ARTHUR SÉRGIO MOUÇO VALENTE

SUB-REGIÕES FITOGEOGRÁFICAS DA FLORESTA ATLÂNTICA ENTRE AS BACIAS DOS RIOS SÃO FRANCISCO E URUGUAI BASEADAS NA ANÁLISE DOS PADRÕES DE DISTRIBUIÇÃO ESPACIAL DA FLORA ARBÓREA E DO CLIMA

LAVRAS – MG

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Tese apresentada à Universidade Federal de Lavras, como parte das exigências do Programa de Pós-Graduação em Engenharia Florestal, área de concentração Ciências Florestais, para a obtenção do título de Doutor.

Orientador

Prof.Dr. Ary Teixeira de Oliveira Filho

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ARTHUR SÉRGIO MOUÇO VALENTE

PHYTOGEOGRAPHIC SUBREGIONS OF THE ATLANTIC FORESTS BETWEEN SÃO FRANCISCO AND URUGUAY RIVER BASINS BASED ON THE ANALYSIS OF SPATIAL DISTRIBUTION PATTERNS OF THE TREE FLORA AND CLIMATE

(SUB-REGIÕES FITOGEOGRÁFICAS DA FLORESTA ATLÂNTICA ENTRE AS BACIAS DOS RIOS SÃO FRANCISCO E URUGUAI BASEADAS NA ANÁLISE DOS PADRÕES DE DISTRIBUIÇÃO ESPACIAL DA FLORA ARBÓREA E DO CLIMA)

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APROVADA em 17 de fevereiro de 2011.

Dr. Jean Carlos Budke	URI – Campus de Erechim
Dr. João Renato Stehmann	UFMG
Dr. Marco Aurélio Leite Fontes	UFLA
Dr. Rubens Manoel dos Santos	UFLA

Prof.Dr. Ary Teixeira de Oliveira Filho
Orientador

LAVRAS – MG

2011

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Por André Dahmer.

ABSTRACT

The spatial variation in the composition of the tree flora of some Atlantic forest areas distributed in the East Atlantic basins, Southeastern and Southern Brazil, extended to Paraguay and Argentina, was investigated under four main aspects: (1) to evaluate the level of floristic differentiation of tropical and subtropical forests along their latitudinal, altitudinal and inland gradients; (2) to propose and circumscribe phytogeographic subdivisions for the region based on variations in the composition of the dendroflora and physiognomic features of the forests; (3) to evaluate the heterogeneity of the tree flora pondering the influence of spatial and environmental variables; (4) to indicate the main climatic factors that characterize the phytogeographic subregions. The dataset includes 589 organized forest areas in an environmental database, containing geographical and bioclimatic records and a floristic database, containing binary records for the presence of 3,669 species, 632 genera and 117 families. Multivariate analyses (CCA, DCA, PCoA, CRT, TWINSPAN, ISA, cluster analyses and dissimilarity indexes) were used to search for the distribution of emerging patterns and interrelationships in the dataset. The set of tree species represents 24% of the estimated vascular plants for the Atlantic Forest. There were three times more rare species of trees in the 100 km closer to the sea. The tropical forests tend to have the richest flora and with greater occurrence of unique species, however there is a clear reduction of species richness in the subtropical subregions. Although this reduction is also reported in the level of internalization, this did not occur in a homogeneous pattern among subregions in none of the latitudinal and altitudinal gradients. The floristic heterogeneity is evidenced in the description and in the relationship among the eleven phytogeographic subregions which represent subsets of the tree flora. There are five rain subregions where two are typically tropical coastal plains and five seasonal inland subregions and more the mixed Araucarian forests. The results have added a contribution to the knowledge of the phytogeographic differentiation of the Atlantic Forest trees *sensu lato* to the South of São Francisco River basin. It is possible to maintain a high correlation between phytogeographic and phytophysiognomic classifications and those with the climate.

Keywords: Atlantic Forest. Brazil. Climate. Multivariate analyses. Phytogeography, Tree Flora. Tropical. Subtropical. Rain forest. Seasonal Forest.

RESUMO

A variação espacial da composição da flora arbórea de áreas de floresta Atlântica distribuídas nas bacias atlânticas do leste, sudeste e sul do Brasil, estendendo-se ao Paraguai e Argentina, foi investigada sob quatro aspectos principais: (1) avaliar o nível de diferenciação florística de florestas tropicais e subtropicais ao longo de gradientes latitudinais, altitudinais e de interiorização no continente; (2) propor e circunscrever subdivisões fitogeográficas para a região com base nas variações da composição da dendroflora e aspectos fisionômicos das florestas; (3) avaliar a heterogeneidade da flora arbórea ponderando a influência de variáveis ambientais e espaciais; (4) indicar os principais fatores climáticos que caracterizam as sub-regiões fitogeográficas. O conjunto de dados reúne 589 áreas de floresta organizados em um banco de dados ambientais, contendo registros geográficos e bioclimáticos, e um banco de dados florísticos, contendo registros binários de presença para 3.669 espécies, 632 gêneros e 117 famílias. Utilizaram-se análises multivariadas (CCA, DCA, PCoA, CRT, TWINSPAN, ISA, análises de agrupamento e índices de dissimilaridade) para procurar padrões emergentes de distribuição e inter-relações no conjunto de dados. O conjunto de espécies arbóreas representa 24% das plantas vasculares estimadas para a Mata Atlântica. Ocorreram três vezes mais espécies raras de árvores nos 100 km mais próximos ao mar. As florestas tropicais tendem a ter a flora mais rica e com maior ocorrência de espécies exclusivas, mas há uma clara redução da riqueza de espécies para as sub-regiões subtropicais. Embora essa redução também seja relatada para o nível de interiorização, em nenhum dos gradientes, latitudinal e altitudinal isso ocorreu de forma homogênea entre as sub-regiões. A heterogeneidade florística é evidenciada na descrição e na relação entre as 11 sub-regiões fitogeográficas que representam subconjuntos da flora arbórea. Há cinco sub-regiões pluviais, sendo duas tipicamente de planícies costeiras tropicais e cinco sub-regiões estacionais do interior e mais as florestas mistas de Araucárias. Os resultados adicionam uma contribuição para o conhecimento da diferenciação fitogeográfica das árvores da Mata Atlântica *sensu lato* ao sul da bacia do Rio São Francisco. Conclui-se ser possível manter uma alta associação entre as classificações fitogeográfica e fitofisionômica e essas com o clima.

Palavras-chave: Floresta Atlântica. Brasil. Clima. Análises multivariadas. Fitogeografia, Flora arbórea. Tropical. Subtropical. Floresta pluvial. Floresta estacional.

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SUMÁRIO

1 INTRODUCTION

Further knowledge about the organization of the tree species in the Atlantic Forest using statistical multivariate analysis techniques can shed light on the observations and the experience of botanists who have contributed to the development of phytophysiognomic and phytogeographic classifications. The large latitudinal amplitude of the Atlantic domain incited us to know the variations of the existing species beyond the tropics. In addition, the forests long evolutionary history in the South American Atlantic coast contrasts with the few decades of inventories and research of its flora. Therefore, these studies are a great source of information for the reevaluation of some questions about how we understand the existing variations in the group of tree species in the domain and about the efforts to preserve portions of this wealth.

In the Theoretical Reference the history and major contributions to the formation of the scientific basis of the Brazilian phytogeography associated to the Atlantic domain and the current trends of the phytogeographic and conservationist studies are verified. The description of the floristic and geographical database covering, among other characteristics, the extension of the studied geographical area is presented in the Methods. It is also possible to verify the phytophysiognomic classification system adopted for the comparison with the proposed phytogeographical division of the Atlantic Forest trees. The multivariate analyses are described with the justifications for using each type of analysis in their applicability in responding the study objectives. Finally, in the Methods, the approach for the treatment of the richness and rarity of the tree species along the latitudinal and internal gradients are presented.

A description of the general arboreal flora is presented in the Results. Hence, the richness of the families and genera most representatives in the extended studied area of the Atlantic Forest and the existing floristic differences

between the tropical and subtropical flora between the phytophysiognomic types were described. Subsequently, a demonstration of the behavior of the richness in each phytophysiognomic type along the latitudinal gradient is displayed.

The proposal of the phytogeographical sub-regions is detailed by the results of the classification and spatial patterns analyses found by the groups defined in the analysis. The set of indicator species and exclusive to each group were aggregated to the sub-regions. A direct comparison between the phytophysiognomic and phytogeographic classifications is presented where the associations between the phytophysiognomic groups with the phytogeographic sub-regions can be observed. The dissimilarity relations between the sub-regions are compared pairwise in a specific section. Detailed descriptions about the correlation of climate variables over the occurrence of the species and climate over the spatial distribution of the proposed sub-regions are also presented.

An association of the scientific literature laying parallels between the proposed sub-regions with other biogeographic studies is exposed in the Discussion. In addition, some results published by researchers in the second half of the 20th century about the Araucaria forests and the roles of the phytophysiognomies in the preservation of the sets of floras are reaffirmed. Further detailed acquired advanced knowledge about the arboreal synusia of the Atlantic Forest and the regionalization of its flora, all contributing to the planning of actions aimed at the preservation of the floristic sets representative of each part of the forest domain landscape are presented.

2 THEORETICAL FRAMEWORK

It is conceivable to see that efforts towards biogeographical understanding of the Biogeographical Domain of the South American Atlantic Forest – or Atlantic Domain to simplify – when available to the scientific knowledge (GARCIA; PIRANI, 2005; OLIVEIRA-FILHO; FONTES, 2000; SILVA; CASTELETI, 2003) are triggers for research studies improving the conservational science (MENINI NETO; FORZZA; ZAPPI, 2009; METZGER, 2009; RIBEIRO et al., 2009). Justifications for the conservation of the Atlantic Domain are inherent in its biodiverse nature, with about 15,000 vascular plants and 49.5% of endemism (FORZZA et al., 2010b; STEHMANN et al., 2009) and threatened (DEAN, 1997; HIROTA; PONZONI, 2008; MORELLATO; HADDAD, 2000). Therefore it is considered the eighth largest *hotspot* among 25 worldwide *hotspots* defined by Myers et al. (2000). The original vegetation extended over more than 1,227,600 km², thus currently is reduced to 91,930 km^2 or 7.5% of its original coverage (MINISTÉRIO DO MEIO AMBIENTE – MMA, 2000).

The wide geographical extension of the Atlantic Domain causes its forests to show complex transitions or contact with three other large domains, the Caatinga, Cerrado and Pampa (AB'SÁBER, 2003), west of its interior boundaries and throughout its North-South continuous. Although it is separated from the largest forestry complex in South America, the Amazon province, its floristic connections motivated scientific discussions (BIGARELLA; ANDRADE-LIMA; RIEHS, 1975; FERNANDES, 2003; RIZZINI, 1963). The great extension, the varied contacts and the geomorphological heterogeneity imply in the wide variation of the Atlantic Forests phytophysiognomies and its floristic composition (OLIVEIRA-FILHO; JARENKOW; RODAL, 2006). This large variation and the environmental threats justify the relevance of efforts

towards phytogeographic and phytophysiognomic classification increasingly more accurate.

With the proposal to harmonize the classification of the vegetation in Brazil as a whole, Veloso, Rangel Filho and Lima (1991) suggested its division according to phytophysiognomic attributes based on the vegetation structure and seasonality. These characteristics, when linked to climatic conditions and geographical features allow the differentiation of vegetation types for the Atlantic Forest, but it does not address phytogeographic aspects; the typology, for example, is the same for the Atlantic and the Amazon forests. The first Brazilian phytogeographic vegetation classification was originated from personal observations from researchers such as those performed by Rizzini (1997), who associated the physiognomy of the vegetation to the knowledge about the distribution of species while pondering the previous classifications from Martius (1958) and Sampaio (1945). The first Atlantic Domain phytogeographic subdivision in subprovinces was performed by Rizzini (1963), using the assorted groups of plants. While Silva and Casteleti (2003) suggested biogeographical subregions employing the rarity of the birds, butterflies and primates species.

In recent years, through the improvement of vegetation databases and the innovations in multivariate analytics it has become possible to diagnose robust phytogeographic interactions and detail the species-environment relationships with emphasis on the climatic variables (FERRAZ; ARAÚJO; SILVA, 2004; OLIVEIRA-FILHO; FONTES, 2000; SCUDELLER; MARTINS; SHEPERD, 2001). This knowledge arose after decades of accumulation of floristic inventories and a systematic and dynamic organization, such as the TreeAtlan v2.0 database (OLIVEIRA-FILHO, 2010).

In the last decade, research studies in Brazil aiming to elucidate phytogeographic relations have predominantly local or regional character,

comparing publications and theses of floristic inventories. In this context, the comprehension of the heterogeneity of the Atlantic Forest from comparative studies employing cluster and ordinating analyses is a growing trend (GONZAGA et al., 2008; MARQUES; SWAINE; LIEBSCH, 2011; NETTESHEIM; MENEZES; CARVALHO, 2010; OLIVEIRA-FILHO et al., 2005; OLIVEIRA-FILHO, 2010; OLIVEIRA-FILHO; FONTES, 2000; SANTOS, 2009). Based on the scientific collection that encompasses the phytogeography in the Atlantic Domain, this study identifies biogeographic subregions based on the composition of the tree flora in a large portion of the Atlantic Domain and characterizes its relations with environmental and spatial variables, thus contributing to a more accurate understanding of the phytophysiognomic and phytogeographic classification. Furthermore, this study aimed to analyze the rarity patterns of the tree flora overlapped with the previous subregion analyses in order to add to the discussion initiated by Silva and Casteleti (2003) which refers to both the corridors of biodiversity and the conservation of species.

3 OBJECTIVES

(1) To assess the level of differentiation in terms of tree flora composition between tropical and subtropical forests and along their latitudinal, altitudinal and inland gradients in the area of the South American Atlantic Forest Domain extending between the São Francisco and Plata river basins;

(2) To propose and circumscribe phytogeographic subdivisions of the Atlantic Forest Domain based on variations of both the species composition of the dendroflora and forest physiognomic features;

(3) To assess the heterogeneity of the dendroflora of the Eastern and Southeastern Brazilian Atlantic basins considering the influence of spatial and geo-climatic variables;

(4) To identify the main climatic factors that characterizes the phytogeographic subregions.

4 METHODS

4.1 Floristic and geographic database

The dataset used in this study was extracted from TreeAtlan 2.0 (OLIVEIRA-FILHO, 2010), a relational database that contains tree species checklists compiled from the literature and herbarium specimens for >1,100 areas in extra-Amazonian and extra-Andean tropical and subtropical South America (detailed description, history and protocol for TreeAtlan 2.0 are available at OLIVEIRA- FILHO, 2010). The extracted dataset consisted of tree species occurrence records (checklists), vegetation type, four spatial variables and 20 bioclimatic variables for 589 areas of the Atlantic Forest located between 7°51'─31°27' S and 36°38'─55°34' W (Fig. 1). The area included the whole catchment basin of the São Francisco River to the North, part of the Plata River basin to the South and all watersheds between the former two and the Atlantic Ocean, comprising the so-called Atlantic basins. The catchment area of the Plata River, the second largest in South America, is composed of two main river systems, the Paraná-Paraguay and the Uruguay, both draining large areas outside the Atlantic Domain. Because of this, the whole Paraguay River basin as well as catchment areas of the Paraná and Uruguay Rivers draining the Chaco and the Pampa Domains was excluded from the studied area. The main Atlantic basins include those of the Guaíba and Itajaí Rivers in the South, the Ribeira and Paraíba do Sul Rivers in the Southeast, and the Doce, Mucuri, Jequitinhonha, Pardo, Contas and Paraguaçu Rivers in the East. This geographic frame contained not only typical areas of Atlantic Forest but also forest enclaves in the adjacent Caatinga and Cerrado Domains therefore corresponding to the *sensu latissimo* concept of Atlantic Forests of Oliveira-Filho, Jarenkow and Rodal (2006). We did not include the Northeastern section of the Atlantic Domain

because it is part of another ongoing project. However Arboreal Caatinga areas of Vale do Rio São Francisco were included.

The nomenclature and classification of areas into forest types given by TreeAtlan 2.0 are based on a system proposed by Oliveira-Filho (2009) as a subsequent development of the IBGE classification system for Brazilian vegetation (VELOSO; RANGEL FILHO; LIMA, 1991) and pursuing to upgrade in both flexibility and detail. The distribution of the upper level vegetation types in the study region and the lower level (and more detailed) subtypes assigned to the 589 areas are both presented in Figure 1. As proposed by the system, the limits between the tropical and subtropical realms were set at latitude 25°00' S for lower and upper plain forests and at latitude 24°00' S for lower and upper highland forests.

The four spatial variables extracted for the 589 areas were latitude, longitude, altitude and shortest distance to the ocean. An additional variable was generated for this study: the product between |latitude| × altitude. Latitude in decimal degrees and altitude in meters. The 20 bioclimatic variables consisted of the 'mean duration of water deficit', extracted from Walter diagrams (WALTER, 1985) and the 19 'bioclimatic parameters' produced by WorldClim 1.4, a high resolution (1 km) set of global climate layers created by Hijmans et al. (2005).

4.2 Species richness and geographic distribution of forest types

The species records for the Atlantic Forest areas were merged into 11 latitude bands, 2° wide, and seven main forest types to analyze the changes in richness of tree species with latitude for each vegetation type as well as for all types together. Additionally, this process was repeated across an inland gradient,

merging areas within the same band of distance to the ocean with 100 km in width.

4.3 Multivariate analyses

A set of techniques of multivariate analyses was used to investigate the emerging patterns of variation in tree species composition in the dataset and their relationship with geo-climatic and spatial variables as well as to assess their floristic consistency with the adopted classification into vegetation types. More than one method was used for these analyses, as a good practice approach, since no method is actually free of problems with assumed models of vegetation organization. Besides, some combinations of analytical tools may be suitable to address a wider range of questions (see AUSTIN, 2005; WEHRDEN et al., 2009). The analyses included: Canonical Correspondence Analysis, CCA (TER BRAAK, 1987, 1995), processed by the program CANOCO 4.5 (TER BRAAK; SMILAUER, 2002); Detrended Correspondence Analysis, DCA (HILL; GAUCH, 1980; KENKEL; ORLÓCI, 1986; LEGENDRE; LEGENDRE, 1998); Two-Way Indicator Species Analysis, TWINSPAN (HILL, 1979); Cluster Analysis and Indicator Species Analysis, ISA (DUFRÊNE; LEGENDRE, 1997) using PC-ORD 5.10 (MCCUNE; MEFFORD, 2006); Multiple Correspondence Analysis, MCA (GREENACRE; BLASIUS, 2006) and Classification and Regression Tree (BREIMAN et al., 1984) Analysis using SPSS 13.0 (SPSS INCORPORATION, 2005).

The CCAs (TER BRAAK, 1987, 1995) were processed coupled with Principal Coordinates of Neighbour Matrices, PCNM (BORCARD; LEGENDRE, 2002; BORCAR; LEGENDRE; DRAPEAU, 1992) to account for both the environmental and spatial structure of the dataset. As required by the method, three matrices were prepared: (1) the species matrix, containing binary

occurrence of species per area; (2) the environmental matrix, containing the 20 bioclimatic variables per area plus the geomorphic variables altitude, distance to the ocean and altitude x | latitude |, transferred from the spatial variables because they commonly summarize complex environmental gradients (HUGGETT, 1995); the whole set is referred to as geo-climatic variables; and (3) the spatial matrix, containing PCNM variables (Euclidean components at several scales and directions) per area produced by Principal Coordinates Analysis (PCoA) of a truncated matrix of distances among all areas. The original distance matrix was prepared from the geographic coordinates in decimal degrees of the areas. As distances among areas were irregular, we followed Borcard and Legendre (2002) to set the truncation distance of the matrix at the widest gap among all areas, 219.1 km, and values above this threshold were replaced by 876.4 km. Borcard and Legendre (2002) demonstrated that beyond a factor of four times the threshold, the principal coordinates remain the same for the 'large' distances. A PCoA of the truncated distance matrix using PAST 1.93 (HAMMER; HARPER; RYAN, 2001) was computed and the PCNM variables extracted from the positive eigenvalues only. Negative eigenvalues are impossible to represent because corresponding axes are complex numbers (BORCARD; LEGENDRE, 2002).

Preliminary CCAs were performed in order to select the bioclimatic and spatial variables with the strongest and significant correlations with the variation in species composition. To this end, the path of further selection of variables was used coupled with the Monte Carlo permutation tests (TER BRAAK, 1988) to select sets of climatic and spatial variables. Four CCAs were performed to relate the species composition to climatic variables only (CCA1), to spatial variables only (CCA2), to bioclimatic variables and spatial co-variables (CCA3) and to spatial variables and bioclimatic co-variables (CCA4). All CCAs were processed coupled with the Monte Carlo permutation tests for the significance of the

relationships. The overall results were used to assess the proportion of the total variation in species composition that is explained by climatic variables only, by spatial variables only, and by spatially structured climatic variables.

One disadvantage presented by the CCA is the disregard of community structure that is unrelated to provided geo-climatic variables. In taking this into consideration, a DCA was performed, which produces ordination axes and scores based on community data only, *i.e.*, unaffected by geo-climatic variables. This allows an *a posteriori* independent assessment of the relationships of 'pure' community gradients with explaining variables (MCCUNE; GRACE, 2002). Consequently, the ordination scores were related to bioclimatic and spatial variables. Only those variables selected by the CCAs were fitted as vectors to the DCA diagram produced by DCA. The DCA was replicated to display the comparison between the forest types and subsets generated by a cluster analysis.

TWINSPAN was used, a divisive cluster analysis technique, because of its detailed output which includes not only the clusters but also indicator species and an ordinated table. TWINSPAN groups and their distribution on DCA diagrams were used to propose and circumscribe the classification of the Atlantic Forest areas into phytogeographic subregions based on the composition of the dendroflora coupled with environmental interpretation. An additional cluster analysis using the Jaccard's coefficient of dissimilarity was performed among merged subsets of areas and the Ward's method as an agglomerative clustering technique (KENT; COKER, 1992). The vegetation physiognomic classification was directly compared with the classification of phytogeographic subregions by MCA.

Lists of characteristic and indicator species of the main subregions using ISA were produced after the application of a randomization test with 1,000 interactions. With a similar purpose, the genera and families were also extracted

sensu APG III (ANGIOSPERM PHYLOGENY GROUP, 2009) with the largest number of species in the main forest types.

The last multivariate analysis performed was the Classification and Regression Tree to identify and summarize in a series of logical if-then (tree nodes) the bioclimatic variables that most effectively describe the floristic subgroups produced in the previous analyses and to validate the prediction of those subgroups based on non-parametric tests. The subtropical subregions were merged to make this analysis safer.

4.4 Species richness and rarity of Phytogeographic Subregions across latitude and inlanding gradients

The same classes of latitude and inland distances to the ocean were used to describe and analyze the contribution of each floristic subgroup to the variations in species richness. In those analyses not only the data of richness held in each class were used, but also the extracted data on species rarity. The number of species that appeared only once in the entire sample was used as a mesurement of species rarity. These forms of rarity were considered the representation of species stenotopic, restricted geographically as proposed by Rabinowitz, Cairns and Dillon (1986) in combining the scale of the geographical distribution and habitat specificity. Moreover the rarity proportional to the local richness was calculated to identify regions where it is expected that rarity is more locally represented.

5 RESULTS

5.1 General floristics

The 589 Atlantic Forest areas *sensu latissimo* used in this study (Appendix 1) were distributed over 12 Brazilian States and in the Federal District besides in northeastern Argentina and eastern Paraguay (Figure 1, Table 1). The floristic composition of the resulting arboreal sinusiae presented 3,669 species (Appendix 2), 117 families and 632 genera. Araucariaceae (1 species) and Podocarpaceae (2) compose the Gimnospermas and Cyatheaceae families (20) and Dicksoniaceae (1) the Pteridophytes, present together in 68% of the areas. However 96% of the families are Angiosperms. Myrtaceae (523 species), Fabaceae (517), Rubiaceae (187), Lauraceae (181), Melastomataceae (162), Euphorbiaceae, (120), Annonaceae (108), Solanaceae (93), Rutaceae (83) and Malvaceae (80) stood out due to the number of species and comprised 56% of overall richness. The following were outstanding genera as for their elevated richness in species: *Eugenia* (186 species), *Myrcia* (120), *Ocotea* (81), *Miconia* (71), *Solanum* (53), *Inga* (50), *Marlierea* (47), *Erythroxylum* (36), *Calyptranthes* (34), *Byrsonima* (32) and *Cyathea* (18). These accounted for 19.84% of the total number of tree species. The reduced number of genera (61) and families (44) which sheltered high fraction of the species composition (50.3% and 90.5%, respectively) was striking. On the other hand, 20 arboreal families (17%) and 257 genera (40.6%) were represented by only one species.

Table 1 Distribution of forest areas in political units

Country/Region/State	Areas
Brazil	576
Northeast	79
Bahia (BA)	73
Sergipe (SE)	4
Pernambuco (PE)	2
Southeast	332
Minas Gerais (MG)	206
São Paulo (SP)	77
Rio de Janeiro (RJ)	31
Espírito Santo (ES)	18
South	141
Paraná (PR)	59
Rio Grande do Sul (RS)	46
Santa Catarina (SC)	36
Central-West	24
Mato Grosso do Sul (MS)	10
Goiás (GO)	8
Distrito Federal (DF)	6
Argentina (ARG)	8
Paraguay (PAY)	5
Total	589

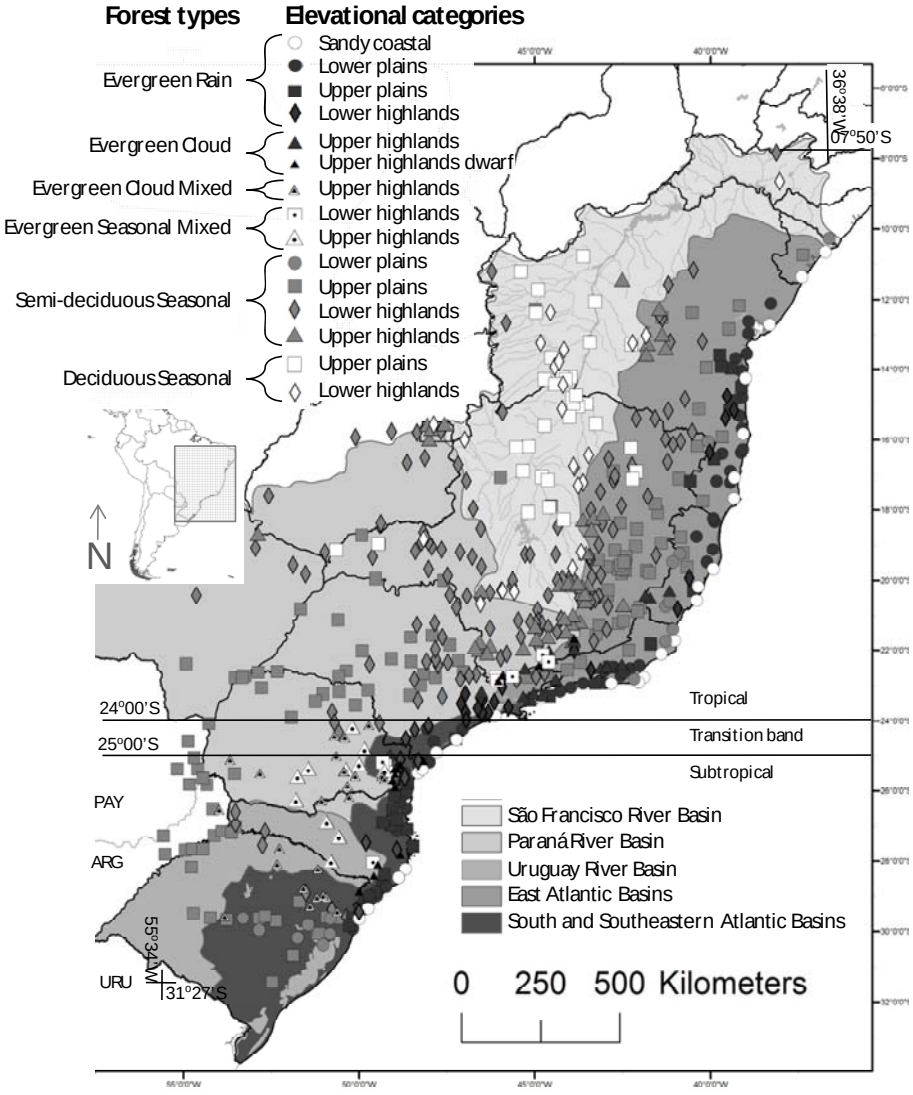


Figure 1 Distribution and classification into forest types of the 589 areas of Atlantic Forests used in the floristic analyses.

