trichilia tessmannii*
19	1	14	AS	6	DACEDU	*Dacryodes edulis*
20	1	18	AS	10	DISGLA	*Discoglypremna gla*
21	1	55	AS	13	PETMAC	*Petersianthus macrocarpus*
22	1	27	AS	12	HANKLA	*Hannoa klaineana*
23	1	15	AS	9	CARSP	*Carapa sp*

Quadrat 24

1	1	51	AS	14	DIOMAN	*Diospyros mannii*
2	1	23	AS	12	GRESUA	*Greenwayodendron suaveolens*
3	1	14	AS	6	DESSUB	*Desplatsia subericarpa*
4	1	19	AS	6	GREOLI	*Grewia cf oligoneura*
5	1	15	AS	7	HEXCRI	*Hexalobus crispiflorus*
6	1	35	AS	11	PANOLE	*Panda oleosa*
7	1	11	AS	6	ENTCYL	*Entandrophragma cylindricum*
8	1	24	AS	9	AMPPTE	*Amphimas pterocarpoides*
9	1	12	AS	7	PHYLET	*Phyllanthus cf. letouzeyanus*
10	1	47	AS	12	MYRARB	*Myrianthus arboreus*
11	1	36	AS	13	COLLAT	*Cola latericia*
12	1	16	AS	7	AUTCON	*Autranella Congolensis*
13	1	10	AS	7	CASSP	*Cassipourea sp*
14	1	10	AS	6	CARSP	*Carapa sp*
15	1	12	AS	7	LOVTRI	*Lovoa trichiloides*
16	1	10	AS	5	GROMAC	*Grossera macrantha*
17	1	12	AL	6	CAN	*cf Canthium sp*
18	1	18	AS	7	CAN	*cf Canthium sp*
19	1	11	AS	5	LACPSE	*Laccodiscus pseudostipularis*
21	1	16	AS	5	CAN	*cf Canthium sp*
22	1	14	AF	7	ONCWEL	*Oncoba welwitchii*
22	2	11	AF	7	ONCWEL	*Oncoba welwitchii*
23	1	14	AF	6	ONCWEL	*Oncoba welwitchii*
23	2	11	AF	6	ONCWEL	*Oncoba welwitchii*

Quadrat 25

1	1	12	AS	6	DRYLEO	*Drypetes leonensis*
2	1	17	AS	7	SANTRI	*Santiria trimera*
3	1	13	AS	8	DIOITU	*Diospyrus iturensis*
4	1	83	AS	20	CLEPAT	*cleistopholis patens*
5	1	46	AS	14	STRGRA	*Strombosia grandifolia*
6	1	66	AS	18	NESPAP	*Nesogodornia papaverifera*
7	1	51	AS	15	PHYLET	*Phyllanthus cf. letouzeyanus*
8	1	45	AS	16	STEBEQ	*Sterculia bequaertii*
9	1	12	AS	7	COLDEW	*Colletoecema dewevrei*
10	1	10	AS	5	DIOBIP	*Diospyros bipindensis*
11	1	14	AS	6	HEXCRI	*Hexalobus crispiflorus*
12	1	13	AS	6	MASACU	*Massularia acuminata*
13	1	13	AS	7	ENTCYL	*Entandrophragma cylindricum*
14	1	14	AS	6	STRPUS	*Strombosia pustulata*
15	1	16	AS	8	GROMAC	*Grossera macrantha*

SPECIES FREQUENCY (PLOT 2)

Sp Code	Total Trees	Total Stems	Average DBH(cm)	Basal Area	Relative Density	Relative Dominance	Relative Frequency	IVI
DASSP	24	24	18.46	0.6	5.57	2.2	3.28	11.05
PANLAU	19	19	22.25	0.7	4.41	2.53	3.55	10.49
ANGPYN	8	8	47.48	1.4	1.86	4.86	1.91	8.62
GUATHO	12	12	31.71	0.9	2.78	3.25	2.19	8.22
PETMAC	6	6	56.1	1.5	1.39	5.08	1.64	8.12
NESPAP	9	9	37.44	1	2.09	3.4	2.19	7.67
GRESUA	11	11	29.51	0.8	2.55	2.58	2.46	7.59
HEXCRI	8	8	36.85	0.9	1.86	2.92	2.19	6.97
STAKAM	11	11	24.09	0.5	2.55	1.72	2.19	6.46
CELTES	10	10	28.23	0.6	2.32	2.15	1.91	6.38
CARSP	12	12	12.97	0.2	2.78	0.54	2.46	5.79
HANKLA	9	9	23.73	0.4	2.09	1.36	1.91	5.37
MANLET	8	8	25.93	0.4	1.86	1.45	1.91	5.22
SANTRI	9	9	16.93	0.2	2.09	0.69	2.19	4.97
INDET4	2	2	85.66	1.2	0.46	3.95	0.55	4.96
PYCMIC	3	3	60.96	0.9	0.7	3	0.82	4.52
DIOITU	8	8	13.11	0.1	1.86	0.37	2.19	4.41
ENTCYL	7	7	24.39	0.3	1.62	1.12	1.64	4.38
DRYLEO	7	7	19.96	0.2	1.62	0.75	1.91	4.29
IRVGRA	1	1	117.1	1.1	0.23	3.69	0.27	4.2
STRPUS	5	5	34.8	0.5	1.16	1.63	1.37	4.16
GARPUN	9	9	15.96	0.2	2.09	0.62	1.37	4.07
TRITES	7	8	13.07	0.1	1.62	0.37	1.64	3.63
DICGLA	9	9	12.53	0.1	2.09	0.38	1.09	3.56
TESAFR	6	6	17.13	0.1	1.39	0.47	1.64	3.51
ENTSP	6	6	16.95	0.1	1.39	0.46	1.64	3.5
ONCWEL	7	9	13.96	0.1	1.62	0.47	1.37	3.46
GROMAC	7	7	15.37	0.1	1.62	0.45	1.37	3.44
RICHEU	1	1	102.5	0.8	0.23	2.83	0.27	3.33
CLEPAT	2	2	64.69	0.7	0.46	2.25	0.55	3.26
CROMAC	5	5	21.95	0.2	1.16	0.65	1.37	3.17
PANOLE	4	4	32.69	0.3	0.93	1.15	1.09	3.17
COLLAT	5	5	21.32	0.2	1.16	0.61	1.37	3.14
DISCAL	3	3	44.5	0.5	0.7	1.6	0.82	3.12
AFRLEP	4	4	31.33	0.3	0.93	1.06	1.09	3.08
DISGLA	6	6	13.61	0.1	1.39	0.3	1.37	3.06
MYRARB	3	3	42.76	0.4	0.7	1.48	0.82	2.99
DIAZEN	3	3	40.85	0.4	0.7	1.35	0.82	2.86
MACSPI	2	2	58.07	0.5	0.46	1.82	0.55	2.83
MACMON	6	6	14.36	0.1	1.39	0.33	1.09	2.82
GAMLAC	1	1	91.4	0.7	0.23	2.25	0.27	2.75
STRTET	3	3	35.47	0.3	0.7	1.02	0.82	2.53
MARLUT	3	3	32.35	0.2	0.7	0.85	0.82	2.36
LOVTRI	4	4	17.35	0.1	0.93	0.32	1.09	2.35
TETDID	5	5	16.17	0.1	1.16	0.35	0.82	2.33

PENMAC	4	4	22.5	0.2	0.93	0.55	0.82	2.29
BARNIG	4	4	15.48	0.1	0.93	0.26	1.09	2.28
PAUMAC	4	4	15.43	0.1	0.93	0.26	1.09	2.28
XYLPAR	3	3	30.7	0.2	0.7	0.76	0.82	2.28
STRGRA	2	2	48.13	0.4	0.46	1.25	0.55	2.26
INDET6	2	2	46.02	0.3	0.46	1.14	0.55	2.15
STEBEQ	3	3	27.94	0.2	0.7	0.63	0.82	2.15
DRYGOS	3	3	26.72	0.2	0.7	0.58	0.82	2.09
STERCF	2	2	41.7	0.3	0.46	0.94	0.55	1.95
TRIPRI	3	3	20.7	0.1	0.7	0.35	0.82	1.86
INDET7	1	1	70.7	0.4	0.23	1.35	0.27	1.85
IRVGAB	1	1	68.5	0.4	0.23	1.26	0.27	1.77
PHYLET	2	2	36.83	0.2	0.46	0.73	0.55	1.74
CELZEN	3	3	16.63	0.1	0.7	0.22	0.82	1.74
ALLAFR	3	3	16.25	0.1	0.7	0.21	0.82	1.73
TRIOMP	3	3	14.43	0	0.7	0.17	0.82	1.68
SYZSP	1	1	65	0.3	0.23	1.14	0.27	1.64
DIOBIP	4	4	11.43	0	0.93	0.14	0.55	1.62
SCOCOR	2	2	31.65	0.2	0.46	0.54	0.55	1.55
PACSTA	1	1	60.5	0.3	0.23	0.99	0.27	1.49
ALBADI	1	1	59	0.3	0.23	0.94	0.27	1.44
CANSCH	1	1	58.3	0.3	0.23	0.92	0.27	1.42
DACEDU	3	3	13.93	0	0.7	0.16	0.55	1.4
BLIWEL	2	2	25.97	0.1	0.46	0.36	0.55	1.37
ZANTES	2	2	25.74	0.1	0.46	0.36	0.55	1.37
INDET5	1	1	55.1	0.2	0.23	0.82	0.27	1.32
COLBAL	2	2	23.51	0.1	0.46	0.3	0.55	1.31
DRYGRO	1	1	53.4	0.2	0.23	0.77	0.27	1.27
ONCMAN	2	2	20.94	0.1	0.46	0.24	0.55	1.25
CELADO	2	2	20.01	0.1	0.46	0.22	0.55	1.23
BLISAP	2	2	19.65	0.1	0.46	0.21	0.55	1.22
DIOMAN	1	1	51.2	0.2	0.23	0.71	0.27	1.21
PACTES	1	1	51.2	0.2	0.23	0.71	0.27	1.21
BEIOBS	2	2	18.45	0.1	0.46	0.18	0.55	1.19
XYLAET	1	1	50.4	0.2	0.23	0.68	0.27	1.19
TRIHEU	1	1	49.9	0.2	0.23	0.67	0.27	1.18
CAN	3	3	15.74	0.1	0.7	0.2	0.27	1.17
DIAPAC	2	2	16.91	0	0.46	0.15	0.55	1.16
ZANTS	2	2	16.4	0	0.46	0.14	0.55	1.16
ISOTHO	2	2	15.52	0	0.46	0.13	0.55	1.14
DIOCAN	2	2	14.2	0	0.46	0.11	0.55	1.12
COLDEW	2	2	14	0	0.46	0.11	0.55	1.12
FUNELA	2	2	13.73	0	0.46	0.1	0.55	1.11
LACPSE	2	2	13.34	0	0.46	0.1	0.55	1.11
ANTMAC	2	2	13.12	0	0.46	0.09	0.55	1.1
DRY1	2	2	12.57	0	0.46	0.09	0.55	1.1
PHYDIS	2	2	12.49	0	0.46	0.08	0.55	1.09
DUBVIR	1	1	44.7	0.2	0.23	0.54	0.27	1.04
ANOMAN	1	1	44.2	0.2	0.23	0.53	0.27	1.03
LEUCUP	1	1	39.8	0.1	0.23	0.43	0.27	0.93

PIPAFR	1	1	38.2	0.1	0.23	0.39	0.27	0.9
PHYDES	1	1	37.7	0.1	0.23	0.38	0.27	0.89
INDET	1	1	32.1	0.1	0.23	0.28	0.27	0.78
KLAGAB	1	1	25.6	0.1	0.23	0.18	0.27	0.68
PTESOY	1	1	25.1	0	0.23	0.17	0.27	0.67
AMPPTE	1	1	24.2	0	0.23	0.16	0.27	0.66
MAEEMI	1	1	23.3	0	0.23	0.15	0.27	0.65
OKOAUB	1	1	20.3	0	0.23	0.11	0.27	0.62
COLSP	1	1	19.7	0	0.23	0.1	0.27	0.61
GREOLI	1	1	19.3	0	0.23	0.1	0.27	0.61
GARKOL	1	1	17.4	0	0.23	0.08	0.27	0.59
AUTCON	1	1	15.7	0	0.23	0.07	0.27	0.57
OCHAFR	1	1	14.5	0	0.23	0.06	0.27	0.56
PANSP	1	1	14.4	0	0.23	0.06	0.27	0.56
DESSUB	1	1	13.8	0	0.23	0.05	0.27	0.56
SLOUSA	1	1	13.3	0	0.23	0.05	0.27	0.55
MASACU	1	1	12.8	0	0.23	0.04	0.27	0.55
LEPSTA	1	1	12.4	0	0.23	0.04	0.27	0.55
unknown	1	1	12.3	0	0.23	0.04	0.27	0.55
GAMBOU	1	1	12.2	0	0.23	0.04	0.27	0.55
DESDEW	1	1	12	0	0.23	0.04	0.27	0.54
PAUFLO	1	1	11.8	0	0.23	0.04	0.27	0.54
CAR	1	1	11.4	0	0.23	0.03	0.27	0.54
ALSCON	1	1	11.3	0	0.23	0.03	0.27	0.54
OXYSPE	1	1	11.2	0	0.23	0.03	0.27	0.54
LECCUP	1	1	11.2	0	0.23	0.03	0.27	0.54
DIOCRA	1	1	10.6	0	0.23	0.03	0.27	0.54
TABPEN	1	1	10.2	0	0.23	0.03	0.27	0.53
CASSP	1	1	10	0	0.23	0.03	0.27	0.53
	431	434	3629	29	99.86	100	99.97	300.02

SPECIES LIST (PLOT 2)

Sp Code	Genus	Species
AFRLEP	*Afrostyrax*	*lepidophyllus*
ALBADI	*Albizia*	*adianthifolia*
ALLAFR	*Allophylus*	*africanus*
ALSCON	*Alstonia*	*Congensis*
AMPPTE	*Amphimas*	*pterocarpoides*
ANGPYN	*Angylocalyx*	*pynaertii*
ANOMAN	*Anonidium*	*mannii*
ANTMAC	*Anthonotha*	*macrophylla*
AUTCON	*Autranella*	*Congolensis*
BARNIG	*Barteria*	*nigritana*
BEIOBS	*Beilschmieda*	*Obscura*
BLISAP	*Blighia*	*sapida*
BLIWEL	*Blighia*	*welwitschii*
CAN	*cf Canthium*	*sp*
CANSCH	*Canarium*	*schweinfurthii*
CAR	*Carapa*	*sp*
CARSP	*Carapa*	*sp*
CASSP	*Cassipourea*	*sp*
CELADO	*Celtis*	*adolfi-friderici*
CELTES	*Celtis*	*tessmannii*
CELZEN	*Celtis*	*zenkeri*
CLEPAT	*cleistopholis*	*patens*
COLBAL	*Cola*	*ballayi*
COLDEW	*Colletoecema*	*dewevrei*
COLLAT	*Cola*	*latericia*
COLSP	*cf. colleto*	*ecema sp*
CROMAC	*Croton*	*macrostasyus*
DACEDU	*Dacryodes*	*edulis*
DASSP	*Dasylepsis*	*sp*
DESDEW	*Desplatsia*	*dewevrei*
DESSUB	*Desplatsia*	*subericarpa*
DIAPAC	*Dialium*	*pachyphyllum*
DIAZEN	*Dialium*	*zenkeri*
DICGLA	*Dichostema*	*glaucescens*
DIOBIP	*Diospyros*	*bipindensis*
DIOCAN	*Diospyros*	*caniculata*
DIOCRA	*Diospyros*	*crassifolia*
DIOITU	*Diospyrus*	*iturensis*
DIOMAN	*Diospyros*	*mannii*
DISCAL	*Discoglypremna*	*caloneura*
DISGLA	*Discoglypremna*	*gla*
DRY1	*Drypetes*	*sp 1*
DRYGOS	*Drypetes*	*gossweileri*
DRYGRO	*Drypetes*	*gro*
DRYLEO	*Drypetes*	*leonensis*
DUBVIR	*Duboscia*	*viridiflora*
ENTCYL	*Entandrophragma*	*cylindricum*

ENTSP	*Entandophragma*	*sp*
FUNELA	*Funtumia*	*elastica*
GAMBOU	*Gambeya*	*boukokowensis*
GAMLAC	*Gambeya*	*lacourtiana*
GARKOL	*Garcinia*	*kola*
GARPUN	*Garcinia*	*punctata*
GREOLI	*Grewia*	*cf oligoneura*
GRESUA	*Greenwayodendron*	*suaveolens*
GROMAC	*Grossera*	*macrantha*
GUATHO	*Guarea*	*thompsonii*
HANKLA	*Hannoa*	*klaineana*
HEXCRI	*Hexalobus*	*crispiflorus*
INDET		
INDET4		
INDET5		
INDET6		
INDET7		
IRVGAB	*Irvingia*	*gabonensis*
IRVGRA	*Irvingia*	*grandifolia*
ISOTHO	*Isolona*	*thonerii*
KLAGAB	*Klainedoxa*	*gabonensis*
LACPSE	*Laccodiscus*	*pseudostipularis*
LECCUP	*Lecaniodiscus*	*cupanioides*
LEPSTA	*Lepidobotrys*	*staudtii*
LEUCUP	*leucaniodiscus*	*cupanioides*
LOVTRI	*Lovoa*	*trichiloides*
MACMON	*Macaranga*	*monandra*
MACSPI	*Macaranga*	*spinosa*
MAEEMI	*Maesopsis*	*eminii*
MANLET	*Manilkara*	*Letouzeyi*
MARLUT	*Markhamia*	*lutea*
MASACU	*Massularia*	*acuminata*
MYRARB	*Myrianthus*	*arboreus*
NESPAP	*Nesogodornia*	*papaverifera*
OCHAFR	*Ochthocosmus*	*africanus*
OKOAUB	*Okoubaka*	*aubrevillei*
ONCMAN	*Oncoba*	*Manii*
ONCWEL	*Oncoba*	*welwitchii*
OXYSPE	*Oxyanthus*	*speciosus*
PACSTA	*Pachypodanthium*	*staudtii*
PACTES	*Pachyelasma*	*tessmanii*
PANLAU	*Panchovia*	*laurentii*
PANOLE	*Panda*	*oleosa*
PANSP	*Pancovia*	*sp*
PAUFLO	*Pauridiantha*	*floribunda*
PAUMAC	*Pausinystalia*	*macroceras*
PENMAC	*Pentaclethra*	*macrophylla*
PETMAC	*Petersianthus*	*macrocarpus*
PHYDES	*cf Phyllanthus*	*sp*
PHYDIS	*Phyllanthus*	*discoideus*

