

Floristic Composition, Diversity of Public Green Spaces in Major Urban Cities in Western Visayas, Philippines

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Abstract

The study was conducted in six public green spaces of Bacolod City and Iloilo City. It aims to determine the floristic composition and diversity of public green spaces in major urban cities in Western Visayas, Philippines. A hundred percent inventory was done to determine the data of this study. *Eucalyptus camaldulensis* was the most common tree species in Bacolod City while *Swietenia macrophylla* was prevalent in Iloilo City. Of the 1,892 woody species in Bacolod City, there were 52 species, 45 genera, and 26 families. In Iloilo City, there were 563 woody species, comprising 34 species, 33 genera, and 21 families of trees. Simpson Diversity Index was high in the green spaces of Iloilo City and moderately high in Bacolod City. Species eucalyptus, genus *Eucalyptus* and family Myrtaceae in Bacolod City, and *S. macrophylla*, *Acacia auriculiformis* and *Terminalia catappa*, genus *Swietenia* and family Meliaceae exceed threshold level of diversity for urban trees. Species importance value based on dbh and crown diameter shows that *E. camaldulensis* was the most important species in green spaces of Bacolod City. On the other hand, *S. macrophylla* was the most important species in green spaces of Iloilo City based on dbh and crown diameter.

Keywords: diversity, floristic composition, green space, health condition, urban forest¹

Urbanization is a global phenomenon, and the degree and rate vary in different parts of the world (Kuchelmeister, 1998). It creates significant changes in land use and land cover, affecting the structure, pattern and function of the ecosystem (Xiao, Ustin, McPherson & Peper, 1999). Vegetation canopy, pavement, and buildings are the three important land cover types that affect the development of the urban ecosystem.

Miller (1997) defined urban forest as the sum of all woody and associated vegetation in and around dense human settlements ranging from small communities in rural settings to metropolitan regions. With this definition, urban forest is defined under Philippine settings as sum of trees planted in public places such as plaza, road system, greenbelt public cemetery, school grounds, office perimeter, and other public places (Research Information Series on Ecosystem [RISE], 2006). Vegetation in these public places are called green space.

In the Philippines, green spaces include trees and other vegetation that are planted in public places such as plaza and recreation centers, road system, and perimeter of government offices, hospitals and public schools. To ensure healthy urban trees, Santamor (1990) and Galvin (1999) recommended the formula 10-20-30. The formula states that for maximum protection against pest outbreaks, the urban forest should not contain more than 10% of any single tree species, not more than 20% of any tree genus, and not more than 30% of any tree family.

Maintaining a clean and healthy environment is now a challenge to various sectors of the society. Urban forest was recognized for its countless benefits to urban population. However, since Urban Forestry is a new field of study, very little interest was focused on the green spaces of the country particularly in Western Visayas as to what species of trees were present that could withstand adverse environmental condition and stress in urban areas. The objective of this study is to determine the species composition and diversity of green spaces in major urban cities in Western Visayas.

Methodology

The Study Sites

This study was conducted in public green spaces in two major urban cities of Western Visayas. These green spaces are the Bacolod City Plaza, Capitol Park and Lagoon and Pana-ad Park and Stadium in Bacolod City. In Iloilo City, these are Plaza Libertad, Lapaz Plaza, and Jaro Plaza.

Species Composition

A hundred percent inventory was conducted to determine the species composition of each green space. Trees, shrubs were noted in this study. Species composition was determined by identifying the plant up to species level.

Determination of Species Diversity

Diversity was determined using Simpson index of diversity (D); it accounts both richness and evenness of species (Glaeser, 2006). Trees and shrubs were considered in the computation of species diversity. Simpson Index of diversity was computed using the formula:

$$D = 1 - \left[\frac{n_1}{N} \right]^2$$

where: D - Simpson Diversity Index

n_i - number of individual of *ith* species

N - total number of individual

Determination of Species Importance Value

Species importance value is an abundance estimate consisting of the sum of three (3) relative values: relative density, relative frequency and relative dominance (Oxford Dictionary of Ecology, in Glaeser, 2006). It is calculated to quantify the relative degree to which a species dominates a population (Cumming, 2001).

$$SIV = RD + RF + RDom \times 100$$

Data Analysis

Descriptive statistics such as average, percentage, and frequency were used to analyze data.