It was recorded that 374 species occurred one time in the sample while 25 and 50% of all samples were recorded 3 and 9 times, respectively. There are 83 species in the threat of extinction according to the red official list from the Brazilian flora (MMA, 2008).

The species that occur in more than half of the 589 areas were: *Casearia sylvestris* Sw., *Zanthoxylum rhoifolium* Lam., *Guapira opposita* (Vell.) Reitz, *Myrsine umbellata* Mart., *Myrcia splendens* (Sw.) DC., *Cabralea canjerana* (Vell.) Mart., *Prunus myrtifolia* (L.) Urb., *Cedrela fissilis* Vell., *Cupania vernalis* Cambess., *Cecropia pachystachya* Trécul, *Roupala montana* Aubl., *Sapium glandulosum* (L.) Morong, *Tapirira guianensis* Aubl., *Myrciaria floribunda* (H.West ex Willd.) O.Berg, *Guarea macrophylla* Vahl, *Pera glabrata* (Schott) Poep. ex Baill., *Alchornea triplinervia* (Spreng.) Müll.Arg., *Endlicheria paniculata* (Spreng.) J.F.Macbr., *Allophylus edulis* (A.St.-Hil. et al.) Radlk., *Casearia decandra* Jacq. and *Inga marginata* Willd.

5.2 Floristic differentiation between tropical and subtropical forest

The richness of tree species from the Atlantic tropical forest is more than triple the richness found in the subtropical forest and the number of restricted species of the tropical forest is about 19 times higher than that of restricted species in the subtropical forests (Table 2). Although they share a considerable number of species (995), the two sets of forests present a high distance of Jaccard, ca. 72.9%. Thus, out of the entire set of species from the subtropical forest, the shared species represent 88% of its tree flora.

The tropical forests present about 70% for species occurring only in tropical regions against only 11% of unique species in subtropical forests. The mixed forests of Araucaria pines and the Cloud forests present the lowest proportions of species which occurred exclusively in their domains. Unlike that,

the rain forest, semi-deciduous and deciduous forests present more representative values for their floras generated by the presence of species apparently unique to its habitat (Table 2).

Table 2 Jaccard's index of dissimilarity (percentage in bold) and number of tree species common between tropical and subtropical Atlantic forests and their main types. N = species richness; R = restricted species

N	R	Forest formation	Trop.	Subtrop.	Rain	Cloud	Araucaria	Semi-deciduous	Deciduous
3535	2540	**Tropical**	1	**72.9**					
1129	134	**Subtropical**	995	1					
2607	565	**Rain**			1	**59.8**	**76.3**	**45.4**	**83.8**
1324	76	**Cloud**			1131	1	**57.0**	**63.9**	**85.2**
744	10	**Araucaria**			645	624	1	**76.3**	**86.4**
2710	426	**Semi-deciduous**			1883	1072	662	1	**72.4**
897	112	**Deciduous**			490	287	197	781	1

The following families predominate in the Atlantic tropical forests according to the richness of species: Fabaceae (499), Myrtaceae (484), Rubiaceae (187), Lauraceae (177), Melastomataceae (158), Euphorbiaceae (158) and Annonacae (107) (Tabela 4). Eighteen families occurred only in the Atlantic tropical forest: Achariaceae, Bixaceae, Bonnetiaceae, Capparaceae, Caryocaraceae, Dichapetalaceae, Dilleniaceae, Hernandiaceae, Hypericaceae, Icacinaceae, Picrodendraceae, Polygalaceae, Putranjivaceae, Siparunaceae, Stemonuraceae, Trigoniaceae, Ulmaceae and Velloziaceae. There is no exclusivisity of families in the subtropical Atlantic Forest. In the subtropical forests, only Myrtaceae (206) and Fabaceae (126) presented more than 100 species (Table 3), however a relatively larger participation of Lauraceae (66), Melastomataceae (55), Asteraceae (45) and Solanaceae (41) to the detriment of decrease of Rubiaceae, Euphorbiaceae and Annonaceae.

Table 3 Top 25 species-richest families in the tree flora of 589 areas of tropical and subtropical Atlantic forests. N = number of areas. S = number of species

Tropical forest N= 441 S= 3535		Subtropical forest N= 148 S= 1129	
Fabaceae	499	Myrtaceae	206
Myrtaceae	484	Fabaceae	126
Rubiaceae	187	Lauraceae	66
Lauraceae	177	Melastomataceae	55
Melastomataceae	158	Asteraceae	45
Euphorbiaceae	118	Rubiaceae	44
Annonaceae	107	Solanaceae	41
Solanaceae	87	Euphorbiaceae	30
Malvaceae	79	Sapotaceae	24
Rutaceae	79	Moraceae	19
Chrysobalanaceae	77	Rutaceae	18
Asteraceae	72	Salicaceae	18
Sapindaceae	70	Sapindaceae	18
Sapotaceae	67	Myrsinaceae	17
Bignoniaceae	52	Symplocaceae	17
Moraceae	51	Annonaceae	15
Vochysiaceae	49	Arecaceae	15
Apocynaceae	45	Bignoniaceae	15
Malpighiaceae	43	Meliaceae	15
Celastraceae	42	Monimiaceae	15
Salicaceae	41	Celastraceae	14
Arecaceae	38	Malvaceae	13
Erythroxylaceae	36	Anacardiaceae	11
Cactaceae	35	Cyatheaceae	11
Monimiaceae	35	Lamiaceae	11

The following genera were outstanding about their richness in species among the tropical and subtropical genera (Table 4): *Eugenia*, *Myrcia*, *Ocotea* and *Miconia*. The following genera stood out for their richness in species in the

tropical forests: *Inga* (50) *Marlierea* (46), *Erythroxylum* (36) and *Byrsonima* (32). A different set of genera stood out in the subtropical forests, including *Solanum*, *Myrceugenia* (24), *Baccharis* (17) and *Symplocos* (17). Among the genera unique to each forest type, 259 were of tropical occurrence, while only 15 were of subtropical occurrence and monospecific (Appendix 3).

Table 4 Top 25 species-richest genera in the tree flora of 589 areas of tropical and subtropical Atlantic forests. N = number of areas. S = number of species

Tropical forest N= 441 S= 3535		Subtropical forest N= 148 S= 1129	
Eugenia	171	*Eugenia*	76
Myrcia	116	*Myrcia*	36
Ocotea	80	*Ocotea*	31
Miconia	70	*Miconia*	29
Inga	50	*Solanum*	25
Solanum	49	*Myrceugenia*	24
Marlierea	46	*Baccharis*	17
Erythroxylum	36	*Symplocos*	17
Byrsonima	32	*Inga*	15
Calyptranthes	32	*Myrsine*	15
Ficus	32	*Mollinedia*	14
Pouteria	31	*Marlierea*	13
Licania	30	*Calyptranthes*	12
Maytenus	30	*Leandra*	12
Mollinedia	29	*Maytenus*	12
Machaerium	28	*Nectandra*	12
Senna	27	*Pouteria*	11
Vochysia	27	*Psychotria*	11
Annona	26	*Annona*	10
Croton	26	*Handroanthus*	10

"Table 4, Concluded."

Tropical forest N= 441 S= 3535		Subtropical forest N= 148 S= 1129	
Casearia	25	*Machaerium*	10
Ilex	25	*Campomanesia*	9
Nectandra	25	*Cordia*	9
Swartzia	25	*Ficus*	9
Symplocos	25	*Mimosa*	9

5.3 Floristic differentiation among forest types

The smallest floristic relations among the sinusiae arboreal forests were observed between the deciduous forests and the other forest types (Table 2). Although the deciduous formations present high dissimilarity when compared to all other physiognomies, its tree species composition showed closer floristic relations with the semi-deciduous formations. Mixed Araucarian forests also stood out by their high floristic dissimilarity. However, the mixed Araucarian forests shared a representative proportion (83.8%) of their tree flora with the cloud formations (624 species).

The lowest index of dissimilarity occurred between the rain and the semi-deciduous forests (Table 2). The results evidenced the high number of shared species between both semi-deciduous and rain forests and between semi-deciduous and deciduous forests. Among the 3,669 species from the database, only 165 occurred in all forest types and with a maximum of 1,883 common species in the pairwise comparisons and 593 species in the comparison between trios (Table 5).

Table 5 Sets of interception of tree species by main types of Atlantic forests. R = rain; C = cloud; A = Araucaria; S = semi-deciduous; D= deciduous

Sets of interception	Species in common
R∩S	1883
R∩C	1131
C∩S	1072
S∩D	781
A∩S	662
R∩A	645
C∩A	624
R∩A∩S	593
R∩C∩A	563
C∩A∩S	557
R∩C∩A∩S	518
R∩D	490
R∩S∩D	486
C∩D	287
R∩C∩D	273
R∩C∩S∩D	272
A∩S∩D	197
A∩D	197
R∩A∩S∩D	191
C∩A∩S∩D	166
C∩A∩D	166
R∩C∩A∩S∩D	165
R∩C∩A∩D	165

The families and genera with higher species richness among the major studied forest types are listed in Tables 6 and 7, respectively. Myrtaceae family was the richest in species in the rain forest, cloud and mixed Araucarian forests, while Fabaceae predominated among the semi-deciduous and deciduous physiognomies. Both families stood out in all forest types. One hundred and sixteen families were observed in the rain forest and the Velloziaceae family was the only one absent in this forest, but present in the semi-deciduous forests. The semi-deciduous formations presented 115 families, with absence of Acanthaceae

and Rhizophoraceae in their communities. The cloud, mixed Araucarian and deciduous forests presented 93, 85 and 75 families, respectively.

Table 6 Top 25 species-richest families in the tree flora of 589 areas of tropical and subtropical Atlantic forests classified into five main forest types. N = number of areas. S = number of species

Evergreen rain forest		Evergreen cloud forests		Evergreen Araucaria forest		Semideciduous seasonal forests		Deciduous seasonal forests	
S = 2617, N = 141		S = 1329, N = 35		S = 746, N = 45		S = 2715, N = 310		S = 897, N = 58	
Myrtaceae	421	Myrtaceae	217	Myrtaceae	112	Fabaceae	397	Fabaceae	219
Fabaceae	307	Fabaceae	127	Fabaceae	71	Myrtaceae	305	Myrtaceae	67
Rubiaceae	152	Lauraceae	101	Lauraceae	56	Lauraceae	145	Euphorbiaceae	42
Lauraceae	142	Melasto-mataceae	93	Melasto-mataceae	48	Rubiaceae	135	Rubiaceae	36
Melasto-mataceae	122	Rubiaceae	77	Asteraceae	45	Melasto-mataceae	113	Malvaceae	31
Annonaceae	80	Asteraceae	50	Solanaceae	37	Euphorbiaceae	86	Rutaceae	26
Euphor-biaceae	74	Solanaceae	50	Rubiaceae	29	Annonaceae	80	Bignoniaceae	25
Chryso-balanaceae	64	Euphorbiaceae	31	Euphor-biaceae	23	Solanaceae	76	Lauraceae	19
Rutaceae	64	Annonaceae	28	Salicaceae	16	Asteraceae	69	Malpighiaceae	19
Solanaceae	63	Monimiaceae	28	Symplo-caceae	16	Malvaceae	66	Moraceae	19
Sapotaceae	60	Sapindaceae	23	Cyatheaceae	12	Sapindaceae	57	Sapindaceae	19
Sapindaceae	55	Symplocaceae	22	Monimiaceae	12	Rutaceae	56	Cactaceae	18
Malvaceae	51	Celastraceae	20	Rutaceae	12	Sapotaceae	54	Salicaceae	18

"Table 6, Concluded."

Evergreen rain forest S = 2617, N = 141		Evergreen cloud forests S = 1329, N = 35		Evergreen Araucaria forest S = 746, N = 45		Semideciduous seasonal forests S = 2715, N = 310		Deciduous seasonal forests S = 897, N = 58	
Asteraceae	46	Salicaceae	19	Sapindaceae	11	Chrysoba-lanaceae	50	Celastraceae	16
Moraceae	39	Bignoniaceae	18	Vochy-siaceae	11	Moraceae	46	Erythro-xylaceae	16
Bigno-niaceae	35	Malvaceae	18	Aquifo-liaceae	10	Bignoniaceae	43	Solanaceae	16
Apocynacea e	33	Sapotaceae	18	Celastraceae	10	Vochysiaceae	42	Annonaceae	15
Salicaceae	31	Rutaceae	17	Sapotaceae	10	Apocynaceae	41	Apocynaceae	15
Moni-miaceae	30	Aquifoliaceae	16	Bignoniaceae	9	Salicaceae	38	Meliaceae	14
Celastraceae	29	Myrsinaceae	15	Lamiaceae	9	Celastraceae	36	Vochysiaceae	14
Myrsinaceae	28	Cyatheaceae	14	Moraceae	9	Arecaceae	34	Combretaceae	13
Vochy-siaceae	28	Meliaceae	14	Myrsinaceae	9	Malpighiaceae	33	Sapotaceae	13
Arecaceae	27	Moraceae	14	Cunoniaceae	8	Cactaceae	31	Arecaceae	12
Meliaceae	27	Proteaceae	14	Annonaceae	7	Lamiaceae	26	Asteraceae	11
Erythroxylac eae	25	Vochysiaceae	14	Apocynaceae	7	Meliaceae	26	Chryso-balanaceae	11

Table 7 Top 25 species-richest genera in the tree flora of 589 areas of tropical and subtropical Atlantic forests classified into five main forest types. N = number of areas. S = number of species

Evergreen rain forest S = 2617, N = 141		Evergreen cloud forests S = 1329, N = 35		Evergreen Araucaria forest S = 746, N = 45		Semideciduous seasonal forests S = 2715, N = 310		Deciduous seasonal forests S = 897, N = 58	
Eugenia	152	*Eugenia*	69	*Eugenia*	36	*Eugenia*	102	*Eugenia*	24
Myrcia	95	*Myrcia*	51	*Myrcia*	27	*Myrcia*	75	*Bauhinia*	17
Ocotea	66	*Ocotea*	44	*Ocotea*	27	*Ocotea*	67	*Erythroxylum*	16
Miconia	54	*Miconia*	41	*Solanum*	25	*Miconia*	59	*Machaerium*	16
Inga	44	*Solanum*	30	*Miconia*	23	*Solanum*	46	*Casearia*	14
Marlierea	41	*Myrceugenia*	23	*Baccharis*	18	*Inga*	39	*Ficus*	14
Solanum	34	*Inga*	22	*Myrceugenia*	18	*Ficus*	29	*Myrcia*	14
Calyptranthes	30	*Mollinedia*	22	*Symplocos*	16	*Marlierea*	28	*Senna*	14
Mollinedia	28	*Symplocos*	22	*Ilex*	10	*Byrsonima*	27	*Byrsonima*	13
Pouteria	27	*Baccharis*	20	*Leandra*	10	*Pouteria*	27	*Mimosa*	12
Erythroxylum	25	*Ilex*	16	*Mollinedia*	10	*Machaerium*	25	*Senegalia*	12
Licania	23	*Psychotria*	16	*Cyathea*	9	*Maytenus*	25	*Aspidosperma*	11
Swartzia	23	*Tibouchina*	16	*Maytenus*	9	*Casearia*	24	*Maytenus*	11
Ficus	22	*Leandra*	15	*Tibouchina*	9	*Erythroxylum*	24	*Zanthoxylum*	11
Plinia	22	*Maytenus*	15	*Croton*	8	*Nectandra*	22	*Annona*	10
Maytenus	21	*Calyptranthes*	14	*Inga*	8	*Senna*	22	*Dalbergia*	10
Myrceugenia	21	*Croton*	13	*Machaerium*	8	*Vochysia*	22	*Handroanthus*	10

"Table 7, Concluded."

Evergreen rain forest S = 2617, N = 141		Evergreen cloud forests S = 1329, N = 35		Evergreen Araucaria forest S = 746, N = 45		Semideciduous seasonal forests S = 2715, N = 310		Deciduous seasonal forests S = 897, N = 58	
Casearia	20	*Marlierea*	13	*Myrsine*	8	*Annona*	21	*Psidium*	10
Cordia	20	*Nectandra*	13	*Nectandra*	8	*Licania*	21	*Ocotea*	9
Machaerium	20	*Casearia*	12	*Casearia*	7	*Ilex*	20	*Cestrum*	8
Tibouchina	20	*Myrsine*	12	*Cordia*	7	*Aspidosperma*	19	*Croton*	8
Trichilia	20	*Campomanesia*	11	*Senna*	7	*Cordia*	19	*Lonchocarpus*	8
Faramea	19	*Cordia*	11	*Vochysia*	7	*Baccharis*	18	*Manihot*	8
Psychotria	19	*Cyathea*	11	*Annona*	6	*Campomanesia*	18	*Pilosocereus*	8
Byrsonima	18	*Vochysia*	10	*Mimosa*	6	*Mimosa*	18	*Pseudobombax*	8

The greatest richness in genera observed among the forest types occured in the semi-deciduous forests with 574, followed by the rain forest with 547. The cloud, deciduous and mixed Araucarian forests had 339, 333 and 255 genera, respectively. In species richness, the semi-decidous forest again excels the rain forest with 2,710 against 2,607 species. The cloud, deciduous and mixed Araucarian forests harbor 1,324, 897 and 744 species, respectively

5.4 Variation in species richness across latitude and forest types

The Atlantic Forest displayed a central region of high species richness and extremes with sharp reduction within the considered limits (Figure 2). The highest level in species richness (2,139) was recorded between the latitudes 22–23° S and the two lowest, 179 and 264, in the bands of 7-9° S-30-31° S, respectively. The deciduous forests showed a peak of richness (515) in the latitudinal range between 14-15° S and its more southern extension, 20-21° S, coincided with the greatest richness of the tropical semi-deciduous (1,716). The latitudinal range of greater specific richness also reflected the peak of species of the tropical rain forest and the only contribution of the tropical mixed Araucarian forest. A strong decline in the transition between the tropical and subtropical regions occurred to the south, 24-25° S, even with the largest number of forest types. This decline was particularly marked between the rain forest and the semi-deciduous forests. The decline is a general pattern in the more southerly latitudes starting from the tropical-subtropical transition. For the tropical mixed Araucarian forest, at 22-23° S, there was an increase in species for its subtropical formation, at 24-25° S, followed by a decline, where it ended its extension to the south just as the rain forests. The semi-deciduous forest is the only forest typology to occupy the entire latitudinal amplitude addressed in this study.

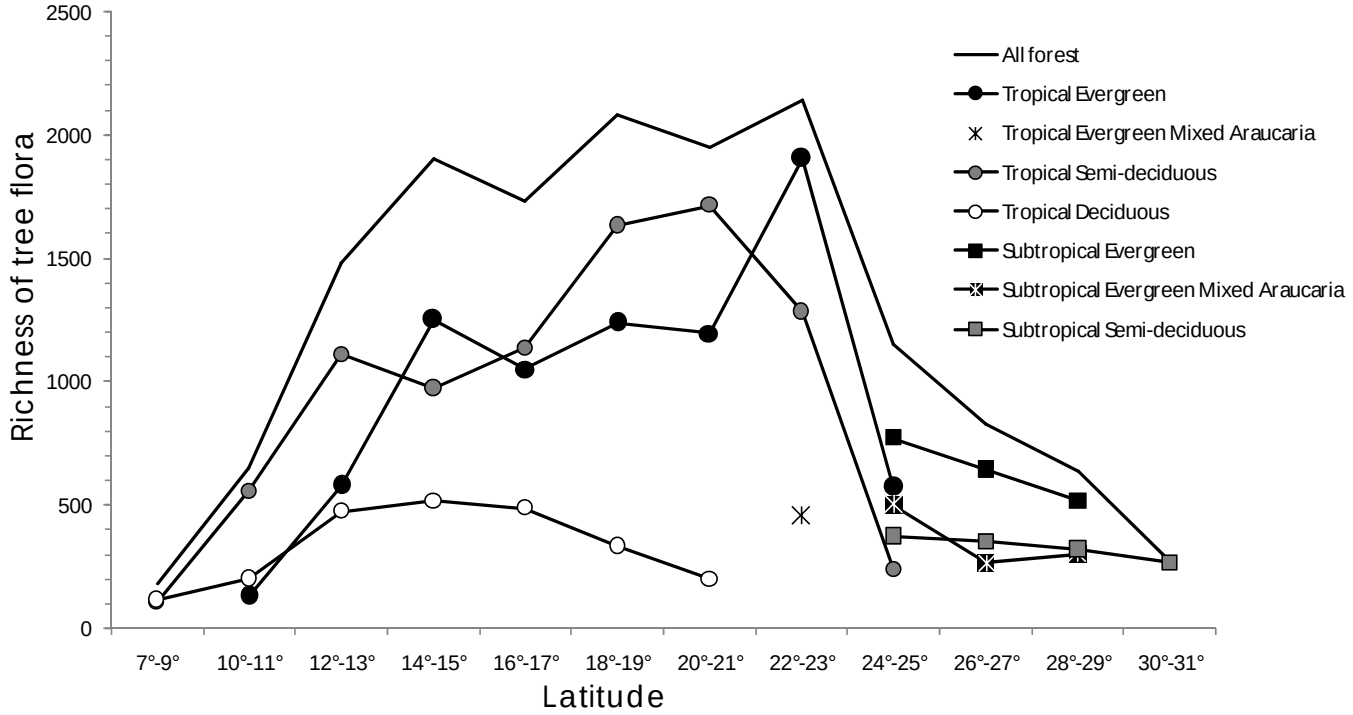


Figure 2 Progression of the number of tree species with increasing latitude in the tropical and subtropical Atlantic Forests South of 7°S, and in four of their main forest types

5.5 Species distribution patterns and environmental and spatial variables

The preliminary environmental CCA coupled with the Monte Carlo tests selected 22 geo-climate variables significantly related to the variation in tree species composition. These variables are presented as follows in descending order of correlation with any of the first two ordination axes: mean temperature of the cold season (-0.89, axis 1); temperature seasonality (0.84, axis 1); mean annual temperature (-0.81, axis 1); distance from the ocean (0.80, axis 2); mean daily temperature range (0.79, axis 2); minimum monthly temperature (-0.76, axis 1); isothermality (-0.69, axis 1); mean annual temperature range (0.66, axis 2); mean temperature of the wet season (-0.62, axis 1); mean temperature of the warm season (-0.60, axis 1); maximum monthly temperature (-0.59, axis 1); mean duration of water deficit (0.59, axis 2); mean annual precipitation (0.56, axis 1); precipitation seasonality (0.56, axis 2); mean precipitation of the warm season (0.51, axis 1); mean precipitation of the cold season (-0.51, axis 2); latitude × altitude (0.50, axis 1); mean precipitation of the driest quarter (-0.49, axis 2); precipitation of the dry period (-0.49%, axis 2); altitude (0.46%, axis 2); precipitation of the wet period (0.24%, axis 2) and mean precipitation of the wettest quarter (0.23%, axis 1). The mean temperature of the dry season was the only variable not significant in the Monte Carlo test (Table 8).

The preliminary spatial CCA selected 28 PCNM spatial variables in the same manner, but their correlations with either axes 1 or 2 were much lower than those obtained for geo-climatic variables (<0.45%) with the exception of PCNM 2 (0.58%, axis 1) and PCNM 8 (0.56%, axis 2). The preponderance of geo-climatic over spatial variables in their relationship with species composition is also evident in the summary of the four final CCAs (Table 9).

Table 8 Summary of canonical correspondence analyses (CCA) provinding intra-set and inter-set correlations for the first two canonical axes, and the correlations between the environmental variables

Geo-environmental variables	Intra-set correlations		Inter-set correlations	
	Axis 1	Axis 2	Axis 1	Axis 2
Mean temperature of the cold season	-0.89	-0.16	-0.91	-0.17
Temperature seasonality	0.84	0.05	0.87	0.05
Mean annual temperature	-0.81	-0.15	-0.83	-0.16
Distance from the ocean	-0.26	0.80	-0.27	0.84
Mean daily temperature range	0.01	0.79	0.01	0.83
Minimum monthly temperature	-0.76	-0.43	-0.78	-0.46
Isothermality	-0.69	0.37	-0.71	0.39
Mean annual temperature range	0.48	0.66	0.49	0.69
Mean temperature of the wet season	-0.62	-0.17	-0.64	-0.18
Mean temperature of the warm season	-0.60	-0.23	-0.62	-0.24
Maximum monthly temperature	-0.59	0.08	-0.60	0.08
Mean duration of water deficit	-0.54	0.59	-0.56	0.63
Mean annual precipitation	0.56	-0.25	0.57	-0.26
Precipitation seasonality	-0.39	0.56	-0.40	0.59
Mean precipitation of the warm season	0.51	0.00	0.52	0.00
Mean precipitation of the cold season	0.35	-0.51	0.36	-0.54
Latitude × altitude	0.50	0.37	0.51	0.39
Mean precipitation of the driest quarter	0.48	-0.49	0.49	-0.52
Mean precipitation of the driest period	0.47	-0.49	0.48	-0.52
Altitude	0.29	0.46	0.29	0.48
Precipitation of wet period	0.18	0.24	0.18	0.25
Mean precipitation of the wettest quarter	0.23	0.14	0.24	0.15

Table 9 Summary of the four canonical correspondence analyses (CCAs) and Monte Carlo permutation tests performed for binary data of tree species presence and geo-environmental (environ.) and spatial variables of 589 areas of Atlantic Forests

Partial CCAs	Matrices		Eingenvalues		Species variation explained	Spp.- environment correlations		Cumulative variance (%)		Monte Carlo tests	
			Axes			Axes		Axes			
	Variables	Co-variables	1	2		1	2	1	2	*F*	*P*
CCA1	Environ.		0.484	0.436	15.73%	0.974	0.951	18.3	34.8	4.803	0.002
CCA2	Spatial		0.229	0.186	11.33%	0.826	0.755	12	21.8	2.554	0.002
CCA3	Environ,	Spatial	0.399	0.358	12.06%	0.971	0.956	19.7	37.3	3.852	0.002
CCA4	Spatial	Environ.	0.117	0.084	7.66%	0.817	0.842	9.1	15.6	1.921	0.002

Eingenvalues represent measurements of ‘gradient length’ in terms of species turnover (see TER BRAAK, 1995). The highest species-environment correlation (>0.97) were obtained by CCAs 1 and 3, where the first relates species composition to geo-climatic variables regardless of space, and the second to purely geo-climatic variables (spatial co-variables). Geo-climatic variables, regardless of space (CCA1), explained 15.73% of the total species variation while spatial variables, regardless of environment (CCA2), explained only 11.33%. The proportional variations purely explained by geo-climatic (CCA3) and spatial variables (CCA4) explained 12.06% and 7.66%, respectively (Table 9).

Because geo-climatic variables are also spatially structured, 3.67% of the species variation was indistinctly geo-climatic and spatial (CCA1-3 or CCA2-4). As a result of this, the two sets of variables (CCA1+4 or CCA2+3) explained together 23.4% of the total species variation leaving 76.6% of residual variance, *i.e.*, a considerable proportion of non-explained ‘noise’ (Figure 3). This is common place in vegetation data and do not impair the significance of species-environment relations (TER BRAAK, 1995). In all cases, the percentage variance of species-environment relation accumulated in the first two CCA axes was high, 34.8-37.3%, and the Monte Carlo permutation tests indicated that the species composition was significantly correlated with all sets of variables (p=0.002).