PHYLET	*Phyllanthus*	*cf. letouzeyanus*
PIPAFR	*Piptadeniastrum*	*africanum*
PTESOY	*Pterocarpus*	*soyauxii*
PYCMIC	*Picnanthus*	*cf. microcephalus*
RICHEU	*Riccinodendron*	*heudelotii*
SANTRI	*Santiria*	*trimera*
SCOCOR	*Scottellia*	*coriacea*
SLOUSA	*Sloetiopsis*	*usambarensis*
STAKAM	*Staudtia*	*kamerunensis*
STEBEQ	*Sterculia*	*bequaertii*
STERCF	*cf Pterigota*	*sp*
STRGRA	*Strombosia*	*grandifolia*
STRPUS	*Strombosia*	*pustulata*
STRTET	*Strombosiopsis*	*tetrandra*
SYZSP	*Syzygium*	*sp*
TABPEN	*Tabernaemontana*	*penduliflora*
TESAFR	*Tessmannia*	*africana*
TETDID	*Tetrorchidium*	*didymostemon*
TRIHEU	*Trichilia*	*heudelotti*
TRIOMP	*Tridesmostemon*	*omphalocarpoides*
TRIPRI	*Trichilia*	*prieuriana*
TRITES	*Trichilia*	*tessmannii*
XYLAET	*Xylopia*	*aethiopica*
XYLPAR	*Xylopia*	*cf. parviflora*
ZANTES	*Zanthoxyllum*	*tessmannii*
ZANTS	*Zanthoxylum*	*ts*
unknown	*unknown*	*unknown*

PLOT 3

QUADRATS

Quadrat: 1

Tree No	Stem No	Dbh	Status	Height	Sp Code	*Species*
1	1	20.2	AL	7	DIOCAN	*Diospyros caniculata*
2	1	12.6	AS	8	DIOCAN	*Diospyros caniculata*
3	1	17.8	AS	10	MILSP3	*Millettia sp3*
4	1	15.8	AS	6	RINOBL	*Rinorea oblongifolia*
5	1	13.8	AS	7	DIOCAN	*Diospyros caniculata*
6	1	20.8	AS	6	DESDEW	*Desplatsia dewevrei*
7	1	25.9	AS	9	ZANTES	*Zanthoxyllum tessmannii*
8	1	10.4	AS	4	DIOCAN	*Diospyros caniculata*
9	1	10.1	AS	6	CELZEN	*Celtis zenkeri*
10	1	24	AB	3	DIOMON	*Diospyros monbuttensis*
11	1	17.9	AS	5	DIOCAN	*Diospyros caniculata*
12	1	15	AL	5	CELZEN	*Celtis zenkeri*
13	1	23.5	AS	8	DIOCAN	*Diospyros caniculata*
15	1	40.4	AS	8	LECCUP	*Lecaniodiscus cupanioides*
16	1	18.1	AS	6	DESDEW	*Desplatsia dewevrei*
17	1	14.5	AS	8	DIOCAN	*Diospyros caniculata*
Quadrat: 2						
1	1	120	AS	18	TERSUP	*Terminalia superba*
2	1	17.4	AS	5	MILDRA	*Milletia drastica*
3	1	20.8	AS	5	DACEDU	*Dacryodes edulis*
4	1	150	AS	16	CEIPEN	*Ceiba pentandra*
5	1	42.6	AL	8	TRIHEU	*Trichilia heudelotti*
6	1	4.2	AL	8	DESDEW	*Desplatsia dewevrei*
7	1	10.2	AS	4	RINDEN	*Rinorea dentata*
8	1	18.7	AS	8	DIOCAN	*Diospyros caniculata*
9	1	21.8	AS	8	LECCUP	*Lecaniodiscus cupanioides*
10	1	12.7	AB	3	DIOMON	*Diospyros monbuttensis*
11	1	14.5	AB	5	DIOCAN	*Diospyros caniculata*
12	1	41.3	AL	9	MYRARB	*Myrianthus arboreus*
13	1	80	AS	19	TERSUP	*Terminalia superba*
14	1	57.2	AS	10	DIAL	*Dialium sp*
Quadrat: 3						
1	1	32.2	AL	8	MYRARB	*Myrianthus arboreus*
2	1	50.2	AS	14	IRVGRA	*Irvingia grandifolia*
3	1	12.6	AS	8	DIOCAN	*Diospyros caniculata*
4	1	18.1	AS	5	RINOBL	*Rinorea oblongifolia*
5	1	13	AS	5	PANOLE	*Panda oleosa*
6	1	15	AS	7	STRPUS	*Strombosia pustulata*
7	1	12.3	AS	6	KLAGAB	*Klainedoxa gabonensis*
8	1	30	AS	8	MYRARB	*Myrianthus arboreus*
9	1	10.7	AS	4	DIOCAN	*Diospyros caniculata*

10	1	18	AS	6	HEXCRI	*Hexalobus crispiflorus*
11	1	12	AS	4	DIOCAN	*Diospyros caniculata*
12	1	13.2	AS	5	DIOCAN	*Diospyros caniculata*
13	1	11.2	AS	4	DIOCAN	*Diospyros caniculata*

Quadrat: 4

1	1	22.2	AS	11	DIOCRA	*Diospyros crassifolia*
2	1	10.2	AS	4	DIOCRA	*Diospyros crassifolia*
3	1	19.4	AS	10	LECCUP	*Lecaniodiscus cupanioides*
4	1	17.6	AS	7	CELADO	*Celtis adolfi-friderici*
5	1	11	AS	22	TERSUP	*Terminalia superba*
6	1	12.9	AL	5	COLDEW	*Colletoecema dewevrei*
7	1	22	AL	8	MILSP	*Milletia sp*
8	1	14	AS	5	DIOCAN	*Diospyros caniculata*
9	1	14.3	AL	6	MILSP	*Milletia sp*
10	1	11.1	AS	4	DIOCAN	*Diospyros caniculata*
11	1	42.1	AS	10	CORPLA	*Cordia platythyrsa*
12	1	40	AS	11	DESDEW	*Desplatsia dewevrei*

Quadrat: 5

1	1	10.9	AS	6	DIOCAN	*Diospyros caniculata*
2	1	19.2	AS	8	PHYDIS	*Phyllanthus discoideus*
3	1	13.3	AS	14	DIAL	*Dialium sp*
4	1	51.2	AS	13	PTESOY	*Pterocarpus soyauxii*
5	1	35.5	AS	7	CELZEN	*Celtis zenkeri*
6	1	17.4	AS	8	DIAL	*Dialium sp*
7	1	67	AS	12	DIAL	*Dialium sp*
8	1	22.5	AS	9	LECCUP	*Lecaniodiscus cupanioides*
9	1	130	AS	20	TERSUP	*Terminalia superba*
10	1	48.3	AS	10	MYRARB	*Myrianthus arboreus*

Quadrat: 6

1	1	19.8	AS	10	DIOCAN	*Diospyros caniculata*
2	1	21.9	AS	8	CELZEN	*Celtis zenkeri*
3	1	20.5	AS	7	DIOCAN	*Diospyros caniculata*
4	1	11.4	AB	8	DIOCAN	*Diospyros caniculata*
5	1	24.7	AS	10	MILDRA	*Milletia drastica*
6	1	105	AS	21	COLCOR	*Cola cordifolia*
7	1	92.8	AS	22	CORPLA	*Cordia platythyrsa*
8	1	17.8	AF	7	STEBEQ	*Sterculia bequaertii*
9	1	16.4	AS	10	DIOCAN	*Diospyros caniculata*
10	1	43	AS	10	MYRARB	*Myrianthus arboreus*
11	1	44.9	AS	9	DUBVIR	*Duboscia viridiflora*
12	1	36	AL	10	CELZEN	*Celtis zenkeri*

Quadrat: 7

1	1	12.2	AS	3	DESSUB	*Desplatsia subericarpa*
1	2	12.3	AS	5	DESSUB	*Desplatsia subericarpa*
1	3	12.4	AS	5	DESSUB	*Desplatsia subericarpa*
2	1	11	AS	5	DIOCAN	*Diospyros caniculata*
3	1	46.8	AS	11	MYRARB	*Myrianthus arboreus*
4	1	17.9	AS	5	DIOCAN	*Diospyros caniculata*
5	1	130	AS	16	CEIPEN	*Ceiba pentandra*
6	1	13.5	AS	9	XYLPAR	*Xylopia cf. parviflora*
7	1	29.8	AL	8	MYRARB	*Myrianthus arboreus*
8	1	14.3	AS	9	DIOBIP	*Diospyros bipindensis*
9	1	13.5	AL	5	THOHEN	*Thomandersia hensii*
10	1	38.8	AS	8	MYRARB	*Myrianthus arboreus*

Quadrat: 8

1	1	23.5	AS	6	RINOBL	*Rinorea oblongifolia*
2	1	10.5	AS	4	KLAGAB	*Klainedoxa gabonensis*
3	1	12.6	AS	7	BARNIG	*Barteria nigritana*
3	2	10.8	AS	4	BARNIG	*Barteria nigritana*
4	1	10.9	AS	5	LEPBAT	*Leptonychia cf. batangensis*
5	1	12.4	AS	5	DIOCAN	*Diospyros caniculata*
6	1	51.3	AL	8	DESDEW	*Desplatsia dewevrei*
7	1	21	AS	6	RINOBL	*Rinorea oblongifolia*
8	1	11.2	AS	4	DIOCAN	*Diospyros caniculata*
9	1	22.5	AS	10	DIAZEN	*Dialium zenkeri*
10	1	22	AS	9	DIOCAN	*Diospyros caniculata*
11	1	12.5	AS	3	DIOCAN	*Diospyros caniculata*
12	1	23.7	AS	10	CELSP	*Celtis sp*
13	1	19.3	AS	5	LECCUP	*Lecaniodiscus cupanioides*
14	1	12.3	AS	4	LEPBAT	*Leptonychia cf. batangensis*
15	1	21.5	AB	4	DIOCAN	*Diospyros caniculata*
16	1	12.8	AS	6	RINOBL	*Rinorea oblongifolia*
17	1	17	AS	7	PANOLE	*Panda oleosa*

Quadrat: 9

1	1	32.6	AL	2	MARLUT	*Markhamia lutea*
2	1	21.2	AS	6	MARLUT	*Markhamia lutea*
3	1	16.3	AS	4	DIOCAN	*Diospyros caniculata*
4	1	10.8	AS	4	DIOCAN	*Diospyros caniculata*
5	1	10.5	AS	3	DIOCAN	*Diospyros caniculata*
6	1	12.8	AS	5	MILSP	*Milletia sp*
7	1	11.8	AS	4	DIOCAN	*Diospyros caniculata*
8	1	43.3	AS	10	MYRARB	*Myrianthus arboreus*

Quadrat: 10

1	1	10.4	AS	5	ZANTES	*Zanthoxyllum tessmannii*
2	1	11.4	AL	4	MARLUT	*Markhamia lutea*
3	1	11.8	AS	2	GLYBRE	*Glyphaea brevis*

4	1	26.4	AS	7	COLLAT	*Cola latericia*
5	1	12.1	AS	4	DIOCAN	*Diospyros caniculata*
6	1	10	AS	3	GROMAC	*Grossera macrantha*
7	1	11.1	AS	3	MYRARB	*Myrianthus arboreus*
8	1	14.9	AS	3	DIOCAN	*Diospyros caniculata*
9	1	10.8	AS	3	HEXCRI	*Hexalobus crispiflorus*
10	1	34.4	AS	8	HEXCRI	*Hexalobus crispiflorus*
11	1	14	AS	6	FUNELA	*Funtumia elastica*

Quadrat: 11

1	1	95	AS	23	TERSUP	*Terminalia superba*
2	1	26.6	AF	8	MARLUT	*Markhamia lutea*
3	1	20.2	AS	9	CELZEN	*Celtis zenkeri*
4	1	35.2	AS	13	CELADO	*Celtis adolfi-friderici*
5	1	14.1	AS	5	DIOCAN	*Diospyros caniculata*
6	1	14.8	AS	3	COLCOR	*Cola cordifolia*
7	1	11.5	AS	6	KLAGAB	*Klainedoxa gabonensis*
8	1	11.1	AL	4	TRICRE	*Tricalysia crepiniana*
9	1	11.5	AS	4	DIOBIP	*Diospyros bipindensis*
10	1	22.2	AS	6	PANOLE	*Panda oleosa*
11	1	49.3	AS	8	MYRARB	*Myrianthus arboreus*
11	2	39.3	AS	8	MYRARB	*Myrianthus arboreus*
12	1	12.7	AS	5	DIOCAN	*Diospyros caniculata*
13	1	14.9	AS	5	DIOBIP	*Diospyros bipindensis*
14	1	14	AS	6	DRYLEO	*Drypetes leonensis*
15	1	11.4	AS	5	ISOSP	*Isolona sp*

Quadrat: 12

1	1	13.2	AS	5	DIOCAN	*Diospyros caniculata*
2	1	15.8	AS	6	DIOCAN	*Diospyros caniculata*
3	1	13.3	AS	6	MILSP	*Milletia sp*
4	1	105.5	AS	12	PANOLE	*Panda oleosa*
5	1	11	AS	3	DIOCAN	*Diospyros caniculata*
6	1	33.3	AS	12	STEBEQ	*Sterculia bequaertii*
7	1	11	AS	4	RINDEN	*Rinorea dentata*
8	1	21	AS	12	INDET	
9	1	14.4	AS	5	MARLUT	*Markhamia lutea*
10	1	19.5	AS	6	ANTMAC	*Anthonotha macrophylla*
11	1	41.4	AS	10	DESDEW	*Desplatsia dewevrei*

Quadrat: 13

1	1	11.2	AS	6	DIOCAN	*Diospyros caniculata*
2	1	16.3	AS	6	DIOCAN	*Diospyros caniculata*
3	1	13.9	AS	7	DIOCAN	*Diospyros caniculata*
4	1	12.2	AS	6	KLAGAB	*Klainedoxa gabonensis*
5	1	12	AS	5	DIOCAN	*Diospyros caniculata*
6	1	23.8	AS	6	DIOCAN	*Diospyros caniculata*

7	1	16.5	AS	4	LECCUP	*Lecaniodiscus cupanioides*
8	1	10.4	AS	3	RINDEN	*Rinorea dentata*
9	1	46	AL	10	DESDEW	*Desplatsia dewevrei*
10	1	50	AS	8	KLAGAB	*Klainedoxa gabonensis*
11	1	27.3	AS	9	CELADO	*Celtis adolfi-friderici*

Quadrat: 14

1	1	11.6	AS	6	DIOCAN	*Diospyros caniculata*
2	1	10.3	AS	5	DIOCAN	*Diospyros caniculata*
3	1	47.8	AS	8	MARLUT	*Markhamia lutea*
4	1	12.2	AS	5	DESSUB	*Desplatsia subericarpa*
5	1	15.7	AS	4	DIOCAN	*Diospyros caniculata*
6	1	12.9	AL	4	GLYBRE	*Glyphaea brevis*
6	2	11	AL	3	GLYBRE	*Glyphaea brevis*
7	1	10	AS	4	RINDEN	*Rinorea dentata*
8	1	16.3	AS	6	CHAARI	*Chaetacme aristata*
8	2	28.2	AS	6	CHAARI	*Chaetacme aristata*
8	3	12.7	AS	0	CHAARI	*Chaetacme aristata*
8	4	32.2	AS	0	CHAARI	*Chaetacme aristata*
9	1	120	AS	21	TERSUP	*Terminalia superba*
10	1	15.5	AS	4	DIOCAN	*Diospyros caniculata*
11	1	18.6	AS	5	DIOCAN	*Diospyros caniculata*
12	1	12.5	AS	6	ISOSP	*Isolona sp*

Quadrat: 15

1	1	10.4	AS	5	XYLPAR	*Xylopia cf. parviflora*
2	1	31.3	AL	8	MARLUT	*Markhamia lutea*
3	1	15.1	AS	6	RINOBL	*Rinorea oblongifolia*
4	1	22	AS	6	CORPAC	*Corynanthe pachyceras*
5	1	10	AS	3	DIOCAN	*Diospyros caniculata*
6	1	36.8	AS	15	ERYMAN	*Erythroxylum mannii*
7	1	25.5	AS	12	FUNELA	*Funtumia elastica*
8	1	10.4	AS	3	RINDEN	*Rinorea dentata*
9	1	13.3	AS	5	LECCUP	*Lecaniodiscus cupanioides*
10	1	16.8	AS	6	RINOBL	*Rinorea oblongifolia*
11	1	11.3	AS	4	DIOCAN	*Diospyros caniculata*
12	1	10.2	AS	5	RINDEN	*Rinorea dentata*
13	1	18	AF	4	DIOCAN	*Diospyros caniculata*

Quadrat: 16

1	1	12.1	AS	6	DIOCAN	*Diospyros caniculata*
2	1	12.2	AL	5	TRIWEL	*Trichilia welwitschii*
3	1	10.9	AS	6	HEXCRI	*Hexalobus crispiflorus*
4	1	41	AS	10	MYRARB	*Myrianthus arboreus*
4	2	40.5	AS	0	MYRARB	*Myrianthus arboreus*
4	3	50.3	AS	0	MYRARB	*Myrianthus arboreus*
5	1	20.9	AS	8	CELZEN	*Celtis zenkeri*

6	1	29.5	AS	9	MARLUT	*Markhamia lutea*
7	1	10.8	AS	2	DUBVIR	*Duboscia viridiflora*
9	1	10.6	AS	5	DIOCAN	*Diospyros caniculata*
10	1	51.4	AS	8	MYRARB	*Myrianthus arboreus*
11	1	20.6	AS	11	MILSP3	*Millettia sp3*
12	1	11.4	AS	8	COLLAT	*Cola latericia*
13	1	42.4	AS	14	MILSP3	*Millettia sp3*
14	1	10.1	AS	3	DIOCAN	*Diospyros caniculata*

Quadrat: 17

1	1	29.2	AS	12	DESDEW	*Desplatsia dewevrei*
2	1	65	AS	22	TERSUP	*Terminalia superba*
3	1	32	AS	10	DESDEW	*Desplatsia dewevrei*
4	1	14.6	AS	6	DIOCAN	*Diospyros caniculata*
5	1	19.8	AS	10	MARLUT	*Markhamia lutea*
6	1	23	AS	6	DESDEW	*Desplatsia dewevrei*
8	1	40.2	AS	12	MARLUT	*Markhamia lutea*
9	1	16.3	AS	6	MARLUT	*Markhamia lutea*

Quadrat: 18

1	1	19	AS	8	MILSP3	*Millettia sp3*
2	1	26.7	AS	9	CELZEN	*Celtis zenkeri*
3	1	44.7	AS	10	MYRARB	*Myrianthus arboreus*
4	1	12	AS	6	CHAARI	*Chaetacme aristata*
4	2	16.1	AS	7	CHAARI	*Chaetacme aristata*
5	1	23.7	AS	10	GRESUA	*Greenwayodendron suaveolens*
6	1	14.8	AS	18	PANOLE	*Panda oleosa*
7	1	38	AS	14	MILSP3	*Millettia sp3*
8	1	17.2	AS	6	MARLUT	*Markhamia lutea*
9	1	23.9	AS	7	CELZEN	*Celtis zenkeri*
10	1	18.7	AS	5	ISOTHO	*Isolona thonerii*
11	1	10.8	AS	4	COLLAT	*Cola latericia*
12	1	10.6	AS	6	RINDEN	*Rinorea dentata*
13	1	26.8	AS	10	FUNELA	*Funtumia elastica*
14	1	13.7	AS	5	DESDEW	*Desplatsia dewevrei*
15	1	10.5	AS	5	ANTMAC	*Anthonotha macrophylla*