Results and Discussion

Species Composition

Species composition of green spaces in Bacolod City. Figure 1 shows the tree species composition of Bacolod City. Data revealed that there are 1,892 stems of woody species in the three green spaces studied. It showed that *Eucalyptus camaldulensis* had the highest number of stems with 1,188 of the total trees in Bacolod City Plaza, Capitol Park and Lagoon and Pana-ad Park and Stadium (Appendix Table 1). Aside from *E. camaldulensis*, ten most commonly planted tree species in public green spaces in Bacolod City were *Swietenia macrophylla* (6.24%), *Triplaris cumingiana* (3.22%), *Pterocarpus indicus* forma *indicus* (2.75%), *Vitex parviflora* (2.27%) *Samanea saman* (1.90%), *Polyathia longifolia* (1.90%), *Terminalia microcarpa* (1.48%), *Tecoma stans* (1.27%), *Azadirachta indica* (1.37%).

Figure 2 shows that *Eucalyptus* is the most dominant genus followed by *Swietenia* (6.24%), *Triplaris* (3.22%), *Pterocarpus* (2.80%), and *Terminalia* (2.59%).

In terms of family, 62.84% of the species in Bacolod City belonged to the family Myrtaceae (Figure 3). The top five families include Meliaceae (8.46%), Verbenaceae (3.44%), Polygonaceae (3.22%), Fabaceae (2.80%) and Mimosaceae (2.75%). There were 26 families composed of 45 genera, 51 species, 1 subspecies and 1 forma of woody plants in three green spaces with 1,892 individuals

Species composition of green spaces of Iloilo City. There were 34 species and 1 forma of trees planted in three public green space in Iloilo City with a total of 563 stems (Figure 1).

Results showed that *S. macrophylla* was the most common species planted in Jaro Plaza, Lapaz Plaza and Plaza Libertad with 30.55% of the entire tree population (Figure 1). The top ten species includes *Acacia auriculiformis* (12.43%), *T. catappa* (11.01%), *P. indicus* forma *indicus* (9.06%), *G. arborea* (6.04%), *Ficus relegiosa* (4.26%), *V. parviflora* (4.09%), *L. speciosa* (3.91%), *Plumeria acuminata* (3.20%), and *Callistemon citrinus* (1.60%).

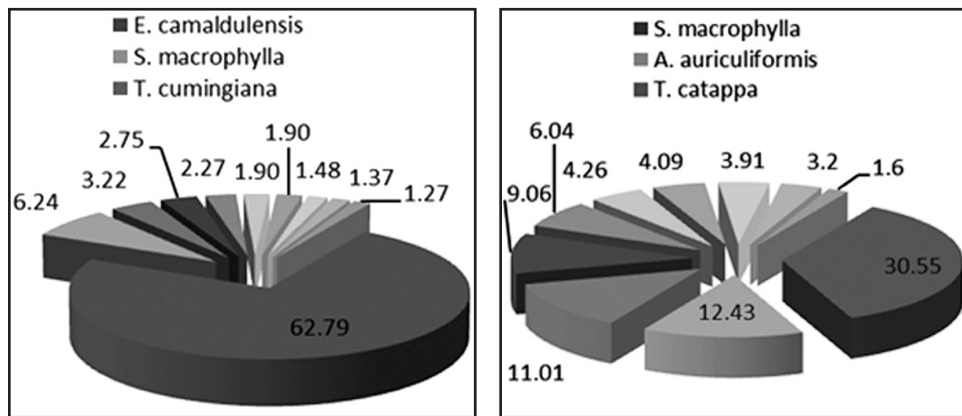


Figure 1. Top 10 species found in the green spaces of Bacolod City (left) and Iloilo City (right).