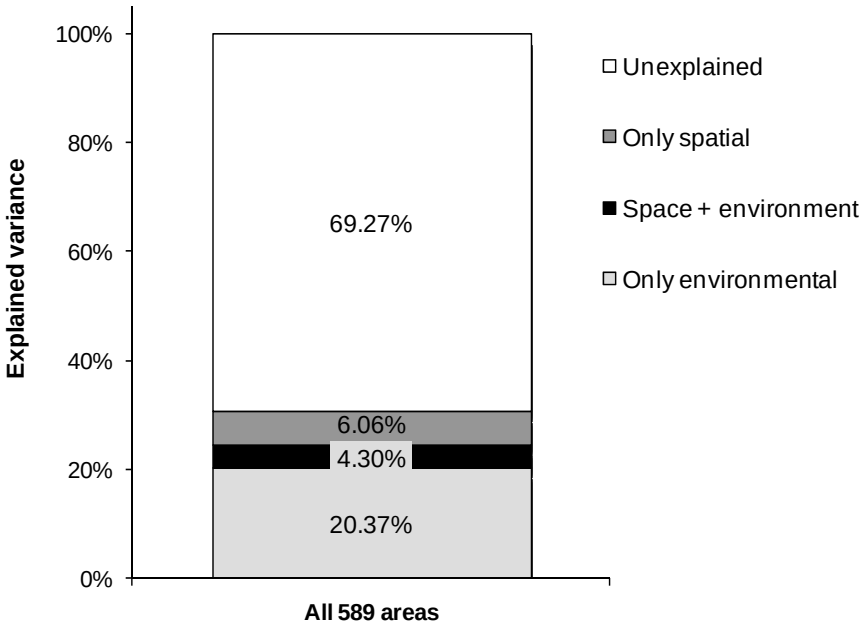
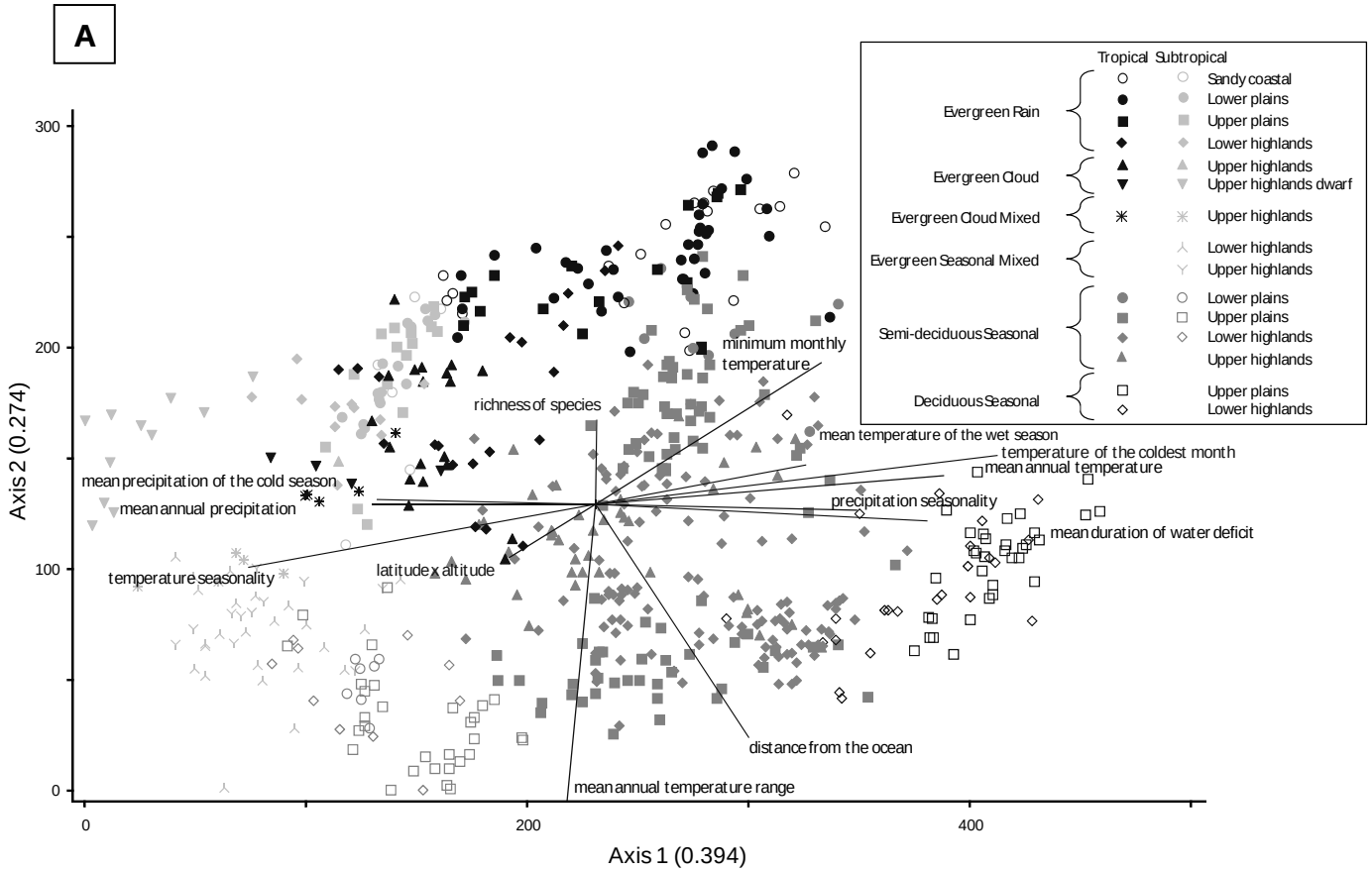


Figure 3 Influence of environmental variation, spatial proximity, spatially structured environmental variation and unexplained variation in canonical correspondence analyses of the floristic, environmental and spatial data of 589 areas of tropical and subtropical Atlantic Forest

The diagrams of DCA (Figure 4) showed patterns consistent with the CCA1 environmental gradients and variations, *i.e.* congruent with the patterns related to the environmental variables. In both analyses the gradients between the tropical and subtropical forests and other forest types can be observed. The three axes presented very low eigenvalues indicating that there are many species distributed along all summarized gradients on the axes, *i.e.*, a few are restricted to particular stretches (TER BRAAK, 1995). The first and second axes represent well the existing gradients in the directions North-South and East-West in the Atlantic Domain, respectively. The subtropical forest types are clearly

distinguished from the corresponding tropical types on the left side of the first axis. The tropical deciduous, cloud and mixed Araucarian forests are in opposite position in this situation. The deciduous forests formed a group which was influenced by the high seasonality of the precipitation, while the groups of nebular and subtropical mixed Araucarian forests were influenced by the high seasonality of the temperature. There was a clear observation of the disjunction of the distribution between the tropical and subtropical forests, mainly distinguished by the temperature seasonality in the latter.

The tropical and subtropical rain forests were well distributed on axis 1 and only a small group did not associate (low similarity), while the major part of their distribution displays proximity to the tropical semi-deciduous, cloud and tropical mixed Araucarian forests. A gradient of rain forest and deciduous forests, with the semi-deciduous situated in an intermediate position in the ordering, was noted when only the forest types were observed. This sequence was structured by the first axis. On the contrary, the second axis structured the gradient of the subtropical rain forests to the semi-deciduous, with the cloud and mixed Araucarian forests being displayed in the intermediate positions. The central region of the diagram was composed mainly by the semi-deciduous forest which comprised a large group distributed along the first and second axes. The semi-deciduous occupied a broad spectrum of the environmental gradients, but were absent in the climatic extremes. The separation of two large groups of the semi-deciduous forests can be understood by analyzing the gradients of geomorphic variables. In the DCA (Figure 4A), the ocean distance vectors and altitude × latitude formed orthogonal axes, which centers has demarcated a separation of these groups.


A
Tropical
Subtropical
Sandy coastal
Lower plains
Upper plains
Lower highlands
Upper highlands
Upper highlands dwarf
Evergreen Rain
Evergreen Cloud
Evergreen Cloud Mixed
Evergreen Seasonal Mixed
Semi-deciduous Seasonal
Deciduous Seasonal
minimum monthly temperature
richness of species
mean temperature of the wet season
temperature of the coldest month
mean annual temperature
mean precipitation of the cold season
mean annual precipitation
precipitation seasonality
mean duration of water deficit
temperature seasonality
latitude x altitude
distance from the ocean
mean annual temperature range
Axis 2 (0.274)
Axis 1 (0.394)
0
100
200
300
400

(“…continue…”)

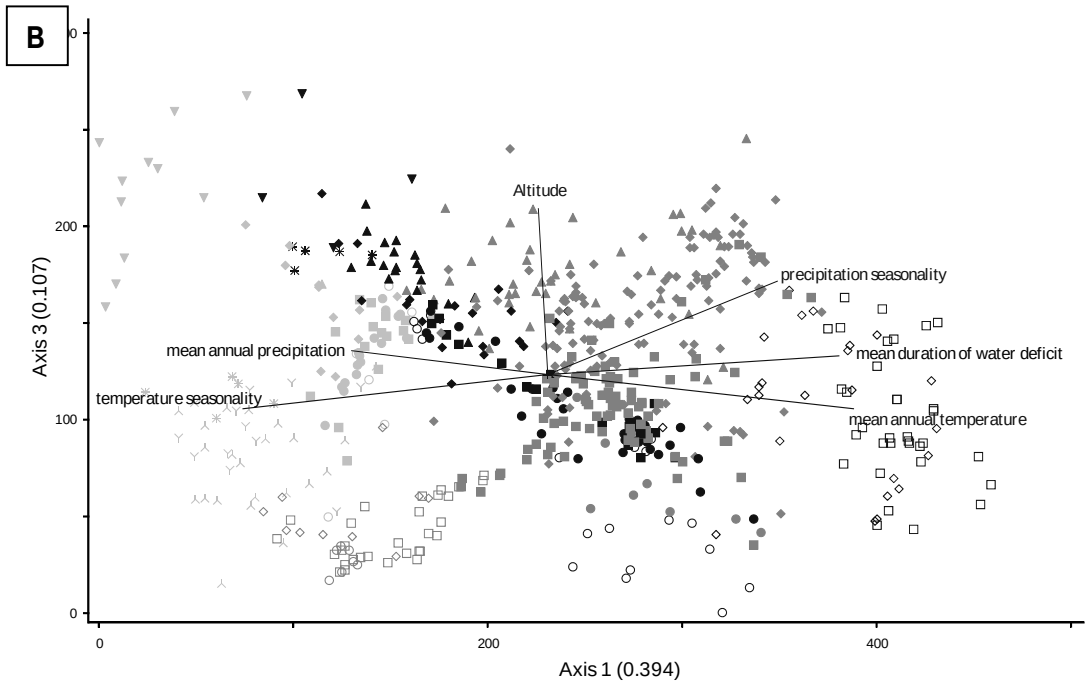


Figure 4 Diagram yielded by Detrended Correspondence Analysis (DCA) showing (A) the ordination on the first two axes, and (B) the first and third axes of 589 areas of tropical and subtropical Atlantic Forest classified by phytophysiognomy. Eingenvalues: axes 1 (0.394), 2 (0.274) and 3 (0.107). Arrows show predominant direction of increasing geo-environmental variables across areas while arrow length is proportional to correlations with axes ("…concluded…")

The analysis of geo-climatic vectors in Figure 4A and the pair-wise correlations between geo-climatic variables in Table 10, indicate main gradients centered by particular variables that are strongly correlated with sets of other variables. At least three main vectors may be distinguished indicating high redundancy among variables. A stronger vector is centered by the mean annual temperature, which is highly correlated with the mean temperature of the cold season (0.98), mean temperature of the warm season (0.94), mean temperature of the wet season (0.86) and latitude × altitude (-0.82). On the other hand, the variable latitude × altitude also centers another main vector including high positive correlation with the altitude (0.96) and negative with the minimum monthly temperature (-0.82). A third important vector is that one centered by precipitation seasonality with high correlations with the mean duration of the water deficit (0.83), temperature seasonality (-0.43) and isothermality (-0.79). The last main vector is centered by the mean annual precipitation with high correlations with the mean precipitation of the driest quarter (0.56), mean precipitation of the driest period (0.56), mean precipitation of the cold season (0.53) and mean precipitation of the warm season (0.73). The strongest correlations observed for the distance to the ocean were those with the mean daily temperature range (0.63), mean duration of water deficit (0.56) and isothermality (0.50).

Table 10 Summary of canonical correspondence analyses (CCA) showing pair-wise correlations between geo-environmental variables

Geo-environmental variables	Geo-environmental variables						
	TempCold	**TempSeas**	**TempAnn**	**DistOc**	**TempDayR**	**TempMin**	**Isotherm**
TempCold	1.0						
TempSeas	-0.69	1.0					
TempAnn	0.98	-0.53	1.0				
DistOc	0.19	-0.20	0.20	1.0			
TempDayR	-0.14	0.05	-0.12	0.63	1.0		
TempMin	0.92	-0.58	0.90	-0.06	-0.50	1.0	
Isotherm	0.49	-0.79	0.38	0.50	0.51	0.22	1.0
TempAnnR	-0.50	0.60	-0.39	0.40	0.81	-0.73	-0.08
TempWet	0.82	-0.35	0.86	0.08	-0.09	0.74	0.22
TempWarm	0.87	-0.24	0.94	0.09	-0.19	0.84	0.10
TempMax	0.80	-0.20	0.88	0.33	0.15	0.67	0.23
WatDef	0.39	-0.48	0.35	0.56	0.61	0.09	0.67
PrecAnn	-0.46	0.43	-0.42	-0.22	-0.27	-0.32	-0.53
PrecSeas	0.17	-0.43	0.11	0.44	0.66	-0.15	0.64
PrecWarm	-0.54	0.37	-0.52	-0.20	0.10	-0.56	-0.30
PrecCold	-0.17	0.39	-0.11	-0.38	-0.62	0.13	-0.59
Latxalt	-0.74	0.13	-0.82	0.10	0.42	-0.82	0.12
PrecDryQ	-0.28	0.52	-0.20	-0.42	-0.60	0.03	-0.71
PrecDryP	-0.26	0.51	-0.19	-0.42	-0.61	0.04	-0.71
Altitude	-0.59	-0.08	-0.70	0.23	0.47	-0.72	0.32
PrecWetP	-0.28	0.02	-0.31	0.15	0.32	-0.43	0.09
PrecWetQ	-0.31	0.07	-0.33	0.07	0.26	-0.42	0.01

"Table 10, Continued"

Geo-environmental variables	Geo-environmental variables						
	TempAnnR	**TempWet**	**TempWarm**	**TempMax**	**WatDef**	**PrecAnn**	**PrecSeas**
TempAnnR	1.0						
TempWet	-0.27	1.0					
TempWarm	-0.28	0.86	1.0				
TempMax	0.02	0.78	0.92	1.0			
WatDef	0.24	0.26	0.17	0.39	1.0		
PrecAnn	0.05	-0.33	-0.30	-0.41	-0.53	1.0	
PrecSeas	0.30	0.15	-0.08	0.12	0.83	-0.33	1.0
PrecWarm	0.29	-0.28	-0.47	-0.50	-0.20	0.73	0.17
PrecCold	-0.29	-0.19	0.06	-0.12	-0.76	0.53	-0.90
Latxalt	0.40	-0.74	-0.91	-0.77	0.03	0.22	0.31
PrecDryQ	-0.19	-0.23	0.00	-0.17	-0.82	0.56	-0.94
PrecDryP	-0.20	-0.22	0.01	-0.16	-0.80	0.56	-0.93
Altitude	0.33	-0.66	-0.86	-0.69	0.21	0.07	0.45
PrecWetP	0.29	-0.18	-0.37	-0.31	0.24	0.54	0.58
PrecWetQ	0.26	-0.18	-0.36	-0.33	0.14	0.62	0.50

"Table 10, Concluded"

Geo-environmental variables	Geo-environmental variables							
	PrecWarm	**PrecCold**	**Latxalt**	**PrecDryQ**	**PrecDryP**	**Altitude**	**PrecWetP**	**PrecWetQ**
PrecWarm	1.0							
PrecCold	-0.05	1.0						
Latxalt	0.46	-0.26	1.0					
PrecDryQ	0.03	0.96	-0.21	1.0				
PrecDryP	0.03	0.95	-0.23	0.99	1.0			
Altitude	0.35	-0.41	0.96	-0.39	-0.40	1.0		
PrecWetP	0.77	-0.34	0.50	-0.36	-0.35	0.48	1.0	
PrecWetQ	0.82	-0.27	0.47	-0.28	-0.27	0.44	0.97	1.0

TempCold= temperature of the coldest month, TempSeas = temperature seasonality, TempAnn= mean annual temperature, Dist.Oc.= distance from the ocean, TempDayR= mean daily temperature range, TempMin= minimum monthly temperature, TempAnnR= mean annual temperature range, TempWet= mean temperature of the wet season, TempWarm= mean temperature of the warm season, TempMax= maximum monthly temperature, Watdef= mean duration of water deficit, PrecAnn= mean annual precipitation, PrecSeas= precipitation seasonality, PrecWarm= mean precipitation of the warm season, PrecCold= mean precipitation of the cold season, Latxalt= latitude × altitude, PrecDryQ mean precipitation of driest quarter, PrecDryP= precipitation of dry period, PrecWetP= precipitation of wet period, PrecWetQ= mean precipitation of wettest quarter.

5.6 Classification of floristic data of the Atlantic Forest and the emergence of Phytogeographic Subregions based on the tree flora

The resulting groups from the TWINSPAN classification (Figure 5) are the foundations for a description of the phytogeographic subregions. There was high association between the phytophysiognomic classification (OLIVEIRA-FILHO, 2009) and the proposed phytogeographic classification (Figure 6). Throughout the whole set, greater similarities occur between some phytophysiognomies which are closer to the occurrence of specific subregions as it occurs with the Deciduous Forest, the Southern Hinterland Highlands and the Subtropical Hinterland Valleys. Thus, the phytogeographic classification maintains high association with the phytophysiognomies but collaborates giving it a regional character.

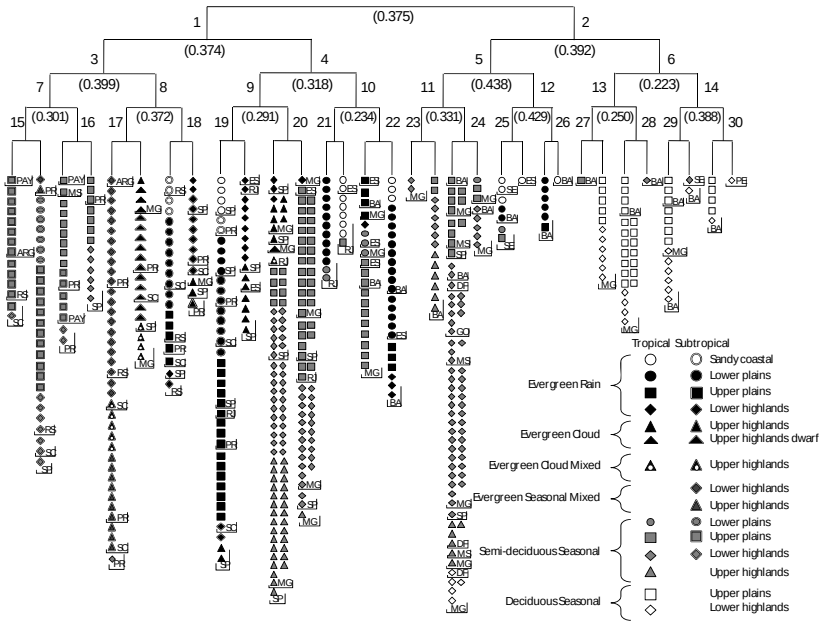


Figure 5 Cladogram produced by TWINSPAN showing the classification of the 589 areas of tropical and subtropical Atlantic Forests based on presence records of 3.669 tree species. The classification of areas into forest types is given by symbols. Numbers within parentheses are eigenvalues of divisions; numbers near bars identify groups of areas. Acronyms are either Brazilian states (see Table 1) or countries (Paraguay, PAY and Argentina, ARG)

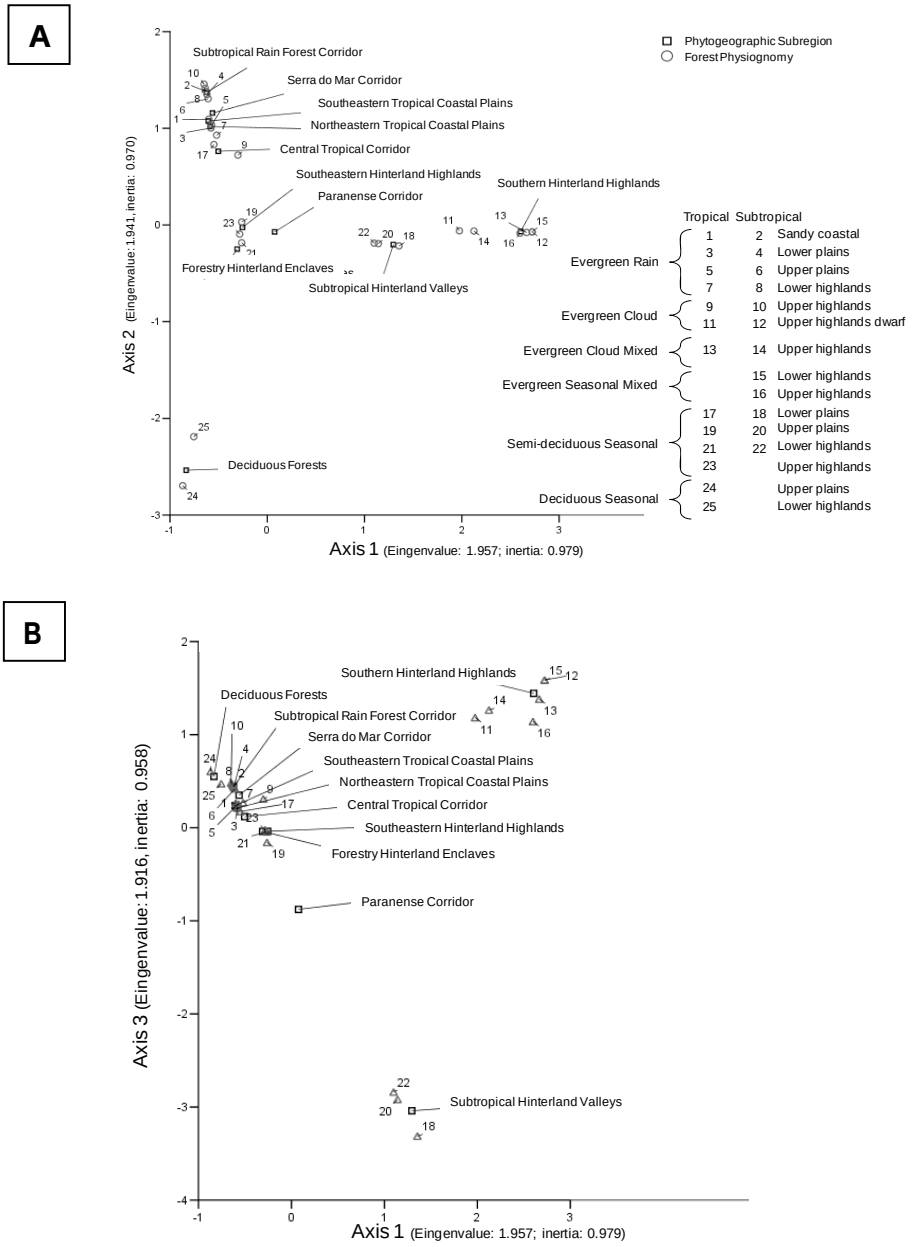


Figure 6 Ordination diagram yielded by Multiple Correspondence Analysis (MCA) showing (A) the first two axes, and (B) the first and third axes of classifications Phytogeographic and Phytophysiognomy of tropical and subtropical Atlantic Forest

There were evidences that the vegetation classification based mainly on the physiognomy and the climate corresponded to variations in the trees species composition. However, the results revealed relations and distinctions still not evaluated under this scale in the Atlantic Forest. In the upper level of division, there has been a separation between a large group composed by the subtropical, rain forest, cloud and mixed Araucarian forests in the North-South regions (Group 1) and another group composed by the deciduous and rain forest forests in the Northeast (Group 2). The semi-deciduous were divided between these two groups.

The joint analysis between the subsequent divisions produced by TWINSPAN (Figure 5), the floristic dissimilarity between groups (Table 11), the geographical distribution of each group (Figure 6) and their phytophysiognomic relationships allowed to propose the classification and circumscription of 11 phytogeographic subregions for the tree flora of the Atlantic Domain in the studied area (Figure 7 and 8) which is described below.

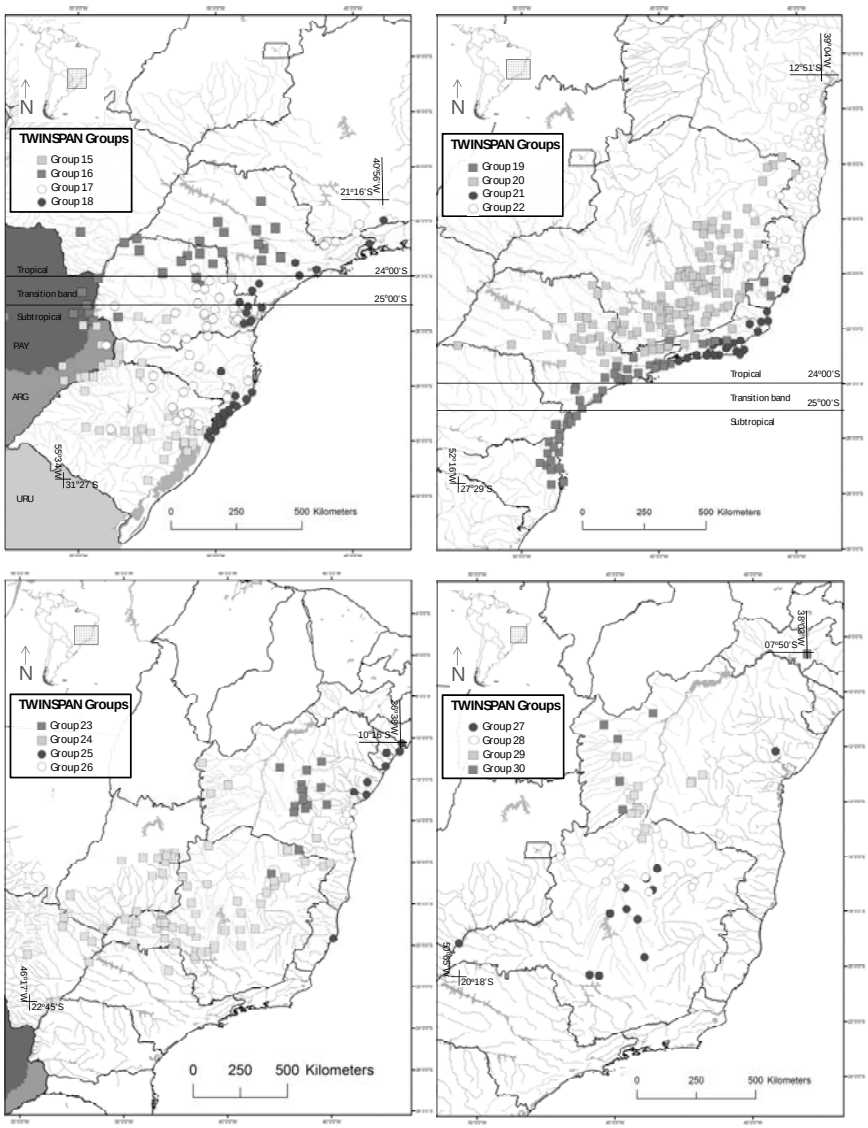


Figure 7 Geographic distribution of the principal TWINSPAN groups that form the basis for the classification of the Atlantic Forest into Phytogeographic Subregions

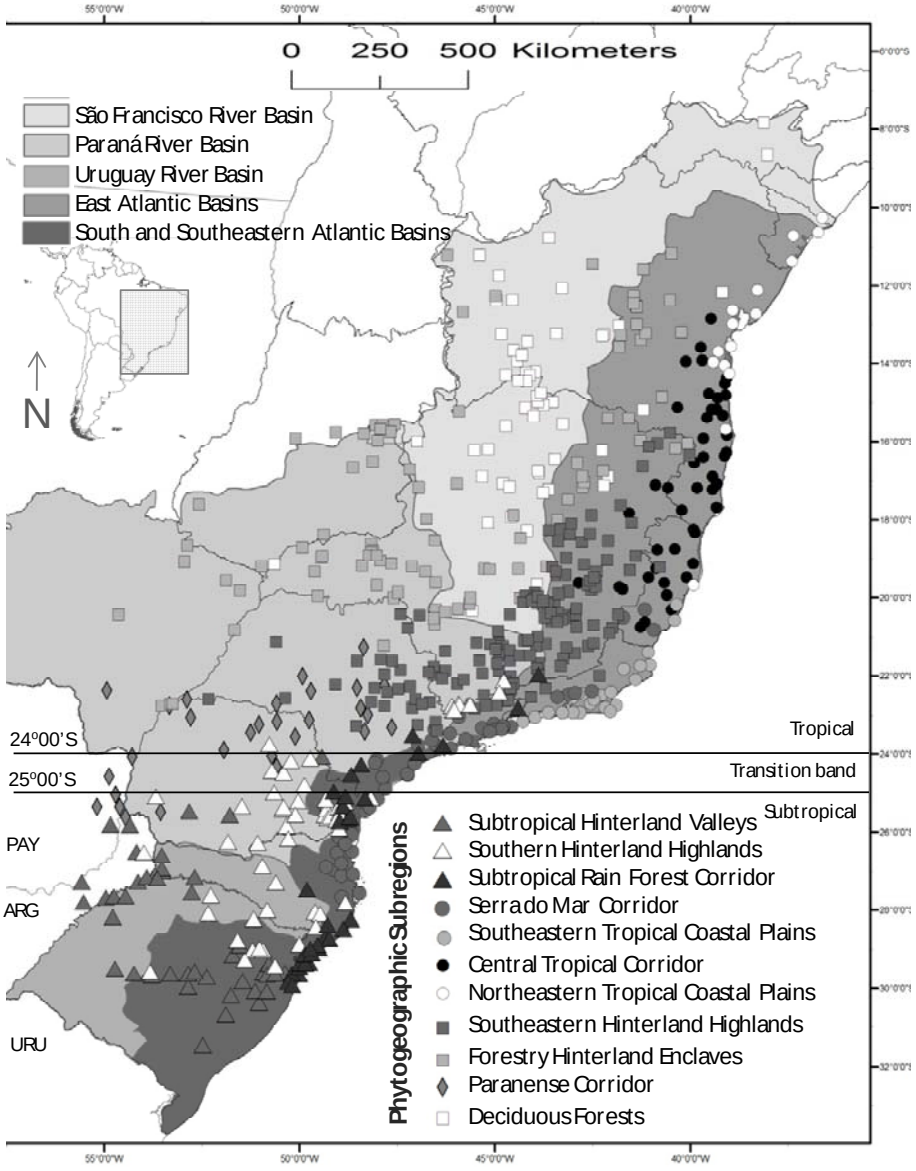


Figure 8 Map of distribution of Phytogeographic Subregions of the Atlantic Forest, overlapped on watersheds

Subregion 1 – Subtropical Hinterland Valleys (TWINSPAN group 15, N= 42): Includes the subtropical semi-deciduous forests occurring along continental limits of Atlantic Forests along the lower valleys of the Paraná, Uruguay and Guaíba River basins in northeastern Argentina, southeastern Paraguay and the southern Brazilian states of Rio Grande do Sul, Santa Catarina and Paraná (southern). Common species: *Cordia americana, Gymnanthes klotzschiana, Gymnanthes concolor, Annona neosalicifolia, Sebastiania brasiliensis, Syagrus romanzoffiana, Ilex brevicuspis, Jacaranda micrantha, Trema micrantha* and *Alchornea triplinervia.* The typical species from each subregion are shown in Table 11.