Quadrat: 19

1	1	14.1	AB	8	DIOCAN	*Diospyros caniculata*
2	1	34.9	AS	10	MYRARB	*Myrianthus arboreus*
2	2	2.16	AS	0	MYRARB	*Myrianthus arboreus*
2	3	49.9	AS	0	MYRARB	*Myrianthus arboreus*
2	4	32	AS	0	MYRARB	*Myrianthus arboreus*
2	5	37.4	AS	0	MYRARB	*Myrianthus arboreus*
2	6	30.4	AS	0	MYRARB	*Myrianthus arboreus*
3	1	16.8	AS	8	KLAGAB	*Klainedoxa gabonensis*
4	1	80	AS	23	CORPLA	*Cordia platythyrsa*

5	1	10.5	AS	2	DIOBIP	*Diospyros bipindensis*
6	1	10.1	AS	4	MILSP4	*Millettia sp4*
7	1	25.3	AS	8	MYRARB	*Myrianthus arboreus*
		Quadrat: 20				
1	1	41.2	AS	9	MARLUT	*Markhamia lutea*
2	1	13.6	AS	2	GROMAC	*Grossera macrantha*
3	1	11.9	AS	4	DIOCAN	*Diospyros caniculata*
4	1	17.5	AS	6	DIOITU	*Diospyrus iturensis*
5	1	18.2	AS	8	GROMAC	*Grossera macrantha*
6	1	12.9	AS	4	GROMAC	*Grossera macrantha*
7	1	18.9	AS	6	CORPLA	*Cordia platythyrsa*
8	1	11.5	AS	6	GROMAC	*Grossera macrantha*
9	1	10.55	AS	3	DIOCAN	*Diospyros caniculata*
10	1	11	AS	3	DIOCAN	*Diospyros caniculata*
11	1	16.4	AS	3	BLISAP	*Blighia sapida*
		Quadrat: 21				
1	1	40.9	AL	12	MILSP3	*Millettia sp3*
2	1	55	AL	10	MYRARB	*Myrianthus arboreus*
3	1	32	AS	8	MYRARB	*Myrianthus arboreus*
4	1	11	AS	4	DIOCAN	*Diospyros caniculata*
5	1	12.2	AS	5	GLYBRE	*Glyphaea brevis*
6	1	12.5	AL	6	DIOCAN	*Diospyros caniculata*
7	1	14.3	AL	7	CANSP2	*Canthium sp 2*
8	1	26.8	AS	8	MARLUT	*Markhamia lutea*
9	1	10.5	AS	4	RINOBL	*Rinorea oblongifolia*
10	1	13.5	AS	6	OCHAFR	*Ochthocosmus africanus*
11	1	10.3	AS	7	DRY1	*Drypetes sp 1*
12	1	110	AS	23	TERSUP	*Terminalia superba*
		Quadrat: 22				
2	1	12.7	AS	4	DASSP	*Dasylepsis sp*
3	1	17.8	AS	5	DESDEW	*Desplatsia dewevrei*
4	1	13.7	AS	5	MILDRA	*Milletia drastica*
5	1	15.3	AS	7	PAUMAC	*Pausinystalia macroceras*
6	1	19.8	AS	8	CELZEN	*Celtis zenkeri*
7	1	18.7	AS	9	MILSP3	*Millettia sp3*
8	1	65	AS	14	MILDRA	*Milletia drastica*
9	1	33.1	AS	10	DESDEW	*Desplatsia dewevrei*
10	1	10.2	AS	8	MARLUT	*Markhamia lutea*
11	1	17.8	AS	8	DESDEW	*Desplatsia dewevrei*
12	1	27.5	AL	10	DESDEW	*Desplatsia dewevrei*
13	1	20.8	AS	9	DASSP	*Dasylepsis sp*
14	1	10.2	AS	4	DASSP	*Dasylepsis sp*
15	1	17.8	AB	4	DASSP	*Dasylepsis sp*

Quadrat: 23

1	1	23	AS	7	MYRARB	*Myrianthus arboreus*
2	1	132.6	AS	14	RICHEU	*Riccinodendron heudelotii*
3	1	105	AS	21	TERSUP	*Terminalia superba*
4	1	11.4	AS	7	DESDEW	*Desplatsia dewevrei*
5	1	50.1	AS	12	MILSP3	*Millettia sp3*
6	1	33.8	AB	5	MARLUT	*Markhamia lutea*
7	1	19.6	AS	7	DIOCAN	*Diospyros caniculata*
8	1	19.4	AS	6	LECCUP	*Lecaniodiscus cupanioides*
9	1	21.9	AS	8	MYRARB	*Myrianthus arboreus*
9	2	20.8	AS	0	MYRARB	*Myrianthus arboreus*
9	3	28.6	AS	0	MYRARB	*Myrianthus arboreus*

Quadrat: 24

1	1	24.7	AF	10	BRACYN	*Brachystegia cf. cynometroides*
2	1	21.8	AF	8	DESSUB	*Desplatsia subericarpa*
3	1	10.4	AB	4	DIOCAN	*Diospyros caniculata*
4	1	29.4	AS	7	ONCWEL	*Oncoba welwitchii*
5	1	12.3	AL	4	MILSP	*Milletia sp*
6	1	12.2	AF	6	DIOCAN	*Diospyros caniculata*
7	1	16.3	AS	6	BARNIG	*Barteria nigritana*

Quadrat: 25

1	1	11.2	AS	5	GRESUA	*Greenwayodendron suaveolens*
2	1	23.4	AS	9	MYRARB	*Myrianthus arboreus*
3	1	12.7	AS	6	DIOCAN	*Diospyros caniculata*
4	1	18.1	AS	10	DIOCAN	*Diospyros caniculata*
5	1	120	AS	20	CEIPEN	*Ceiba pentandra*
6	1	11.7	AS	6	MILDRA	*Milletia drastica*
7	1	17.2	AS	8	KLAGAB	*Klainedoxa gabonensis*
8	1	12.4	AS	6	GRESUA	*Greenwayodendron suaveolens*
9	1	27.9	AS	11	MILDRA	*Milletia drastica*
10	1	23.8	AS	9	CELADO	*Celtis adolfi-friderici*
11	1	16.8	AS	8	DIOCAN	*Diospyros caniculata*
12	1	11.5	AS	6	DIOCAN	*Diospyros caniculata*
13	1	90	AS	21	TERSUP	*Terminalia superba*
14	1	35.3	AS	10	DESDEW	*Desplatsia dewevrei*
15	1	24.6	AS	15	FUNELA	*Funtumia elastica*
16	1	50.7	AS	12	MYRARB	*Myrianthus arboreus*
17	1	19.8	AS	8	MARLUT	*Markhamia lutea*

SPECIES FREQUENCY PLOT 3

Sp Code	Total Trees	Total Stems	Average DBH(cm)	Basal Area	Relative Density	Relative Dominance	Relative Frequency	IVI
DIOCAN	69	69	14.492	1.138	23.15	3.84	11.06	38.05
TERSUP	10	10	98.334	7.594	3.36	25.61	4.33	33.29
MYRARB	22	32	37.914	3.613	7.38	12.18	6.73	26.3
CEIPEN	3	3	133.915	4.225	1.01	14.25	1.44	16.7
MARLUT	17	17	27.987	1.046	5.7	3.53	6.73	15.96
DESDEW	17	17	29.995	1.201	5.7	4.05	5.29	15.04
CELZEN	10	10	24.257	0.462	3.36	1.56	3.37	8.28
MILSP3	8	8	33.31	0.697	2.68	2.35	2.88	7.92
CORPLA	4	4	65.463	1.346	1.34	4.54	1.92	7.8
LECCUP	8	8	22.88	0.329	2.68	1.11	3.85	7.64
PANOLE	5	5	49.599	0.966	1.68	3.26	2.4	7.34
KLAGAB	7	7	22.743	0.284	2.35	0.96	2.88	6.19
RINOBL	8	8	17.157	0.185	2.68	0.62	2.4	5.71
MILDRA	6	6	32.251	0.49	2.01	1.65	1.92	5.59
RICHEU	1	1	132.6	1.381	0.34	4.66	0.48	5.47
RINDEN	7	7	10.404	0.06	2.35	0.2	2.88	5.43
COLCOR	2	2	74.98	0.883	0.67	2.98	0.96	4.61
DIAL	4	4	45.389	0.647	1.34	2.18	0.96	4.49
CELADO	4	4	26.742	0.225	1.34	0.76	1.92	4.02
MILSP	5	5	15.366	0.093	1.68	0.31	1.92	3.91
FUNELA	4	4	23.29	0.17	1.34	0.57	1.92	3.84
HEXCRI	4	4	20.873	0.137	1.34	0.46	1.44	3.25
DIOBIP	4	4	12.933	0.053	1.34	0.18	1.44	2.96
GROMAC	5	5	13.527	0.072	1.68	0.24	0.96	2.88
DESSUB	3	5	14.683	0.085	1.01	0.29	1.44	2.73
COLLAT	3	3	17.735	0.074	1.01	0.25	1.44	2.7
GLYBRE	3	4	11.995	0.045	1.01	0.15	1.44	2.6
CHAARI	2	6	21.064	0.209	0.67	0.71	0.96	2.34
DUBVIR	2	2	32.655	0.167	0.67	0.56	0.96	2.2
GRESUA	3	3	16.742	0.066	1.01	0.22	0.96	2.19
DASSP	4	4	15.928	0.08	1.34	0.27	0.48	2.09
STEBEQ	2	2	26.7	0.112	0.67	0.38	0.96	2.01
ZANTES	2	2	19.735	0.061	0.67	0.21	0.96	1.84
DIOMON	2	2	19.2	0.058	0.67	0.2	0.96	1.83
BARNIG	2	3	13.43	0.042	0.67	0.14	0.96	1.78
ANTMAC	2	2	15.66	0.039	0.67	0.13	0.96	1.76
XYLPAR	2	2	12.05	0.023	0.67	0.08	0.96	1.71
ISOSP	2	2	11.963	0.022	0.67	0.08	0.96	1.71
PTESOY	1	1	51.2	0.206	0.34	0.69	0.48	1.51
IRVGRA	1	1	50.2	0.198	0.34	0.67	0.48	1.48
DIOCRA	2	2	17.275	0.047	0.67	0.16	0.48	1.31
TRIHEU	1	1	42.6	0.143	0.34	0.48	0.48	1.3
LEPBAT	2	2	11.621	0.021	0.67	0.07	0.48	1.22
ERYMAN	1	1	36.8	0.106	0.34	0.36	0.48	1.17
ONCWEL	1	1	29.4	0.068	0.34	0.23	0.48	1.05
BRACYN	1	1	24.7	0.048	0.34	0.16	0.48	0.98
CELSP	1	1	23.7	0.044	0.34	0.15	0.48	0.97

DIAZEN	1	1	22.5	0.04	0.34	0.13	0.48	0.95
CORPAC	1	1	22	0.038	0.34	0.13	0.48	0.94
INDET	1	1	21	0.035	0.34	0.12	0.48	0.93
DACEDU	1	1	20.8	0.034	0.34	0.11	0.48	0.93
PHYDIS	1	1	19.2	0.029	0.34	0.1	0.48	0.91
ISOTHO	1	1	18.7	0.027	0.34	0.09	0.48	0.91
DIOITU	1	1	17.5	0.024	0.34	0.08	0.48	0.9
BLISAP	1	1	16.4	0.021	0.34	0.07	0.48	0.89
PAUMAC	1	1	15.3	0.018	0.34	0.06	0.48	0.88
STRPUS	1	1	15	0.018	0.34	0.06	0.48	0.88
CANSP2	1	1	14.3	0.016	0.34	0.05	0.48	0.87
DRYLEO	1	1	14	0.015	0.34	0.05	0.48	0.87
OCHAFR	1	1	13.5	0.014	0.34	0.05	0.48	0.86
THOHEN	1	1	13.5	0.014	0.34	0.05	0.48	0.86
COLDEW	1	1	12.9	0.013	0.34	0.04	0.48	0.86
TRIWEL	1	1	12.2	0.012	0.34	0.04	0.48	0.86
TRICRE	1	1	11.1	0.01	0.34	0.03	0.48	0.85
DRY1	1	1	10.3	0.008	0.34	0.03	0.48	0.84
MILSP4	1	1	10.1	0.008	0.34	0.03	0.48	0.84
	298	316	1823.737	29.655	100.09	100.01	99.92	299.98

SPECIES LIST (PLOT 3)

Sp Code	Genus	Species
ANTMAC	*Anthonotha*	*macrophylla*
BARNIG	*Barteria*	*nigritana*
BLISAP	*Blighia*	*sapida*
BRACYN	*Brachystegia*	*cf. cynometroides*
CANSP2	*Canthium*	*sp 2*
CANSUB	*Canthium*	*subcordatum*
CEIPEN	*Ceiba*	*pentandra*
CELADO	*Celtis*	*adolfi-friderici*
CELSP	*Celtis*	*sp*
CELZEN	*Celtis*	*zenkeri*
CHAARI	*Chaetacme*	*aristata*
COLCOR	*Cola*	*cordifolia*
COLDEW	*Colletoecema*	*dewevrei*
COLLAT	*Cola*	*latericia*
CORPAC	*Corynanthe*	*pachyceras*
CORPLA	*Cordia*	*platythyrsa*
DACEDU	*Dacryodes*	*edulis*
DASSP	*Dasylepsis*	*sp*
DESDEW	*Desplatsia*	*dewevrei*
DESSUB	*Desplatsia*	*subericarpa*
DIAL	*Dialium*	*sp*
DIAZEN	*Dialium*	*zenkeri*
DIOBIP	*Diospyros*	*bipindensis*
DIOCAN	*Diospyros*	*caniculata*
DIOCRA	*Diospyros*	*crassifolia*
DIOITU	*Diospyrus*	*iturensis*
DIOMON	*Diospyros*	*monbuttensis*
DRY1	*Drypetes*	*sp 1*
DRYLEO	*Drypetes*	*leonensis*
DUBVIR	*Duboscia*	*viridiflora*
ERYMAN	*Erythroxylum*	*mannii*
FUNELA	*Funtumia*	*elastica*
GLYBRE	*Glyphaea*	*brevis*
GRESUA	*Greenwayodendron*	*suaveolens*
GROMAC	*Grossera*	*macrantha*
HEXCRI	*Hexalobus*	*crispiflorus*
INDET		
IRVGRA	*Irvingia*	*grandifolia*
ISOSP	*Isolona*	*sp*
ISOTHO	*Isolona*	*thonerii*
KLAGAB	*Klainedoxa*	*gabonensis*
LECCUP	*Lecaniodiscus*	*cupanioides*
LEPBAT	*Leptonychia*	*cf. batangensis*
MARLUT	*Markhamia*	*lutea*
MILDRA	*Milletia*	*drastica*
MILSP	*Milletia*	*sp*

MILSP3	*Millettia*	*sp3*
MILSP4	*Millettia*	*sp4*
MYRARB	*Myrianthus*	*arboreus*
OCHAFR	*Ochthocosmus*	*africanus*
ONCWEL	*Oncoba*	*welwitchii*
PANOLE	*Panda*	*oleosa*
PAUMAC	*Pausinystalia*	*macroceras*
PHYDIS	*Phyllanthus*	*discoideus*
PTESOY	*Pterocarpus*	*soyauxii*
RICHEU	*Riccinodendron*	*heudelotii*
RINDEN	*Rinorea*	*dentata*
RINOBL	*Rinorea*	*oblongifolia*
STEBEQ	*Sterculia*	*bequaertii*
STRPUS	*Strombosia*	*pustulata*
TERSUP	*Terminalia*	*superba*
THOHEN	*Thomandersia*	*hensii*
TRICRE	*Tricalysia*	*crepiniana*
TRIHEU	*Trichilia*	*heudelotti*
TRIWEL	*Trichilia*	*welwitschii*
XYLPAR	*Xylopia*	*cf. parviflora*
ZANTES	*Zanthoxyllum*	*tessmannii*
unknown	*unknown*	*unknown*

PLOT 4
QUADRATS

Quadrat: 1

Tree No	Stem No	Dbh	Status	Height	Sp Code	Species
1	1	22.2	AL		10ONCMAN	*Oncoba Manii*
2	1	18.1	AL		8COLDEW	*Colletoecema dewevrei*
3	1	18.7	AS		9ONCMAN	*Oncoba Manii*
4	1	11.7	AS		6DIOITU	*Diospyrus iturensis*
5	1	19.1	AS		8PAUMAC	*Pausinystalia macroceras*
6	1	26.5	AS		10PAUMAC	*Pausinystalia macroceras*
7	1	30.4	AS		12PAUMAC	*Pausinystalia macroceras*
8	1	10.5	AS		5TABPEN	*Tabernaemontana penduliflora*
9	1	22.8	AS		10ONCMAN	*Oncoba Manii*
10	1	15.7	AB		3DRYGIL	*Drypetes gilgiana*
11	1	7.2	AS		17IRVGRA	*Irvingia grandifolia*
12	1	10.7	AS		5RINWEL	*Rinorea welwitschii*
13	1	24.7	AS		8PAUMAC	*Pausinystalia macroceras*
14	1	18.2	AS		8MANLET	*Manilkara Letouzeyi*
15	1	11.9	AS		4DIOITU	*Diospyrus iturensis*
16	1	10.3	AS		5ANGPYN	*Angylocalyx pynaertii*
17	1	15.8	AS		6DRYGIL	*Drypetes gilgiana*
18	1	74.7	AS		20HEXCRI	*Hexalobus crispiflorus*
19	1	11.2	AS		6ONCMAN	*Oncoba Manii*
20	1	68.8	AS		15MANLET	*Manilkara Letouzeyi*
21	1	28	AS		12PHYDIS	*Phyllanthus discoideus*
22	1	14.7	AS		10PAUMAC	*Pausinystalia macroceras*

Quadrat: 2

1	1	12.5	AS		5SCOCOR	*Scottellia coriacea*
2	1	14	AS		6DICGLA	*Dichostema glaucescens*
3	1	57.2	AS		18MANLET	*Manilkara Letouzeyi*
4	1	16.4	AL		8ONCMAN	*Oncoba Manii*
5	1	14.7	AL		6HEXCRI	*Hexalobus crispiflorus*
6	1	11.9	AS		7DIOITU	*Diospyrus iturensis*
7	1	10.2	AB		4ENTSP	*Entandophragma sp*
8	1	29.8	AB		10MANLET	*Manilkara Letouzeyi*
9	1	26.9	AS		12ERYSUA	*Erythrophloeum suaveolens*
10	1	12.3	AS		8BEIFUL	*Beilschmeidia fulva*
11	1	21.4	AS		13ENTCYL	*Entandrophragma cylindricum*
12	1	18.3	AS		8ONCMAN	*Oncoba Manii*
13	1	11.5	AL		5RINWEL	*Rinorea welwitschii*
14	1	12	AS		6ONCMAN	*Oncoba Manii*
15	1	10.5	AS		5PAUMAC	*Pausinystalia macroceras*
16	1	22.2	AS		8ONCMAN	*Oncoba Manii*
17	1	12.8	AS		6ONCMAN	*Oncoba Manii*
18	1	13.5	AS		5DICGLA	*Dichostema glaucescens*
19	1	13.1	AS		7ERYSUA	*Erythrophloeum suaveolens*
20	1	37.9	AS		10MANLET	*Manilkara Letouzeyi*