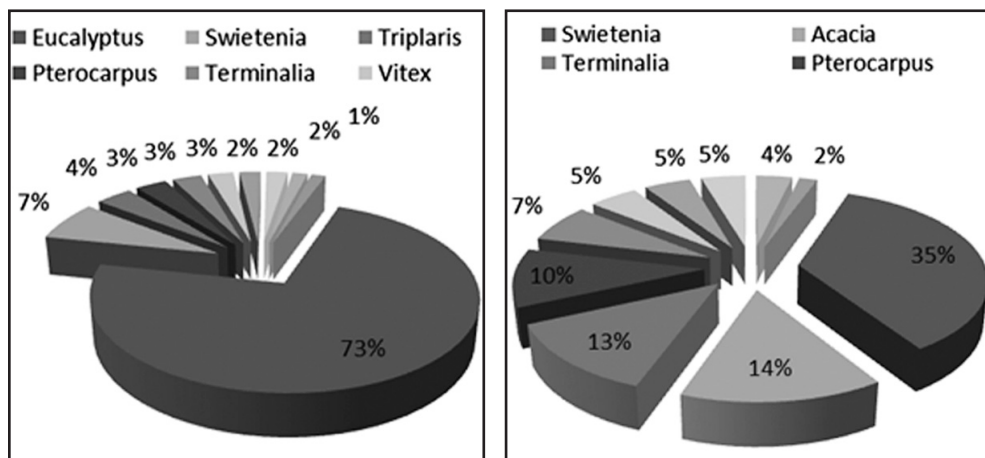


Figure 2. Top ten genera of trees in green spaces of Bacolod City (left) and Iloilo City (right).

There were 21 families of trees in planted in the public green spaces. Majority of them (30.60%) belonged to genus *Swietenia*. It is followed by *Acacia*, *Terminalia*, *Pterocarpus*, and *Gmelina* with 12.46%, 11.03%, 9.07% and 6.05%, respectively (Figure 2). Of the total species, 31.32% belonged to family Meliaceae, followed by Mimosaceae (12.46%), Combretaceae (11.03%), Fabaceae (10.85%) and Verbenaceae (10.86%). There were thirty four (34) species, thirty three genera (33) and twenty one (21) families of trees in Iloilo City with 563 individuals.

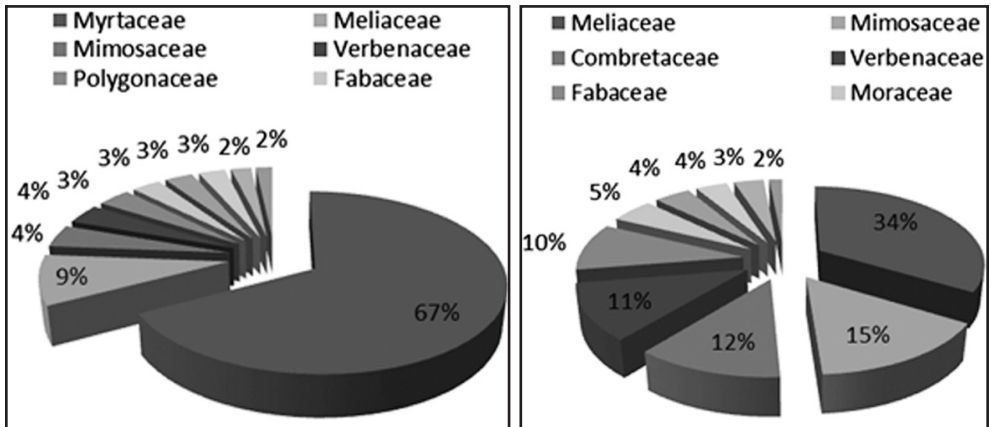


Figure 3. Top 10 families of trees in green spaces of Bacolod City (left) and Iloilo City (right).