Table 11 Jaccard's index of dissimilaity (percentage in bold) and number of tree species in common between phytogeographic subregions of tree flora in the Atlantic Forest. S = richness species; R = restricted species. 1= Subtropical Hinterland Valleys;2= Southern Hinterland Highlands; 3= Subtropical Rain Forest Corridor; 4= Serra do Mar Corridor; 5= Southeastern Tropical Coastal Plains; 6= Central Tropical Corridor; 7= Northeastern Tropical Coastal Plains; 8= Southeastern Hinterland Highlands; 9= Forestry Hinterland Enclaves; 10= Paranense Corridor; 11= Deciduous Forests

S	**R**		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
521	23	**1**		**59.9**	**66.6**	**78.3**	**84.1**	**87.2**	**91.4**	**79.6**	**82.1**	**55.1**	**84.7**
804	22	**2**	379		**48.0**	**64.3**	**80.9**	**82.2**	**90.7**	**67.7**	**78.8**	**65.4**	**86.2**
912	7	**3**	359	587		**51.3**	**72.7**	**77.5**	**88.0**	**65.3**	**78.2**	**68.6**	**86.7**
1609	113	**4**	380	635	826		**55.0**	**61.7**	**83.0**	**49.5**	**71.8**	**74.6**	**84.8**
1352	92	**5**	257	346	485	919		**52.6**	**74.0**	**60.9**	**72.9**	**78.1**	**82.0**
1937	221	**6**	279	414	523	452	962		**64.1**	**55.3**	**66.0**	**81.3**	**78.9**
786	35	**7**	104	135	182	348	441	409		**80.5**	**79.0**	**86.2**	**82.7**
1916	74	**8**	413	664	728	982	1058	440	719		**51.7**	**71.1**	**72.8**
1573	167	**9**	318	415	445	699	624	348	409	890		**71.0**	**57.4**
624	9	**10**	355	367	367	452	355	494	171	403	494		**74.9**
942	121	**11**	194	212	218	336	350	502	255	612	751	314	

Subregion 2 – Southern Hinterland Highlands (TWINSPAN Group 17, N = 58): Includes seasonal and cloud mixed Araucarian forests and cloud dwarf-forests occurring in the inner highlands of both the tropical (southern Mantiqueira range) and subtropical (southern Brazilian plateau) regions. Common species: *Araucaria angustifolia, Ilex paraguariensis, Ilex theezans, Vernonanthura discolor, Piptocarpha angustifolia, Lithraea brasiliensis, Dicksonia sellowiana, Ilex dumosa, Cinnamodendron dinisii, Annona rugulosa* and *Lamanonia ternata.*

Subregion 3 – Subtropical Rain Forest Corridor (TWINSPAN Group 18, N = 33): Includes rain forests associated to either lower altitudes at southern latitudes, along the coastline and adjacent coastal plains of eastern Rio Grande do Sul and southern Santa Catarina, or higher altitudes at northern latitudes, on oceanic highland slopes of the states of Paraná, São Paulo, Rio de Janeiro and Minas Gerais. Common species: *Schefflera angustissima, Euterpe edulis, Alchornea triplinervia, Alsophila setosa, Hirtella hebeclada, Geonoma schottiana, Clethra scabra, Dicksonia sellowiana, Ilex theezans, Cyathea corcovadensis, Ilex brevicuspis* and *Weinmannia paulliniifolia.*

Subregion 4 – Serra do Mar Corridor (TWINSPAN Group 19; N = 145): Includes rain and cloud forests occurring along the coastal ridges of southeastern and southern Brazil showing the same balance between altitude and latitude observed for Subregion 3. They extend, therefore, from coastal plains in the South (northern Santa Catarina, Paraná and southern São Paulo) to ridgetops in the North (northern São Paulo, Rio de Janeiro, southern Minas Gerais and a disjunct area in southern Espírito Santo). Common species: *Euterpe edulis, Schefflera angustissima, Guatteria australis, Sloanea guianensis, Hirtella hebeclada, Alchornea triplinervia, Clusia criuva, Annona neosericea, Garcinia brasiliensis, Ilex theezans* and *Tapirira guianensis.*

Subregion 5 – Southeastern Tropical Coastal Plains (TWINSPAN group 21, N = 152): Includes the tropical rain forests, both along the coastline and adjacent coastal plains and in the southeastern states of Rio de Janeiro and Espírito Santo (southern). Common species: *Pausandra megalophylla, Jacaranda bracteata, Monilicarpa brasiliana, Algernonia leandrii, Abarema cochliacarpa, Clusia hilariana, Maytenus brasiliensis, Protium icicariba, Gymnanthes glabrata, Crateva tapia* and *Symphonia globulifera.*

Subregion 6 – Central Tropical Corridor (TWINSPAN Group 22, N = 306): Includes rain and semi-deciduous forests of plains and lower highlands in eastern Minas Gerais, Espírito Santo and eastern Bahia. Common species: *Himatanthus bracteatus, Thyrsodium spruceanum, Aparisthmium cordatum, Protium warmingianum, Astrocaryum aculeatissimum, Carpotroche brasiliensis, Annona dolabripetala, Tapirira guianensis, Joannesia princeps, Caryocar edule* and *Attalea oleifera.*

Subregion 7 – Northeastern Tropical Coastal Plains (TWINSPAN group 12, N= 15): Includes the tropical rain and semi-deciduous forests, both along the coastline and adjacent coastal plains in Sergipe and northern Bahia; the single area in coastal Espírito is probably an outlier. Common species: *Symphonia globulifera, Attalea funifera, Himatanthus bracteatus, Erythroxylum nobile, Syagrus botryophora, Licania octandra, Abarema filamentosa, Xylopia laevigata, Annona glabra, Thyrsodium spruceanum* and *Clusia nemorosa.*

Subregion 8 – Southeastern Hinterland Highlands (TWINSPAN Group 20, N= 173): Includes tropical semi-deciduous forests occurring on upper plains and highlands of eastern, central and southern Minas Gerais, the Paraíba do Sul river valley, in Rio de Janeiro and eastern São Paulo and the eastern half of the São Paulo inner plateau; westernmost areas are probably outliers. Common species: *Croton floribundus, Tapirira guianensis, Tapirira obtusa, Annona dolabripetala, Cordia sellowiana, Piptocarpha macropoda, Guatteria*

australis, Cyathea delgadii, Protium heptaphyllum, Annona cacans, Dendropanax cuneatus and *Annona sylvatica*.

Subregion 9 – Forestry Hinterland Enclaves (TWINSPAN Group 11, N = 155): Includes enclaves of semi-deciduous forests occurring within the adjacent Cerrado Biogegraphic Domain, in central and western Bahia and Minas Gerais, the Distrito Federal, southern Goiás and eastern Mato Grosso do Sul. Common species: *Astronium fraxinifolium, Hirtella glandulosa, Terminalia glabrescens, Protium heptaphyllum, Maprounea guianensis, Diospyros hispida, Calophyllum brasiliense, Xylopia aromatica, Xylopia emarginata, Tapirira guianensis* and *Aspidosperma subincanum.*

Subregion 10 – Paranense Corridor (TWINSPAN Group 16, N = 41): Includes tropical semi-deciduous forests occurring on higher plateau areas in central São Paulo, northern Paraná, Mato Grosso do Sul and northeastern Paraguay, all within the Parana River catchment area. Common species: *Aspidosperma polyneuron, Cordia americana, Syagrus romanzoffiana, Tabernaemontana catharinensis, Astronium graveolens, Alchornea glandulosa, Jacaratia spinosa, Cordia ecalyculata, Trema micrantha* and *Maytenus aquifolia.*

Subregion 11 – Deciduous Forests (TWINSPAN Group 6, N = 56): Includes the deciduous forests bounding the Caatinga Biogeographic Domain in the states of Sergipe, Pernambuco, Bahia and Minas Gerais mostly within the São Franscisco River basin; additional enclaves are found within the Cerrado Biome. Common species: *Aspidosperma pyrifolium, Myracrodruon urundeuva, Schinopsis brasiliensis, Handroanthus impetiginosus, Annona leptopetala, Cereus jamacaru, Aspidosperma cuspa, Tabebuia roseoalba, Aralia warmingiana* and *Terminalia argentea.*

5.7 Floristic relationships among Phytogeographic Subregions

The proposed dissimilarity analysis applied to the subregions has allowed the understanding of the heterogeneity of the Atlantic Forest circumscribing subdivisions to the rain forest and semi-deciduous forests (Table 12). Consequently, there were dissimilarities that ranged from 48% to 66% among the phytogeographic regions with subtropical influence. The Subtropical Hinterland Valleys forest has 59.9% dissimilarity with the Southern Hinterland Highlands and 66.6% dissimilarity with the Subtropical Rain Forest Corridor. The lowest dissimilarity of the sample was observed between the Southern Hinterland Highlands and the Subtropical Rain Forest Corridor (Table 11). The Southeastern Hinterland Highlands and the Serra do Mar Corridor also showed low dissimilarity (49.5%). The Subtropical Hinterland Valleys forest maintains in its further north limit, 55% with the Paranense Corridor. These displayed influence from both tropical and subtropical floras. The subregion of the Southern Hinterland Highlands forests had low dissimilarity with the Serra do Mar Corridor (64.3%), Semi-deciduous of the Paranense Corridor (65.4%) and the Southeastern Hinterland Highlands (67.7%). The Subtropical Rain Forest Corridor had dissimilarities with the Serra do Mar Corridor (51.3%), the Southeastern Hinterland Highlands (65.3%) and the Semi-deciduous of the Paranense Corridor (68.6%).

Table 12 List of indicator species (ISA) of the floristic patterns based on eight TWINSPAN groups and three groups of altitude. Species ordered by indicator value (IV), $p < 0.05$

Subregion 1 – Subtropical Hinterland Valleys (TWINSPAN group 15, N= 42)
Adelia spinosa, Albizia burkartiana, Albizia edwallii, Baccharis psiadioides, Bernardia pulchella, Brasiliopuntia schulzii, Butia paraguayensis, Butia yatay, Cereus hildmannianus, Cereus stenogonus, Diospyros inconstans, Erythroxylum myrsinites, Gymnanthes schottiana, Handroanthus pulcherrimus, Malmeanthus subintegerrimus, Plumeria rubra, Schaefferia argentinensis, Schinus molle, Schinus pearcei, Terminalia australis.
Subregion 2 – Southern Hinterland Highlands (TWINSPAN group 17, N= 58)
Araucaria angustifolia, Baccharis caprariifolia, Baccharis retusa, Baccharis semiserrata, Berberis laurina, Butia eriospatha, Clethra uleana, Crinodendron brasiliense, Croton alchorneicarpus, Escallonia chlorophylla, Escallonia petrophila, Handroanthus catarinensis, Ilex taubertiana, Kaunia rufescens, Maytenus boaria, Oreopanax fulvus, Piptocarpha regnellii, Raulinoreitzia leptophloebia, Weinmannia humilis, Weinmannia organensi.
Subregion 3 – Subtropical Rain Forest Corridor (TWINSPAN group 18, N=33)
Annona maritima, Baccharis longoattenuata, Baccharis oreophila, Hirtella glaziovii, Symphyopappus lymansmithii, Trithrinax brasiliensis.
Subregion 4 – Serra do Mar Corridor (TWINSPAN group 19; N= 145)
Aspidosperma compactinervium, Connarus rostratus, Couepia leitaofilhoi, Couepia parvifolia, Croton organensis, Cyathea hirsuta, Dendropanax australis, Dendropanax langsdorffii, Dendropanax nebulosus, Dendropanax trilobus, Diospyros brasiliensis, Duguetia microphylla, Erythroxylum vaccinifolium, Guatteria latifolia, Handroanthus botelhensis, Kielmeyera gracilis, Kielmeyera insignis, Licania indurata, Lytocaryum weddellianum, Maytenus littoralis, Maytenus schumanniana, Ophthalmoblapton crassipes, Oreopanax capitatus, Parinari brasiliensis, Piptocarpha organensis, Porcelia macrocarpa, Stephanopodium estrellense, Stephanopodium organense, Stifftia fruticosa, Tetrorchidium parvulum, Verbesina glabrata, Weinmannia pinnata.

"Table 12, Continued".

Subregion 5 – Southeastern Tropical Coastal Plains (TWINSPAN group 21, N=152)
Algernonia brasiliensis, Algernonia gibbosa, Algernonia glazioui, Algernonia obovata, Annona ferruginea, Annona xylopiifolia, Aspidosperma triternatum, Avicennia germinans, Avicennia schaueriana, Bocagea viridis, Clusia immersa, Clusia spiritusanctensis, Connarus detersus, Conocarpus erectus, Cordia ochnacea, Croton compressus, Croton sphaerogynus, Duguetia pohliana, Duguetia riedeliana, Duguetia sessilis, Erythroxylum occultum, Gymnanthes nervosa, Hirtella barrosoi, Jacaranda bracteata, Kielmeyera rizziniana, Laguncularia racemosa, Licania glazioviana, Maytenus basidentata, Maytenus longifolia, Ophthalmoblapton macrophyllum, Pausandra megalophylla, Salacia arborea, Sebastiania pteroclada, Stephanopodium sessile, Stifftia parviflora, Terminalia acuminata, Tetragastris breviacuminata, Tontelea fluminensis, Trigynaea axilliflora, Unonopsis riedeliana.
Subregion 6 – Central Tropical Corridor (TWINSPAN group 22, N= 306)
Abarema barnebyana, Abarema limae, Actinostemon lasiocarpus, Actinostemon macrocarpus, Algernonia bahiensis, Algernonia pardina, Annona bahiensis, Annona mucosa, Anthodiscus amazonicus, Aspidosperma illustre, Aspidosperma thomasii, Bixa arborea, Bixa orellana, Bocagea longepedunculata, Brasiliocroton mamoninha, Buchenavia pabstii, Buchenavia rabelloana, Buchenavia tetraphylla, Caryocar edule, Caryodendron janeirense, Celtis orthacanthos, Clusia aemygdioi, Clusia palmicida, Clusia panapanari, Colicodendron bahianum, Cordia bicolor, Cordia latiloba, Cordia sericicalyx, Cordia toqueve, Cordia trachyphylla, Couepia bondarii, Couepia carautae, Couepia insignis, Couepia longipetiolata, Couepia monteclarensis, Couepia pernambucensis, Couepia rufa, Couma rigida, Crepidospermum atlanticum, Cyathea macrocarpa, Cyathea praecincta, Dendropanax amorimii, Dendropanax bahiensis, Diospyros apeibacarpus, Diospyros capreifolia, Diospyros duartei, Diospyros gaultheriifolia, Diospyros guatterioides, Diospyros ketun, Duguetia chrysocarpa, Duguetia magnolioidea, Duguetia reticulata, Duguetia scottmori, Duguetia sooretamae, Ephedranthus sp.1, Ephedranthus sp.2, Ephedranthus sp.3, Erythroxylum columbinum, Erythroxylum compressum, Erythroxylum hamigerum, Erythroxylum mattossilvae, Erythroxylum ochrantum, Exellodendron gracile, Guatteria macropus, Gymnanthes bahiensis, Gymnanthes hypoleuca, Handroanthus arianeae, Handroanthus cristatus, Handroanthus riodocensis, Hirtella bahiensis, Hirtella bicornis, Hirtella insignis, Hirtella santosii, Hornschuchia bryotrophe, Hornschuchia citriodora, Hornschuchia obliqua, Licania arianeae,

"Table 12, Continued"

Licania bahiensis, Licania belemii, Licania canescens, Licania cymosa, Hornschuchia polyantha, Hornschuchia santosii, Kielmeyera albopunctata, Kielmeyera elata, Kielmeyera sigillata, Kuhlmanniodendron apterocarpum, Licania heteromorpha, Licania lamentanda, Licania micrantha, Licania naviculistipula, Licania salzmannii, Licania santosii, Licania turbinata, Neocalyptrocalyx grandipetala, Neocalyptrocalyx nectarius, Ophthalmoblapton parviflorum, Paralychnophora santosii, Paratecoma peroba, Parinari alvimii, Parinari littoralis, Rauvolfia bahiensis, Rauvolfia capixabae, Rauvolfia mattfeldiana, Rourea bahiensis, Rourea discolor, Schefflera aurata, Schefflera capixaba, Sebastiania riparia, Spondias macrocarpa, Stephanopodium blanchetianum, Stephanopodium magnifolium, Syagrus macrocarpa, Syagrus picrophylla, Syagrus ruschiana, Tabebuia stenocalyx, Tabernaemontana flavicans, Terminalia kuhlmannii, Tetragastris catuaba, Tovomita bahiensis, Tovomita mangle, Trattinnickia mensalis, Unonopsis renati,
Subregion 7 – Northeastern Tropical Coastal Plains (TWINSPAN group 12, N= 15)
Adelia membranifolia, Annona pickelii, Clusia pernambucensis, Clusia sellowiana, Cocos nucifera, Cordia exaltata, Couepia coarctata, Diospyros ubaita, Duguetia gardneriana, Duguetia moricandiana, Duguetia restingae, Erythroxylum distortum, Erythroxylum mucronatum, Erythroxylum splendidum, Erythroxylum squamatum, Guatteria schomburgkiana, Hancornia speciosa, Himatanthus obovatus, Jacaranda microcalyx, Kielmeyera reticulata, Kielmeyera rugosa, Mabea occidentalis, Maytenus erythroxyla, Pilosocereus catingicola, Sapium paucinervium, Tetragastris occhionii.
Subregion 8 – Southeastern Hinterland Highlands (TWINSPAN group 20, N= 173)
Abarema obovata, Abarema villosa, Agarista coriifolia, Agarista eucalyptoides, Arthrocereus melanurus, Aspidosperma parvifolium, Austrocritonia angulicaulis, Austrocritonia velutina, Baccharis dracunculifolia, Baccharis lychnophora, Baccharis ramosissima, Baccharis salzmannii, Baccharis serrulata, Buchenavia hoehneana, Clusia fragrans, Connarus beyrichii, Connarus regnellii, Croton echinocarpus, Croton piptocalyx, Croton priscus, Cyathea villosa, Eremanthus crotonoides, Eremanthus erythropappus, Eremanthus glomerulatus, Erythroxylum cuneifolium, Erythroxylum pelleterianum, Escallonia hispida, Gochnatia brasiliensis, Gochnatia paniculata, Guatteria pohliana, Guatteria rupestris, Guatteria villosissima, Handroanthus vellosoi, Hirtella floribunda, Ilex pseudovaccinium, Ilex sapotifolia, Jacaranda macrantha, Jacaranda subalpina, Kielmeyera bifaria, Lamanonia grandistipularis, Licania riedelii, Manihot pilosa, Morithamnus ganophyllus, Ophthalmoblapton pedunculare, Peritassa flaviflora,

"Table 12, Continued"

Pilosocereus aurisetus, Rauvolfia pruinosifolia, Schefflera vinosa, Sebastiania edwalliana, Sloanea retusa, Stephanopodium engleri, Syagrus glaucescens, Tontelea leptophylla, Tovomita leucantha.
Subregion 9 – Forestry Hinterland Enclaves (TWINSPAN group 11, N= 155)
Acosmium cardenasii, Agarista chapadensis, Alchornea discolor, Aspidosperma dispermum, Aspidosperma quirandy, Astronium nelsonrosae, Attalea phalerata, Attalea pindobassu, Attalea speciosa, Bocageopsis mattogrossensis, Buchenavia tomentosa, Cardiopetalum calophyllum, Caryocar brasiliense, Caryocar cuneatum, Clusia obdeltifolia, Cordia alliodora, Couepia grandiflora, Couepia uiti, Cyathea poeppigii, Diospyros burchellii, Diospyros sericea, Duguetia marcgraviana, Eremanthus capitatus, Erythroxylum anguifugum, Erythroxylum daphnites, Erythroxylum subracemosum, Exellodendron gardneri, Guatteria blepharophylla, Guatteria conspicua, Guatteria notabilis, Himatanthus articulatus, Hirtella burchellii, Hirtella glandulosa, Hirtella hoehnei, Ilex conocarpa, Ilex integrifolia, Ilex pseudotheezans, Jacaranda caroba, Jacaranda cuspidifolia, Jacaranda irwinii, Kielmeyera coriacea, Kielmeyera cuspidata, Kielmeyera petiolaris, Lamanonia brasiliensis, Leocereus bahiensis, Licania apetala, Licania araneosa, Licania dealbata, Licania gardneri, Licania humilis, Licania nitida, Manihot jacobinensis, Manihot tripartita, Mauritia flexuosa, Maytenus catingarum, Maytenus floribunda, Maytenus mucugensis, Maytenus opaca, Micranthocereus albicephalus, Micranthocereus purpureus, Moquinia racemosa, Paralychnophora bicolor, Parinari obtusifolia, Pilosocereus glaucochrous, Pilosocereus magnificus, Piptocarpha rotundifolia, Plenckia bahiensis, Protium ovatum, Schefflera macrocarpa, Sebastiania jacobinensis, Sebastiania membranifolia, Syagrus flexuosa, Tabebuia insignis, Tapura amazonica, Terminalia eichleriana, Tetragastris cerradicola, Unonopsis guatterioides, Wunderlichia bahiensis, Wunderlichia crulsiana, Xylopia emarginata.
Subregion 10 – Paranense Corridor (TWINSPAN group 16, N= 41)
Annona amambayensis, Aspidosperma riedelii, Pereskia nemorosa.
Subregion 11 – Deciduous Forests (TWINSPAN group 6, N=56)
Acosmium diffusissimum, Annona cornifolia, Annona leptopetala, Annona spinescens, Annona vepretorum, Aralia excelsa, Arrabidaea bahiensis, Arrojadoa rhodantha, Aspidosperma cuspa, Aspidosperma macrocarpon, Aspidosperma multiflorum, Aspidosperma pyrifolium, Aspidosperma tomentosum, Cereus jamacaru, Cnidoscolus bahianus,

"Table 12, Continued"

Cnidoscolus pubescens,Cnidoscolus quercifolius, Cnidoscolus vitifolius, Cochlospermum vitifolium, Colicodendron yco, Combretum duarteanum, Combretum glaucocarpum, Combretum leprosum, Commiphora leptophloeus, Connarus suberosus, Copernicia prunifera, Cordia glabrata, Cordia glazioviana, Cordia incognita, Cordia rufescens, Croton argyrophylloides, Croton blanchetianus, Croton heliotropiifolius, Cyrtocarpa caatingae, Dasyphyllum brasiliense, Erythroxylum caatingae, Erythroxylum revolutum, Exellodendron cordatum, Facheiroa cephaliomelana, Fraunhofera multiflora, Handroanthus pedicellatus, Handroanthus selachidentatus, Handroanthus spongiosus, Jacaratia sp.nov.ined., Jatropha mollissima, Manihot catingae, Manihot dichotoma, Manihot glaziovii, Mauritiella armata, Maytenus horrida, Maytenus quadrangulata, Maytenus rigida, Neocalyptrocalyx longifolium, Oxandra reticulata, Pereskia bahiensis, Pereskia stenantha, Pilosocereus densiareolatus, Pilosocereus gounellei, Pilosocereus machrisii, Pilosocereus multicostatus, Pilosocereus pachycladus, Quiabentia zehntneri, Sapium obovatum, Schinopsis brasiliensis, Spondias tuberosa, Stillingia saxatilis, Tabebuia aurea, Tabebuia gemmiflora, Tabebuia reticulata, Varronia globosa, Varronia leucocephala, Vasconcellea glandulosa, Zeyheria montana.
Coastal and Lower Plains (N= 290)
Abarema barnebyana, Abarema brachystachya, Abarema cochliacarpa, Abarema filamentosa, Abarema jupunba, Abarema turbinata, Acosmium lentiscifolium, Actinostemon lasiocarpus, Actinostemon verticillatus, Adenophaedra megalophylla, Agarista revoluta, Algernonia dimitrii, Algernonia leandrii, Algernonia pardina, Algernonia riedelii, Anacardium occidentale, Anaxagorea dolichocarpa, Annona acutiflora, Annona bahiensis, Annona ferruginea, Annona glabra, Annona maritima, Annona neosericea, Annona salzmannii, Anthodiscus amazonicus, Aparisthmium cordatum, Aspidosperma camporum, Aspidosperma discolor, Aspidosperma illustre, Astrocaryum aculeatissimum, Astronium concinnum, Attalea dubia, Attalea funifera, Attalea oleifera, Avicennia germinans, Avicennia schaueriana, Baccharis longoattenuata, Baccharis singularis, Bactris ferruginea, Bactris horridispatha, Bactris setosa, Bixa arborea, Bocagea longepedunculata, Bocagea viridis, Bonnetia stricta, Brasiliocroton mamoninha, Brasiliopuntia brasiliensis, Buchenavia kleinii, Buchenavia pabstii, Buchenavia tetraphylla, Butia capitata, Capparidastrum frondosum, Caraipa densifolia, Carpotroche brasiliensis, Caryocar edule, Caryodendron janeirense, Cereus fernambucensis, Cereus hildmannianus, Chrysobalanus icaco, Cinnamodendron axillare, Clusia fluminensis, Clusia hilariana, Clusia palmicida, Clusia sellowiana, Clusia spiritusanctensis, Cocos nucifera, Colicodendron bahianum, Conocarpus erectus,