Quadrat: 3

1	1	40.3AS	6INDET5	
2	1	15.5AS	7STAKAM	*Staudtia kamerunensis*
3	1	18.2AS	8CHLCHL	*Chlamydocola chlamydantha*
4	1	23.3AL	10ANGPYN	*Angylocalyx pynaertii*
5	1	18.7AS	6DICGLA	*Dichostema glaucescens*
6	1	18.1AS	7STAKAM	*Staudtia kamerunensis*
7	1	27.2AS	10ZANTES	*Zanthoxyllum tessmannii*
8	1	16AS	5ONCMAN	*Oncoba Manii*
9	1	27AS	10ONCMAN	*Oncoba Manii*
10	1	15.2AS	6MANLET	*Manilkara Letouzeyi*
11	1	15.2AS	7HEXSP	*Hexalobus sp*
12	1	15AS	6DICGLA	*Dichostema glaucescens*
13	1	18.2AS	7SYNSTI	*Synsepalum stipulatum*
14	1	11.4AS	5AFRSP	*Afrostyrax sp*
15	1	12.4AS	5SYNSTI	*Synsepalum stipulatum*
16	1	12.5AS	7CAN	*cf Canthium sp*
17	1	21.2AS	9ONCMAN	*Oncoba Manii*
18	1	10.9AS	6DIOITU	*Diospyrus iturensis*
19	1	10AS	5DIOBIP	*Diospyros bipindensis*

Quadrat: 4

1	1	9.5AS	14LOPALA	*Lophira alata*
2	1	19.3AS	6ONCMAN	*Oncoba Manii*
3	1	14.2AS	5ONCMAN	*Oncoba Manii*
4	1	13.3AS	5ONCMAN	*Oncoba Manii*
5	1	36.3AS	10DASSP	*Dasylepsis sp*
6	1	28.6AS	7TREAFR	*Treculia africana*
7	1	13.3AF	6ONCMAN	*Oncoba Manii*
8	1	11.8AS	7XYLHYP	*Xylopia hypolampra*
9	1	10.5AS	7XYLHYP	*Xylopia hypolampra*
10	1	12.4AS	7XYLHYP	*Xylopia hypolampra*
11	1	17.2AB	4ENTSP	*Entandophragma sp*
12	1	11AS	5STRPUS	*Strombosia pustulata*
13	1	16.6AS	8BEIFUL	*Beilschmeidia fulva*
14	1	13.8AB	4MANLET	*Manilkara Letouzeyi*
15	1	10.4AS	6ONCMAN	*Oncoba Manii*
16	1	20AS	8DISCAL	*Discoglypremna caloneura*
17	1	21.1AS	7ONCMAN	*Oncoba Manii*
18	1	34.3AS	10DISCAL	*Discoglypremna caloneura*
19	1	30.3AS	11DISCAL	*Discoglypremna caloneura*
20	1	15.9AS	4DICGLA	*Dichostema glaucescens*

Quadrat: 5

1	1	13AS	6DRYAFR	*Drypetes aframensis*
2	1	24.3AS	10PAUMAC	*Pausinystalia macroceras*
3	1	59.5AS	13CLESTA	*Cleistopholis staudtii*

4	1	11.8AS	4HEXCRI	*Hexalobus crispiflorus*
5	1	54.7AL	8COEPRE	*Coelocaryon preussii*
6	1	37.8AS	11MANLET	*Manilkara Letouzeyi*
7	1	31.2AS	10MYRARB	*Myrianthus arboreus*
8	1	18.3AS	5DIOCAN	*Diospyros caniculata*
9	1	16.3AL	6PHYDIS	*Phyllanthus discoideus*
10	1	11.1AS	5DICGLA	*Dichostema glaucescens*
11	1	17.2AS	6DISCAL	*Discoglypremna caloneura*
12	1	32.6AS	11ENTUTI	*Entandrophragma utile*
13	1	11.4AS	5TRITAL	*Tricalysia talbotii*
14	1	13.3AS	5ANTMAC	*Anthonotha macrophylla*

Quadrat: 6

1	1	35.8AS	12XYLHYP	*Xylopia hypolampra*
2	1	23.9AS	9CLESTA	*Cleistopholis staudtii*
3	1	25.1AS	6PANLAU	*Panchovia laurentii*
4	1	36.3AS	8PANOLE	*Panda oleosa*
5	1	12.4AS	5RINWEL	*Rinorea welwitschii*
6	1	10.5AS	5DRYGIL	*Drypetes gilgiana*
7	1	23.3AS	7PAUMAC	*Pausinystalia macroceras*
8	1	10.9AS	5MASACU	*Massularia acuminata*
9	1	53.9AS	13ERYSUA	*Erythrophloeum suaveolens*
10	1	54.3AS	10AFRLEP	*Afrostyrax lepidophyllus*
11	1	13.4AS	6DICGLA	*Dichostema glaucescens*
12	1	20.7AS	7ONCMAN	*Oncoba Manii*
13	1	13AS	7ONCMAN	*Oncoba Manii*
14	1	46.9AS	12PAUMAC	*Pausinystalia macroceras*
15	1	27.9AS	10PAUMAC	*Pausinystalia macroceras*
16	1	39.3AS	11XYLHYP	*Xylopia hypolampra*
17	1	32.4AS	10PHYLET	*Phyllanthus cf. letouzeyanus*
18	1	14.2AS	6CHLCHL	*Chlamydocola chlamydantha*
19	1	26AS	14XYLHYP	*Xylopia hypolampra*
20	1	11.5AS	4RINWEL	*Rinorea welwitschii*
21	1	15.8AS	6DIOITU	*Diospyrus iturensis*
22	1	14.5AS	6ONCMAN	*Oncoba Manii*
23	1	16.8AS	8ONCMAN	*Oncoba Manii*

Quadrat: 7

1	1	14.5AS	5DICGLA	*Dichostema glaucescens*
2	1	20.4AS	6PAUMAC	*Pausinystalia macroceras*
3	1	10.2AL	4RINWEL	*Rinorea welwitschii*
4	1	30.3AS	12STRPUS	*Strombosia pustulata*
5	1	27AS	10PANLAU	*Panchovia laurentii*
6	1	22.1AS	8XYLHYP	*Xylopia hypolampra*
7	1	28.6AS	7ONCMAN	*Oncoba Manii*
8	1	16.8AS	5DICGLA	*Dichostema glaucescens*
9	1	28.1AS	7MARLUT	*Markhamia lutea*
10	1	13AS	5DICGLA	*Dichostema glaucescens*

11	1	31.6AS	7NESPAP	*Nesogodornia papaverifera*
12	1	34.9AS	7PANLAU	*Panchovia laurentii*
13	1	16.2AS	6BARNIG	*Barteria nigritana*

Quadrat: 8

1	1	17.9AL	4DICGLA	*Dichostema glaucescens*
2	1	11.1AL	4CAN	*cf Canthium sp*
3	1	11AS	5CHLCHL	*Chlamydocola chlamydantha*
4	1	13.8AS	5CARSP	*Carapa sp*
4	2	13.1AS	5CARSP	*Carapa sp*
5	1	12.6AS	5LOPALA	*Lophira alata*
6	1	10.1AS	4ANTMAC	*Anthonotha macrophylla*
7	1	13.6AS	6ONCMAN	*Oncoba Manii*
8	1	16.4AS	7LOPALA	*Lophira alata*
9	1	11.4AS	5DIOBIP	*Diospyros bipindensis*
10	1	23AS	10TESAFR	*Tessmannia africana*
11	1	31.8AS	10DIAPAC	*Dialium pachyphyllum*
12	1	10.1AS	6DICGLA	*Dichostema glaucescens*
13	1	12.1AS	5DRYGIL	*Drypetes gilgiana*
14	1	11.4AS	3CAN	*cf Canthium sp*
14	2	12.4AS	5CAN	*cf Canthium sp*
15	1	28.1AS	15CELADO	*Celtis adolfi-friderici*
16	1	12.9AS	4DICGLA	*Dichostema glaucescens*
17	1	16.7AS	5DICGLA	*Dichostema glaucescens*
18	1	30.3AS	12PIPFAS	*Piptostigma cf. fasciculatum*
19	1	11AS	5DIOITU	*Diospyrus iturensis*

Quadrat: 9

1	1	29.9AS	7DESSUB	*Desplatsia subericarpa*
2	1	24.8AS	6DUBVIR	*Duboscia viridiflora*
3	1	13.5AS	5CARSP	*Carapa sp*
4	1	21.3AS	6ONCMAN	*Oncoba Manii*
5	1	11.4AL	3DICGLA	*Dichostema glaucescens*
6	1	34.5AS	9COLLAT	*Cola latericia*
7	1	28.9AS	12BLIWEL	*Blighia welwitschii*
8	1	22.2AS	10GRESUA	*Greenwayodendron suaveolens*
9	1	11.7AS	5TABPEN	*Tabernaemontana penduliflora*
10	1	33.1AS	10XYLPHO	*Xylopia phoiodora*
11	1	12.3AS	5GRESUA	*Greenwayodendron suaveolens*
12	1	14.7AS	5SYNSTI	*Synsepalum stipulatum*
13	1	16.8AS	6DICGLA	*Dichostema glaucescens*
14	1	12.4AS	3DICGLA	*Dichostema glaucescens*
15	1	16.8AS	7PAUMAC	*Pausinystalia macroceras*
16	1	11.8AS	6DICGLA	*Dichostema glaucescens*
17	1	11AS	6BEIFUL	*Beilschmeidia fulva*
18	1	27AS	10ONCMAN	*Oncoba Manii*
19	1	26.5AS	9DICGLA	*Dichostema glaucescens*
20	1	13.1AS	6TRISP	*Tricalysia sp*

Quadrat: 10

1	1	32.9AS	10GUATHO	*Guarea thompsonii*
2	1	37.9AS	11OCHAFR	*Ochthocosmus africanus*
3	1	11.7AS	5CARSP	*Carapa sp*
4	1	77AS	18CELTES	*Celtis tessmannii*
5	1	19.1AS	6MARLUT	*Markhamia lutea*
6	1	11.9AS	5MARLUT	*Markhamia lutea*
7	1	46.4AS	16BLIWEL	*Blighia welwitschii*
8	1	36.9AS	12TRIPRI	*Trichilia prieuriana*
9	1	13.7AS	8XYLHYP	*Xylopia hypolampra*
10	1	34.5AS	8GILDEW	*Gilbertiodendron dewevrei*
11	1	15.8AS	8DICGLA	*Dichostema glaucescens*
12	1	12.8AS	6ISOSP	*Isolona sp*
13	1	37.9AS	11ANGPYN	*Angylocalyx pynaertii*
14	1	15.9AS	7ORIGLA	*oriciopsis glaberrima*
15	1	18.4AS	6TABCRA	*Tabernaemontana crassa*
16	1	22.8AS	8DRYLEO	*Drypetes leonensis*
17	1	11.7AS	5DICGLA	*Dichostema glaucescens*
18	1	46.5AS	13PAUMAC	*Pausinystalia macroceras*
19	1	21.5AS	8FUNELA	*Funtumia elastica*
20	1	21.6AS	7TRIWEL	*Trichilia welwitschii*

Quadrat: 11

1	1	16.3AS	6ONCMAN	*Oncoba Manii*
2	1	12AS	5TABPEN	*Tabernaemontana penduliflora*
3	1	29.8AS	11LOVTRI	*Lovoa trichiloides*
4	1	26AL	9ANGPYN	*Angylocalyx pynaertii*
5	1	10.7AS	4DRYGIL	*Drypetes gilgiana*
6	1	14.1AL	6DIOMAN	*Diospyros mannii*
7	1	49.9AS	10GAMBOU	*Gambeya boukokowensis*
8	1	17.8AS	8ANTMAC	*Anthonotha macrophylla*
9	1	54.3AS	14STAKAM	*Staudtia kamerunensis*
10	1	40.1AS	10DUBVIR	*Duboscia viridiflora*

Quadrat: 12

1	1	30.2AS	10PHYLET	*Phyllanthus cf. letouzeyanus*
2	1	10.4AS	6DIOITU	*Diospyrus iturensis*
3	1	44.9AS	10PHYLET	*Phyllanthus cf. letouzeyanus*
4	1	14.9AS	6TRISP	*Tricalysia sp*
5	1	16.5AS	7HEXCRI	*Hexalobus crispiflorus*
6	1	12.9AS	6STRPUS	*Strombosia pustulata*
7	1	12.4AS	4ANOMAN	*Anonidium mannii*
8	1	10.5AS	5TABPEN	*Tabernaemontana penduliflora*
9	1	27AS	10ISOTHO	*Isolona thonerii*
10	1	11.5AS	5DRYGIL	*Drypetes gilgiana*
11	1	11.4AF	6XYLPHO	*Xylopia phoiodora*

12	1	34.6AS	9XYLPHO	*Xylopia phoiodora*
13	1	21.6AS	9PANOLE	*Panda oleosa*
14	1	19.8AS	8HEXCRI	*Hexalobus crispiflorus*
15	1	60.2AS	13GUATHO	*Guarea thompsonii*
16	1	10.4AS	5RINWEL	*Rinorea welwitschii*

Quadrat: 13

1	1	15.1AB	4CARSP	*Carapa sp*
2	1	13AS	3SYNSTI	*Synsepalum stipulatum*
3	1	20.4AS	7ONCMAN	*Oncoba Manii*
4	1	11.9AS	8HEXCRI	*Hexalobus crispiflorus*
5	1	11.8AS	5COLDEW	*Colletoecema dewevrei*
6	1	12AS	6STRTET	*Strombosiopsis tetrandra*
7	1	12.7AB	7CARSP	*Carapa sp*
8	1	14.3AS	5PAUMAC	*Pausinystalia macroceras*
9	1	10.5AL	4RINWEL	*Rinorea welwitschii*
10	1	21.3AS	8PAUMAC	*Pausinystalia macroceras*
11	1	80AS	19PIPAFR	*Piptadeniastrum africanum*
12	1	11.2AS	6SYZSP	*Syzygium sp*
13	1	13.9AS	6DICGLA	*Dichostema glaucescens*
14	1	18.2AS	7PAUMAC	*Pausinystalia macroceras*
15	1	17.1AS	7TESAFR	*Tessmannia africana*
16	1	10.1AS	8DIOBIP	*Diospyros bipindensis*

Quadrat: 14

1	1	11.8AS	4ONCMAN	*Oncoba Manii*
2	1	30.3AB	6PYCANG	*Pycnanthus anglonensis*
3	1	25.7AL	6ANOMAN	*Anonidium mannii*
4	1	14.8AB	5PLAEMA	*Plagiosiphon emarginatus*
5	1	27.6AS	12STAKAM	*Staudtia kamerunensis*
6	1	14.5AS	6DICGLA	*Dichostema glaucescens*
7	1	16.3AS	5ANOMAN	*Anonidium mannii*
8	1	13.9AS	5COLSP	*cf. colletoecema sp*
9	1	14.2AS	8CARSP	*Carapa sp*
10	1	17.8AS	9PAUMAC	*Pausinystalia macroceras*
11	1	17.7AS	8GARSME	*Garcinia smeathmannii*
12	1	16.7AS	7STAKAM	*Staudtia kamerunensis*
13	1	16.3AS	7DICGLA	*Dichostema glaucescens*
14	1	22.3AS	10STRPUS	*Strombosia pustulata*
15	1	71.5DS	10PETMAC	*Petersianthus macrocarpus*
16	1	19.7AS	7ONCMAN	*Oncoba Manii*
17	1	10.7AS	2RINWEL	*Rinorea welwitschii*
18	1	10.4AS	3PAUMAC	*Pausinystalia macroceras*
19	1	14.1AS	4DIOITU	*Diospyrus iturensis*

Quadrat: 15

1	1	38.2AL	10STRPUS	*Strombosia pustulata*

3	1	12.5AS	4DRYLEO	*Drypetes leonensis*
4	1	11.8AS	4PAUMAC	*Pausinystalia macroceras*
5	1	40.6AS	10GILDEW	*Gilbertiodendron dewevrei*
6	1	18AS	8DESSUB	*Desplatsia subericarpa*
7	1	33.3AS	11GILDEW	*Gilbertiodendron dewevrei*
8	1	20.5AS	9GILDEW	*Gilbertiodendron dewevrei*
9	1	10.8AS	5RINWEL	*Rinorea welwitschii*
10	1	22.6AS	10DRYGOS	*Drypetes gossweileri*
11	1	21.5AS	8COPMIL	*Copaifera mildbraedii*
12	1	36.9AS	10GILDEW	*Gilbertiodendron dewevrei*
13	1	10.8AS	5GILDEW	*Gilbertiodendron dewevrei*
14	1	34.5AS	10PANOLE	*Panda oleosa*
15	1	15.5AS	6DICGLA	*Dichostema glaucescens*
16	1	28.2AS	10GILDEW	*Gilbertiodendron dewevrei*
17	1	15.3AS	4COLDEW	*Colletoecema dewevrei*

Quadrat: 16

1	1	15.4AS	5ONCMAN	*Oncoba Manii*
2	1	11.3AS	5TABPEN	*Tabernaemontana penduliflora*
3	1	13.7AS	8ONCMAN	*Oncoba Manii*
4	1	12.2AS	5DRYGIL	*Drypetes gilgiana*
5	1	38AB	7MYRARB	*Myrianthus arboreus*
6	1	12.8AS	6ONCMAN	*Oncoba Manii*
7	1	17.7AS	8LOVTRI	*Lovoa trichiloides*
8	1	22AS	12XYLHYP	*Xylopia hypolampra*
9	1	12.3AS	6HEXCRI	*Hexalobus crispiflorus*
10	1	15.3AS	7GRESUA	*Greenwayodendron suaveolens*
11	1	21.5AS	10GRESUA	*Greenwayodendron suaveolens*
12	1	17.3AS	7ISOSP	*Isolona sp*
13	1	15.2AS	8PAUMAC	*Pausinystalia macroceras*
14	1	10AS	5DICGLA	*Dichostema glaucescens*
15	1	26.6AS	9ENTUTI	*Entandrophragma utile*
16	1	22.1AS	6PANLAU	*Panchovia laurentii*
17	1	14.7AS	6TESAFR	*Tessmannia africana*
18	1	10.4AS	5DIOITU	*Diospyrus iturensis*