It was found out that *E. camaldulensis* in Bacolod City and *S. macrophylla*, *A. auriculiformis* and *T. catappa* exceed the threshold level for species diversity. Genus *Eucalyptus* and family Myrtaceae in Bacolod City while genus *Swietenia* and family Meliaceae in Iloilo City was higher than the prescribed formula for urban forest in which a single species should not be more than 10% of species 20% of genus and 30% of family of the entire tree population (Santamor, 1990; Galvin 1999).

Green spaces serve as repository of different species of trees both for ornamental, timber, and fruit trees either exotic or endemic. In Bacolod City Plaza, it also serves as seed source for the production of planting materials which were planted in different streets and other places in the city (Villalobos, personal communication). For example *tindalo* (*Azelia rhomboidia*) an endangered species, that was planted by the late president Manuel L. Quezon in 1939 is the major seed source of *tindalo* seedlings planted in the province.

Species Diversity

The Simpson Index of Diversity showed that Plaza Lagoon was the most diverse with 0.91, followed by Bacolod City Plaza with 0.90 and the least diverse was Pana-ad Park and Stadium with 0.43 (Table 3). There is low diversity of species at Pana-ad Park and Stadium is because the area was previously a eucalyptus plantation before it was bought by the provincial government of Negros Occidental.

In Iloilo City, Plaza Libertad was the most diverse with 0.83 followed by Jaro Plaza (0.82) and Lapaz Plaza (0.81). This shows a highly diverse species planted in urban green spaces in Western Visayas except in Pana-ad Park and Stadium where it is dominated by a single species. Iloilo City had a higher diversity index compared to Bacolod City.

The Simpson Diversity Index is a measure of diversity which takes into account the number of species present, as well as the relative abundance of each species. Results of this study showed that mean diversity in green spaces of Iloilo City was highly evenness and green spaces of Bacolod City was moderately high.

Table 3

Tree species diversity of green spaces in Bacolod City and Iloilo City

Bacolod City	Diversity	Iloilo City	Diversity
Bacolod City Plaza	0.90	Jaro Plaza	0.82
Capitol Park and Lagoon	0.91	Lapaz Plaza	0.83
Pana-ad Park and Stadium	0.43	Plaza Libertad	0.81

Species Importance Value (SIV)

In Bacolod City, SIV using dbh for relative dominance shows that *E. camaldulensis* was the most ecologically important species based on dbh with IV of 60.08% of the expected species importance value of 100% (Figure 9). The most ecologically important species includes *S. macrophylla* (6.10%), *P. indicus* forma *indicus* (4.13%), *T. grandis* (5.31%), *Ficus sp* (3.68%), *S. saman* (2.27%), *L. speciosa* (2.71%) *T. catappa* (1.15%). Detailed summary of species importance value was presented in Appendix Table 9.

Similarly, *E. camaldulensis* was the most ecologically important species (56.52%) based on their crown diameter to compute the relative dominance. Other ecologically important species based on this crown diameter computation were *S. macrophylla* (6.87%), *P. indicus* forma *indicus* (6.02%), *S. saman* (5.52%), *V. parviflora* (2.72%), *T. grandis* (2.72%), *T. catappa* (1.99%), *L. speciosa* (1.95%), *T. microcarpa* (1.60%), and *Ficus sp* (0.75%).

Species importance value using dbh for basal area shows that ten most ecologically important species in Iloilo City were *S. macrophylla* (28.45%), *F. relogiosa* (15.23%) *P. indicus* forma *indicus* (9.21%) *G. arborea* (8.48%), *P. acuminata* (7.50%), *A. auriculiformis* (7.50%), *L. speciosa* (4.40%), *V. parviflora* (4.11%), *F. elastica* (3.19%) and *S. saman* (3.10%).

Similarly, *S. macrophylla* was the most ecologically important species (SIVCD) IV of 27.67% followed by *T. catappa* (13.06%) *P. indicus* forma *indicus* (12.02%) *A. auriculiformis* (6.87%), *G. arborea* (6.50%), *V. parviflora* (5.43%) *L. speciosa* (4.95%), *S. saman* (5.00%) and *P. acuminata* (3.64%) and *E. camaldulensis* (2.01%).