"Table 12, Continued"

Cordia aberrans, Cordia latiloba, Cordia magnoliifolia, Cordia nodosa, Cordia sericicalyx, Cordia silvestris, Cordia taguahyensis, Cordia trachyphylla, Cordia trichoclada, Couepia belemii, Couepia carautae, Couepia impressa, Couepia insignis, Couepia longipetiolata, Couepia ovalifolia, Couepia schottii, Couma rigida, Crateva tapia, Crepidospermum atlanticum, Croton compressus, Croton macrobothrys, Croton polyandrus, Croton sphaerogynus, Curatella americana, Cyathea atrovirens, Cyathea leucofolis, Cyathea macrocarpa, Cyathea microdonta, Cymbopetalum brasiliense, Cynophalla flexuosa, Dendropanax australis, Dendropanax bahiensis, Diospyros apeibacarpus, Diospyros brasiliensis, Diospyros capreifolia, Diospyros duartei, Diospyros gaultheriifolia, Diospyros guatterioides, Duguetia bahiensis, Duguetia chrysocarpa, Duguetia flagellaris, Duguetia gardneriana, Duguetia magnolioidea, Duguetia moricandiana, Duguetia sessilis, Duguetia sooretamae, Erythroxylum affine, Erythroxylum argentinum, Erythroxylum coelophlebium, Erythroxylum columbinum, Erythroxylum compressum, Erythroxylum cuspidifolium, Erythroxylum distortum, Erythroxylum hamigerum, Erythroxylum mattossilvae, Erythroxylum mucronatum, Erythroxylum nobile, Erythroxylum ochrantum, Erythroxylum passerinum, Erythroxylum splendidum, Erythroxylum squamatum, Euterpe edulis, Exellodendron gracile, Garcinia brasiliensis, Geissospermum laeve, Geonoma gamiova, Geonoma pohliana, Geonoma rubescens, Glycydendron espiritosantense, Guatteria candolleana, Guatteria ferruginea, Guatteria oligocarpa, Gymnanthes glabrata, Gymnanthes nervosa, Hancornia speciosa, Handroanthus cristatus, Handroanthus heptaphyllus, Handroanthus riodocensis, Handroanthus umbellatus, Himatanthus bracteatus, Himatanthus obovatus, Hirtella angustifolia, Hirtella bahiensis, Hirtella bicornis, Hirtella insignis, Hirtella sprucei, Hirtella triandra, Hornschuchia bryotrophe, Hornschuchia citriodora, Hornschuchia leptandra, Hornschuchia myrtillus, Hornschuchia polyantha, Hornschuchia santosii, Idiothamnus pseudorgyalis, Ilex floribunda, Ilex psammophila, Ilex pseudobuxus, Jacaranda bracteata, Jacaranda microcalyx, Jacaranda obovata, Jacaranda puberula, Jacaratia heptaphylla, Joannesia princeps, Kielmeyera albopunctata, Kielmeyera marauensis, Kielmeyera membranacea, Kielmeyera neglecta, Kielmeyera occhioniana, Kielmeyera rugosa, Kuhlmanniodendron apterocarpum, Lacmellea bahiensis, Lacmellea pauciflora, Laguncularia racemosa, Licania arianeae, Licania belemii, Licania cymosa, Licania hypoleuca, Licania lamentanda, Licania littoralis, Licania micrantha, Licania octandra, Licania salzmannii, Licania santosii, Licania turbinata, Mabea glaziovii, Mabea occidentalis, Mabea piriri, Macoubea guianensis, Malouetia arborea, Maytenus cassineformis, Maytenus cestrifolia, Maytenus distichophylla,

"Table 12, Continued"

Maytenus erythroxyla, Maytenus littoralis, Maytenus obtusifolia, Maytenus samydiformis, Maytenus schumanniana, Monilicarpa brasiliana, Neocalyptrocalyx grandipetala, Oedematopus dodecandrus, Ophthalmoblapton parviflorum, Opuntia monacantha, Oxandra nitida, Pachystroma longifolium, Paratecoma peroba, Parinari alvimii, Parinari excelsa, Parinari leontopitheci, Parinari littoralis, Pausandra megalophylla, Pausandra morisiana, Pereskia aculeata, Pilosocereus arrabidae, Pilosocereus catingicola, Polyandrococos caudescens, Protium aracouchini, Protium bahianum, Protium brasiliense, Protium icicariba, Protium kleinii, Protium warmingianum, Pseudoxandra bahiensis, Rauvolfia bahiensis, Rauvolfia capixabae, Rauvolfia grandiflora, Rauvolfia mattfeldiana, Rourea bahiensis, Rourea discolor, Salacia grandifolia, Schefflera angustissima, Schefflera aurata, Schefflera selloi, Schinus molle, Schinus terebinthifolius, Sebastiania argutidens, Sebastiania pteroclada, Sebastiania riparia, Senefeldera verticillata, Sloanea garckeana, Sloanea guianensis, Sloanea obtusifolia, Sparattosperma leucanthum, Spondias macrocarpa, Spondias mombin, Spondias venulosa, Stephanopodium blanchetianum, Stifftia parviflora, Syagrus botryophora, Syagrus pseudococos, Syagrus schizophylla, Symphonia globulifera, Tabebuia cassinoides, Tabebuia elliptica, Tabebuia obtusifolia, Tabebuia stenocalyx, Tabernaemontana flavicans, Tabernaemontana laeta, Tabernaemontana salzmannii, Tapirira guianensis, Terminalia kuhlmannii, Tetragastris catuaba, Tetragastris occhionii, Tetrorchidium rubrivenium, Thyrsodium spruceanum, Tovomita brasiliensis, Tovomita brevistaminea, Tovomita mangle, Trattinnickia mensalis, Trithrinax brasiliensis, Unonopsis bahiensis, Unonopsis renati, Xylopia frutescens, Xylopia involucrata, Xylopia laevigata, Xylopia langsdorfiana, Xylopia ochrantha, Xylopia sericea.
Upper Plains and Lower Highlands (N=108)
Acosmium diffusissimum, Acrocomia aculeata, Actinostemon klotzschii, Albizia edwallii, Albizia inundata, Albizia niopoides, Alchornea glandulosa, Annona crassiflora, Annona leptopetala, Annona neosalicifolia, Annona sylvatica, Aralia excelsa, Aralia warmingiana, Arrabidaea bahiensis, Aspidosperma australe, Aspidosperma cuspa, Aspidosperma cylindrocarpon, Aspidosperma polyneuron, Aspidosperma pyrifolium, Aspidosperma subincanum, Astronium fraxinifolium, Bernardia pulchella, Celtis brasiliensis, Celtis iguanaea, Cereus jamacaru, Cheiloclinium cognatum, Cnidoscolus quercifolius, Colicodendron yco, Combretum duarteanum, Combretum glaucocarpum, Combretum leprosum, Commiphora leptophloeus, Cordia americana, Cordia glabrata, Cordia glazioviana, Cordia incognita, Cordia trichotoma, Croton blanchetianus, Croton floribundus, Croton urucurana, Cybistax antisyphilitica,

"Table 12, Continued"

Cyrtocarpa caatingae, Dendropanax cuneatus, Diospyros hispida, Diospyros inconstans, Diospyros ketun, Duguetia lanceolata, Erythroxylum citrifolium, Erythroxylum daphnites, Erythroxylum deciduum, Erythroxylum pelleterianum, Erythroxylum revolutum, Erythroxylum subracemosum, Exellodendron cordatum, Guatteria campestris, Handroanthus impetiginosus, Handroanthus ochraceus, Handroanthus serratifolius, Handroanthus spongiosus, Hirtella glandulosa, Hirtella gracilipes, Ilex cerasifolia, Jacaranda brasiliana, Jacaratia sp.nov.ined., Jacaratia spinosa, Jatropha mollissima, Licania apetala, Licania gardneri, Lithraea molleoides, Mabea fistulifera, Manihot anomala, Manihot caerulescens, Manihot dichotoma, Maprounea guianensis, Mauritia flexuosa, Maytenus floribunda, Maytenus gonoclada, Maytenus rigida, Myracrodruon urundeuva, Oxandra reticulata, Pereskia bahiensis, Peritassa flaviflora, Pilosocereus densiareolatus, Protium heptaphyllum, Protium spruceanum, Quiabentia zehntneri, Rauvolfia sellowii, Salacia elliptica, Schefflera morototoni, Schinopsis brasiliensis, Sebastiania brasiliensis, Sloanea stipitata, Spondias tuberosa, Syagrus oleracea, Tabebuia insignis, Tabebuia roseoalba, Tabernaemontana hystrix, Terminalia argentea, Terminalia fagifolia, Terminalia glabrescens, Terminalia phaeocarpa, Terminalia triflora, Tovomita leucantha, Trema micrantha, Unonopsis guatterioides, Xylopia aromatica, Xylopia emarginata, Zeyheria tuberculosa.
Upper Highlands (N=172)
Agarista chapadensis, Agarista coriifolia, Agarista eucalyptoides, Agarista niederleinii, Agarista oleifolia, Alchornea sidifolia, Alchornea triplinervia, Alsophila setosa, Alsophila sternbergii, Annona dolabripetala, Annona rugulosa, Annona xylopiifolia, Araucaria angustifolia, Arthrocereus melanurus, Aspidosperma olivaceum, Aspidosperma parvifolium, Austrocritonia velutina, Baccharis caprariifolia, Baccharis dentata, Baccharis glaziovii, Baccharis grandimucronata, Baccharis intermixta, Baccharis leucocephala, Baccharis lychnophora, Baccharis microdonta, Baccharis oblongifolia, Baccharis oreophila, Baccharis ramosissima, Baccharis regnellii, Baccharis retusa, Baccharis rufidula, Baccharis salzmannii, Baccharis semiserrata, Baccharis serrulata, Berberis campos-portoi, Berberis laurina, Butia eriospatha, Chrysochlamys saldanhae, Cinnamodendron dinisii, Citronella engleriana, Clethra scabra, Clethra uleana, Clusia fragrans, Clusia lanceolata, Clusia organensis, Connarus regnellii, Crinodendron brasiliense, Croton alchorneicarpus, Croton campanulatus, Croton celtidifolius, Croton echinocarpus, Croton hecatonandrus, Croton organensis, Croton salutaris, Cyathea corcovadensis, Cyathea delgadii, Cyathea dichromatolepis, Cyathea glaziovii, Cyathea phalerata, Cyathea rufa, Cyathea villosa, Dasyphyllum brasiliense, Dasyphyllum spinescens,

"Table 12, Concluded"

Dasyphyllum tomentosum, Dendropanax langsdorffii, Dendropanax trilobus, Dendrophorbium glaziovii, Dicksonia sellowiana, Duguetia microphylla, Duguetia salicifolia, Eremanthus crotonoides, Eremanthus erythropappus, Eremanthus glomerulatus, Eremanthus incanus, Erythroxylum vaccinifolium, Escallonia bifida, Escallonia chlorophylla, Escallonia megapotamica, Escallonia petrophila, Gaultheria eriophylla, Gochnatia hatschbachii, Gochnatia paniculata, Gochnatia polymorpha, Guatteria australis, Guatteria latifolia, Guatteria pohliana, Guatteria sellowiana, Handroanthus albus, Handroanthus bureavii, Handroanthus catarinensis, Handroanthus chrysotrichus, Handroanthus vellosoi, Hedyosmum brasiliense, Himatanthus articulatus, Ilex asperula, Ilex brasiliensis, Ilex conocarpa, Ilex dumosa, Ilex grandis, Ilex longipetiolata, Ilex microdonta, Ilex paraguariensis, Ilex pseudotheezans, Ilex pseudovaccinium, Ilex sapotifolia, Ilex taubertiana, Ilex theezans, Jacaranda pulcherrima, Jacaranda subalpina, Kaunia rufescens, Kielmeyera bifaria, Kielmeyera cuspidata, Kielmeyera gracilis, Kielmeyera insignis, Kielmeyera petiolaris, Lamanonia brasiliensis, Lamanonia chabertii, Lamanonia cuneata, Lamanonia grandistipularis, Lamanonia ternata, Lithraea brasiliensis, Lytocaryum weddellianum, Manihot grahamii, Maytenus boaria, Maytenus evonymoides, Maytenus glaucescens, Maytenus ilicifolia, Maytenus salicifolia, Maytenus subalata, Moquinia racemosa, Morithamnus ganophyllus, Oreopanax fulvus, Pilosocereus aurisetus, Pilosocereus glaucochrous, Piptocarpha angustifolia, Piptocarpha axillaris, Piptocarpha densifolia, Piptocarpha macropoda, Piptocarpha organensis, Piptocarpha regnellii, Plenckia populnea, Raulinoreitzia leptophloebia, Sambucus australis, Sapium glandulosum, Schefflera calva, Schinus polygamus, Sphaeropteris gardneri, Stephanopodium organense, Syagrus flexuosa, Syagrus glaucescens, Symphyopappus itatiayensis, Tapirira obtusa, Tetragastris cerradicola, Tetrorchidium parvulum, Tovomita paniculata, Trixis praestans, Verbesina glabrata, Vernonanthura discolor, Vernonanthura divaricata, Vernonanthura petiolaris, Vernonanthura puberula, Weinmannia discolor, Weinmannia humilis, Weinmannia organensis, Weinmannia paulliniifolia, Weinmannia pinnata, Wunderlichia mirabilis.

The heterogeneity of the Atlantic Forest is even more striking when it is observed that the largest dissimilarities occur in respect of the Northeastern Tropical Coastal Plain with the subtropical subregions (88 to 91.4%). The subregion of the Deciduous Forest still maintains high values of dissimilarity with all other subregions (> 72% to 86.7%) however, an important sharing is observed with the Forestry Hinterland Enclaves for being less dissimilar (57.4%).

Among the subregions of semi-deciduous influence there were relatively high dissimilarities (up to 82.1%) but less dissimilar patterns occurred. There was low dissimilarity between the Southeastern Hinterland Highlands and the Forestry Hinterland Enclaves (51.7%), as well as between the Subtropical Hinterland Valleys and the Paranense Corridor (55.1%).

The tropical semi-deciduous forests related with the tropical rain forests as follows: the lowest dissimilarities occurred between the Southeastern Hinterland Highlands and the Serra do Mar Corridor (49.5%) and the Southeastern Hinterland Highlands and the Central Corridor (55.3) and the Forestry Hinterland Enclaves and the Tropical Central Corridor (66%). A strong differentiation towards the comparison between the subtropical semi-deciduous and the semi-deciduous from the countryside of SP and PR with the rain forests was observed (> 74.6 to 91.4%).

The following underlying gradient towards differentiation among the predominantly rain subregions follows as: from the Northeastern Tropical Coastal Plain to the Central Tropical Corridor (64.1%), to the Southeastern Tropical Coastal Plain (74%) and Serra do Mar Corridor (83%). The smallest dissimilarities occur between the relationship of the Southeastern Tropical Coastal Plain with the Tropical Central Corridor (52.6%) and with the Serra do Mar Corridor (55%). There is a differentiation of 61.7% between the Central Tropical Corridor and the Serra do Mar Corridor.

5.8 Climate and spatial patterns of Phytogeographic Subregions

The geographical distribution of main groups generated by TWINSPAN (Figure 7) lead to consolidate the distribution of phytogeographic subregions. These were overlapped on the watersheds and the altitudinal ranges in Figures 8 and 9, respectively. The rain formations dominated the Atlantic coast in five sets, each characteristically related to an inland seasonal forest. To the North, the Deciduous Forest is distributed through the São Francisco River Valley with the Forestry Hinterland Enclaves bordering the basin's headwaters. To the South, the Subtropical Hinterland Valleys are more inland than the Plateau of Araucarian Forest, with this latter being markedly rain and cloud, forming the Southern Hinterland Highlands with cloud forest relicts in the Serra da Mantiqueira. In the DCA diagram (Figure 10) it is observed how the Southeastern Hinterland Highlands has an important role in presenting greater interaction with all the subregions and hence being a key component of linkage or continuous transition of the phytogeographic variation.

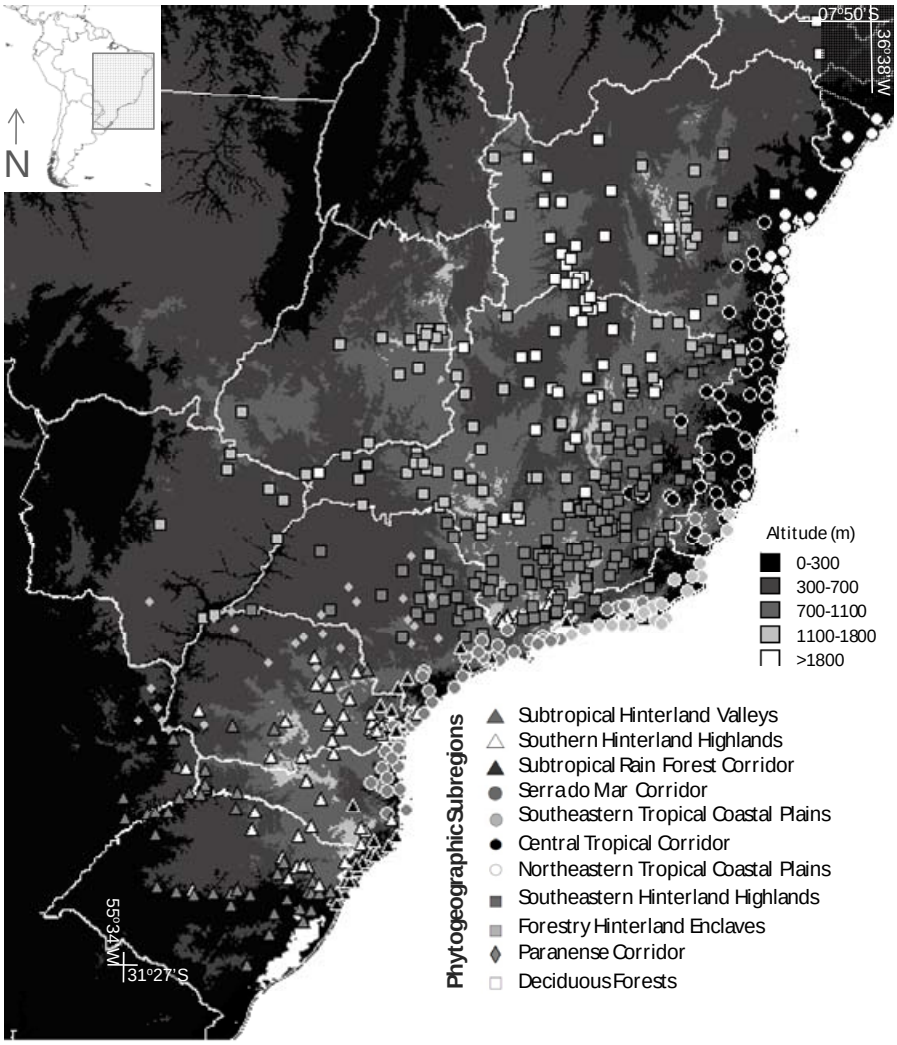


Figure 9 Map of distribution of Phytogeographic Subregions of the Atlantic Forest, overlapping altitudinal ranges

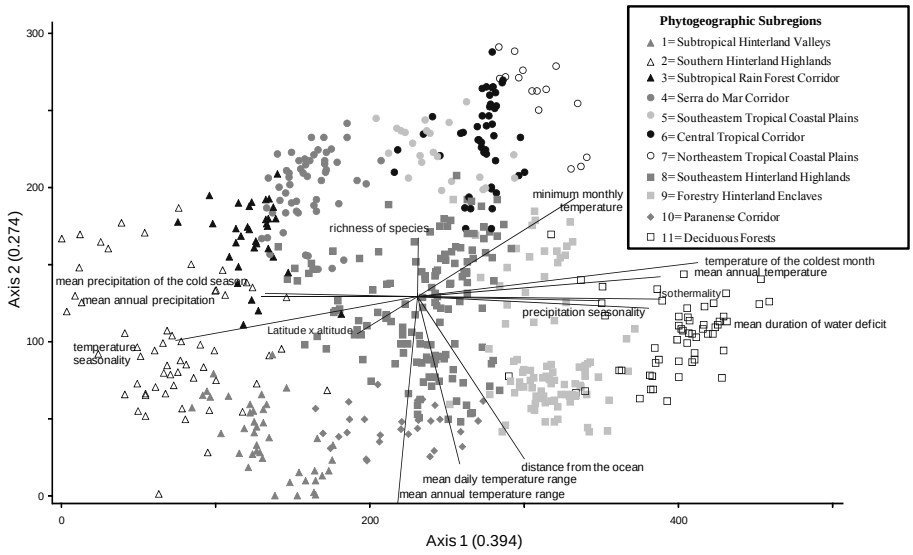


Figure 10 Ordination diagram yielded by Detrended Correspondence Analysis (DCA) of 589 areas of tropical and subtropical Atlantic Forest classified into Phytogeographic Subregions. Eingenvalues: axes 1 (0.394) and 2 (0.274)

The subregions' groupings (Figure 11) revealed two large floristic sets. The first one comprised from the Deciduous Forest subregion to the Southeastern Tropical Coastal Plains forming a notably tropical group. The second one, from the Southeastern Hinterland Highlands to the Subtropical forests. It is observed that in the first set the Deciduous Forest is closer to the Forestry Hinterland Enclaves, and together, they distance themselves from the block of the Northeastern Tropical Coastal Plains with the Tropical Central Corridor. The SoutheasternTropical Coastal Plains is more singular in this large tropical group. In the second set it is observed that the Southeastern Hinterland Highlands has a flora less similar than the one from the Serra do Mar Corridor when approaching the Southern Hinterland Highlands block with the Subtropical

Rain Forest Corridor. The Subtropical Hinterland Valleys and the Paranense Corridor block diverge from the rest in the second set.

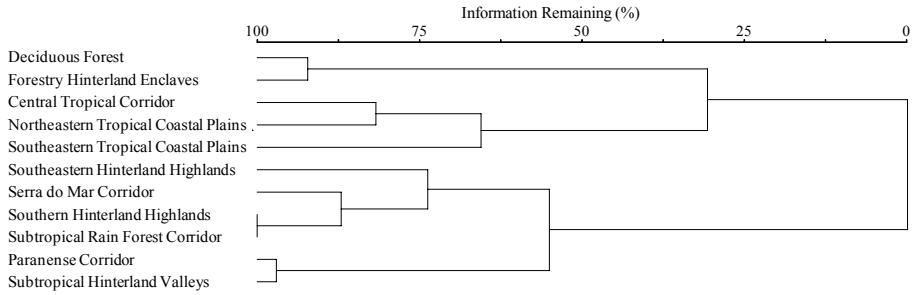


Figure 11 Dendrograms of cluster analysis of Phytogeographic Subregions of tree flora in the Atlantic Forest. Linkage method: Ward`s method; association measure: Correlation; percent chaining = 3.85

The subtropical forests tended to be differentiated by the values of the mean daily temperature range and isothermality. Nonetheless, the mixed Araucarian forest and Cloud forest of Southern Hinterlands Highlands are well differentiated for their lowest values of the mean temperature of the cold season, minimum monthly temperature and higher values of temperature seasonality (Figure 12).

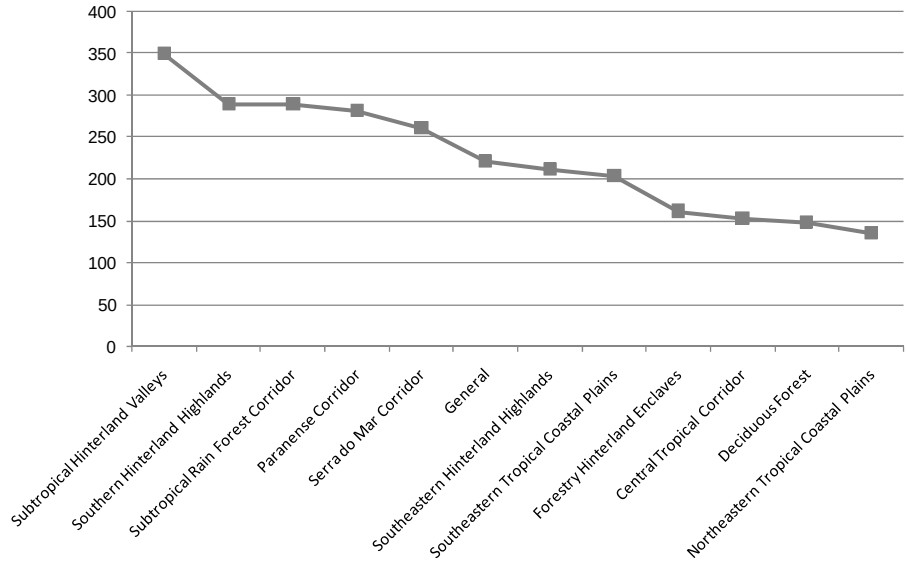


Figure 12 Mean of temperature seasonality for each Phytogeographic Subregion of the Atlantic Forest. In descending order

The subregion of the Serra do Mar Corridor presented higher values for the mean annual precipitation (Figure 13). The Central Tropical Corridor has the lowest values for temperature seasonality (Figure 12), no larger than Deciduous Forests and the Northeastern Tropical Coastal Plains. Nevertheless, it still have higher values for the mean temperature of the cold season, such as the Southeastern Tropical Coastal Plains and Deciduous Forest (Figure 14). The Northeastern Tropical Coastal Plains have higher values for the mean precipitation of the cold season (Figure 15).

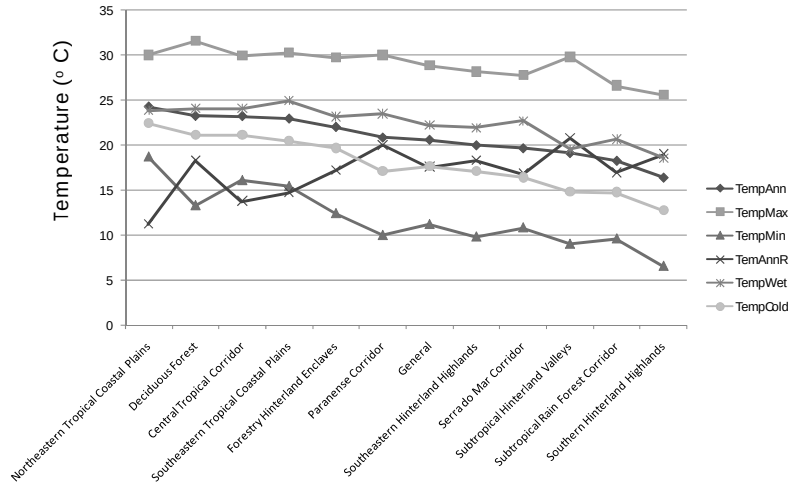


Figure 13 Mean climatic parameters of temperature for each Phytogeographic Subregion of the Atlantic Forest. In descending order by mean annual temperature. TempAnn = mean annual temperature; TempMax = maximum monthly temperature; TempMin= minimum monthly temperature; TempAnnR= mean annual temperature range; TempWet= mean temperature of the wet season; TempCold= mean temperature of the cold season

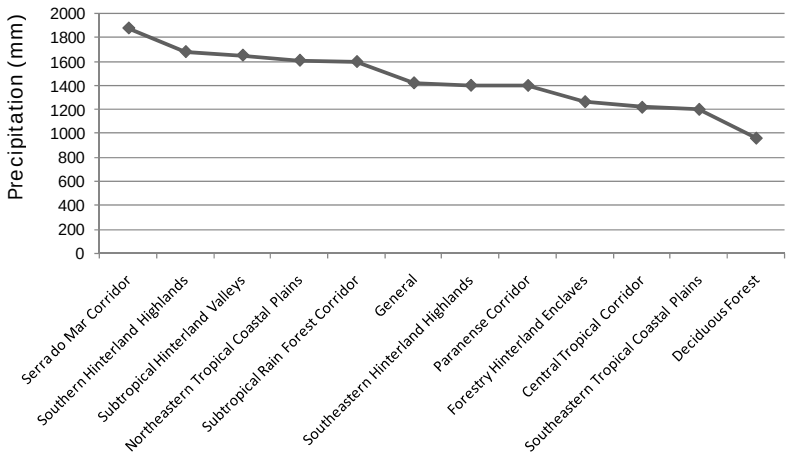


Figure 14 Mean of annual precipitation for each Phytogeographic Subregion of the Atlantic Forest. In descending order

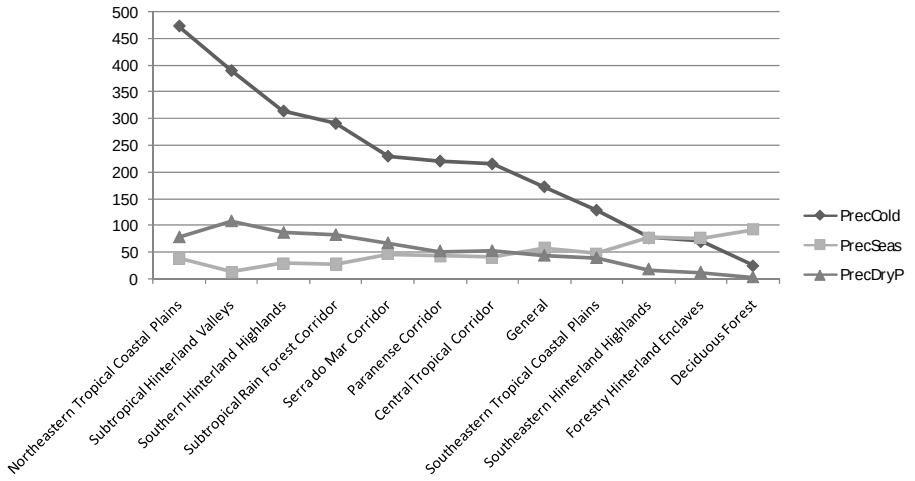


Figure 15 Mean climatic parameters of precipitation for each Phytogeographic Subregion of the Atlantic Forest. PrecCold= mean preciptation of the cold season (mm); PrecSeas= preciptation seasonality; PrecDryP= preciptation of dry period (mm). In descending order by PrecCold

The semi-deciduous forests from the Subtropical Hinterland Valleys are well characterized by highest values for precipitation in the dry period (Figure 15) and the mean annual temperature range (Figure 14) and the lowest values of precipitation seasonality (Figure 15).