Quadrat: 17

1	1	17AS	8HEXCRI	*Hexalobus crispiflorus*
2	1	26.8AS	12MANLET	*Manilkara Letouzeyi*
3	1	16.3AS	7DRYLEO	*Drypetes leonensis*
4	1	17.9AS	8MANLET	*Manilkara Letouzeyi*
5	1	12.4AS	7GRESUA	*Greenwayodendron suaveolens*
6	1	81.4AL	15ERYSUA	*Erythrophloeum suaveolens*
7	1	18.5AS	7DIOITU	*Diospyrus iturensis*
8	1	19.4AS	9GRESUA	*Greenwayodendron suaveolens*
9	1	21.7AS	7ISOTHO	*Isolona thonerii*
10	1	18.8AS	7HEXCRI	*Hexalobus crispiflorus*
11	1	40.8AS	13MANLET	*Manilkara Letouzeyi*

12	1	20AS	10GRESUA	*Greenwayodendron suaveolens*
13	1	25.9AS	11GRESUA	*Greenwayodendron suaveolens*
14	1	13.3AS	7DIOBIP	*Diospyros bipindensis*
15	1	29.5AS	11COEPRE	*Coelocaryon preussii*
16	1	16.1AL	7COFSP	*Colletoecema sp*
17	1	23.2AB	5TESAFR	*Tessmannia africana*
18	1	38.3AS	12ANGPYN	*Angylocalyx pynaertii*
19	1	19.5AS	9MANLET	*Manilkara Letouzeyi*
20	1	99.5AS	15PTESOY	*Pterocarpus soyauxii*

Quadrat: 18

1	1	15.1AS	10MANLET	*Manilkara Letouzeyi*
2	1	18.1AB	7LOPALA	*Lophira alata*
3	1	12.6AS	5RINWEL	*Rinorea welwitschii*
4	1	11.8AS	7SYNSTI	*Synsepalum stipulatum*
5	1	30AB	11PAUMAC	*Pausinystalia macroceras*
6	1	60.9AS	14ZANTES	*Zanthoxyllum tessmannii*
7	1	35.3AS	10GRESUA	*Greenwayodendron suaveolens*
8	1	11.1AS	5DIOMAN	*Diospyros mannii*
9	1	12.3AS	5TABPEN	*Tabernaemontana penduliflora*
10	1	21.2AS	9BEIFUL	*Beilschmeidia fulva*
11	1	12.2AB	3DRYLEO	*Drypetes leonensis*
12	1	10AS	3DICGLA	*Dichostema glaucescens*
13	1	16.6AS	7STRPUS	*Strombosia pustulata*
14	1	17.1AL	7PAUMAC	*Pausinystalia macroceras*
15	1	10.2AS	4RINWEL	*Rinorea welwitschii*
16	1	10.7AL	5COLDEW	*Colletoecema dewevrei*
17	1	10.6AS	5TABPEN	*Tabernaemontana penduliflora*
18	1	13.7AS	7ANGPYN	*Angylocalyx pynaertii*
19	1	15.4AS	5DIOITU	*Diospyrus iturensis*
20	1	40.3AL	18STAKAM	*Staudtia kamerunensis*
21	1	81.3AL	14ONGGOR	*Ongokea gore*
22	1	47.7AS	10STRTET	*Strombosiopsis tetrandra*

Quadrat: 19

1	1	19.6AS	5MANLET	*Manilkara Letouzeyi*
2	1	10.4AS	5DICGLA	*Dichostema glaucescens*
3	1	11AS	6RINOBL	*Rinorea oblongifolia*
4	1	10.4AS	5DICGLA	*Dichostema glaucescens*
5	1	18.5AS	10GUATHO	*Guarea thompsonii*
6	1	24AB	6LOPALA	*Lophira alata*
7	1	16.3AS	6ONCMAN	*Oncoba Manii*
8	1	12.7AS	5DIOCAN	*Diospyros caniculata*
9	1	21.5AS	7ONCMAN	*Oncoba Manii*
10	1	39.9AS	12DRYGOS	*Drypetes gossweileri*
11	1	24.9AB	7DIOCRA	*Diospyros crassifolia*
12	1	12.8AS	3RINOBL	*Rinorea oblongifolia*
13	1	16.2AS	10GRESUA	*Greenwayodendron suaveolens*

14	1	41.9AS	8STRPUS	*Strombosia pustulata*
15	1	36.4AS	10PANOLE	*Panda oleosa*
16	1	11.2AS	6GRESUA	*Greenwayodendron suaveolens*
17	1	15.2AS	7MANLET	*Manilkara Letouzeyi*
18	1	37.4AS	9PHYLET	*Phyllanthus cf. letouzeyanus*
19	1	26.7AS	14LOPALA	*Lophira alata*
20	1	22.8AS	11GRESUA	*Greenwayodendron suaveolens*

Quadrat: 20

1	1	11.8AS	6DICGLA	*Dichostema glaucescens*
2	1	16.5AS	10GILDEW	*Gilbertiodendron dewevrei*
3	1	16AS	7GILDEW	*Gilbertiodendron dewevrei*
4	1	20DS	7DASSP	*Dasylepsis sp*
5	1	27.3AS	10GILDEW	*Gilbertiodendron dewevrei*
6	1	45.7AS	12GILDEW	*Gilbertiodendron dewevrei*
7	1	18.2AS	10DRYLEO	*Drypetes leonensis*
8	1	71.5DS	20DASSP	*Dasylepsis sp*
9	1	0AB	12ENTCYL	*Entandrophragma cylindricum*
10	1	25.1AS	13OCHAFR	*Ochthocosmus africanus*
11	1	21DL	7DASSP	*Dasylepsis sp*
12	1	10.8AS	8TESAFR	*Tessmannia africana*
13	1	22.5AS	10GILDEW	*Gilbertiodendron dewevrei*
14	1	15.5AS	7AFRLEP	*Afrostyrax lepidophyllus*

Quadrat: 21

1	1	16.3AS	6FUNELA	*Funtumia elastica*
2	1	12.2AS	5SYNSTI	*Synsepalum stipulatum*
3	1	12.1AS	5ONCWEL	*Oncoba welwitchii*
4	1	11.6AL	5ENTSP	*Entandophragma sp*
5	1	15.6AS	6DICGLA	*Dichostema glaucescens*
6	1	50.3AS	12MARLUT	*Markhamia lutea*
7	1	17AS	7ONCMAN	*Oncoba Manii*
8	1	17.4AL	7DRYGOS	*Drypetes gossweileri*
9	1	10.1AS	6ONCMAN	*Oncoba Manii*
10	1	47AB	10ALSCON	*Alstonia Congensis*
11	1	10AS	4MASACU	*Massularia acuminata*
12	1	16.5AS	7DICGLA	*Dichostema glaucescens*
13	1	29.9AS	10GUATHO	*Guarea thompsonii*

Quadrat: 22

1	1	16AS	7GRESUA	*Greenwayodendron suaveolens*
2	1	10.4AF	6RINWEL	*Rinorea welwitschii*
3	1	13.3AS	7MANLET	*Manilkara Letouzeyi*
4	1	11.8AL	6DIOITU	*Diospyrus iturensis*
5	1	23.9AL	8AFRLEP	*Afrostyrax lepidophyllus*
6	1	24.1DS	8DASSP	*Dasylepsis sp*
7	1	14.2AF	5DIOBIP	*Diospyros bipindensis*

8	1	26.4AS	10GRESUA	*Greenwayodendron suaveolens*
9	1	24.3AS	10DRYLEO	*Drypetes leonensis*
10	1	61.9AS	14ZANTS	*Zanthoxylum ts*
11	1	15.4AS	7DRYLEO	*Drypetes leonensis*
12	1	15.8AS	5DIOBIP	*Diospyros bipindensis*
13	1	10.8AS	4DIAPAC	*Dialium pachyphyllum*
14	1	16.9AS	6DICGLA	*Dichostema glaucescens*
15	1	75.5AS	13CELTES	*Celtis tessmannii*
16	1	10.4AS	5RINWEL	*Rinorea welwitschii*
17	1	66AS	10PANOLE	*Panda oleosa*
18	1	47.2AB	7DASSP	*Dasylepsis sp*
19	1	37.5AS	10GRESUA	*Greenwayodendron suaveolens*
20	1	12.2AS	6DIOITU	*Diospyrus iturensis*
21	1	18.9AS	9DIOITU	*Diospyrus iturensis*

Quadrat: 23

1	1	27.7AS	10PHYLET	*Phyllanthus cf. letouzeyanus*
2	1	14.9AS	6DIOBIP	*Diospyros bipindensis*
3	1	50.2AS	12PHYLET	*Phyllanthus cf. letouzeyanus*
4	1	13.3AS	7GILDEW	*Gilbertiodendron dewevrei*
5	1	30.8AS	10GILDEW	*Gilbertiodendron dewevrei*
6	1	55AS	14ALBADE	*Albizia adianthifolia*
7	1	11.7AS	5RINOBL	*Rinorea oblongifolia*
8	1	15.2AS	8MANLET	*Manilkara Letouzeyi*
9	1	15.4AS	9MANLET	*Manilkara Letouzeyi*
10	1	26.8AS	10COLLAT	*Cola latericia*
11	1	15.7AS	6ONCMAN	*Oncoba Manii*
12	1	11.9AS	5DRYLEO	*Drypetes leonensis*

Quadrat: 24

1	1	75DS	15DASSP	*Dasylepsis sp*
2	1	30.6AS	10MANLET	*Manilkara Letouzeyi*
3	1	30.5S	11STRPUS	*Strombosia pustulata*
4	1	40.7AS	10PANOLE	*Panda oleosa*
5	1	28.1AS	11ISOTHO	*Isolona thonerii*
6	1	57.5AS	14CELTES	*Celtis tessmannii*
7	1	11.4AS	7MASACU	*Massularia acuminata*
8	1	27.4AS	10DIOITU	*Diospyrus iturensis*
9	1	15.9AS	6DIOITU	*Diospyrus iturensis*
10	1	21AS	12GILDEW	*Gilbertiodendron dewevrei*
11	1	23.3AS	11GRESUA	*Greenwayodendron suaveolens*
12	1	11.4AS	5ISOSP	*Isolona sp*

Quadrat: 25

1	1	12AS	5TABPEN	*Tabernaemontana penduliflora*
2	1	16.7AS	8GRESUA	*Greenwayodendron suaveolens*
3	1	12.5AS	5MANLET	*Manilkara Letouzeyi*

4	1	15AS	7ISOSP	*Isolona sp*
5	1	21.7AS	7GILDEW	*Gilbertiodendron dewevrei*
6	1	23.4AB	10GILDEW	*Gilbertiodendron dewevrei*
7	1	15.6AS	7ISOSP	*Isolona sp*
8	1	12.2AS	7DIOPSE	*Diospyros pseudomespilus*
9	1	10.2AS	5MANLET	*Manilkara Letouzeyi*
10	1	1.8AS	13GILDEW	*Gilbertiodendron dewevrei*
11	1	16.7AL	6DIOITU	*Diospyrus iturensis*

Species Frequency (Plot 4)

Sp Code	Total Trees	Total Stems	Average DBH(cm)	Basal Area	Relative Density	Relative Dominance	Relative Frequency	IVI
ONCMAN	38	38	18	0.962	8.96	3.44	4.82	17.23
GILDEW	18	18	46	2.995	4.25	10.73	1.93	16.9
DICGLA	33	33	14.7	0.557	7.78	2	5.79	15.57
MANLET	21	21	29.5	1.436	4.95	5.14	3.86	13.95
PAUMAC	22	22	24.2	1.011	5.19	3.62	3.86	12.67
DIOITU	17	17	15	0.301	4.01	1.08	4.18	9.27
GRESUA	17	17	22.1	0.65	4.01	2.33	2.57	8.91
RINWEL	13	13	11	0.123	3.07	0.44	3.22	6.72
LOPALA	6	6	48.4	1.102	1.42	3.95	1.29	6.65
HEXCRI	9	9	28.9	0.592	2.12	2.12	2.25	6.49
PANOLE	6	6	41.5	0.81	1.42	2.9	1.93	6.24
STRPUS	8	8	27.7	0.481	1.89	1.72	2.57	6.18
CELTES	3	3	70.6	1.173	0.71	4.2	0.96	5.87
CELADO	1	1	128	1.289	0.24	4.62	0.32	5.17
XYLHYP	9	9	23.7	0.398	2.12	1.42	1.61	5.16
PHYLET	6	6	38	0.68	1.42	2.44	1.29	5.14
ERYSUA	4	4	51.1	0.819	0.94	2.93	0.96	4.84
DRYLEO	8	8	17.3	0.188	1.89	0.67	2.25	4.81
ANGPYN	6	6	27.1	0.347	1.42	1.24	1.93	4.59
STAKAM	6	6	32.1	0.485	1.42	1.74	1.29	4.44
TABPEN	8	8	11.4	0.081	1.89	0.29	2.25	4.43
ENTCYL	2	2	72.3	0.821	0.47	2.94	0.64	4.06
DIOBIP	7	7	13	0.093	1.65	0.33	1.93	3.91
DRYGIL	7	7	12.8	0.09	1.65	0.32	1.93	3.9
GUATHO	4	4	38.5	0.467	0.94	1.67	1.29	3.9
IRVGRA	1	1	107	0.903	0.24	3.23	0.32	3.79
CARSP	6	7	13.5	0.1	1.42	0.36	1.61	3.38
SYNSTI	6	6	13.9	0.091	1.42	0.33	1.61	3.35
PTESOY	1	1	99.5	0.778	0.24	2.78	0.32	3.34
TESAFR	5	5	18.4	0.133	1.18	0.48	1.61	3.26
MARLUT	4	4	30.9	0.301	0.94	1.08	0.96	2.98
PANLAU	4	4	27.7	0.241	0.94	0.86	0.96	2.77
ISOSP	5	5	14.6	0.083	1.18	0.3	1.29	2.76
AFRLEP	3	3	35.4	0.295	0.71	1.06	0.96	2.73
BEIFUL	4	4	15.8	0.078	0.94	0.28	1.29	2.51
COLDEW	4	4	14.3	0.064	0.94	0.23	1.29	2.46
ONGGOR	1	1	81.3	0.519	0.24	1.86	0.32	2.42
DISCAL	4	4	26.4	0.219	0.94	0.78	0.64	2.37
ZANTES	2	2	47.2	0.349	0.47	1.25	0.64	2.37
PIPAFR	1	1	80	0.503	0.24	1.8	0.32	2.36
DRYGOS	3	3	28.3	0.189	0.71	0.68	0.96	2.35
CLESTA	2	2	45.3	0.323	0.47	1.16	0.64	2.27
ISOTHO	3	3	25.8	0.156	0.71	0.56	0.96	2.23
COEPRE	2	2	43.9	0.303	0.47	1.09	0.64	2.2

DASSP	2	2	42.1	0.278	0.47	1	0.64	2.11
XYLPHO	3	3	28.4	0.19	0.71	0.68	0.64	2.03
BLIWEL	2	2	38.7	0.235	0.47	0.84	0.64	1.96
CHLCHL	3	3	14.8	0.051	0.71	0.18	0.96	1.86
ANTMAC	3	3	14.1	0.047	0.71	0.17	0.96	1.84
ENTSP	3	3	13.3	0.042	0.71	0.15	0.96	1.82
STRTET	2	2	34.8	0.19	0.47	0.68	0.64	1.8
MYRARB	2	2	34.8	0.19	0.47	0.68	0.64	1.79
MASACU	3	3	10.8	0.027	0.71	0.1	0.96	1.77
DUBVIR	2	2	33.3	0.175	0.47	0.63	0.64	1.74
OCHAFR	2	2	32.1	0.162	0.47	0.58	0.64	1.7
ANOMAN	3	3	19	0.085	0.71	0.3	0.64	1.65
COLLAT	2	2	30.9	0.15	0.47	0.54	0.64	1.65
ZANTS	1	1	61.9	0.301	0.24	1.08	0.32	1.64
ENTUTI	2	2	29.8	0.139	0.47	0.5	0.64	1.61
CAN	3	4	11.9	0.044	0.71	0.16	0.64	1.51
RINOBL	3	3	11.9	0.033	0.71	0.12	0.64	1.47
DESSUB	2	2	24.7	0.096	0.47	0.34	0.64	1.46
LOVTRI	2	2	24.5	0.094	0.47	0.34	0.64	1.45
DIAPAC	2	2	23.7	0.089	0.47	0.32	0.64	1.43
PHYDIS	2	2	22.9	0.082	0.47	0.3	0.64	1.41
ALBADE	1	1	55	0.238	0.24	0.85	0.32	1.41
FUNELA	2	2	19.1	0.057	0.47	0.2	0.64	1.32
GAMBOU	1	1	49.9	0.196	0.24	0.7	0.32	1.26
DIOCAN	2	2	15.8	0.039	0.47	0.14	0.64	1.25
TRISP	2	2	14	0.031	0.47	0.11	0.64	1.23
DIOMAN	2	2	12.7	0.025	0.47	0.09	0.64	1.21
ALSCON	1	1	47	0.173	0.24	0.62	0.32	1.18
INDET5	1	1	40.3	0.128	0.24	0.46	0.32	1.01
TRIPRI	1	1	36.9	0.107	0.24	0.38	0.32	0.94
NESPAP	1	1	31.6	0.078	0.24	0.28	0.32	0.84
PIPFAS	1	1	30.3	0.072	0.24	0.26	0.32	0.82
PYCANG	1	1	30.3	0.072	0.24	0.26	0.32	0.82
TREAFR	1	1	28.6	0.064	0.24	0.23	0.32	0.79
DIOCRA	1	1	24.9	0.049	0.24	0.17	0.32	0.73
TRIWEL	1	1	21.6	0.037	0.24	0.13	0.32	0.69
COPMIL	1	1	21.5	0.036	0.24	0.13	0.32	0.69
TABCRA	1	1	18.4	0.027	0.24	0.1	0.32	0.65
GARSME	1	1	17.7	0.025	0.24	0.09	0.32	0.65
BARNIG	1	1	16.2	0.021	0.24	0.07	0.32	0.63
COFSP	1	1	16.1	0.02	0.24	0.07	0.32	0.63
ORIGLA	1	1	15.9	0.02	0.24	0.07	0.32	0.63
HEXSP	1	1	15.2	0.018	0.24	0.06	0.32	0.62
PLAEMA	1	1	14.8	0.017	0.24	0.06	0.32	0.62
COLSP	1	1	13.9	0.015	0.24	0.05	0.32	0.61
DRYAFR	1	1	13	0.013	0.24	0.05	0.32	0.6
SCOCOR	1	1	12.5	0.012	0.24	0.04	0.32	0.6
DIOPSE	1	1	12.2	0.012	0.24	0.04	0.32	0.6
ONCWEL	1	1	12.1	0.011	0.24	0.04	0.32	0.6
TRITAL	1	1	11.4	0.01	0.24	0.04	0.32	0.59