Aside from the most frequent and most dense species, these species also have the highest crown coverage in green space. The ability of trees to provide shade is one of the most important attributes of trees in green spaces and this attribute is determined by its crown area.

It was noted that the trend of species importance value using diameter at breast height and crown diameter to compute basal area varies. Although some trees have higher diameter at breast height, but less in crown diameter compared to other species. The most ecologically important species in urban forest are the most frequent species, the most abundant, and occupying most of the area in green space in basal area and in terms of dbh and crown.

In the study of Glaeser (2006), he found out that *Betula lenta* (IV-51.99%) was the most ecologically important species in Forest Park Woodland, New York. Nowak et al, (2007) calculated the importance values (IV) using the relative leaf area and relative abundance in a New York City urban forest. They found out that the most important species were London planetree, northern red oak, sweetgum, white mulberry and Norway maple.

Conclusion

Green spaces served as repository of different species of trees, with high Simpson Diversity Index except in Pana-ad Park and Stadium that were dominated by a single species of eucalyptus. In the green spaces of Bacolod City, 37% were exotic and majority (70.25%) of the species planted in Iloilo City was exotic species.

E. camaldulensis in Bacolod City and *S. macrophylla* in Iloilo City exceed the threshold level for species diversity since the species should not be more than 10% of the entire population of trees in the urban forest. Genus *Eucalyptus* and family Myrtaceae in Bacolod City exceed the prescribed diversity for genus and family in urban forest. Genus *Swietenia* and family Meliaceae were also above the threshold for diversity level for genus and family in Iloilo City.

Recommendations

In view of the findings of this study, the following recommendations were drawn. It is suggested that the concerned agencies increase the species diversity by introducing native species *P. indicus* forma *indicus*, *A. rhomboidea*, *V. parvilifera*, *Bischofia javanica*, *Melia azedarach*, and *Heritiera sylvatica*. Also, they can label the existing trees bearing common name, scientific name, family name and tree uses for educational and scientific purposes.