The semi-deciduous forests of the Southeastern Hinterlands Highlands and the Forestry Hinterland Enclaves feature the lowest values for precipitation in the dry period and the higher values for precipitation seasonality (Figure 15), but no larger than these values for the Deciduous Forests.

The semi-deciduous forests are well characterized by the highest values for precipitation seasonality (Figure 15) and along with the Northeastern Tropical Coastal Plains, the Tropical Central Corridor and the Southeastern Tropical Coastal Plains present the lowest averages for the mean annual temperature (Figure 14).

The scattering of areas from each subregion by their annual temperatures and precipitation seasonality values well illustrates the gradients on the scale in study (Figure 16).

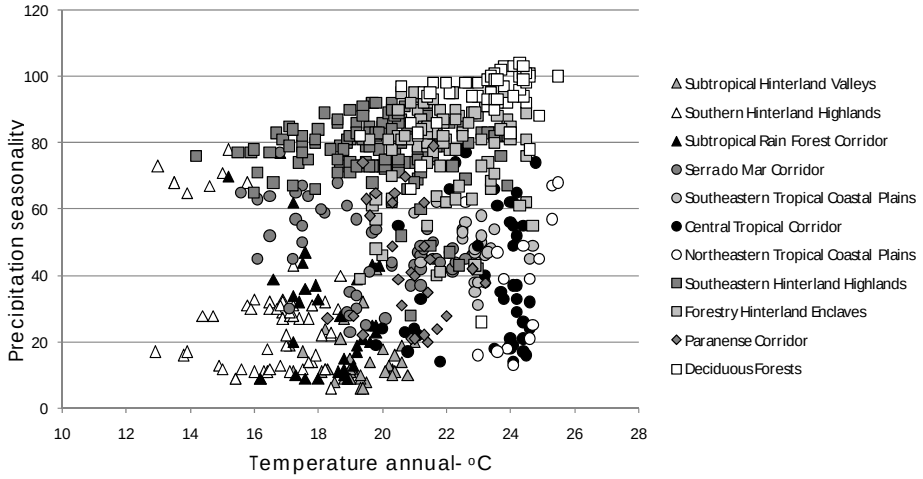


Figure 16 Relationship between temperature annual and precipitation seasonality in the 589 areas of the Atlantic Forests classified into Phytogeographic Subregions

The classification tree (Table 13) highlighted a set of logical conditions that at every step observed the phytogeographic classification in response to the main environmental variables. Thus, the patterns and exceptions under certain levels of the most parsimonious conditions were observed. Approximately 88% of the subtropical areas added to 46% of the areas in the Serra do Mar Corridor were differentiated by having temperature seasonality greater than 268.5. The other subregions with seasonality temperature less than or equal to 268.5 were analyzed in another condition. According to the isothermality, 83% of the Deciduous Forest and 67% of the Forestry Hinterland Enclaves, differentiated from the others by values above 68.5. Those below this value were differentiated by the precipitation seasonality. The following differentiated with values above

66.5%: 92% of the Southeastern Hinterland Highlands, 23% of the Forestry Hinterland Enclaves and 12% of Deciduous Forest. Finally, the remaining areas and with temperature seasonality greater than 178.5 covered 48% of the Serra do Mar Corridor and 91% of the Southeastern Tropical Coastal Plains. The analysis could not predict in these logical conditions the representativeness of the Semi-deciduous, Paranense Corridor and Northeastern Tropical Coastal Plains. However, it had been already reported here that higher values for the mean annual temperature range (Figure 14) and higher values for the mean precipitation of the cold season (Figure 15) best characterized these two subregions, respectively.

Table 13 Classification Tree of 589 areas and 9 sub-region biogeography of Atlantic Forest. 1= Subtropical Hinterland Valleys, Southern Hinterland Highlands and Subtropical Rain Forest Corridor; 2= Serra do Mar Corridor; 3= Southeastern Tropical Coastal Plains; 4= Central Tropical Corridor; 5= Northeastern Tropical Coastal Plains; 6= Southeastern Hinterland Highlands; 7= Forestry Hinterland Enclaves; 8= Paranense Corridor; 9= Deciduous Forests

	Dichotomous classification																	
	*0		*00		*01		*010		*011		*0110		*0111		*01110		*01111	
Sub-region	**All Areas**		**Temperature Seasonality**				**Isothermality**				**Precipitation Seasonality**				**Temperature Seasonality**			
			> 268.5		**<= 268.5**		**> 68.5**		**<= 68.5**		**> 66.5**		**<= 66.5**		**> 178.5**		**<= 178.5**	
	%	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**
1	22.6	133	75.0	117	3.7	16	0.0	0	5.0	16	5.0	9	5.0	7	8.4	7	0.0	0
2	9.2	54	16.0	25	6.7	29	0.0	0	9.0	29	1.7	3	18.4	26	31.3	26	0.0	0
3	3.9	23	0.0	0	5.3	23	0.0	0	7.1	23	0.0	0	16.3	23	25.3	21	3.5	2
4	7.8	46	0.0	0	10.6	46	0.0	0	14.2	46	3.3	6	28.4	40	3.6	3	63.8	37
5	2.6	15	0.0	0	3.5	15	0.0	0	4.6	15	1.1	2	9.2	13	1.2	1	20.7	12
6	23.9	141	0.0	0	32.6	141	0.9	1	43.3	140	71.4	130	7.1	10	7.2	6	6.9	4
7	15.6	92	0.0	0	21.3	92	56.4	62	9.3	30	12.1	22	5.7	8	7.2	6	3.5	2
8	4.9	29	0.0	0	3.5	15	0.0	0	4.6	15	1.7	3	8.5	12	14.5	12	0.0	0
9	9.5	56	0.0	0	12.9	56	42.7	47	2.8	9	3.9	7	1.4	2	1.2	1	1.7	1
Sum	100.0	589	26.5	156	73.5	433	18.7	110	54.8	323	30.0	182	23.9	141	14.1	83	9.9	58

5.9 Species richness and rarity of Phytogeographic Subregions across latitude and inland gradients

In utilizing the phytogeographic subdivision it was observed that there is a greater level of details of information about the phytophysiognomy classification. It is noted that at the peak of richness of the whole sample, at latitude 22-23º, there is a greater number of subregions contributing to this (Figure 17). The types of subtropical influence, the Southeastern Hinterland Highlands, the Paranense Corridor and even a small contribution of the Forestry Hinterland Enclaves contributed to this richness. Yet, it can be observed that the alternating contribution between semi-deciduous-rain between 10-23º, shown in Figure 2, correspond to the richest contributions from the Forestry Hinterland Enclaves, Tropical Central Corridor, Southeastern Hinterland Highlands and Serra do Mar Corridor, respectively.

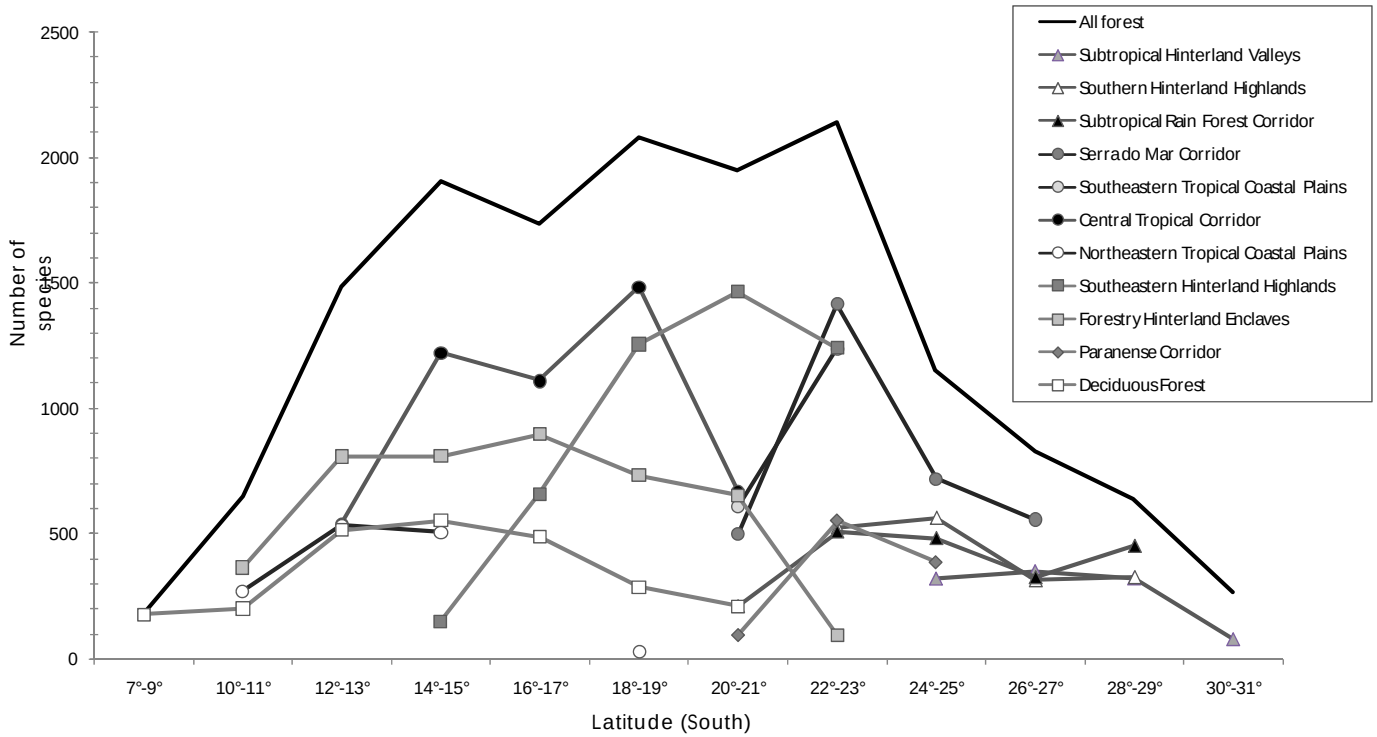


Figure 17 Progression of the number of tree species with increasing latitude in tropical and subtropical Atlantic Forests south of 7°S, for each Phytogeographic Subregion

When assessing the distribution of richness as a function of the inlanding of each subregion, it is noted that the subregions with rain influence are not extended in more than 300 km towards inland in the continent and its riches are proportionally larger than in the more seasonal subregions but with the tendency to sharply decrease in this gradient (Figure 18). Unlikely, the more seasonal subregions tend to contribute with greater richness in their inland sides. For example, the Southeastern Hinterland Highlands presents the highest richness level from 100 to 599 km inland in descending sequence, unlike the Forestry Hinterland Enclaves showing an ascending contribution in this. The Forestry Hinterland Enclaves have the greatest extension and is the only one to be beyond 800 km inland. The Deciduous Forests, the Paranense Corridor, the Subtropical Hinterland Valleys and the Southern Hinterland Highlands subregions also feature extensive inlanding patterns, however with different patterns of richness among themselves.

The rarity of the species, *i.e.* the number of species occurring only once across the sample is much greater in the 100 km closer to the Brazilian Atlantic coast line and decreases considerably inland (Figure 19). However, when this richness rarity is considered in each area, different patterns are observed (Figure 20). The relative importance of the rare species tends to be higher among the more seasonal subregions, tend to decrease up to 499 km and tend to increase over 500 km.

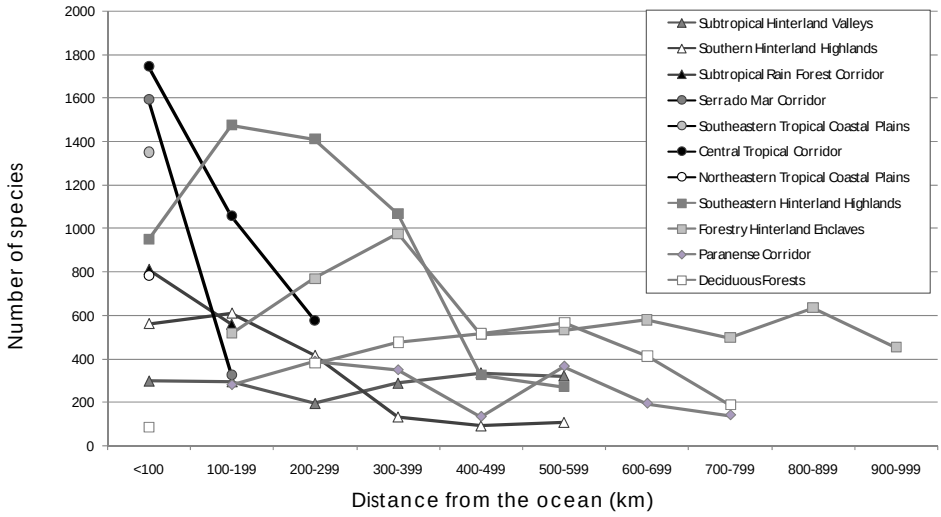


Figure 18 Progression of the number of tree species with increasing distance to the ocean in Atlantic Forests south of 7°S for each Phytogeographic Subregion

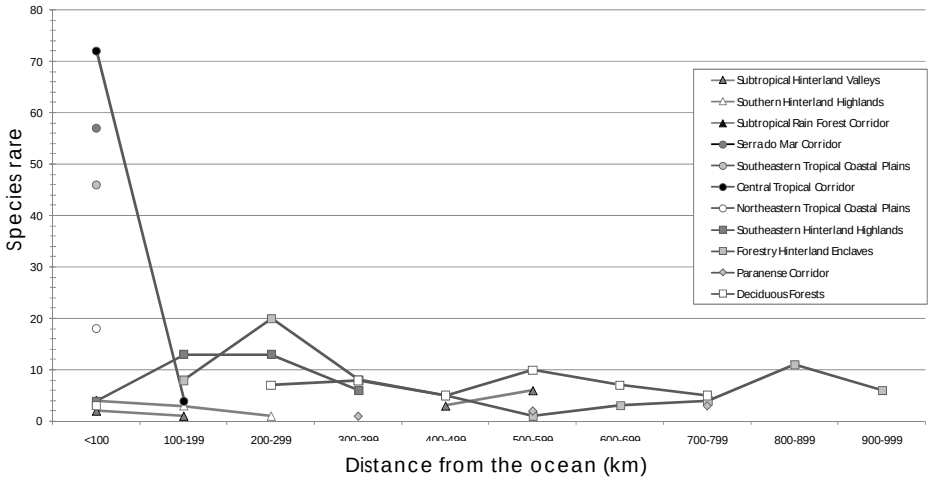


Figure 19 Progression of the number of rare tree species with increasing distance to the ocean in the Atlantic Forests south of 7°S for each Phytogeographic Subregion

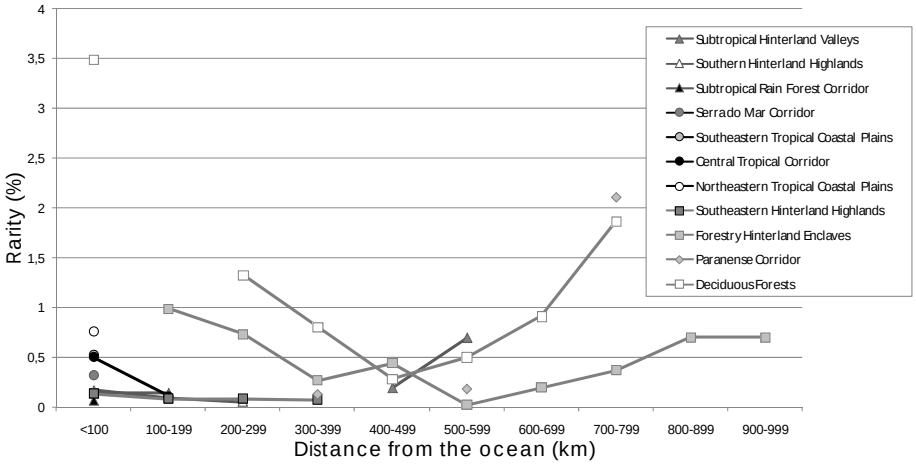


Figure 20 Progression of the proportion of rare tree species with increasing distance to the ocean in the Atlantic Forests south of 7°S for each Phytogeographic Subregion

6 DISCUSSION

As for the estimated number of vascular plant species for the Brazilian Atlantic Forest (FORZZA et al., 2010b), the tree flora analyzed represents 24% of the 14,813 species in the domain. The Atlantic Forest is recognized by encompassing elevated species richness and endemicity (MYERS et al., 2000). However, the distributions of these parameters for the trees are not homogenous in the directions North-South or East-West. It is noted that a number of common species occur when considering the floristic from different vegetation domains in Brazil, but the affinities are in descending order and larger at the hierarchical levels of family, genus and species (LEITÃO FILHO; 1987; OLIVEIRA-FILHO; FONTES, 2000). These floristic distinctions also occur in the Atlantic domain, though less abrupt, the internal heterogeneity allowed the separation of the subtropical and tropical forest formations, which diagnosed the relations between climatic variables and geographic distribution of tree species. There is also little differentiation of genera and families between the semi-deciduous and rain formations in the forestry physiognomies of the Atlantic Forest, reinforcing previous observations (FERRAZ; ARAÚJO; SILVA, 2004; OLIVEIRA-FILHO; FONTES, 2000; SCUDELLER; MARTINS; SHEPERD, 2001). Therefore, the distinction of floristic subsets should not be primarily through the physiognomic formation or the classification of vegetation, but learned via floristic relations.

The Atlantic Forest is the most heterogeneous of the Brazilian forest formations and the oldest in the South American continent, existing for roughly 70 million years (LEITÃO FILHO, 1987), with origins in an ancient floristic heritage from the breakage of the Gonduana supercontinent, first with Africa in the Cretaceous and then with the Oceania and Antarctica (LEITE, 2002). The high richness in tree species recorded for Fabaceae, Mimosaceae, Rubiaceae, Lauraceae and Euphorbiaceae, does not occur only in the Atlantic domain and

Gentry (1995) reveals that these families already displayed a high number of species in South America during the Miocene, between 23 to 5 million years ago. This period that predated both the uplift of the Andes to the West, as well as the crystalline complex to the East of the continent also predates the Quaternary climatic fluctuations when glacial cycles were more frequent (BURNHAM; GRAHAM, 1999; KIOUS; TILLING, 1996), during which time the evolution and exposure of the Brazilian coastal plains occurred (AMADOR; PONZI, 1974). These glacial cycles and sea level changes in the order of 110 meters lasted during the past 2.4 million years, bringing important consequences for the diversification of woody plants (RICHARDSON et al., 2001) and for the biogeography of tropical forests (HEWITT, 2000). The current distribution of physiognomies of the Atlantic domain *sensu lato* must have developed in the last 7 thousand years, when the semi-deciduous forest replaced the 'cerrado' areas due to a reduction in the annual dry season and in the moister climatic conditions (BEHLING, 2002) and a stabilization of the current sea level and of the marine holocenic terraces (SUGUIO; MARTIN, 1978). This relatively recent physiographic conformation in the geological period probably allowed some degree of speciation enough to the occurrence of internal differentiation, in the species level within the Atlantic domain.

The recognition of formal biogeographical provinces implies not only in the fact that each province contains distinct endemic taxa, but also that the biota within each province is more homogeneous than in their adjacent areas (BROWN; LOMOLINO, 1998). This internal homogeneity was understood between the DCA by comparing the phytophysiognomic classification of the forests to a proposition of subregions as subdivision and to the regrouping of the phytophysiognomic relations. This generated the formation of more similar and internally homogeneous groups. It was verified that this homogeneity is greater in the rainiest subregions and in the Deciduous subregion as well as that the

variation is greater between the Hinterlands of Southern and Southeastern Highlands.

The delimitation of species of restricted occurrence to a subregion was possible after the elimination of redundancies of indicator species. The analysis of the indicator species (ISA) allowed the recognition of the more regionalized phytophysiognomies, with dozens of tree species characteristics of each subregion. The restrictveness only between the phytogeographic subregions of the Atlantic domain area proposed was considered, however the occurrence of each species must be considered in other areas such as the Cerrado, Caatinga, Amazon and even in the Brazilian Northeast Atlantic Forest. When considering the geographical distribution of indicator species from *on line* reference sources, such as the Flora of Brazil List (FORZZA et al., 2010a), it was observed that each subregion is an area of intersection in the distribution of each species.

Out of the 20 climatic variables, at least five are necessary for the understanding of the variations in the approached scale: mean annual precipitation, temperature seasonality, mean annual temperature range, minimum monthly temperature, mean annual temperature and precipitation seasonality agreeing with Brown and Lomolino (1998) for which the types of vegetation are highly restricted to abiotic factors such as temperature and rainfall. The distribution of vegetation is controlled mainly by the climatic factors and the extremes may be more important than the averages (GOOD, 1964).

The influence of both in the seasonal and annual perspectives respectively, allowed the understanding of gradients that influence the phytogeographic subregions. Internal variations in the subregions demonstrate the behavior in the tropical-subtropical system. In the tropical set, the average annual temperatures are always greater than in the subtropical set, except for part of the Southeastern Hinterland Highlands that despite maintaining

temperatures at similar levels, the seasonality of rainfall is greater than commonly observed for subtropical subregions. This observation is interesting because the rain seasonality in the subtropical regions is comparable to levels that occur in the Tropical Central Corridor, where the precipitation level is high. The Serra do Mar and Paranense Corridors by the tropical meridional set and the Hinterland of the Southeastern Highlands and the Tropical Central Corridor by the tropical side, mark the climatic transition of the system and are important to maintain a flow of common species.

Despite the decrease in tree species richness in high latitudes, a filter of species is mainly perceived from the tropical-subtropical transition in the Serra do Mar Corridor set when analyzing the latitudinal gradient. If the lowest richness in the subtropical regions can be explained partially by the bioclimatic variables then it is suggested that the temperature must have greater influence than the rainfall, because in the South there is an increase in the rain levels coming from the South and the Andes which render them as rainy as the tropical rain forests.

To the northern boundary of lower latitudes, a false trend of decreased richness was observed. This can be justified by both the fewer inventories available in the literature which could complete the database, and by the naturally smaller richness distribution in the Atlantic Forest in the lowest latitudinal range studied, which coincides with the pioneer formations (fluvial-lacustrine) of the São Francisco River delta and the occurrence with the Caatinga domain not considered with in whole in this analysis. At latitudes lower than 19º S, Santos (2009) encountered 1,243 tree species occurring between the Caatinga and the Dry Forest.

The valuable Northeastern arboreal richness is reiterated here not only because the Deciduous Forest and the Northeastern Tropical Coastal Plains present more species than the Paranense Corridor and the Subtropical Hinterland

Valleys. But presents different floristic units, rich and rare. In addition, the Deciduous forest, under the conservationist focus, presents the highest degree of rare species among the inland subregions in the Atlantic domain. The absolute richness of the inland forests has a mega diverse character even when displaying fewer species then the forests near the Atlantic coast and it shouldn't be dismissed by the conservationist efforts (SCARANO, 2006; SMITH et al., 2001). The set of species from each subregion is an expression of its structural capacity and resilience, as it also states about the diversity maintenance and the tolerance of the species components of the Atlantic Domain.

The Deciduous Forest subregion includes the phytophysiognomies from the Dry Forest (or Mata Seca) and the arboreal Caatinga with floristic affinities in the set of the Vale do Rio São Francisco. The separation between the Caatinga and Atlantic Forest domains, in the case of deciduous forest trees, is hampered by the presence of floristic subsets that are continuous from these two types of forests with the semi-deciduous forests. There are exclusive species necessary for the maintenance of the Deciduous Forest. The Mata Seca cannot be uncharacterized off of the Atlantic Forest and the arboreal Caatinga cannot be neglected about its important to share species with the Mata Seca, especially when considering the species that are more resistant to the dry seasons.

In other hand, it is essential to understand how the biodiversities transition from ecosystems of humid and hot downlands from the phytogeographic study in the Atlantic Forest, with a view to protecting the integrated regional biodiversities *in situ* (AB'SÁBER, 2003). The Southeastern and Northeastern Tropical Coastal Plains subregions mark the transition to these downland environments. This means that the sets of species from these two coastal plain regions can house recent elements of holocentric diversification. The other subregions present a geographical distribution in some way related with the mountainous elevations of the Brazilian Atlantic domain. For example,

from the Cadeia do Espinhaço (BA) to the Serras Gaúchas (RS) in the direction North-South or from the Serra dos Órgãos (RJ) to the Chapadão do Sul (MS) in the direction East to West.

The flora from the mountains is old and has close links with the Brazilian coastline formed by the breakage of the supercontinent (LEITE, 2002). According to the author, these old floras from the mountains diverge from the rain forest floras lining the Atlantic slope of the Brazilian Atlantic coastal hills of quaternary origin. The same author believes that an impoverishment of the flora took place in its expansion to the South and, adaptation and developments of species did not occur in the mountains in adaptation to the coastal rain forest flora in the southern tip of Brazil. In fact, there was no distinct phytogeographic group for the Southern coastal region of Brazil, as there were in the Northeast and Southeast. The analyses in this study support that there are fewer than a dozen exclusive species in the Subtropical Rainforest Corridor. However, the heterogeneity is highlighted in the existence of three phytogeographic subregions which seem to support the observation by Rambo (1956) that the flora of southern forests is influenced by three floristic branches of different ages: Subtropical Hinterland Valleys, Southern Hinterland Highlands and the Subtropical Rainforest Corridor.

The Southern Hinterland Highlands presents wide phytophysiognomic variation from the Araucaria mixed forest. Its heterogeneity was conferred by Jarenkow and Budke (2009) when assessing the importance of altitude and latitudinal gradient in the floristic differentiation and in the definition of patterns of richness. In the biogeographical history of the South American Araucarias, migration and refuge events are highlighted throughout the continent, with Araucaria angustifolia occupying cold and wet territories and showing recent expansion towards the fields in the Brazilian Southern Plateau, at around 4,300 years ago (BAUERMANN; BEHLING, 2009).

The use of a composite variable, like the altitude x |latitude|, demonstrated to be more appropriate to the scale of the study than the use of altitude separately, because it maintained high canonical correlation (> 0.95) with the altitude x |latitude| and yet this latter was vectored in the ordering process of the first two axes. This demonstrates the importance of a joint analysis in this scale, including these two spatial variables. In the light of the observations by Humboldt, which is today one of the presumptions of biogeography, is the association between the latitude and altitude gradients, environmentally similar with shared biota in supra generic or converging hierarchical levels, as already detected for the Páramos and Campos de altitude in South America (SAFFORD, 2007).