AFRSP	1	1	11.4	0.01	0.24	0.04	0.32	0.59
SYZSP	1	1	11.2	0.01	0.24	0.04	0.32	0.59
	424	426	2882	27.922	100.2	100		

Species List Plot 4

Sp Code	Genus	Species
AFRLEP	Afrostyrax	lepidophyllus
AFRSP	Afrostyrax	sp
ALBADE	Albizia	adianthifolia
ALSCON	Alstonia	Congensis
ANGPYN	Angylocalyx	pynaertii
ANOMAN	Anonidium	mannii
ANTMAC	Anthonotha	macrophylla
BARNIG	Barteria	nigritana
BEIFUL	Beilschmeidia	fulva
BLIWEL	Blighia	welwitschii
CAN	cf Canthium	sp
CARSP	Carapa	sp
CELADO	Celtis	adolfi-friderici
CELTES	Celtis	tessmannii
CHLCHL	Chlamydocola	chlamydantha
CLESTA	Cleistopholis	staudtii
COEPRE	Coelocaryon	preussii
COFSP	Colletoecema	sp
COLDEW	Colletoecema	dewevrei
COLLAT	Cola	latericia
COLSP	cf. colletoecema	sp
COPMIL	Copaifera	mildbraedii
DASSP	Dasylepsis	sp
DESSUB	Desplatsia	subericarpa
DIAPAC	Dialium	pachyphyllum
DICGLA	Dichostema	glaucescens
DIOBIP	Diospyros	bipindensis
DIOCAN	Diospyros	caniculata
DIOCRA	Diospyros	crassifolia
DIOITU	Diospyrus	iturensis
DIOMAN	Diospyros	mannii
DIOPSE	Diospyros	pseudomespilus
DISCAL	Discoglypremna	caloneura
DRYAFR	Drypetes	aframensis
DRYGIL	Drypetes	gilgiana
DRYGOS	Drypetes	gossweileri
DRYLEO	Drypetes	leonensis
DUBVIR	Duboscia	viridiflora
ENTCYL	Entandrophragma	cylindricum
ENTSP	Entandophragma	sp
ENTUTI	Entandrophragma	utile
ERYSUA	Erythrophloeum	suaveolens
FUNELA	Funtumia	elastica
GAMBOU	Gambeya	boukokowensis
GARSME	Garcinia	smeathmannii

GILDEW	Gilbertiodendron	dewevrei
GRESUA	Greenwayodendron	suaveolens
GUATHO	Guarea	thompsonii
HEXCRI	Hexalobus	crispiflorus
HEXSP	Hexalobus	sp
INDET5	INDET5	INDET5
IRVGRA	Irvingia	grandifolia
ISOSP	Isolona	sp
ISOTHO	Isolona	thonerii
LOPALA	Lophira	alata
LOVTRI	Lovoa	trichiloides
MANLET	Manilkara	Letouzeyi
MARLUT	Markhamia	lutea
MASACU	Massularia	acuminata
MYRARB	Myrianthus	arboreus
NESPAP	Nesogodornia	papaverifera
OCHAFR	Ochthocosmus	africanus
ONCMAN	Oncoba	Manii
ONCWEL	Oncoba	welwitchii
ONGGOR	Ongokea	gore
ORIGLA	oriciopsis	glaberrima
PANLAU	Panchovia	laurentii
PANOLE	Panda	oleosa
PAUMAC	Pausinystalia	macroceras
PETMAC	Petersianthus	macrocarpus
PHYDIS	Phyllanthus	discoideus
PHYLET	Phyllanthus	cf. letouzeyanus
PIPAFR	Piptadeniastrum	africanum
PIPFAS	Piptostigma	cf. fasciculatum
PLAEMA	Plagiosiphon	emarginatus
PTESOY	Pterocarpus	soyauxii
PYCANG	Pycnanthus	anglonensis
RINOBL	Rinorea	oblongifolia
RINWEL	Rinorea	welwitschii
SCOCOR	Scottellia	coriacea
STAKAM	Staudtia	kamerunensis
STRPUS	Strombosia	pustulata
STRTET	Strombosiopsis	tetrandra
SYNSTI	Synsepalum	stipulatum
SYZSP	Syzygium	sp
TABCRA	Tabernaemontana	crassa
TABPEN	Tabernaemontana	penduliflora
TESAFR	Tessmannia	africana
TREAFR	Treculia	africana
TRIPRI	Trichilia	prieuriana
TRISP	Tricalysia	sp
TRITAL	Tricalysia	talbotii
TRIWEL	Trichilia	welwitschii
XYLHYP	Xylopia	hypolampra
XYLPHO	Xylopia	phoiodora

ZANTES	Zanthoxyllum	tessmannii
unknown	unknown	unknown

PLOT 5

QUADRATS

Quadrat: 1

Tree No	Stem No	Dbh	Status	Height	Sp Code	Species
1	1	69.3	AS	23	AMPPTE	*Amphimas pterocarpoides*
2	1	31.9	AS	10	IRVGAB	*Irvingia gabonensis*
3	1	14.8	AS	7	DIOITU	*Diospyrus iturensis*
4	1	19.3	DS	8	DASSP	*Dasylepsis sp*
5	1	25.2	AS	11	BLIWEL	*Blighia welwitschii*
6	1	34.9	AS	13	PAUMAC	*Pausinystalia macroceras*
7	1	60	AS	25	CELTES	*Celtis tessmannii*
8	1	52.1	AS	13	MARLUT	*Markhamia lutea*
9	1	18.7	AS	7	SYNSTI	*Synsepalum stipulatum*
10	1	88.8	AB	12	PETMAC	*Petersianthus macrocarpus*
11	1	27.9	AS	15	DRYLEO	*Drypetes leonensis*
12	1	10.5	AS	5	CELTES	*Celtis tessmannii*
13	1	12.8	AS	7	BEIOBS	*Beilschmieda Obscura*
14	1	50	AS	24	DONUBA	*Donella ubangiensis*
15	1	10.6	AS	7	MASACU	*Massularia acuminata*
16	1	18.8	AS	8	ANOMAN	*Anonidium mannii*
17	1	25.2	AS	10	STRPUS	*Strombosia pustulata*
18	1	40.6	AS	14	RAUMAC	*Rauvolfia macrophylla*
19	1	13.4	AS	8	GAMLAC	*Gambeya lacourtiana*
20	1	15.7	AS	8	CARSP	*Carapa sp*
21	1	14.1	AS	8	PHYLET	*Phyllanthus cf. letouzeyanus*
22	1	17.3	AS	8	AORCLA	*Aoranthe cladantha*
23	1	18.8	AS	6	TRIWEL	*Trichilia welwitschii*

Quadrat: 2

1	1	14.2	AS	8	DIOITU	*Diospyrus iturensis*
2	1	15	AS	8	TRIWEL	*Trichilia welwitschii*
3	1	12.3	AS	4	DASSP	*Dasylepsis sp*
4	1	15.5	AS	4	DASSP	*Dasylepsis sp*
5	1	52.8	AS	22	STRPUS	*Strombosia pustulata*
6	1	20.1	AS	7	DASSP	*Dasylepsis sp*
7	1	67.3	AS	20	MANLET	*Manilkara*

						Letouzeyi
8	1	11.7	AS	6	PANLAU	*Panchovia laurentii*
9	1	19.9	AS	12	DIAPAC	*Dialium pachyphyllum*
10	1	40.1	AS	14	STRPUS	*Strombosia pustulata*
11	1	15.2	AS	5	GARSME	*Garcinia smeathmannii*
12	1	16.7	AS	7	PANOLE	*Panda oleosa*
13	1	32.1	AS	10	MANLET	*Manilkara Letouzeyi*
14	1	18.7	AS	5	GROMAC	*Grossera macrantha*
15	1	12.5	AS	4	DIOITU	*Diospyrus iturensis*
16	1	65.1	AS	12	STRTET	*Strombosiopsis tetrandra*
17	1	22.4	AS	8	DRYLEO	*Drypetes leonensis*
18	1	46.7	AS	16	STAKAM	*Staudtia kamerunensis*
19	1	17.2	AS	10	ANGPYN	*Angylocalyx pynaertii*
20	1	13.4	AS	10	PAUMAC	*Pausinystalia macroceras*
21	1	30.5	AS	12	PAUMAC	*Pausinystalia macroceras*

Quadrat: 3

1	1	46.3	AS	15	SYNSTI	*Synsepalum stipulatum*
2	1	11.3	AS	5	DIOITU	*Diospyrus iturensis*
3	1	13.4	AS	8	DIOITU	*Diospyrus iturensis*
4	1	11.9	AS	5	DIOBIP	*Diospyros bipindensis*
5	1	37.2	AS	10	GRESUA	*Greenwayodendron suaveolens*
6	1	47.1	AS	14	MANLET	*Manilkara Letouzeyi*
7	1	19	AS	14	SCOCOR	*Scottellia coriacea*
8	1	120	AS	15	TRISCL	*Triplochiton scleroxylon*
9	1	32.1	AS	10	GRESUA	*Greenwayodendron suaveolens*
10	1	12.5	AS	3	PANLAU	*Panchovia laurentii*
11	1	21.2	AS	8	PANLAU	*Panchovia laurentii*
12	1	19.4	AB	1	GROMAC	*Grossera macrantha*
13	1	43.6	AS	12	DIOCRA	*Diospyros crassifolia*
14	1	40.8	AB	8	DIAPAC	*Dialium pachyphyllum*
15	1	45.2	AS	10	STRPUS	*Strombosia pustulata*
16	1	14.6	AS	0	DIOITU	*Diospyrus iturensis*

17	1	33.5	AS	11	ISOTHO	*Isolona thonerii*
18	1	75.5	AS	18	GAMBEG	*Gambeya beguei*
19	1	21.4	AS	6	PANLAU	*Panchovia laurentii*
20	1	20.4	AS	8	OCHAFR	*Ochthocosmus africanus*
21	1	0	AS	6	DRYLEO	*Drypetes leonensis*

Quadrat: 4

1	1	23.1	AS	7	SANTRI	*Santiria trimera*
2	1	13	AS	4	DASSP	*Dasylepsis sp*
3	1	26.1	AS	7	DUBVIR	*Duboscia viridiflora*
4	1	11.9	AS	5	RUB1	*Rubiaceae indet*
5	1	16.7	AS	7	DASSP	*Dasylepsis sp*
6	1	21	AL	10	COEPRE	*Coelocaryon preussii*
7	1	13.9	AL	6	DASSP	*Dasylepsis sp*
8	1	34.8	AS	12	CELADO	*Celtis adolfi-friderici*
9	1	20.4	AS	10	COEPRE	*Coelocaryon preussii*
10	1	30.7	AS	11	NESPAP	*Nesogodornia papaverifera*
11	1	14	AS	6	SYNSTI	*Synsepalum stipulatum*
12	1	29.7	AS	12	GRESUA	*Greenwayodendron suaveolens*
13	1	17.8	AS	6	LECCUP	*Lecaniodiscus cupanioides*
14	1	11.1	AS	6	PANLAU	*Panchovia laurentii*
15	1	125	AS	20	ALSCON	*Alstonia Congensis*
16	1	14.8	AS	5	GROMAC	*Grossera macrantha*
17	1	15.6	AS	6	DIOBIP	*Diospyros bipindensis*
18	1	11.2	AS	6	RINOBL	*Rinorea oblongifolia*
19	1	10.8	AS	5	RINOBL	*Rinorea oblongifolia*
20	1	15.7	AS	7	GROMAC	*Grossera macrantha*
21	1	46.1	AS	12	FUNELA	*Funtumia elastica*
22	1	31.8	AS	10	DASSP	*Dasylepsis sp*
23	1	31	AS	10	GRESUA	*Greenwayodendron suaveolens*

Quadrat: 5

1	1	12.3	AL	6	RINOBL	*Rinorea oblongifolia*
2	1	14.4	AS	5	LOVTRI	*Lovoa trichiloides*
3	1	16.4	AS	5	MYRARB	*Myrianthus arboreus*
4	1	33.4	AS	10	DASSP	*Dasylepsis sp*

5	1	15.1	AS	4	GROMAC	*Grossera macrantha*
6	1	24.3	AS	7	COLLAT	*Cola latericia*
7	1	15	AS	5	TESAFR	*Tessmannia africana*
8	1	12.1	AS	6	DIAPAC	*Dialium pachyphyllum*
9	1	10.9	AS	5	STRPUS	*Strombosia pustulata*
10	1	58.5	AS	20	GAMLAC	*Gambeya lacourtiana*

Quadrat: 6

1	1	12.8	AS	6	TRIWEL	*Trichilia welwitschii*
2	1	12	AS	5	GROMAC	*Grossera macrantha*
3	1	10.6	AS	5	DRYLEO	*Drypetes leonensis*
4	1	12.1	AS	5	GROMAC	*Grossera macrantha*
5	1	18.9	AS	4	GROMAC	*Grossera macrantha*
6	1	20.1	AS	10	ANGPYN	*Angylocalyx pynaertii*
7	1	22.3	AS	11	FUNELA	*Funtumia elastica*
8	1	11.1	AS	7	CARSP	*Carapa sp*
9	1	12.9	AS	6	ZANLEM	*Zanthoxylum lemairei*
10	1	12.1	AS	5	DESSUB	*Desplatsia subericarpa*
10	2	10.2	AS	5	DESSUB	*Desplatsia subericarpa*
11	1	15.4	AS	6	DACEDU	*Dacryodes edulis*
12	1	11.8	AS	5	ISOSP	*Isolona sp*
13	1	16.3	AS	6	CELTES	*Celtis tessmannii*
14	1	17.7	AS	7	FUNELA	*Funtumia elastica*
15	1	17	AS	7	FUNELA	*Funtumia elastica*
16	1	19.6	AS	7	FUNELA	*Funtumia elastica*
17	1	11.5	AS	5	FUNELA	*Funtumia elastica*
18	1	23.6	AS	12	XYLHYP	*Xylopia hypolampra*
19	1	18.8	AS	7	FUNELA	*Funtumia elastica*
20	1	21.6	AS	8	FUNELA	*Funtumia elastica*
21	1	14.3	AS	7	FUNELA	*Funtumia elastica*
22	1	27.5	AS	10	PHYDIS	*Phyllanthus discoideus*
23	1	10.6	AS	4	GROMAC	*Grossera macrantha*
24	1	11.1	AS	5	GROMAC	*Grossera macrantha*
25	1	33.8	AS	8	PHYDIS	*Phyllanthus discoideus*
26	1	11.7	AS	4	TRIWEL	*Trichilia welwitschii*
27	1	22.3	AS	10	CELTES	*Celtis tessmannii*

Quadrat: 7

1	1	23.8	AS	10	PAUMAC	*Pausinystalia macroceras*
2	1	31.5	AS	10	GROMAC	*Grossera macrantha*
3	1	14.3	AS	6	RINOBL	*Rinorea oblongifolia*
4	1	67.8	AS	12	PENMAC	*Pentaclethra macrophylla*
5	1	13.2	AS	7	DASSP	*Dasylepsis sp*
6	1	29.3	AS	10	PANLAU	*Panchovia laurentii*
7	1	18.8	AS	8	DASSP	*Dasylepsis sp*
8	1	25.6	AS	10	STRPUS	*Strombosia pustulata*
9	1	20.1	AS	10	DASSP	*Dasylepsis sp*
10	1	18.6	AS	7	CELZEN	*Celtis zenkeri*
11	1	29.3	AS	10	STRPUS	*Strombosia pustulata*
12	1	30.3	AS	12	ANGPYN	*Angylocalyx pynaertii*
13	1	11	AS	6	DIAPAC	*Dialium pachyphyllum*
14	1	13.5	AS	5	DRYLEO	*Drypetes leonensis*
15	1	10.9	AS	4	CARSP	*Carapa sp*
16	1	24.3	AS	10	CELTES	*Celtis tessmannii*
17	1	17.8	AS	7	PHYDIS	*Phyllanthus discoideus*
18	1	11.1	AS	6	FUNELA	*Funtumia elastica*
19	1	36.9	AS	11	NESPAP	*Nesogodornia papaverifera*
20	1	10.5	AS	6	RINOBL	*Rinorea oblongifolia*
21	1	13.6	AS	6	PENMAC	*Pentaclethra macrophylla*
22	1	11.9	AS	8	STRPUS	*Strombosia pustulata*
23	1	10.2	AS	7	DRYLEO	*Drypetes leonensis*
24	1	20.1	AS	9	DASSP	*Dasylepsis sp*

Quadrat 8

1	1	18.6	AS	7	BLIWEL	*Blighia welwitschii*
2	1	15.3	AS	6	NESPAP	*Nesogodornia papaverifera*
3	1	12.8	AS	5	STRTET	*Strombosiopsis tetrandra*
4	1	22.2	AS	10	DASSP	*Dasylepsis sp*
5	1	23.8	AS	10	ISOTHO	*Isolona thonerii*
6	1	19.9	AS	12	XYLHYP	*Xylopia hypolampra*
7	1	35	AS	10	DASSP	*Dasylepsis sp*
8	1	22.5	AS	10	DASSP	*Dasylepsis sp*

9	1	23.8	AS	10	SYNSTI	*Synsepalum stipulatum*
10	1	71.6	AS	12	MANLET	*Manilkara Letouzeyi*
11	1	104	AS	13	MANLET	*Manilkara Letouzeyi*
12	1	27.6	AS	9	ANGPYN	*Angylocalyx pynaertii*
13	1	42.9	AS	12	BEIFUL	*Beilschmeidia fulva*
14	1	11.5	AS	8	CLEPAT	*cleistopholis patens*

Quadrat: 9

1	1	20.3	AS	6	ANGPYN	*Angylocalyx pynaertii*
2	1	10.5	AS	4	THOHEN	*Thomandersia hensii*
3	1	51.8	AS	10	PIPAFR	*Piptadeniastrum africanum*
4	1	30.8	AS	10	STAKAM	*Staudtia kamerunensis*
5	1	14.6	AS	7	DASSP	*Dasylepsis sp*
6	1	13.2	AS	6	NESPAP	*Nesogodornia papaverifera*
7	1	10.8	AS	6	PANOLE	*Panda oleosa*
8	1	15.5	AS	7	CARSP	*Carapa sp*
9	1	10.4	AS	4	GARSME	*Garcinia smeathmannii*
10	1	11.4	AS	5	PANOLE	*Panda oleosa*
11	1	22.9	AS	10	GRESUA	*Greenwayodendron suaveolens*
12	1	23.4	AS	10	DASSP	*Dasylepsis sp*
13	1	28.2	AS	11	IRVWOM	*Irvingia wombolu*
14	1	11.3	AS	5	XYLPHO	*Xylopia phoiodora*
15	1	14.4	AS	5	PAUMAC	*Pausinystalia macroceras*
16	1	24.6	AS	10	PENMAC	*Pentaclethra macrophylla*
17	1	16.7	AS	8	TESAFR	*Tessmannia africana*
18	1	10.2	AS	5	GROMAC	*Grossera macrantha*

Quadrat: 10

1	1	15.5	AS	5	TABCRA	*Tabernaemontana crassa*
2	1	14.3	AS	7	PANLAU	*Panchovia laurentii*
3	1	13.2	AS	5	LECCUP	*Lecaniodiscus cupanioides*
4	1	24.8	AS	7	STRGRA	*Strombosia grandifolia*
5	1	16.3	AS	10	TESAFR	*Tessmannia africana*

6	1	24.9	AS	10	DASSP	*Dasylepsis sp*
7	1	15	AS	8	DASSP	*Dasylepsis sp*
8	1	61.4	AS	14	STRTET	*Strombosiopsis tetrandra*
9	1	11.8	AS	6	FUNELA	*Funtumia elastica*
10	1	110	AS	16	DUBMAC	*Duboscia macrocarpa*