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Appendices

Appendix Table 1

Species composition of the green spaces in Bacolod City

Common Name	Scientific Name	Family	No. of Stem	%
Eucalyptus*	<i>Eucalyptus camaldulensis</i>	Myrtaceae	1188	62.79
Big Leaf Mahogany*	<i>Swietenia macrophylla</i>	Meliaceae	118	6.24
Palosanto*	<i>Triplaris cumingiana</i>	Polygonaceae	61	3.22
Narra	<i>Pterocarpus Indicus</i> Forma <i>Indicus</i>	Fabaceae	52	2.75
Molave	<i>Vitex parviflora</i>	Verbenaceae	43	2.27
Rain Tree	<i>Samanea saman</i>	Mimosaceae	36	1.90
Indian Tree*	<i>Polyalthia longifolia</i>	Annonaceae	36	1.90
Kalumpit	<i>Terminalia microcarpa</i>	Combretaceae	28	1.48
Yellow Trumpet Bush*	<i>Tecoma stans</i>	Bignoniaceae	24	1.27
Neem*	<i>Azadirachta indica</i>	Meliaceae	26	1.37
Ipil-Ipil*	<i>Leucaena leucocephalla</i>	Mimosaceae	22	1.16
Talisay	<i>Terminalia catappa</i>	Combretaceae	21	1.11
Amugis	<i>Koordersiodendron pinnatum</i>	Anacardiaceae	21	1.11
Banaba	<i>Lagerstroemia speciosa</i>	Lythaceae	19	1.00
Balete	<i>Ficus Sp</i>	Moraceae	16	0.85
Teak*	<i>Tectona grandis</i>	Verbenaceae	16	0.85
Ilang-Ilang	<i>Cananga odorata</i>	Annonaceae	16	0.85
Lanete	<i>Wrightia pubescens</i> Ssp <i>Laniti</i>	Apocynaceae	12	0.63
Tuai	<i>bischofia javanica</i>	euphorbiaceae	11	0.58
Aurie*	<i>acacia auriculiformis</i>	mimosaceae	10	0.53
Bacan	<i>litsea philippinensis</i>	lauraceae	9	0.48
Tapuyi	<i>agalaia lancilimba</i>	meliceae	9	0.48
Indian Mango*	<i>mangifera indica</i>	anacardiaceae	8	0.42
Libas	<i>spondias pinnata</i>	anacardiaceae	8	0.42
Bagalunga	<i>melia dubia</i>	meliaceae	7	0.37
Nangka	<i>artocarpus heterophylla</i>	moraceae	7	0.37
Antso-An	<i>cassia javanica</i>	caesalpinaceae	7	0.37
Fire Tree*	<i>delonix regia</i>	caesalpinaceae	6	0.32
Gmelina*	<i>gmelina arborea</i>	verbenaceae	6	0.32
African Tulip*	<i>spathodea campanulata</i>	bignoniaceae	6	0.32
Baguilumbang	<i>reutealis trisperma</i>	euphorbiaceae	6	0.32
Kamagong	<i>diospyrus discolor</i>	ebenaceae	5	0.26
Bayok Bayokan	<i>pterospermum niveum</i>	sterculiaceae	4	0.21
Mangium*	<i>acacia mangium</i>	mimosaceae	4	0.21
Mt Agoho	<i>gymnostoma rhumpianum</i>	casuarunaceae	2	0.11
Palawan Cherry	<i>prunus javanica</i>	rosaceae	2	0.11
Malugai	<i>pometia pinnata</i>	sapindaceae	2	0.11
Tindalo	<i>afzelia rhomboidea</i>	caesalpinaceae	2	0.11
Arbor Vitae*	<i>platycladus orientalis</i>	cupressaceae	2	0.11