In the analyzed altitude gradient, under the approached study scale, it was possible to detect floristically the proximity of mixed Araucarian forest with the cloud forest in higher altitudes in the Serra da Mantiqueira in tropical ranges, as well as the extensions of the Subtropical Rainforest Corridor in tropical territory or even the extension of the Serra do Mar Corridor up to the mountains of Espirito Santo. All these extensions in the northern limit of each of these subregions corresponded to the montane regions and point to island or remanescent patterns.

Some authors propose the inclusion of the semi-deciduous forests from the Atlantic Phytogeographic Domain in the Pleistocene Arch, or dried diagonal of the tropical Forests seasonally dried (e.g. PENNINGTON et al., 2004). However, the questioning of Oliveira-Filho, Jarenkow and Rodal (2006) about the occurrence of typical elements in the rain forests flora is reinforced by the grouping and dissimilarity analyses of the present study. It was observed that there are two large groups of semi-deciduous, one more associated with the rain forest and the other closer to the deciduous. The latter is more inland and best suited to the analysis of floristic patterns in the dried diagonal.

The possibility to evaluate the tree flora of a whole region in the Atlantic Forest domain, such as the database of areas in the southern basin of São Francisco analyzed in this study, allowed to recognize internal subdivisions and to strengthen, just as in Oliveira-Filho and Fontes (2000), that the definition of the Atlantic Forests should be as comprehensive as the definition of the Amazonian Forests.

A comparison with the biogeographic provinces and districts of Latin America proposed by Cabrera and Willink (1973) is difficult. The reason being only forestry regions were used and the analysis involved only the arboreal group in that study. However, the patterns of this synusia informed important phytogeographic relations for the Atlantic Forests. The subdivision of the Paranense province in the Matas, Araucarias and Serrano districts by Cabrera and Willink (1973) are compared here only to the subregions of Subtropical Hinterland Valleys and Southern Hinterland Highlands, respectively. A direct comparison was not possible since the Atlantic province was not split into districts. However the parallels are more meanigful with the subdivisions reported by Rizzini (1963, 1997) and Silva and Casteleti (2003).

Parallels can be drawn with the following subdivisions of Rizzini (1963): Atlantic Province: Northeastern Subprovince, Hinterland sector (parallel with the Deciduous Forest subregion); Austro-Oriental Subprovince, Coastal Sector, Cordillera Sector, (part of the Serra do Mar Corridor, Subtropical Rainforest Corridor and Southeastern Hinterland Highlands), Tabuleiro Sector (part of the Tropical Central Corridor subregion), Pine Forest Sector (congruent with the Subtropical Hinterland Valleys and Paranense Corridor and mixed Araucarian forest of the Southern Hinterland Highlands).

The subregions and parallels with this study are as follows according to the classification of Silva and Casteleti (2003): São Francisco (part of the Deciduous Forest), Diamantina (part of the Forestry Hinterland Enclaves), Bahia

(Tropical Central Corridor, Northeastern Tropical Coastal Plains), Inland forests (Southeastern Hinterland Highlands, Forestry Hinterland Enclaves, Paranense Corridor and Subtropical Hinterland Valleys), Araucaria forest (part of the Southern Hinterland Highlands subregion as it excludes the Cloud dwarf forest from the Serra da Mantiqueira) and Serra do Mar (Subtropical Rainforest Corridor, Serra do Mar Corridor and part of the Southeastern Tropical Coastal Plains).

It geographical overlay of the tree flora subregions is interesting when assessed with the proposals by Silva and Casteleti (2003), from the rarity of butterflies, mammals and birds of the Atlantic Forest. It contributes to the theoretical body that can strengthen public policies to create Conservation Units by subregion, thus preserving the distinct biota. These areas can be continuous, fragmented, remnants, enclaves or biological corridors to preserve and recover the forests and may have a more regionalized character with the knowledge of indicator species from each subregion, including the ones with wide occurrence to together compose the more effective strategies for the conservation of nature. This corroborates with the intents of Morellato and Haddad (2000) to execute deeper investigations in the Atlantic Forest for the effective conservation, rational management and public policies.

Additionally, the physiographic and geomorphological differentiation of the Atlantic domain contributes with the description of the evaluated subregions. According to Ab'Sáber (2003), in the Brazilian intertropical and subtropical vast territory array, the North-South continuous stands out in the Atlantic Forests, possessing one North-Northeast and one South-Southeast longitudinal axes which gives them a complex azonal character. According to the author, the knowledge about the partitioning of the Atlantic facade is essential for the understanding of ecological dynamics since the late Pleistocene. It is noteworthy to add that the proposed subregions allowed recognizing the subdivisions in

contiguous areas of forests and extensions beyond the central areas such as the Serra do Mar and Tropical Central Corridors, probably reflecting narrow physiographic corridors as mountain complexes and basins. However, in the Northeastern Tropical Coastal Plains there were observations of disjunctions in the State of Espírito Santo, which should be seen as outliers in the analysis and not as some real phytogeographic remanescent.

Hence, some territories appointed by geomorphological studies are congruent to the tree flora subregions. The Central and Southern highlands of the Paraná River basin, with basaltic fertile soils and moisture from the South correspond to the Subtropical Hinterland Valleys areas which has as its southern boundary the Serras Gaúchas. The Subtropical Rain Forest Corridor subregion covers biodiverse forests of Aparados da Serra, to the South, penetrating the Western edges of the Eastern facade of Santa Catarina, bordering the Paraná highlands to the east and extending to the Vale do Ribeira in the northern limit, until the half-mountain in the Mantiqueira complex, in São Paulo (Bananal) and Minas Gerais (Serra Negra). This is a tropical rain forest coastal floristic center, currently a transmitter of flows of evergreen elements (LEITE, 2002), which relates with the mixed Araucarian forests forming biodiverse subtropical forests in areas of cold climates, however with high rainfall levels well distributed throughout the year.

The semi-deciduous forests from the Paranense Corridor refer to the Atlantic Forests in Northern Paraná, adjacent to the Paulista midwestern forests over sedimentary plateaus. The Southeastern Hinterland Highlands subregion is the central area of the domain of the "sea of hills" covering the Southern region and the Zona da Mata, Minas Gerais. The Forestry Hinterland Enclaves are inserted in a mixed domain and considered in ecological transition, with both the cerrados and the caatingas. The Deciduous Forest subregion ranges from

moistened areas of depression in the São Francisco Valley to the semi-arid with fields of inselbergs.

In the Tropical Central Corridor subregion, the forests of South-southeastern Bahia until the forest on tertiary "tabuleiros" of Espírito Santo penetrate into the regions of the Vale do Mucuri and Rio Doce in Minas Gerais, by the Eastern basins of this state. This internalization covers up to 300 kilometers inwards, until the Oriental fringes of the Serra do Espinhaço. The Serra do Mar Corridor span from areas of mountains and valleys in Santa Catarina to mountain ridges in Espírito Santo.

According to Oliveira-Filho and Fontes (2000), the tree flora of the rain forests are closer to the adjacent seasonal forests than to the Amazon rainforest. There are 7.5 times less shared species between the Cerrado and the semi-deciduous forest than between the rain forests and the semi-deciduous forests. The tree flora of the semi-deciduous forests is, largely, a sub-set of the rainforest flora. The semi-deciduous forests comprise two subsets representing the transition between the rain forests and the deciduous forests. The Southeastern Hinterland Highlands subregion is closer to the subregions with rain forests (Serra do Mar Corridor, Southeastern Tropical Coastal Plains and Tropical Central Corridor), while the Forestry Hinterland Enclaves have more similar relationships to the Deciduous Forest. It is noted that these semi-deciduous regions maintain stocks of shared species with the extreme phytophysiognomies, the deciduous and rain forests. Therefore, one can imagine predicting the effect of climatic changes over the expansion and retraction of the geographic distribution of the forest types.

Some patterns already detected by Oliveira-Filho and Fontes (2000) are reaffirmed as: (a) the differentiation between rain forests and semi-deciduous is floristically consistent and strongly correlated with the regime of rainfall, although the transitions can be abrupt and gradual; (b) there is a North-South

differentiation both for rain forests and semi-deciduous forests, probably caused by variations in temperature and rainfall regime; (c) the flora of the semi-deciduous forests also changes with the distance from the ocean and the corresponding increase in the seasonality or duration of the dry season; and (d) altitude and its corresponding temperature variations are strongly correlated with the internal differentiation of both rain forests and semi-deciduous forests. The association of the tropical forestry types of high altitudes in the Serra da Mantiqueira and the Serra do Mar Corridor to the subtropical forestry types still reveals, before the climatic similarities, relict-like areas or floras that gave rise to the southern floristic sets.

The classification of vegetation physiognomic of tropical and subtropical cis-Andean South American proposed by Oliveira-Filho (2009) has proved to be fundamental to the phytogeographic classification described in this study, especially by presenting hierarchical attributes for thermal domains, climatic regimes, leaf renewal and altitudinal bands with geographically very clear criteria. It is believed that this has been the focal point so that the phytogeographic classification, which was also consistent with the existing climatic variation in the Atlantic domain, could have their subregions named and described with the more regionalized character of their phytophysiognomies.

The history of the climatic changes during the Quaternary, with the alternations and combinations between cold and hot and dry and humid, reflects the vegetation patterns distributed today by the immense environmental variability of the Atlantic domain (LEDRU; MOURGUIART; RICCOMINI, 2009). It is interesting to note that the Southeastern Hinterland Highlands, the Paranense and Serra do Mar Corridors forests, marked the subtropical and tropical floristic differentiation. The tree flora of the Atlantic subtropical forests is composed of a vast majority of tree species, non-exclusive in their domains; however, there are at least a hundred reasons to preserve those (134 unique

species). Even those species which predominate by their phytophysiognomies and phytogeographic subregions shall be examined taking into consideration that their populations may present some ecophysiological adaptation to changing climates existing in the domain. It was noted that the rarity relative importance is bigger in the perimeters or borders of the subregions, both in coastal and continental boundaries. Nevertheless, there are up to 3 times more rare species in the Atlantic Forest in the 100 km closer to the ocean.

7 CONCLUSION

The results from this study have added an important contribution to the knowledge of phytogeographic differentiation of the trees in the Atlantic Forest *sensu lato* to the South of the São Francisco River basin. It is concluded that the use of a binary database of presence/absence of tree species in the domain for the phytogeographic classification satisfied the differentiation of floristic patterns, maintaining high correlation with the phytophysiognomic classification and the climate. The regionalization of the Atlantic Forests, the knowledge of the species that are restricted to the subregions, the similarity relations and their patterns of richness, geographic distribution and climatic characteristics are a crucial tool for everyone involved in the elaboration of effective strategies and actions for conservation (CÂMARA, 2003; SILVA; CASTELETI, 2003). Further studies will allow the understanding of localized groupings among subregions and about how they share species with other biomes. These results are the return from the efforts applied towards each published inventory that have been made available in the last decades which in this study, were analyzed in a regionalized scale.

REFERENCES

AB'SÁBER, A. N. **Os domínios de natureza no Brasil**: potencialidades paisagísticas. 2. ed. São Paulo: Ateliê Editorial, 2003. 159 p.

AMADOR, E. S.; PONZI, V. R. A. Estratigrafia e sedimentação dos depósitos flúvio-marinhos da orla da Baía de Guanabara. **Anais da Academia Brasileira de Ciências**, Rio de Janeiro, v. 46, n. 1, p. 3-4, 1974.

ANGIOSPERM PHYLOGENY GROUP. An update of the Angiosperm Phylogeny Group classification for the orders and families of flowering plants: APG III. **Botanical Journal of the Linnean Society**, London, v. 161, n. 2, p. 105-121, 2009.

AUSTIN, M. P. Vegetation and environment: discontinuities and continuities. In: MAAREL, E. van der (Ed.). **Vegetation ecology**. Malden: Blackwell Science, 2005. p. 52-84.

BAUERMANN, S. G.; BEHLING, H. Padrões florísticos e análise estrutural de remanescentes florestais com *Araucaria angustifolia* no Brasil. In: FONSECA, C. S. D. et al. (Org.). **Floresta com araucária**: ecologia, conservação e desenvolvimento sustentável. Ribeirão Preto: Holos, 2009. p. 113-126.

BEHLING, H. South and southeast Brazilian grasslands during Late Quaternary times: a synthesis. **Palaeogeography, Palaeoclimatology, Palaeoecology**, Amsterdam, v. 177, n. 1/2, p. 19-27, Jan. 2002.

BIGARELLA, J. J.; ANDRADE-LIMA, D.; RIEHS, J. Considerações a respeito das mudanças paleoclimáticas na distribuição de algumas espécies vegetais e animais no Brasil. **Anais da Academia Brasileira de Ciências**, Rio de Janeiro, v. 47, p. 411- 464, 1975. Suplemento.

BORCARD, D.; LEGENDRE, P. All-scale spatial analysis of ecological data by means of principal coordinates of neighbour matrices. **Ecological Modelling**, [S.l.], v. 153, n. 1/2, p. 51-68, July 2002. Doi:10.1016/S0304-3800(01)00501-4.

BORCARD, D.; LEGENDRE, P.; DRAPEAU, P. Partialling out the spatial component of ecological variation. **Ecology**, Washington, v. 73, n. 3, p. 1045-1055, 1992.

BREIMAN, L. et al. **Classification and regression trees**. Monterey: Wadsworth & Brooks/Cole Advanced Books & Software, 1984.

BROWN, J. H.; LOMOLINO, M. V. **Biogeography**. 2nd ed. Sunderland: Sinauer Associates, 1998.

BURNHAM, R. J.; GRAHAM, A. The history of neotropical vegetation: new developments and status. **Annals of the Missouri Botanical Garden**, St. Louis, v. 86, n. 2, p. 546-589, 1999.

CABRERA, A. L.; WILLINK, A. **Biogeografia de América Latina**. Washington: Eva V. Chesneau/ Organización de los Estados Americanos, 1973. 117 p. (Serie Biología. Monografía, n. 13).

CÂMARA, I. G. Brief history of conservation in the Atlantic Forest. In: GALINDO-LEAL, C.; CÂMARA, I. G. (Ed.). **The Atlantic Forest of South America**. Washington: Center for Applied Biodiversity Science, 2003. p. 31-42.

DEAN, W. **With broadax and firebrand**: the destruction of the brazilian Atlantic Forest. Berkeley: University of California, 1997.

DUFRÊNE, M.; LEGENDRE, P. Species assemblages and indicator species: the need for a flexible asymmetrical approah. **Ecological Monographs**, Ithaca, v. 67, n. 3, p. 345-366, 1997.

FERNANDES, A. **Conexões florísticas do Brasil**. Fortaleza: Banco do Nordeste, 2003. 134 p.

FERRAZ, E. M.; ARAÚJO, E. D.; SILVA, S. I. da. Floristic similarities between lowland and montane areas of Atlantic Coastal Forest in Northeastern Brazil. **Plant Ecology**, Oxford, v. 174, n. 1, p. 59-70, 2004.

FORZZA, R. C. et al. (Org.). **Lista de espécies da flora do Brasil**. Rio de Janeiro: Jardim Botânico do Rio de Janeiro, 2010a. Available at: <http://floradobrasil.jbrj.gov.br/2010/>. Access on: nov. 2, 2010.

FORZZA, R. C. et al. Síntese da diversidade. In: FORZZA, R. C. et al. (Org.). **Catálogo de plantas e fungos do Brasil**. Rio de Janeiro: A. Jakobson Estúdio, 2010b. v. 1, p. 21-42.

GARCIA, R. J. F.; PIRANI, J. R. Análise florística, ecológica e fitogeográfica do Núcleo Curucutu, Parque Estadual da Serra do Mar (São Paulo, SP), com ênfase nos campos junto à crista da Serra do Mar. **Hoehnea**, São Paulo, v. 32, n. 1, p. 1-48, 2005.

GENTRY, A. H. Patterns of diversity and floristic composition in neotropical montane forests. In: CHURCHILL, S. P. et al. (Ed.). **Biodiversity and conservation of neotropical montane forests**: neotropical montane forest biodiversity and conservation symposium. New York: New York Botanical Garden, 1995. p. 103-126.

GONZAGA, A. P. et al. Diagnóstico florístico-estrutural do componente arbóreo da floresta da Serra de São José, Tiradentes, MG, Brasil. **Acta Botanica Brasilica**, São Paulo, v. 22, n. 2, p. 505-520, 2008.

GOOD, R. **Geography of the flowering plants**. 3rd ed. Londres: Longmans, Green & Co. 1964.

GREENACRE, M.; BLASIUS, J. (Ed.). **Multiple correspondence analysis and related methods**. Boca Raton: Chapman & Hall/CRC, 2006.

HAMMER, Ø; HARPER, D. A. T.; RYAN, P. D. PAST: paleontological statistics software package for education and data analysis. **Paleontologia Eletronica**, [S.l.], v. 4, n. 1, p. 1-9. 2001.

HEWITT, G. The genetic legacy of the Quaternary ice ages. **Nature**, London, v. 405, n. 6789, p. 907-13, June 2000. Doi:10.1038/35016000.

HIJMANS, R. J. et al. Very high resolution interpolated climate surfaces for global land areas. **International Journal of Climatology**, Chichester, v. 25, n. 15, p. 1965-1978, 2005.

HILL, M. O.; GAUCH, H. G. Detrended correspondence analysis: an improved ordination technique. **Vegetatio**, Washington, v. 42, n. 1/3, p. 47-58, 1980.

HILL, M. O. **TWINSPAN**: A FORTRAN program for arranging multivariate data in an ordered two-way table by classification of the individuals and attributes. Ithaca: Ecology and Systematics, Cornell University, 1979.

HIROTA, M. M.; PONZONI, F. J. (Coord.). **Atlas dos remanescentes florestais da Mata Atlântica**: período 2000-2005. São Paulo: Fundação SOS Mata Atlântica/Instituto Nacional de Pesquisas Espaciais, 2008.

HUGGET, R. J. **Geoecology, an evolutionary approach**. London: Routledge, 1995.

JARENKOW, J. A.; BUDKE, J. C. Padrões florísticos e análise estrutural de remanescentes florestais com *Araucaria angustifolia* no Brasil. In: FONSECA, C. S. D. et al. (Org.). **Floresta com araucária**: ecologia, conservação e desenvolvimento sustentável. Ribeirão Preto: Holos, 2009. p. 113-126.

KENKEL, N. C.; ORLÓCI, L. Applying metric and nonmetric multidimensional scaling to ecological studies: some new results. **Ecology**, Washington, v. 67, n. 4, p. 919-928, 1986.

KENT, M.; COKER, P. **Vegetation description and analysis, a practical approach**. London: Belhaven, 1992.

KIOUS, W. J.; TILLING, R. I. **The dinamic earth**: the story of plate tectonics. Washington: United States Geological Service/U.S. Government Priting Office, 1996.

LEDRU, M.; MOURGUIART, P.; RICCOMINI, C. Related changes in biodiversity, insolation and climate in the Atlantic rainforest since the last interglacial. **Palaeogeography, Palaeoclimatology, Palaeoecology**, Amsterdan, v. 271, n. 1/2, p. 140-152, Jan. 2009. Doi:10.1016/j.palaeo.2008.10.008.

LEGENDRE, P.; LEGENDRE, L. **Numerical ecology**. Amsterdam: Elsevier, 1998.

LEITÃO FILHO, H. F. Considerações sobre a florística de florestas tropicais e subtropicais do Brasil. **IPEF**, Piracicaba, n. 35, p. 41-46, abr. 1987.

LEITE, P. F. Contribuição ao conhecimento fitoecológico do sul do Brasil. **Ciência & Ambiente**, Santa Maria, v. 24, p. 51-73, jan./jun. 2002.

MARQUES, M. C. M.; SWAINE, M. D.; LIEBSCH, D. Diversity distribution and floristic differentiation of the coastal lowland vegetation: implications for the conservation of the Brazilian Atlantic Forest. **Biodiversity and Conservation**, Netherlands, v. 20, n. 1, p. 153-168, 2011. Doi: 10.1007/s10531-010-9952-4.

MARTIUS, C. F. P. von. A fisionomia do reino vegetal no Brasil. **Anuário Brasileiro de Economia Florestal**, Rio de Janeiro, v. 10, n. 10, p. 209-227, 1958.

MCCUNE, B.; GRACE, J. B. **Analysis of ecological communities**. 2nd ed. Gleneden Beach: MjM Software Design, 2002. 300 p.

MCCUNE, B.; MEFFORD, M. J. **PC-ORD, multivariate analysis of ecological data, version 5.10**. Gleneden Beach: MjM Software Design, 2006.

MENINI NETO, L.; FORZZA, R. C.; ZAPPI, D. Angiosperm epiphytes as conservation indicators in forest fragments: a case study from southeastern Minas Gerais, Brazil. **Biodiversity and Conservation**, Netherlands, v. 18, n. 14, p. 3785-3807, July 2009. Doi:10.1007/s10531-009-9679-2.

METZGER, J. P. Conservation issues in the Brazilian Atlantic forest. **Biological Conservation**, Oxford, v. 142, n. 6, p. 1138-1140, 2009.

MINISTÉRIO DO MEIO AMBIENTE. **Avaliações e ações prioritárias para a conservação da biodiversidade da Mata Atlântica e Campos Sulinos**. Brasília: MMA/SBF, 2000. 40 p.

MINISTÉRIO DO MEIO AMBIENTE. Instrução normativa n. 6, de 23 de setembro de 2008. Espécies da flora brasileira ameaçadas de extinção e com deficiência de dados. **Diário Oficial [da] República Federativa do Brasil**, Poder Executivo, Brasília, DF, 24 set. 2008. Seção 1, p. 75-83.

MORELLATO, L. P. C.; HADDAD, C. F. B. Introduction: the Brazilian Atlantic Forest. **Biotropica**, Washington, v. 32, n. 4b, p. 786-792, 2000.

MYERS, N. et al. Biodiversity hotspots for conservation priorities. **Nature**, London, v. 403, n. 6772, p. 853-858, 2000.

NETTESHEIM, F.; MENEZES, L.; CARVALHO, D. Influence of environmental variation on Atlantic Forest tree-shrub-layer phytogeography in southeast Brazil. **Acta Botanica Brasilica**, São Paulo, v. 24, n. 2, p. 369-377, 2010.

OLIVEIRA-FILHO, A. T. Classificação das fitofisionomias da América do Sul cisandina tropical e subtropical: proposta de um novo sistema prático e flexível ou uma injeção a mais de caos? **Rodriguésia**, Rio de Janeiro, v. 60, n. 2, p. 237-258, 2009.

OLIVEIRA FILHO, A. T. et al. Análise florística do compartimento arbóreo de áreas de Floresta Atlântica sensu lato na região das Bacias do Leste (Bahia, Minas Gerais, Espírito Santo e Rio de Janeiro). **Rodriguésia**, Rio de Janeiro, v. 56, n. 87, p. 185-235, 2005.

OLIVEIRA-FILHO, A. T.; FONTES, M. A. L. Patterns of floristic differentiation among Atlantic forests in south-eastern Brazil, and the influence of climate. **Biotropica**, Washington, v. 32, p. 793-810, 2000. Supplement 5.

OLIVEIRA-FILHO, A. T.; JARENKOW, J. A.; RODAL, M. J. N. Floristic relationships of seasonally dry forests of eastern South America based on tree species distribution patterns. In: PENNINGTON, R. T.; RATTER, J. A.; LEWIS, G. P. (Ed.). **Neotropical savannas and dry forests**: plant diversity, biogeography and conservation. Boca Raton: CRC, 2006. p. 159-192.

OLIVEIRA-FILHO, A. T. **TreeAtlan 2.0, flora arbórea da América do Sul cisandina tropical e subtropical**: um banco de dados envolvendo biogeografia, diversidade e conservação. Universidade Federal de Minas Gerais, 2010. Available at: <http://www.treeatlan.icb.ufmg.br/>. Access on: mar. 31, 2010.

PENNINGTON, R. T. et al. Historical climate change and speciation: neotropical seasonally dry forest plants show patterns of both tertiary and quaternary diversification. **Philosophical Transactions of the Royal Society of London. Series B**, London, v. 359, n. 1443, p. 515-538, 2004. Doi:10.1098/rstb.2003.1435.

RABINOWITZ, D.; CAIRNS, S.; DILLON, T. Seven forms of rarity and their frequency in the flora of the British Isles. In: SOULÉ, M. E. (Ed). **Conservation biology**: the science of scarcity and diversity. Massachusetts: Sinauer Associates, 1986. p. 182-204.

RAMBO, B. **A fisionomia do Rio Grande do Sul**: ensaio de monografia natural. 2. ed. Porto Alegre: Selbach, 1956. 456 p.

RIBEIRO, M. C. et al. The Brazilian Atlantic Forest: how much is left, and how is the remaining forest distributed? Implications for conservation. **Biological Conservation**, Oxford, v. 142, n. 6, p. 1141-1153, 2009. Doi:10.1016/j.biocon.2009.02.021.

RICHARDSON, J. E. et al. Rapid diversification of a species-rich genus of neotropical rain forest trees. **Science**, Washington, v. 293, n. 5538, p. 2242-2245, 2001. Doi:10.1126/science.1061421.

RIZZINI, C. T. Nota prévia sobre a divisão fitogeográfica do Brasil. **Revista Brasileira de Geografia e Estatística**, Rio de Janeiro, v. 25, n. 1, p. 3-64, 1963.

RIZZINI, C. T. **Tratado de fitogeografia do Brasil**: aspectos ecológicos, sociológicos e florísticos. Rio de Janeiro: Âmbito Cultural, 1997.

SAFFORD, H. D. Brazilian Páramos: IV. phytogeography of the campos de altitude. **Journal of Biogeography**, Hoboken, v. 34, n. 10, p. 1701-1722, Oct. 2007. Doi:10.1111/j.1365-2699.2007.01732.x.

SAMPAIO, A. J. de. **Fitogeografia do Brasil**. 3. ed. São Paulo: Comp. Ed. Nacional, 1945. 372 p.

SANTOS, R. M. dos. **Identidade e relações florísticas da caatinga arbórea do norte de Minas Gerais e sudeste da Bahia**. 2009. 118 p. Tese (Doutorado em Ciências Florestais)–Universidade Federal de Lavras, Lavras, 2009.

SCARANO, F. R. Prioridades para conservação: a linha tênue que separa teorias e dogmas. In: ROCHA, C. F. D. et al. (Ed.). **Biologia da conservação**: essências. São Carlos: RiMa, 2006. cap. 1, p. 23-41.

SCUDELLER, V. V.; MARTINS, F. R.; SHEPERD, G. J. Distribution and abundance of arboreal species in the atlantic ombrophilous dense forest in Southeastern Brazil. **Plant Ecology**, Oxford, v. 152, n. 2, p. 185-199, 2001.

SILVA, J. M. C.; CASTELETI, C. H. M. Status of the biodiversity of the Atlantic Forest of Brazil. In: GALINDO-LEAL, C.; CÂMARA, I. G. (Ed.). **The Atlantic Forest of South America**: biodiversity status, threats, and outlook. Washington: Center for Applied Biodiversity Science, 2003. p. 43-59.

SMITH, T. B. et al. Biodiversity hotspots and beyond: the need for preserving environmental transitions. **Trends in Ecology and Evolution**, Oxford, v. 16, n. 8, p. 431, 2001.

SPSS INCORPORATION. **SPSS Base 14.0 user's guide**. Chicago, 2005. 764 p.

STEHMANN, J. et al. (Org.). **Plantas da Floresta Atlântica**. Rio de Janeiro: Jardim Botânico do Rio de Janeiro, 2009. v. 2.

SUGUIO, K.; MARTIN, L. Formações quaternárias marinhas do litoral paulista e sul fluminense (Quaternary marine formations of the State of São Paulo and southern Rio de Janeiro). In: INTERNACIONAL SYMPOSIUM ON COASTAL EVOLUTION IN THE QUATERNARY, 1978, São Paulo. **Proceedings.** São Paulo: SBG/IGUSP, 1978. p. 1-55. Special Publication, v. 1, n. 1.

TER BRAAK, C. J. F. **CANOCO – A FORTRAN program for canonical community ordination by (partial) (detrended) (canonical) correspondence analysis, principal components analysis and redundancy analysis**: version 2.1. Wageningen: Technical report LWA-88-02/ TNO-Institute of Applied Computer Science, 1988.