Quadrat: 11

1	1	12.2	AS	5	DESSUB	*Desplatsia subericarpa*
2	1	10.5	AS	5	FUNELA	*Funtumia elastica*
3	1	34	AS	10	PHYDIS	*Phyllanthus discoideus*
4	1	12.4	AS	5	DRYLEO	*Drypetes leonensis*
5	1	12.7	AS	6	TRIWEL	*Trichilia welwitschii*
6	1	24.3	AS	10	XYLHYP	*Xylopia hypolampra*
7	1	26.9	AS	11	XYLHYP	*Xylopia hypolampra*
8	1	13	AS	7	PHYDIS	*Phyllanthus discoideus*
9	1	20.8	AS	12	XYLHYP	*Xylopia hypolampra*
10	1	40.6	AS	13	FUNELA	*Funtumia elastica*
11	1	21.2	AS	9	XYLHYP	*Xylopia hypolampra*
12	1	13.5	AS	6	ZANTES	*Zanthoxyllum tessmannii*
13	1	11.7	AS	5	ZANTES	*Zanthoxyllum tessmannii*
14	1	19.1	AS	9	XYLHYP	*Xylopia hypolampra*
15	1	11.8	AS	5	GROMAC	*Grossera macrantha*
16	1	11	AS	3	DESSUB	*Desplatsia subericarpa*
17	1	37	AS	12	TERSUP	*Terminalia superba*
18	1	19.4	AS	8	CELADO	*Celtis adolfi-friderici*
19	1	15	AS	10	BARNIG	*Barteria nigritana*
20	1	22.9	AS	12	DISCAL	*Discoglypremna caloneura*
21	1	23.5	AS	10	DISCAL	*Discoglypremna caloneura*
22	1	33.9	AS	13	XYLHYP	*Xylopia hypolampra*
23	1	15.7	AS	9	ZANTES	*Zanthoxyllum tessmannii*
24	1	23	AS	9	FUNELA	*Funtumia elastica*
25	1	10.4	AS	5	XYLHYP	*Xylopia hypolampra*

Quadrat: 12

1	1	13.3	AS	5	TRISP	*Tricalysia sp*
2	1	25.5	AS	10	CLEPAT	*cleistopholis patens*
3	1	94.8	AS	14	TRISCL	*Triplochiton scleroxylon*
4	1	22.6	AS	12	CELZEN	*Celtis zenkeri*

5	1	13	AS	5	DRYLEO	*Drypetes leonensis*
6	1	17.4	AS	6	DISCAL	*Discoglypremna caloneura*
7	1	17.5	AS	6	DISCAL	*Discoglypremna caloneura*
8	1	15.4	AS	5	NESPAP	*Nesogodornia papaverifera*
9	1	11.1	AS	4	PHYLET	*Phyllanthus cf. letouzeyanus*
10	1	17.4	AS	5	NESPAP	*Nesogodornia papaverifera*
11	1	15.9	AS	5	GUATHO	*Guarea thompsonii*
12	1	15.7	AS	6	PANLAU	*Panchovia laurentii*
13	1	11	AS	5	FUNELA	*Funtumia elastica*
14	1	15.2	AS	4	PHYLET	*Phyllanthus cf. letouzeyanus*
15	1	13.4	AS	5	PTESOY	*Pterocarpus soyauxii*
16	1	16.2	AS	6	CARSP	*Carapa sp*
17	1	16.6	AS	6	BLIWEL	*Blighia welwitschii*
18	1	24.2	AS	8	CLEPAT	*cleistopholis patens*
19	1	15.4	AS	7	ALSCON	*Alstonia Congensis*

Quadrat: 13

1	1	73.9	AS	11	DUBVIR	*Duboscia viridiflora*
2	1	20	AS	10	PHYLET	*Phyllanthus cf. letouzeyanus*
3	1	12.2	AS	7	DRYLEO	*Drypetes leonensis*
4	1	26.3	AS	8	STRGRA	*Strombosia grandifolia*
5	1	20.7	AS	8	DASSP	*Dasylepsis sp*
6	1	29.1	AS	10	GRESUA	*Greenwayodendron suaveolens*
7	1	100	AS	16	TRISCL	*Triplochiton scleroxylon*
8	1	73.7	AS	10	ALBSP2	*Albizia sp2*
9	1	22.4	AS	8	PHYLET	*Phyllanthus cf. letouzeyanus*
10	1	19.6	AS	7	FUNELA	*Funtumia elastica*
11	1	15.9	AS	7	CELTES	*Celtis tessmannii*
12	1	21.3	AS	8	TRIWEL	*Trichilia welwitschii*
13	1	19.3	AS	8	PANOLE	*Panda oleosa*
14	1	14	AS	5	BRIATR	*Bridelia artroviridis*
15	1	13.2	AS	6	GUATHO	*Guarea thompsonii*
16	1	20.9	AS	5	ZANLEM	*Zanthoxylum lemairei*
17	1	69.5	AS	13	CELTES	*Celtis tessmannii*
18	1	16	AS	7	PHYLET	*Phyllanthus cf. letouzeyanus*
19	1	22.1	AS	8	PTESOY	*Pterocarpus soyauxii*

Quadrat: 14

1	1	34.9	AS	10	PAUMAC	*Pausinystalia macroceras*
2	1	17.9	AS	7	DIOSP3	*Diospyros cf mannii*
3	1	21.5	AS	8	DIOCRA	*Diospyros crassifolia*
4	1	60.5	AS	14	IRVGAB	*Irvingia gabonensis*
5	1	10.1	AS	5	RINOBL	*Rinorea oblongifolia*
6	1	14.5	AS	6	GRESUA	*Greenwayodendron suaveolens*
7	1	32.9	AS	10	PAUMAC	*Pausinystalia macroceras*
8	1	11.6	AS	5	GARSME	*Garcinia smeathmannii*
9	1	12.3	AS	6	DRYGOS	*Drypetes gossweileri*
10	1	65.7	AS	15	MANLET	*Manilkara Letouzeyi*
11	1	26.1	AS	11	CELTES	*Celtis tessmannii*
12	1	18.7	AS	7	DIOMAN	*Diospyros mannii*
13	1	35.5	AS	8	PAUMAC	*Pausinystalia macroceras*
14	1	120	AS	15	DASSP	*Dasylepsis sp*
15	1	11.8	AS	7	DIAPAC	*Dialium pachyphyllum*
16	1	32.4	AS	8	GAMBOU	*Gambeya boukokowensis*
17	1	43.1	AS	10	AFRLEP	*Afrostyrax lepidophyllus*
18	1	11.1	AS	5	DIOITU	*Diospyrus iturensis*
19	1	22.4	AS	7	PANLAU	*Panchovia laurentii*
20	1	13.4	AS	5	PANLAU	*Panchovia laurentii*
21	1	26	AS	7	ISOSP	*Isolona sp*
22	1	11.6	AS	5	GARSME	*Garcinia smeathmannii*

Quadrat: 15

1	1	20.1	AS	8	TESAFR	*Tessmannia africana*
2	1	59.9	AS	12	DIOCRA	*Diospyros crassifolia*
3	1	32.6	AS	10	PAUMAC	*Pausinystalia macroceras*
4	1	16.3	AS	8	GRESUA	*Greenwayodendron suaveolens*
5	1	10.6	AS	5	PANLAU	*Panchovia laurentii*
6	1	12.2	AS	5	INDET1	
7	1	26.5	AS	10	STRGRA	*Strombosia grandifolia*
8	1	52.4	AS	10	STRPUS	*Strombosia pustulata*

9	1	70	AS	16	KLAGAB	*Klainedoxa gabonensis*
10	1	12.2	AS	5	GARSME	*Garcinia smeathmannii*
11	1	15.1	AS	8	MANLET	*Manilkara Letouzeyi*
12	1	15.2	AS	6	CELZEN	*Celtis zenkeri*
13	1	21.5	AS	9	PAUMAC	*Pausinystalia macroceras*
14	1	20.8	AS	6	INDET1	
15	1	17	AS	6	ANGPYN	*Angylocalyx pynaertii*
16	1	15.1	AS	6	INDET1	
17	1	14.2	AS	7	PAUMAC	*Pausinystalia macroceras*
18	1	23.8	AS	8	STRTET	*Strombosiopsis tetrandra*
19	1	35.3	AS	10	BEIFUL	*Beilschmeidia fulva*
20	1	15.3	AS	8	GRESUA	*Greenwayodendron suaveolens*
21	1	38.3	AS	10	DRYLEO	*Drypetes leonensis*
22	1	10.3	AS	4	LOVTRI	*Lovoa trichiloides*

Quadrat: 16

1	1	29.5	AL	10	PANOLE	*Panda oleosa*
2	1	30.3	AS	12	PHYDIS	*Phyllanthus discoideus*
3	1	12.1	AS	5	FUNELA	*Funtumia elastica*
4	1	17.8	AS	8	FUNELA	*Funtumia elastica*
5	1	19.4	AS	10	ERYSUA	*Erythrophloeum suaveolens*
6	1	29.1	AS	15	XYLHYP	*Xylopia hypolampra*
7	1	18.8	AS	10	FUNELA	*Funtumia elastica*
8	1	29.1	AS	14	XYLHYP	*Xylopia hypolampra*
9	1	10.5	AS	6	XYLHYP	*Xylopia hypolampra*
10	1	37.2	AS	13	CLESTA	*Cleistopholis staudtii*
11	1	14	AS	6	CELZEN	*Celtis zenkeri*
12	1	12.9	AS	8	LOVTRI	*Lovoa trichiloides*
13	1	13.6	AS	6	ENTSP	*Entandophragma sp*
14	1	29.7	AS	9	XYLHYP	*Xylopia hypolampra*
15	1	23.3	AS	8	STEBEQ	*Sterculia bequaertii*
16	1	11.5	AS	5	GROMAC	*Grossera macrantha*
17	1	15.2	AS	7	STRPUS	*Strombosia pustulata*
18	1	22.3	AS	9	STRPUS	*Strombosia pustulata*
19	1	14.9	AS	9	DIAPAC	*Dialium pachyphyllum*
20	1	27.9	AS	10	ENTCYL	*Entandrophragma cylindricum*

21	1	59.2	AS	15	ENTCAN	*Entandophragma candollei*
22	1	17.7	AS	7	DACEDU	*Dacryodes edulis*
23	1	12.4	AS	5	STAKAM	*Staudtia kamerunensis*
		Quadrat:	**17**			
1	1	22.3	AS	12	XYLHYP	*Xylopia hypolampra*
2	1	12.5	AL	6	ONCWEL	*Oncoba welwitchii*
3	1	19.5	AS	5	ONCWEL	*Oncoba welwitchii*
4	1	23.2	AS	6	DACEDU	*Dacryodes edulis*
5	1	12.7	AS	5	TRIWEL	*Trichilia welwitschii*
6	1	12.1	AL	5	CARSP	*Carapa sp*
7	1	26.4	AS	10	PYCMIC	*Picnanthus cf. microcephalus*
8	1	10.4	AS	5	GROMAC	*Grossera macrantha*
9	1	31.2	AS	12	PHYDIS	*Phyllanthus discoideus*
10	1	17.5	AS	7	FUNELA	*Funtumia elastica*
11	1	11	AS	7	XYLHYP	*Xylopia hypolampra*
12	1	15.7	AS	7	XYLHYP	*Xylopia hypolampra*
13	1	16.3	AS	8	FUNELA	*Funtumia elastica*
14	1	21.2	AS	8	FUNELA	*Funtumia elastica*
15	1	29.9	AS	11	XYLHYP	*Xylopia hypolampra*
16	1	26.8	AS	10	FUNELA	*Funtumia elastica*
17	1	12.2	AS	6	AORCLA	*Aoranthe cladantha*
18	1	10.6	AS	5	KLAGAB	*Klainedoxa gabonensis*
		Quadrat:	**18**			
1	1	10.1	AL	4	DESDEW	*Desplatsia dewevrei*
1	2	14.3	AS	4	DESDEW	*Desplatsia dewevrei*
2	1	14.1	AS	5	GROMAC	*Grossera macrantha*
3	1	11.6	AS	5	CELZEN	*Celtis zenkeri*
4	1	24.7	AS	12	XYLHYP	*Xylopia hypolampra*
5	1	25.1	AB	7	NESPAP	*Nesogodornia papaverifera*
6	1	21.6	AS	6	PHYLET	*Phyllanthus cf. letouzeyanus*
7	1	20.7	AS	5	INDET1	
8	1	25.8	AS	8	DUBVIR	*Duboscia viridiflora*
9	1	26.3	AS	8	DESDEW	*Desplatsia dewevrei*
10	1	20.1	AS	7	ANTMAC	*Anthonotha macrophylla*
11	1	10.4	AS	4	PHYLET	*Phyllanthus cf. letouzeyanus*

12	1	12.6	AL	5	CELTES	*Celtis tessmannii*
13	1	18.9	AS	8	DRYGOS	*Drypetes gossweileri*
14	1	22.4	AS	10	FUNELA	*Funtumia elastica*
15	1	26.3	AS	9	PHYLET	*Phyllanthus cf. letouzeyanus*
16	1	14.4	AS	7	STAKAM	*Staudtia kamerunensis*
17	1	15.1	AB	4	DIAPAC	*Dialium pachyphyllum*
18	1	37.8	AS	12	CELTES	*Celtis tessmannii*
19	1	15.4	AS	7	FUNELA	*Funtumia elastica*

Quadrat: 19

1	1	14.7	AS	6	CARSP	*Carapa sp*
2	1	11.8	AS	6	DIOCAN	*Diospyros caniculata*
3	1	15.5	AB	3	DIOBIP	*Diospyros bipindensis*
4	1	39.9	AS	13	COLLAT	*Cola latericia*
5	1	22	AF	14	STRPUS	*Strombosia pustulata*
6	1	13.2	AS	7	STRGRA	*Strombosia grandifolia*
7	1	11.6	AS	6	MANLET	*Manilkara Letouzeyi*
8	1	21.3	AS	9	DIOITU	*Diospyrus iturensis*
9	1	95.5	DS	10	DASSP	*Dasylepsis sp*
10	1	13.3	AS	5	LOVTRI	*Lovoa trichiloides*
11	1	21.2	AL	7	CARSP	*Carapa sp*
12	1	10.4	AS	5	COLLAT	*Cola latericia*
13	1	60.3	AS	10	MANLET	*Manilkara Letouzeyi*
14	1	17	AS	8	DASSP	*Dasylepsis sp*
15	1	11.2	AS	5	CELTES	*Celtis tessmannii*

Quadrat: 20

1	1	25.8	AB	4	DIAPAC	*Dialium pachyphyllum*
2	1	28.3	AL	10	PANLAU	*Panchovia laurentii*
3	1	25.3	AL	12	GARPUN	*Garcinia punctata*
4	1	11.2	AS	5	DIOITU	*Diospyrus iturensis*
5	1	10.1	AS	5	DRYLEO	*Drypetes leonensis*
6	1	23.3	AS	7	CELTES	*Celtis tessmannii*
7	1	14.4	AS	6	ANGPYN	*Angylocalyx pynaertii*
8	1	14.3	AS	6	DESDEW	*Desplatsia dewevrei*
9	1	19.9	AS	10	RINOBL	*Rinorea oblongifolia*
10	1	10	AS	5	DRYCAP	*Drypetes capillipes*

11	1	27	AS	12	CELTES	*Celtis tessmannii*
12	1	12.2	AB	3	STRPUS	*Strombosia pustulata*
13	1	15.9	AS	7	DACEDU	*Dacryodes edulis*
14	1	13.2	AS	6	DASSP	*Dasylepsis sp*
15	1	20.2	AB	8	PAUMAC	*Pausinystalia macroceras*
16	1	12.4	AS	6	ENTSP	*Entandophragma sp*
17	1	18.5	AS	9	ANOMAN	*Anonidium mannii*
18	1	26.9	AS	10	HEXCRI	*Hexalobus crispiflorus*
19	1	65	AS	16	BLIWEL	*Blighia welwitschii*
20	1	23.2	AB	5	GARPUN	*Garcinia punctata*
21	1	13.2	AL	4	NESPAP	*Nesogodornia papaverifera*
22	1	23.9	AL	8	PAUMAC	*Pausinystalia macroceras*
23	1	15.5	AS	6	DASSP	*Dasylepsis sp*

Quadrat: 21

1	1	40.1	AS	14	CELTES	*Celtis tessmannii*
2	1	15.4	AS	5	DRYLEO	*Drypetes leonensis*
3	1	10.9	AS	5	CELTES	*Celtis tessmannii*
4	1	15.2	AS	6	PANLAU	*Panchovia laurentii*
5	1	18.1	AS	5	NESPAP	*Nesogodornia papaverifera*
6	1	11.1	AS	7	PHYLET	*Phyllanthus cf. letouzeyanus*
7	1	11	AS	6	STAKAM	*Staudtia kamerunensis*
8	1	36.6	AS	8	MYRARB	*Myrianthus arboreus*
9	1	11.7	AS	5	CELZEN	*Celtis zenkeri*
10	1	17.3	AS	10	DRYGOS	*Drypetes gossweileri*
11	1	11.5	AS	5	GAMLAC	*Gambeya lacourtiana*
12	1	18.1	AS	7	DASSP	*Dasylepsis sp*
13	1	10.2	AS	6	PAUMAC	*Pausinystalia macroceras*
14	1	18.4	AS	8	SYNSTI	*Synsepalum stipulatum*
15	1	58.3	AS	14	DUBVIR	*Duboscia viridiflora*
16	1	15.4	AS	5	INDET1	
17	1	28.9	AS	6	DASSP	*Dasylepsis sp*
18	1	17.4	AS	7	MANLET	*Manilkara Letouzeyi*
19	1	29.4	AL	9	DIOITU	*Diospyrus iturensis*
20	1	22.3	AS	8	ANOMAN	*Anonidium mannii*
21	1	20	AS	6	ANGPYN	*Angylocalyx pynaertii*

22	1	28.9	AS	10	DRYLEO	*Drypetes leonensis*
23	1	18.9	AB	6	DASSP	*Dasylepsis sp*

Quadrat: 22

1	1	23.3	AS	10	XYLHYP	*Xylopia hypolampra*
2	1	75.2	AS	19	PHYDIS	*Phyllanthus discoideus*
3	1	14.1	AB	1.5	GROMAC	*Grossera macrantha*
4	1	12.5	AS	5	AFZBIP	*Afzelia bipindensis*
5	1	10.5	AS	4	PHYLET	*Phyllanthus cf. letouzeyanus*
6	1	22.9	AS	8	XYLHYP	*Xylopia hypolampra*
7	1	10.3	AS	4	GARPUN	*Garcinia punctata*
8	1	14.6	AS	5	FUNELA	*Funtumia elastica*
9	1	11.4	AS	5	FUNELA	*Funtumia elastica*
10	1	10	AS	17.7	XYLHYP	*Xylopia hypolampra*
11	1	20.4	AL	7	LECCUP	*Lecaniodiscus cupanioides*
12	1	23	AS	9	GARPUN	*Garcinia punctata*
13	1	37.2	AS	16	PAUMAC	*Pausinystalia macroceras*
14	1	38.4	AS	12	TRISCL	*Triplochiton scleroxylon*
15	1	13.1	AS	8	DIAPAC	*Dialium pachyphyllum*
16	1	16	AS	6	CARSP	*Carapa sp*
17	1	10	AS	5	GROMAC	*Grossera macrantha*
18	1	10	AS	5	DASSP	*Dasylepsis sp*
19	1	23.6	AS	7	OCHAFR	*Ochthocosmus africanus*
20	1	10.1	AS	5	CARSP	*Carapa sp*
21	1	15.2	AS	7	XYLPHO	*Xylopia phoiodora*
22	1	15.9	AS	7	CELTES	*Celtis tessmannii*