Bignai	<i>antidesma bunius</i>	euphorbiaceae	2	0.11
Star Apple*	<i>chrysophyllum cainito</i>	sapotaceae	2	0.11
Prickly Narra	<i>Pterocarpus indicus</i> Forma <i>Echinatus</i>	Fabaceae	1	0.05
Alim	<i>Melanolepsis multigladulosa</i>	Euphorbiaceae	1	0.05
Bitaoag	<i>Calophyllum inophyllum</i>	Clusiaceae	1	0.05
Duhat	<i>Syzygium cumini</i>	Myrtaceae	1	0.05
Botong	<i>Barringtonia asiatica</i>	Lecythidaceae	1	0.05
Dungon	<i>Heritiera sylvtica</i>	Sterculiaceae	1	0.05
Mollucan Sau*	<i>Paraserianthes falcataria</i>	Mimosaceae	1	0.05
India Rubber*	<i>Ficus elastica</i>	Moraceae	1	0.05
Kamansi*	<i>Artocarpus communis</i>	Moraceae	1	0.05
Anabiong	<i>Trema orientalis</i>	Ulmaceae	1	0.05
Total			1892	100

Note: *Exotic species

Appendix Table 2

Summary of species composition of the green spaces in Iloilo City

Common Name	Scientific Name	Family	No. of Stem	%
Big leaf mahogany*	<i>Swietenia macrophylla</i>	Meliaceae	172	30.55
Aurie*	<i>Acacia auriculiformis</i>	Mimosaceae	70	12.43
Talisay	<i>Terminalia catappa</i>	Combretaceae	62	11.01
Narra	<i>Pterocarpus indicus</i> forma <i>indicus</i>	Fabaceae	51	9.06
Gmelina*	<i>Gmelina arborea</i>	Verbenaceae	34	6.04
Bo Tree*	<i>Ficus relogiosa</i>	Moraceae	24	4.26
Molave	<i>Vitex parviflora</i>	Verbenaceae	23	4.09
Banaba	<i>Lagerstroemia speciosa</i>	Lyrthaceae	22	3.91
Kalachuchi*	<i>Plumeria acuminata</i>	Apocynaceae	18	3.20
Bottle brush*	<i>Callistemon citrinus</i>	Myrtaceae	9	1.60
Eucalyptus*	<i>Eucalyptus camaldulensis</i>	Myrtaceae	9	1.60
Palawan cherry	<i>Prunus javanica</i>	Rosaceae	8	1.42
Rain tree*	<i>Samanea saman</i>	Mimosaceae	8	1.42
Araucaria*	<i>Araucaria columnaris</i>	Araucariaceae	7	1.24
Pili	<i>Canarium ovatum</i>	Burseraceae	6	1.07
Agoho del monte	<i>Gymnostoma rumphianum</i>	Casuarinaceae	5	0.89
Thailand shower*	<i>Senna siamea</i>	Caesalpiniceae	4	0.71
Neem*	<i>Azadirachta indica</i>	Meliaceae	4	0.71
Indian mango*	<i>Mangifera indica</i>	Anacardiaceae	3	0.53
Teak*	<i>Tectona grandis</i>	Verbenaceae	3	0.53
Indian tree*	<i>Polyalthia longifolia</i>	Annonaceae	3	0.53
Kamagong	<i>Diospyrus discolor</i>	Ebenaceae	3	0.53
African tulip*	<i>Spathodea campanulata</i>	Bignoniaceae	2	0.36
Kamachile*	<i>Pithecellobium dulce</i>	Mimosaceae	2	0.36
Kamias*	<i>Averrhoa balimbi</i>	Oxalidaceae	1	0.18

Datilis*	<i>Muntingia calabura</i>	Elaeocarpaceae	1	0.18
Duhat	<i>Syzygium cumini</i>	Myrtaceae	1	0.18
Golden shower*	<i>Cassia fistula</i>	Caesalpinaceae	1	0.18
Sampalok*	<i>Tamarindus indica</i>	Caesalpinaceae	1	0.18
India rubber*	<i>Ficus elastica</i>	Moraceae	1	0.18
Nangka*	<i>Artocarpus heterophylla</i>	Moraceae	1	0.18
Caimito*	<i>Chrysophyllum cainito</i>	Sapotaceae	1	0.18
Palosanto*	<i>Triplaris cumingiana</i>	Polygonaceae	1	0.18
Antsoan	<i>Casia javanica</i>	Caesalpinaceae	1	0.18
Fire tree*	<i>Delonix regia</i>	Caesalpinaceae	1	0.18
Total			1892	100

Note: *Exotic species

Appendix Table 3
Families of trees in the green spaces of Bacolod City

Family	Frequency	Percentage
Myrtaceae	1189	62.84
Meliaceae	160	8.46
Mimosaceae	73	3.86
Verbenaceae	65	3.44
Polygonaceae	61	3.22
Fabaceae	53	2.80
Annonaceae	52	2.75
Combretaceae	49	2.59
Anacardiaceae	37	1.96
Bignoniaceae	30	1.59
Moraceae	25	1.32
Euphorbiaceae	20	1.06
Lythraceae	19	1.00
Caesalpinaceae	15	0.79
Apocynaceae	12	0.63
Lauraceae	9	0.48
Ebenaceae	5	0.26
Sterculiaceae	5	0.26
Sapindaceae	2	0.11
Casuarinaceae	2	0.11
Cupresaceae	2	0.11
Sapotaceae	2	0.11
Rosaceae	2	0.11
Clusiaceae	1	0.05
Lecythidaceae	1	0.05
Ulmaceae	1	0.05
Total	1892	100

Appendix Table 4
Genera of trees in the green spaces of Bacolod City

Genus	Frequency	%
<i>Eucalyptus</i>	1188	62.79
<i>Swietenia</i>	118	6.24
<i>Triplaris</i>	61	3.22
<i>Pterocarpus</i>	53	2.80
<i>Terminalia</i>	49	2.59
<i>Vitex</i>	43	2.27
<i>Samanea</i>	36	1.90
<i>Polyalthia</i>	36	1.90
<i>Azadirachta</i>	26	1.37
<i>Tecoma</i>	24	1.27
<i>Leucaena</i>	22	1.16
<i>Koodersiodendron</i>	21	1.11
<i>Lagerstroemia</i>	19	1.00
<i>Ficus</i>	17	0.90
<i>Tectona</i>	16	0.85
<i>Cananga</i>	16	0.85
<i>Acacia</i>	14	0.74
<i>Wrightia</i>	12	0.63
<i>Bischofia</i>	11	0.58
<i>Aglaia</i>	9	0.48
<i>Litsea</i>	9	0.48
<i>Mangifera</i>	8	0.42
<i>Spondias</i>	8	0.42
<i>Artocarpus</i>	8	0.42
<i>Melia</i>	7	0.37
<i>Cassia</i>	7	0.37
<i>Delonix</i>	6	0.32
<i>Gmelina</i>	6	0.32
<i>Reutalis</i>	6	0.32
<i>Spathodea</i>	6	0.32
<i>Diospyros</i>	5	0.26
<i>Pterospermum</i>	4	0.21
<i>Azalia</i>	2	0.11
<i>Antidisma</i>	2	0.11
<i>Pometia</i>	2	0.11
<i>Platyclusus</i>	2	0.11
<i>Gymnostoma</i>	2	0.11
<i>Crysophyllum</i>	2	0.11
<i>Prunus</i>	2	0.11
<i>Syzygium</i>	1	0.05

<i>Paraserianthes</i>	1	0.05
<i>Melanolipses</i>	1	0.05
<i>Heretiera</i>	1	0.05
<i>Callophyllum</i>	1	0.05
<i>Barrintonia</i>	1	0.05
<i>Trema</i>	1	0.05
Total	1892	100

Appendix Table 5
Families of trees in the green spaces of Iloilo City

Family	Frequency	Percentage
Meliaceae	176	31.32
Mimosaceae	80	14.23
Combretaceae	62	11.03
Verbenaceae	60	10.68
Fabaceae	51	9.07
Moraceae	26	4.63
Lyrthaceae	22	3.91
Myrtaceae	19	3.38
Apocynaceae	18	3.20
Caesapliniaceae	8	1.42
Rosaceae	8	1.42
Araucariaceae	7	1.25
Burseraceae	6	1.07
Casuarinaceae	5	0.89
Anacardiaceae	3	0.53
Annonaceae	3	0.53
Ebenaceae	3	0.53
Bignoniaceae	2	0.36
Oxalidaceae	1	0.18
Elaeocarpaceae	1	0.18
Polygonaceae	1	0.18
Total	562	100

Appendix Table 6

Genera of trees in the green spaces of Iloilo City

Genus	Frequency	%
<i>Swietenia</i>	172	30.60
<i>Acacia</i>	70	12.46
<i>Terminalia</i>	62	11.03
<i>Pterocarpus</i>	51	9.07
<i>Gmelina</i>	34	6.05
<i>Ficus</i>	24	4.27
<i>Vitex</i>	23	4.09
<i>Lagerstroemia</i>	22	3.91
<i>Plumeria</i>	18	3.20
<i>Eucalyptus</i>	9	1.60
<i>Callistemon</i>	9	1.60
<i>Samanea</i>	8	1.42
<i>Prunus</i>	8	1.42
<i>Araucaria</i>	7	1.25
<i>Canarium</i>	6	1.07
<i>Gymnostoma</i>	5	0.89
<i>Azadirachta</i>	4	0.71
<i>Senna</i>	4	0.71
<i>Tectona</i>	3	0.53
<i>Mangifera</i>	3	0.53
<i>Polyalthia</i>	3	0.53
<i>Diospyros</i>	3	0.53
<i>Pithecellobium</i>	2	0.36
<i>Spathodea</i>	2	0.36
<i>Cassia</i>	2	0.36
<i>Delonix</i>	1	0.18
<i>Tamarindus</i>	1	0.18
<i>Syzygium</i>	1	0.18
<i>Artocarpus</i>	1	0.18
<i>Ficus</i>	1	0.18
<i>Averrhoa</i>	1	0.18
<i>Muntingia</i>	1	0.18
<i>Triplaris</i>	1	0.18
Total	562	100