Quadrat: 23

1	1	12.6	AS	5	FUNELA	*Funtumia elastica*
2	1	21.3	AS	10	PHYDIS	*Phyllanthus discoideus*
3	1	30.3	AS	12	PAUMAC	*Pausinystalia macroceras*
4	1	10.4	AS	6	TRISP	*Tricalysia sp*
5	1	17.8	AS	6	ONCWEL	*Oncoba welwitchii*
6	1	67.5	AS	15	GAMBEG	*Gambeya beguei*
7	1	28.9	AS	12	XYLHYP	*Xylopia hypolampra*
8	1	13.9	AS	6	XYLHYP	*Xylopia hypolampra*
9	1	64.3	AS	12	DASSP	*Dasylepsis sp*
10	1	16.9	AS	5	CELTES	*Celtis tessmannii*
11	1	21.3	AS	10	XYLHYP	*Xylopia hypolampra*

12	1	31.5	AS	12	XYLHYP	*Xylopia hypolampra*
13	1	20.9	AS	10	XYLHYP	*Xylopia hypolampra*
14	1	29.4	AS	13	XYLHYP	*Xylopia hypolampra*
15	1	10.2	AS	5	XYLHYP	*Xylopia hypolampra*

Quadrat: 24

1	1	11.3	AS	8	PAUMAC	*Pausinystalia macroceras*
2	1	11.5	AS	5	DRYGOS	*Drypetes gossweileri*
3	1	35	AS	8	MACSPI	*Macaranga spinosa*
4	1	27.1	AS	10	CELTES	*Celtis tessmannii*
5	1	41.5	AS	10	COEPRE	*Coelocaryon preussii*
6	1	10.9	AS	5	CELTES	*Celtis tessmannii*
7	1	11.4	AS	5	DIOITU	*Diospyrus iturensis*
8	1	12.3	AS	6	PAUMAC	*Pausinystalia macroceras*
9	1	23.6	AS	10	CELADO	*Celtis adolfi-friderici*
10	1	55.5	AS	13	PETMAC	*Petersianthus macrocarpus*
11	1	39.4	AS	14	CELTES	*Celtis tessmannii*
12	1	29.9	AS	10	TETTET	*Tetrapleura tetraptera*
13	1	45.1	AB	6	STAKAM	*Staudtia kamerunensis*
14	1	12.2	AS	5	ENTCYL	*Entandrophragma cylindricum*
15	1	17.1	AB	4	ANOMAN	*Anonidium mannii*
16	1	45.6	AS	12	STEBEQ	*Sterculia bequaertii*
17	1	11.5	AS	5	PAUMAC	*Pausinystalia macroceras*
18	1	32.3	AL	15	XYLHYP	*Xylopia hypolampra*
19	1	15.1	AS	6	DACEDU	*Dacryodes edulis*

Quadrat: 25

1	1	120	AS	15	PIPAFR	*Piptadeniastrum africanum*
2	1	22.4	AB	5	ENTCYL	*Entandrophragma cylindricum*
3	1	16.5	AB	6	COLLAT	*Cola latericia*
4	1	47.5	AF	14	NESPAP	*Nesogodornia papaverifera*
5	1	15	AS	6	MANLET	*Manilkara Letouzeyi*
6	1	40.3	AB	7	ANOMAN	*Anonidium mannii*
7	1	41.9	AB	9	PETMAC	*Petersianthus macrocarpus*
8	1	58	AF	12	XYLAET	*Xylopia aethiopica*
9	1	10.8	AS	7	ENTSP	*Entandophragma sp*

10	1	12.6	AS	8	CARSP	*Carapa sp*
11	1	46.9	AS	11	PETMAC	*Petersianthus macrocarpus*
12	1	24.2	AS	7	GRESUA	*Greenwayodendron suaveolens*
13	1	14.9	AS	5	STAKAM	*Staudtia kamerunensis*

Species Frequency (Plot 5)

Sp Code	Total Trees	Total Stems	Average DBH(cm)	Basal Area	Relative Density	Relative Dominance	Relative Frequency	IVI
DASSP	29	29	32.2	2.36	5.97	6.82	3.85	16.63
XYLHYP	29	29	23.4	1.25	5.97	3.62	2.47	12.06
MANLET	11	11	54.4	2.56	2.26	7.4	2.2	11.87
FUNELA	28	28	20.4	0.91	5.76	2.64	3.3	11.7
CELTES	20	20	30.4	1.45	4.12	4.2	3.3	11.61
TRISCL	4	4	93.4	2.74	0.82	7.92	1.1	9.84
PAUMAC	19	19	25.3	0.96	3.91	2.77	3.02	9.7
STRPUS	13	13	31.6	1.02	2.67	2.94	2.47	8.09
GROMAC	18	18	15.4	0.34	3.7	0.97	3.3	7.97
DRYLEO	13	13	19.2	0.38	2.67	1.09	3.02	6.79
PANLAU	13	13	18.5	0.35	2.67	1.01	2.75	6.44
PHYDIS	9	9	35.8	0.91	1.85	2.62	1.92	6.4
NESPAP	10	10	25.8	0.52	2.06	1.51	2.47	6.04
GRESUA	10	10	26.3	0.54	2.06	1.57	1.92	5.55
CARSP	11	11	14.5	0.18	2.26	0.53	2.47	5.26
DIAPAC	9	9	20.4	0.3	1.85	0.85	2.47	5.18
DIOITU	11	11	15.9	0.22	2.26	0.63	2.2	5.1
PETMAC	4	4	61.1	1.17	0.82	3.39	0.82	5.04
PIPAFR	2	2	92.4	1.34	0.41	3.88	0.55	4.84
STAKAM	7	7	29	0.46	1.44	1.33	1.92	4.7
ANGPYN	8	8	21.5	0.29	1.65	0.84	2.2	4.68
PHYLET	11	11	17.1	0.25	2.26	0.73	1.65	4.64
ALSCON	2	2	89	1.24	0.41	3.6	0.55	4.56
DUBVIR	4	4	50.5	0.8	0.82	2.32	1.1	4.24
STRTET	4	4	46.7	0.69	0.82	1.99	1.1	3.91
TRIWEL	7	7	15.4	0.13	1.44	0.38	1.65	3.46
GAMBEG	2	2	71.6	0.81	0.41	2.33	0.55	3.29
CELZEN	6	6	16.1	0.12	1.23	0.35	1.65	3.24
DUBMAC	1	1	110	0.95	0.21	2.74	0.27	3.22
SYNSTI	5	5	26.8	0.28	1.03	0.82	1.37	3.22
BLIWEL	4	4	37	0.43	0.82	1.25	1.1	3.17
ANOMAN	5	5	24.9	0.24	1.03	0.71	1.37	3.11
RINOBL	7	7	13.1	0.1	1.44	0.27	1.37	3.09
DIOCRA	3	3	44.5	0.47	0.62	1.35	0.82	2.79
DACEDU	5	5	17.7	0.12	1.03	0.36	1.37	2.76
PANOLE	5	5	18.8	0.14	1.03	0.4	1.1	2.53
STRGRA	4	4	23.4	0.17	0.82	0.5	1.1	2.42
PENMAC	3	3	42.4	0.42	0.62	1.22	0.55	2.39
GARSME	5	5	12.3	0.06	1.03	0.17	1.1	2.3
GAMLAC	3	3	35.3	0.29	0.62	0.85	0.82	2.29
COLLAT	4	4	25.3	0.2	0.82	0.58	0.82	2.23
TESAFR	4	4	17.1	0.09	0.82	0.27	1.1	2.19
INDET1	5	5	17.2	0.12	1.03	0.34	0.82	2.19
DRYGOS	4	4	15.3	0.07	0.82	0.21	1.1	2.14

KLAGAB	2	2	50.1	0.39	0.41	1.14	0.55	2.1
LOVTRI	4	4	12.8	0.05	0.82	0.15	1.1	2.07
IRVGAB	2	2	48.4	0.37	0.41	1.06	0.55	2.02
CELADO	3	3	26.7	0.17	0.62	0.49	0.82	1.93
GARPUN	4	4	21.3	0.14	0.82	0.41	0.55	1.78
ENTCYL	3	3	21.8	0.11	0.62	0.32	0.82	1.77
DISCAL	4	4	20.5	0.13	0.82	0.38	0.55	1.76
COEPRE	3	3	29.3	0.2	0.62	0.59	0.55	1.75
ALBSP2	1	1	73.7	0.43	0.21	1.23	0.27	1.71
BEIFUL	2	2	39.3	0.24	0.41	0.7	0.55	1.66
LECCUP	3	3	17.4	0.07	0.62	0.21	0.82	1.65
DIOBIP	3	3	14.4	0.05	0.62	0.14	0.82	1.58
AMPPTE	1	1	69.3	0.38	0.21	1.09	0.27	1.57
STEBEQ	2	2	36.2	0.21	0.41	0.6	0.55	1.56
ENTSP	3	3	12.3	0.04	0.62	0.1	0.82	1.54
CLEPAT	3	3	21.4	0.11	0.62	0.31	0.55	1.48
DESDEW	3	4	17.3	0.09	0.62	0.27	0.55	1.44
ONCWEL	3	3	16.9	0.07	0.62	0.19	0.55	1.36
ISOTHO	2	2	29.1	0.13	0.41	0.38	0.55	1.34
MYRARB	2	2	28.4	0.13	0.41	0.37	0.55	1.33
DESSUB	3	4	11.4	0.04	0.62	0.12	0.55	1.28
ENTCAN	1	1	59.2	0.28	0.21	0.8	0.27	1.28
XYLAET	1	1	58	0.26	0.21	0.76	0.27	1.24
OCHAFR	2	2	22.1	0.08	0.41	0.22	0.55	1.18
ISOSP	2	2	20.2	0.06	0.41	0.19	0.55	1.15
PTESOY	2	2	18.3	0.05	0.41	0.15	0.55	1.11
ZANLEM	2	2	17.4	0.05	0.41	0.14	0.55	1.1
MARLUT	1	1	52.1	0.21	0.21	0.62	0.27	1.1
AORCLA	2	2	15	0.04	0.41	0.1	0.55	1.06
GUATHO	2	2	14.6	0.03	0.41	0.1	0.55	1.06
DONUBA	1	1	50	0.2	0.21	0.57	0.27	1.05
XYLPHO	2	2	13.4	0.03	0.41	0.08	0.55	1.04
TRISP	2	2	11.9	0.02	0.41	0.06	0.55	1.03
ZANTES	3	3	13.7	0.04	0.62	0.13	0.27	1.02
AFRLEP	1	1	43.1	0.15	0.21	0.42	0.27	0.9
RAUMAC	1	1	40.6	0.13	0.21	0.37	0.27	0.86
CLESTA	1	1	37.2	0.11	0.21	0.31	0.27	0.79
TERSUP	1	1	37	0.11	0.21	0.31	0.27	0.79
MACSPI	1	1	35	0.1	0.21	0.28	0.27	0.76
GAMBOU	1	1	32.4	0.08	0.21	0.24	0.27	0.72
TETTET	1	1	29.9	0.07	0.21	0.2	0.27	0.68
IRVWOM	1	1	28.2	0.06	0.21	0.18	0.27	0.66
HEXCRI	1	1	26.9	0.06	0.21	0.16	0.27	0.64
PYCMIC	1	1	26.4	0.06	0.21	0.16	0.27	0.64
SANTRI	1	1	23.1	0.04	0.21	0.12	0.27	0.6
ANTMAC	1	1	20.1	0.03	0.21	0.09	0.27	0.57
ERYSUA	1	1	19.4	0.03	0.21	0.09	0.27	0.57
SCOCOR	1	1	19	0.03	0.21	0.08	0.27	0.56
DIOMAN	1	1	18.7	0.03	0.21	0.08	0.27	0.56
DIOSP3	1	1	17.9	0.03	0.21	0.07	0.27	0.55

TABCRA	1	1	15.5	0.02	0.21	0.05	0.27	0.54
BARNIG	1	1	15	0.02	0.21	0.05	0.27	0.53
BRIATR	1	1	14	0.02	0.21	0.04	0.27	0.53
BEIOBS	1	1	12.8	0.01	0.21	0.04	0.27	0.52
AFZBIP	1	1	12.5	0.01	0.21	0.04	0.27	0.52
RUB1	1	1	11.9	0.01	0.21	0.03	0.27	0.51
DIOCAN	1	1	11.8	0.01	0.21	0.03	0.27	0.51
MASACU	1	1	10.6	0.01	0.21	0.03	0.27	0.51
THOHEN	1	1	10.5	0.01	0.21	0.03	0.27	0.51
DRYCAP	1	1	10	0.01	0.21	0.02	0.27	0.5
	486	488	3058	34.6	100.1	99.96		
			29.4					

Species list (Plot 5)

Sp Code	Genus	Species
AFRLEP	*Afrostyrax*	*lepidophyllus*
AFZBIP	*Afzelia*	*bipindensis*
ALBSP2	*Albizia*	*sp2*
ALSCON	*Alstonia*	*Congensis*
AMPPTE	*Amphimas*	*pterocarpoides*
ANGPYN	*Angylocalyx*	*pynaertii*
ANOMAN	*Anonidium*	*mannii*
ANTMAC	*Anthonotha*	*macrophylla*
AORCLA	*Aoranthe*	*cladantha*
BARNIG	*Barteria*	*nigritana*
BEIFUL	*Beilschmeidia*	*fulva*
BEIOBS	*Beilschmieda*	*obscura*
BLIWEL	*Blighia*	*welwitschii*
BRIATR	*Bridelia*	*artroviridis*
CARSP	*Carapa*	*sp*
CELADO	*Celtis*	*adolfi-friderici*
CELTES	*Celtis*	*tessmannii*
CELZEN	*Celtis*	*zenkeri*
CLEPAT	*cleistopholis*	*patens*
CLESTA	*Cleistopholis*	*staudtii*
COEPRE	*Coelocaryon*	*preussii*
COLLAT	*Cola*	*latericia*
DACEDU	*Dacryodes*	*edulis*
DASSP	*Dasylepsis*	*sp*
DESDEW	*Desplatsia*	*dewevrei*
DESSUB	*Desplatsia*	*subericarpa*
DIAPAC	*Dialium*	*pachyphyllum*
DIOBIP	*Diospyros*	*bipindensis*
DIOCAN	*Diospyros*	*caniculata*
DIOCRA	*Diospyros*	*crassifolia*
DIOITU	*Diospyrus*	*iturensis*
DIOMAN	*Diospyros*	*mannii*
DIOSP3	*Diospyros*	*cf mannii*
DISCAL	*Discoglypremna*	*caloneura*
DONUBA	*Donella*	*ubangiensis*
DRYCAP	*Drypetes*	*capillipes*
DRYGOS	*Drypetes*	*gossweileri*
DRYLEO	*Drypetes*	*leonensis*
DUBMAC	*Duboscia*	*macrocarpa*
DUBVIR	*Duboscia*	*viridiflora*
ENTCAN	*Entandophragma*	*candollei*
ENTCYL	*Entandrophragma*	*cylindricum*
ENTSP	*Entandophragma*	*sp*
ERYSUA	*Erythrophloeum*	*suaveolens*
FUNELA	*Funtumia*	*elastica*
GAMBEG	*Gambeya*	*beguei*
GAMBOU	*Gambeya*	*boukokowensis*

GAMLAC	*Gambeya*	*lacourtiana*
GARPUN	*Garcinia*	*punctata*
GARSME	*Garcinia*	*smeathmannii*
GRESUA	*Greenwayodendron*	*suaveolens*
GROMAC	*Grossera*	*macrantha*
GUATHO	*Guarea*	*thompsonii*
HEXCRI	*Hexalobus*	*crispiflorus*
INDET1	*INDET1*	*INDET1*
IRVGAB	*Irvingia*	*gabonensis*
IRVWOM	*Irvingia*	*wombolu*
ISOSP	*Isolona*	*sp*
ISOTHO	*Isolona*	*thonerii*
KLAGAB	*Klainedoxa*	*gabonensis*
LECCUP	*Lecaniodiscus*	*cupanioides*
LOVTRI	*Lovoa*	*trichiloides*
MACSPI	*Macaranga*	*spinosa*
MANLET	*Manilkara*	*Letouzeyi*
MARLUT	*Markhamia*	*lutea*
MASACU	*Massularia*	*acuminata*
MYRARB	*Myrianthus*	*arboreus*
NESPAP	*Nesogodornia*	*papaverifera*
OCHAFR	*Ochthocosmus*	*africanus*
ONCWEL	*Oncoba*	*welwitchii*
PANLAU	*Panchovia*	*laurentii*
PANOLE	*Panda*	*oleosa*
PAUMAC	*Pausinystalia*	*macroceras*
PENMAC	*Pentaclethra*	*macrophylla*
PETMAC	*Petersianthus*	*macrocarpus*
PHYDIS	*Phyllanthus*	*discoideus*
PHYLET	*Phyllanthus*	*cf. letouzeyanus*
PIPAFR	*Piptadeniastrum*	*africanum*
PTESOY	*Pterocarpus*	*soyauxii*
PYCMIC	*Picnanthus*	*cf. microcephalus*
RAUMAC	*Rauvolfia*	*macrophylla*
RINOBL	*Rinorea*	*oblongifolia*
RUB1	*Rubiaceae*	*indet*
SANTRI	*Santiria*	*trimera*
SCOCOR	*Scottellia*	*coriacea*
STAKAM	*Staudtia*	*kamerunensis*
STEBEQ	*Sterculia*	*bequaertii*
STRGRA	*Strombosia*	*grandifolia*
STRPUS	*Strombosia*	*pustulata*
STRTET	*Strombosiopsis*	*tetrandra*
SYNSTI	*Synsepalum*	*stipulatum*
TABCRA	*Tabernaemontana*	*crassa*
TERSUP	*Terminalia*	*superba*
TESAFR	*Tessmannia*	*africana*
TETTET	*Tetrapleura*	*tetraptera*
THOHEN	*Thomandersia*	*hensii*

TRISCL	*Triplochiton*	*scleroxylon*
TRISP	*Tricalysia*	*sp*
TRIWEL	*Trichilia*	*welwitschii*
XYLAET	*Xylopia*	*aethiopica*
XYLHYP	*Xylopia*	*hypolampra*
XYLPHO	*Xylopia*	*phoiodora*
ZANLEM	*Zanthoxylum*	*lemairei*
ZANTES	*Zanthoxyllum*	*tessmannii*
unknown	*unknown*	*unknown*