TER BRAAK, C. J. F. Ordination. In: JONGMAN, R. H. G.; TER BRAAK, C. J. F.; TONGEREN, O. F. R. van. **Data analysis in community and landscape ecology**. Cambridge: Cambridge University, 1995. p. 91-173.

TER BRAAK, C. J. F.; SMILAUER, P. **CANOCO Reference Manual and CanoDraw for Windows User's Guide**: Software for Canonical Community Ordination (version 4.5). Ithaca: Microcomputer Power, 2002.

TER BRAAK, C. J. F. The analysis of vegetation–environment relationships by canonical correspondence analysis. **Vegetatio**, Washington, v. 69, n. 1, p. 69-77, 1987.

VELOSO, H. P.; RANGEL FILHO, A. L. R.; LIMA, J. C. A. **Classificação da vegetação brasileira, adaptada a um sistema universal**. Rio de Janeiro: Instituto Brasileiro de Geografia e Estatística, 1991.

WALTER, H. **Vegetation of the earth and ecological systems of the geo–biosphere**. 3rd ed. Berlin: Springer-Verlag, 1985.

WEHRDEN, H. von et al. Pluralism and diversity: trends in the use and application of ordination methods 1990-2007. **Journal of Vegetation Science**, Knivsta, v. 20, n. 4, p. 695-705, 2009. Doi: 10.1111/j.1654-1103.2009.01063.x.

APPENDICES

APPENDIX A – List of 589 areas of Atlantic Forest studied.

Table 1 List of 589 areas of Atlantic Forest studied. For interpreted Vegetation Code: ERD= evergreen rain dwarf-forest, ERF= evergreen rain forest, ECF= evergreen cloud forest, ECD= evergreen cloud dwarf-forest, ESM= evergreen seasonal mixed Araucaria forest, ECM= evergreen cloud mixed Araucaria forest, ESM= evergreen seasonal mixed Araucaria forest, SSF= semi-deciduous seasonal forest, SDF= deciduous seasonal forest, CO = sandy coastal; LP = lower plains –; UP = upper plains, LH = lower highlands; UH = upper highlands; TR= tropical, ST= subtropical. 1= Subtropical Hinterland Valleys; 2= Southern Hinterland Highlands; 3= Subtropical Rain Forest Corridor; 4= Serra do Mar Corridor; 5= Southeastern Tropical Coastal Plains 6= Central Tropical Corridor; 7= Northeastern Tropical Coastal Plains; 8= Southeastern Hinterland Highlands; 9= Forestry Hinterland Enclaves; 10= Paranaense Corridor; 11= Deciduous Forest

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Triunfo	PEtriu	Brazil	PE	SSF-LH-TR	07º50'S	38º07'W	1002	11
Serra Negra	PEsneg	Brazil	PE	SDF-LH-TR	08º39'S	38º02'W	842	11
Santana do São Francisco	SEsant	Brazil	SE	SSF-LP-TR	10º16'S	36º38'W	10	7
Aracaju	SEarac	Brazil	SE	ERD-CO-TR	10º39'S	36º44'W	5	7
Itabaiana	SEitab	Brazil	SE	SSF-UP-TR	10º44'S	37º22'W	409	7
Mansidão, caatinga arbórea	BAmans	Brazil	BA	SDF-UP-TR	10º47'S	43º37'W	460	11
Jacobina	BAjaco	Brazil	BA	SSF-LH-TR	11º10'S	40º29'W	848	9
Formosa do Rio Preto	BAform	Brazil	BA	SSF-LH-TR	11º13'S	46º13'W	722	9
Formosa do Rio Preto, caatinga arbórea	BAfoca	Brazil	BA	SDF-UP-TR	11º13'S	45º24'W	550	11
Santa Luzia do Itanhi	SEsita	Brazil	SE	ERD-CO-TR	11º22'S	37º24'W	11	7
Gentio do Ouro	BAgent	Brazil	BA	SSF-UH-TR	11º26'S	42º30'W	1104	9
Morro do Chapéu	BAmorr	Brazil	BA	SSF-LH-TR	11º35'S	41º12'W	1093	9
Riachão das Neves, caatinga arbórea	BArnev	Brazil	BA	SDF-UP-TR	11º44'S	44º54'W	501	11

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Ibotirama, caatinga arbórea	BAibot	Brazil	BA	SDF-UP-TR	12º04'S	43º17'W	420	11
Alagoinhas	BAalag	Brazil	BA	ERF-LP-TR	12º07'S	38º17'W	141	7
Feira de Santana	BAfesa	Brazil	BA	SSF-UP-TR	12º10'S	39º11'W	462	11
Grotão	BAgrot	Brazil	BA	SSF-UH-TR	12º16'S	41º27'W	1010	9
Barreiras	BAbrre	Brazil	BA	SSF-UP-TR	12º16'S	44º59'W	656	9
Cristópolis, caatinga arbórea	BAcris	Brazil	BA	SDF-LH-TR	12º22'S	44º33'W	800	11
Rui Barbosa	BArbrb	Brazil	BA	SSF-UP-TR	12º23'S	40º31'W	602	9
São Desidério, caatinga arbórea	BAsdca	Brazil	BA	SDF-UP-TR	12º23'S	44º58'W	505	11
Palmeiras	BApalm	Brazil	BA	SSF-LH-TR	12º27'S	41º27'W	835	9
Lençóis	BAlenc	Brazil	BA	SSF-UP-TR	12º31'S	41º23'W	561	9
Rio Mandassaia	BAmand	Brazil	BA	SSF-LH-TR	12º33'S	41º26'W	780	9
Cachoeira e Santo Amaro	BAcach	Brazil	BA	ERF-LP-TR	12º38'S	38º55'W	122	7
Roda Velha	BAroda	Brazil	BA	SSF-LH-TR	12º41'S	45º49'W	725	9
Salvador e Camaçari	BAsalv	Brazil	BA	ERD-CO-TR	12º44'S	38º19'W	18	7
Serra da Jibóia	BAjibo	Brazil	BA	SSF-UP-TR	12º51'S	39º28'W	531	6
Nazaré e Sto. Antônio de Jesus	BAnaza	Brazil	BA	ERF-LP-TR	12º59'S	38º55'W	42	7
Mucugê	BAmucu	Brazil	BA	SSF-UH-TR	13º00'S	41º22'W	1016	9
Abaíra, caatinga arbórea	BAabai	Brazil	BA	SDF-UH-TR	13º02'S	41º50'W	1400	11
Maracás	BAmara	Brazil	BA	SSF-LH-TR	13º12'S	40º14'W	872	9
Chapadinha Itaeté	BAitae	Brazil	BA	SSF-LH-TR	13º13'S	41º09'W	755	9
Bom Jesus da Lapa, caatinga	BAbom	Brazil	BA	SDF-UP-TR	13º14'S	43º26'W	431	11

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
arbórea								
Caturama, caatinga arbórea	BAcatu	Brazil	BA	SDF-LH-TR	13º15'S	42º13'W	740	11
Correntina, caatinga arbórea	BAcoca	Brazil	BA	SDF-LH-TR	13º15'S	44º50'W	746	11
Catolés	BAcato	Brazil	BA	SSF-UH-TR	13º17'S	41º47'W	1233	9
Paramirim, caatinga arbórea	BAprmr	Brazil	BA	SDF-UP-TR	13º18'S	42º15'W	546	11
Correntina, caatinga arbórea	BAcorr	Brazil	BA	SDF-UP-TR	13º20'S	44º32'W	491	11
Ibicoara	BAibic	Brazil	BA	SSF-UH-TR	13º24'S	41º16'W	1035	9
Santa Maria da Vitoria, caatinga arbórea	BAsmvt	Brazil	BA	SDF-LH-TR	13º27'S	44º10'W	600	11
Cairu	BAcair	Brazil	BA	ERF-LP-TR	13º34'S	38º58'W	32	7
Rio de Contas	BArcon	Brazil	BA	SSF-UH-TR	13º35'S	41º49'W	1115	9
Wenceslau Guimarães	BAwenc	Brazil	BA	ERF-UP-TR	13º36'S	39º44'W	594	6
Nilo Peçanha	BAnilo	Brazil	BA	ERF-LP-TR	13º42'S	39º17'W	133	7
São Félix do Coribe, caatinga arbórea	BAsfco	Brazil	BA	SDF-LH-TR	13º47'S	44º18'W	732	11
Itamari	BAitju	Brazil	BA	ERF-UP-TR	13º55'S	39º42'W	483	6
Coribe, caatinga arbórea	BAcori	Brazil	BA	SDF-LH-TR	13º56'S	44º26'W	750	11
Jequié, Mata de Cipó	BAjeqm	Brazil	BA	SSF-UP-TR	13º57'S	40º07'W	596	6
Ibirapitanga	BAibta	Brazil	BA	ERF-UP-TR	13º58'S	39º25'W	256	7
Camamu e Maraú	BAcama	Brazil	BA	ERF-LP-TR	14º03'S	39º08'W	90	7
Carinhanha, caatinga arbórea	BAcari	Brazil	BA	SDF-UP-TR	14º12'S	43º58'W	470	11
Feira da Mata, caatinga arbórea	BAfmat	Brazil	BA	SDF-UP-TR	14º14'S	44º13'W	454	11

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Itacaré	BAitac	Brazil	BA	ERD-CO-TR	14º15'S	39º00'W	16	7
Juvenília, caatinga arbórea	MGjuve	Brazil	MG	SDF-UP-TR	14º17'S	44º07'W	467	11
Cocos, caatinga arbórea	BAcoco	Brazil	BA	SDF-UP-TR	14º17'S	44º43'W	547	11
Fazenda Capitão	BAfaze	Brazil	BA	ERF-LP-TR	14º21'S	39º04'W	107	6
Montalvânia, caatinga arbórea	MGmtlv	Brazil	MG	SDF-UP-TR	14º26'S	44º24'W	540	11
Monte Rei, caatinga arbórea	MGmrei	Brazil	MG	SDF-LH-TR	14º26'S	44º12'W	621	11
Uruçuca	BAuruc	Brazil	BA	ERF-UP-TR	14º30'S	39º07'W	218	6
RB do Verde Grande, caatinga arbórea	MGvrgd	Brazil	MG	SDF-UP-TR	14º45'S	43º49'W	466	11
Barro Preto	BAbprt	Brazil	BA	ERF-LH-TR	14º46'S	39º32'W	774	6
Ilhéus	BAilhe	Brazil	BA	ERF-LP-TR	14º48'S	39º06'W	72	6
Manga, RB Mata Seca, caatinga arbórea	MGmang	Brazil	MG	SDF-UP-TR	14º49'S	43º56'W	448	11
Vitória da Conquista	BAvito	Brazil	BA	SSF-LH-TR	14º51'S	40º44'W	923	9
Itabuna	BAitab	Brazil	BA	ERF-LP-TR	14º53'S	39º18'W	103	6
Gado Bravo, caatinga arbórea	MGgado	Brazil	MG	SDF-UP-TR	14º59'S	43º31'W	458	11
Matias Cardoso, Lajedão e Cajueiro, caatinga arbórea	MGljcj	Brazil	MG	SDF-UP-TR	14º59'S	43º54'W	470	11
Matias Cardoso, RB Jaíba, caatinga arbórea	MGjaib	Brazil	MG	SDF-UP-TR	15º04'S	43º46'W	477	11
Itapetinga	BAitpt	Brazil	BA	SSF-UP-TR	15º07'S	40º20'W	363	6
Veredas do Peruaçu, caatinga arbórea	MGperu	Brazil	MG	SDF-LH-TR	15º08'S	44º14'W	704	11
Jussari	BAjuss	Brazil	BA	ERF-UP-TR	15º10'S	39º27'W	452	6

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Arataca	BAarat	Brazil	BA	ERF-LH-TR	15º10'S	39º20'W	842	6
Cândido Sales	BAcand	Brazil	BA	SSF-LH-TR	15º11'S	41º12'W	830	11
Grande Sertão Veredas	MGgran	Brazil	MG	SSF-LH-TR	15º13'S	45º55'W	723	9
Una	BAuna	Brazil	BA	ERF-LP-TR	15º20'S	39º10'W	93	6
Jaíba, Serra Azul e Sabonetal, caatinga arbórea	MGsabo	Brazil	MG	SDF-UP-TR	15º22'S	44º01'W	522	11
Camacan	BAcamc	Brazil	BA	ERF-LH-TR	15º23'S	39º34'W	810	6
Ninheira	MGninh	Brazil	MG	SSF-LH-TR	15º24'S	41º35'W	816	9
Indaiabira, carrasco	MGindai	Brazil	MG	SSD-LH-TR	15º24'S	42º07'W	858	9
Águas Emendadas	DFagua	Brazil	DF	SSF-UH-TR	15º33'S	47º34'W	1124	9
Mato Verde, Pai Pedro, caatinga arbórea	MGpped	Brazil	MG	SDF-UP-TR	15º33'S	43º16'W	501	11
Cafuringa	DFcafu	Brazil	DF	SSF-UH-TR	15º34'S	48º03'W	1129	9
Brasília, FERCAL	DFferc	Brazil	DF	SDF-LH-TR	15º34'S	47º53'W	974	9
Januária, caatinga arbórea	MGjanu	Brazil	MG	SDF-UP-TR	15º36'S	44º43'W	468	11
Canavieiras	BAcana	Brazil	BA	ERF-LP-TR	15º41'S	39º06'W	20	7
Brasília, Parque Nacional	DFpnac	Brazil	DF	SSF-UH-TR	15º41'S	47º56'W	1042	9
Planaltina	DFplan	Brazil	DF	SSF-LH-TR	15º45'S	47º40'W	910	9
Pirenópolis	GOpiren	Brazil	GO	SSF-LH-TR	15º46'S	49º04'W	816	9
Bandeira	MGband	Brazil	MG	SSF-LH-TR	15º47'S	40º31'W	816	8
Sto. Antônio do Descoberto	GOstoa	Brazil	GO	SSF-LH-TR	15º48'S	48º21'W	967	9
Belmonte	BAbelm	Brazil	BA	ERD-CO-TR	15º50'S	39º04'W	24	6

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Itapebi	BAitap	Brazil	BA	SSF-UP-TR	15º55'S	39º40'W	235	6
Goiás Velho	GOgoia	Brazil	GO	SSF-LH-TR	15º56'S	50º06'W	870	9
Pedra Azul	MGpedr	Brazil	MG	SSF-LH-TR	15º59'S	41º17'W	641	9
Gama-Cabeça de Veado	DFgama	Brazil	DF	SSF-UH-TR	15º59'S	48º00'W	1193	9
Sagarana	MGsaga	Brazil	MG	SDF-LH-TR	16º00'S	47º00'W	941	11
Salto da Divisa	MGsdiv	Brazil	MG	SSF-LP-TR	16º03'S	40º04'W	157	9
Almenara	MGalm	Brazil	MG	SSF-LH-TR	16º03'S	40º51'W	829	8
Jequitinhonha	MGjqnh	Brazil	MG	SSF-LH-TR	16º08'S	41º04'W	846	8
Jacinto	MGjaci	Brazil	MG	SSF-UP-TR	16º10'S	40º23'W	251	9
São Romão	MGsrom	Brazil	MG	SDF-UP-TR	16º12'S	45º10'W	477	11
Urucuia, caatinga arbórea	MGuruc	Brazil	MG	SDF-UP-TR	16º14'S	45º32'W	485	11
Salinas, caatinga arbórea	MGsali	Brazil	MG	SDF-UP-TR	16º14'S	42º16'W	499	11
Santa Cruz Cabrália	BAsant	Brazil	BA	ERF-LP-TR	16º17'S	39º05'W	39	6
Santa Maria do Salto	MGsmst	Brazil	MG	ERF-LH-TR	16º22'S	40º01'W	845	8
Porto Seguro	BAport	Brazil	BA	ERF-LP-TR	16º23'S	39º08'W	75	6
Eunápolis	BAeuna	Brazil	BA	ERF-LP-TR	16º24'S	39º40'W	197	6
Francisco Sá	MGfran	Brazil	MG	SDF-LH-TR	16º27'S	43º28'W	732	11
Goiânia	GOgogo	Brazil	GO	SSF-LH-TR	16º32'S	48º08'W	943	9
Guaratinga	BAguar	Brazil	BA	ERF-UP-TR	16º33'S	39º54'W	293	6
Grão Mogol	MGgrao	Brazil	MG	SSF-LH-TR	16º33'S	42º54'W	953	9
Joaíma, carrasco	MGjoai	Brazil	MG	SSD-LH-TR	16º38'S	41º13'W	830	8

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Silvânia	GOsilv	Brazil	GO	SSF-LH-TR	16º40'S	48º38'W	987	9
Unaí	MGunai	Brazil	MG	SSF-LH-TR	16º43'S	47º11'W	904	9
Montes Claros	MGmocl	Brazil	MG	SDF-LH-TR	16°45'S	43°54'W	734	11
Virgem da Lapa	MGvirg	Brazil	MG	SSF-LH-TR	16º45'S	42º14'W	677	9
Juramento	MGjura	Brazil	MG	SDF-LH-TR	16º48'S	43º52'W	860	11
Monte Pascoal	BAmont	Brazil	BA	ERF-LP-TR	16º54'S	39º26'W	90	6
Posses	MGposs	Brazil	MG	SSF-UP-TR	16º54'S	42º46'W	584	9
Santa Fé de Minas	MGstfe	Brazil	MG	SDF-UP-TR	16º54'S	45º20'W	484	11
Araçuaí, caatinga arbórea	MGarac	Brazil	MG	SDF-UP-TR	16º55'S	42º07'W	335	11
Leme do Prado	MGleme	Brazil	MG	SSF-LH-TR	17º02'S	42º43'W	738	9
Brasilândia	MGbras	Brazil	MG	SSF-UP-TR	17º04'S	45º59'W	497	9
Buritizeiro	MGburi	Brazil	MG	SDF-UP-TR	17º04'S	44º48'W	480	11
Prado	BAprad	Brazil	BA	ERD-CO-TR	17º05'S	39º19'W	28	6
Águas Formosas	MGagfo	Brazil	MG	SSF-UP-TR	17º07'S	40º53'W	325	6
Jenipapo de Minas, caatinga arbórea	MGjeni	Brazil	MG	SDF-UP-TR	17º07'S	42º13'W	437	11
Acauã, carrasco	MGacau	Brazil	MG	SSD-LH-TR	17º09'S	42º46'W	860	9
Jequitaí	MGjequ	Brazil	MG	SDF-UP-TR	17º09'S	44º38'W	489	11
Paracatu	MGpara	Brazil	MG	SSF-LH-TR	17º10'S	46º57'W	849	9
Itamaraju	BAitam	Brazil	BA	ERF-LP-TR	17º11'S	39º50'W	152	6
Machacalis	MGmach	Brazil	MG	ERF-UP-TR	17º11'S	40º35'W	278	6

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Teixeira de Freitas	BAteix	Brazil	BA	ERF-LP-TR	17º13'S	39º26'W	80	6
Bocaiúva	MGboca	Brazil	MG	SDF-LH-TR	17º13'S	43º38'W	822	11
Olhos d'Água	MGolho	Brazil	MG	SDF-LH-TR	17º18'S	43º46'W	844	11
Chapada de São Domingos	MGchap	Brazil	MG	SSF-LH-TR	17º29'S	43º08'W	938	9
Mineiros	GOmine	Brazil	GO	SSF-LH-TR	17º36'S	52º34'W	707	9
Ladainha	MGlada	Brazil	MG	SSF-LH-TR	17º37'S	41º47'W	666	8
Caravelas	BAcara	Brazil	BA	ERD-CO-TR	17º41'S	39º20'W	11	6
Nanuque	MGnanu	Brazil	MG	SSF-UP-TR	17º45'S	40º26'W	293	6
Teófilo Otoni	MGteof	Brazil	MG	SSF-UP-TR	17º50'S	41º34'W	558	6
Aricanduva	MGaric	Brazil	MG	SSF-LH-TR	17º53'S	42º32'W	897	8
Lassance	MGlass	Brazil	MG	SSF-UP-TR	17º53'S	44º32'W	572	9
Lassance	MGlams	Brazil	MG	SDF-UP-TR	17º55'S	44º35'W	572	11
Lagamar	MGlaga	Brazil	MG	SSF-LH-TR	17º58'S	46º45'W	675	9
São Gonçalo do Rio Preto	MGsgon	Brazil	MG	SSF-LH-TR	18º00'S	43º24'W	870	9
Frei Gaspar	MGfgas	Brazil	MG	SSF-UP-TR	18º05'S	41º30'W	537	8
Três Marias	MGtres	Brazil	MG	SDF-UP-TR	18º05'S	45º11'W	538	11
Serra do Ambrósio	MGsamb	Brazil	MG	SSF-UH-TR	18º06'S	43º03'W	1149	8
Felício dos Santos	MGfeli	Brazil	MG	SSF-UH-TR	18º14'S	43º20'W	1550	8
Pedro Canário	ESpedr	Brazil	ES	ERF-LP-TR	18º15'S	39º55'W	65	6
Diamantina	MGdiam	Brazil	MG	SSF-UH-TR	18º16'S	43º37'W	1209	8
Santo Hipólito	MGhipo	Brazil	MG	SDF-UP-TR	18º17'S	44º11'W	530	11

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Conceição da Barra	ESconc	Brazil	ES	ERF-LP-TR	18º20'S	39º53'W	80	6
São Pedro do Suaçuí	MGsped	Brazil	MG	SSF-UP-TR	18º22'S	42º34'W	572	8
Rio Vermelho e Serra Azul	MGrver	Brazil	MG	SSF-LH-TR	18º23'S	43º05'W	783	8
Itumbiara	GOitum	Brazil	GO	SSF-LH-TR	18º23'S	49º23'W	663	9
Corinto	MGcori	Brazil	MG	SSF-LH-TR	18º28'S	44º21'W	644	9
Marilac	MGmrlc	Brazil	MG	SSF-UP-TR	18º32'S	42º06'W	305	8
Patos de Minas	MGptmg	Brazil	MG	SSF-LH-TR	18º32'S	46º32'W	858	9
Serro	MGserr	Brazil	MG	SSF-UH-TR	18º33'S	43º23'W	1048	8
São João Evangelista	MGevan	Brazil	MG	SSF-LH-TR	18º34'S	42º47'W	757	8
Araguari	MGarag	Brazil	MG	SSF-LH-TR	18º38'S	48º10'W	920	9
Alto Aporé	MSapor	Brazil	MS	SSF-UH-TR	18º40'S	52º52'W	833	9
Ipiaçu	MGipia	Brazil	MG	SSF-UP-TR	18º43'S	49º56'W	507	9
Nova Venécia	ESnova	Brazil	ES	ERF-LP-TR	18º45'S	40º24'W	164	6
Mantena	MGmant	Brazil	MG	SSF-UP-TR	18º46'S	40º51'W	356	6
Araguari	MGarms	Brazil	MG	SDF-LH-TR	18º48'S	48º07'W	617	9
Uberlândia, Buriti	MGubbu	Brazil	MG	SDF-LH-TR	18º50'S	48º10'W	719	9
UH Miranda	MGuhmi	Brazil	MG	SSF-LH-TR	18º55'S	48º02'W	748	9
Uberlândia	MGuber	Brazil	MG	SSF-LH-TR	18º55'S	48º13'W	905	9
São Geraldo do Baixio	MGbaix	Brazil	MG	SSF-UP-TR	18º56'S	41º24'W	285	8
Ituiutaba	MGItui	Brazil	MG	SSF-UP-TR	18º57'S	49º26'W	555	9
Ituiutaba	MGItms	Brazil	MG	SDF-UP-TR	18º58'S	49º27'W	568	11

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Conceição do Mato Dentro	MGmtdr	Brazil	MG	SSF-LH-TR	18º59'S	43º11'W	725	8
Governador Valadares	MGgove	Brazil	MG	SSF-UP-TR	19º02'S	42º08'W	212	8
Indianópolis	MGindi	Brazil	MG	SSF-LH-TR	19º03'S	47º56'W	751	9
Chapadão do Sul	MSchap	Brazil	MS	SSF-LH-TR	19º05'S	52º57'W	551	9
Linhares	ESlinh	Brazil	ES	ERF-LP-TR	19º08'S	39º56'W	50	6
Nova Ponte	MGnovp	Brazil	MG	SSF-LH-TR	19º08'S	47º39'W	866	9
Braúnas e Joanésia	MGbrau	Brazil	MG	SSF-UP-TR	19º09'S	42º43'W	367	8
Santa Vitória	MGsvit	Brazil	MG	SDF-UP-TR	19º09'S	50º39'W	348	11
Uberlândia, Panga	MGpang	Brazil	MG	SSF-LH-TR	19º10'S	48º24'W	761	9
Perdizes	MGperd	Brazil	MG	SSF-LH-TR	19º12'S	47º08'W	876	9
Itajá	GOitaj	Brazil	GO	SSF-LH-TR	19º12'S	50º58'W	411	9
Santana do Riacho	MGsant	Brazil	MG	SDF-LH-TR	19º12'S	43º41'W	880	9
Pancas	ESpanc	Brazil	ES	SSF-UP-TR	19º13'S	40º47'W	237	8
Serra do Cipó	MGcipo	Brazil	MG	SSF-UH-TR	19º13'S	43º32'W	1327	8
São Gabriel da Palha	ESpalh	Brazil	ES	SSF-LP-TR	19º15'S	40º53'W	797	6
Paraopeba	MGpeba	Brazil	MG	SSF-LH-TR	19º16'S	44º24'W	747	9
Abaeté	MGabae	Brazil	MG	SSF-LH-TR	19º16'S	45º16'W	609	9
Martinho Campos	MGmart	Brazil	MG	SSF-LH-TR	19º17'S	45º08'W	606	9
Conselheiro Pena	MGpena	Brazil	MG	SSF-LH-TR	19º18'S	41º33'W	810	8
Morro do Pilar	MGpila	Brazil	MG	SSF-LH-TR	19º20'S	43º26'W	871	8
Patrocínio	MGpatr	Brazil	MG	SSF-LH-TR	19º20'S	46º47'W	873	9

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Gurinhatã	MGguri	Brazil	MG	SSF-LH-TR	19º20’S	49º37’W	611	9
Ipaba	MGipab	Brazil	MG	SSF-UP-TR	19º20'S	42º24'W	216	8
Cabeça de Boi	MGcboi	Brazil	MG	SSF-LH-TR	19°25'S	43°25'W	847	8
Itambé do Mato Dentro	MGitam	Brazil	MG	SSF-UP-TR	19º25’S	43º12’W	582	8
Flona Goytacazes	ESflon	Brazil	ES	ERF-LP-TR	19º29’S	40º06’W	32	6
Aimorés	MGaimo	Brazil	MG	SSF-LP-TR	19º29’S	41º04’W	137	6
Marliéria, Vinhático	MGvinh	Brazil	MG	SSF-UP-TR	19º29'S	42º28'W	300	8
Inocência	MSinoc	Brazil	MS	SSF-LH-TR	19º34’S	51º53’W	524	9
Ipatinga	MGipat	Brazil	MG	SSF-UP-TR	19º35’S	42º25’W	246	8
Timóteo	MGtimo	Brazil	MG	SSF-UP-TR	19º35'S	42º34'W	248	8
Ibiá	MGibia	Brazil	MG	SSF-LH-TR	19º36’S	46º31’W	985	9
Colatina a S. Roque do Canaã	EScola	Brazil	ES	SSF-UP-TR	19º37’S	40º40’W	204	6
Antônio Dias	MGanto	Brazil	MG	SSF-UP-TR	19º37’S	42º51’W	592	6
Matozinhos	MGmtzi	Brazil	MG	SDF-LH-TR	19º39’S	43º56’W	821	11
Regência	ESrege	Brazil	ES	ERD-CO-TR	19º41’S	39º55’W	3	7
Uberaba	MGubrb	Brazil	MG	SSF-LH-TR	19º41’S	48º02’W	775	9
Marliéria, Parque do Rio Doce	MGmarl	Brazil	MG	SSF-UP-TR	19º41'S	42º38'W	400	8
Marliéria, Ponte Queimada	MGptqm	Brazil	MG	SSF-UP-TR	19º41'S	42º30'W	260	6
Pingo d’Água	MGping	Brazil	MG	SSF-UP-TR	19º43'S	42º25'W	259	8
Caratinga	MGcart	Brazil	MG	SSF-UP-TR	19º44’S	41º49’W	494	6
Ipanema	MGipan	Brazil	MG	SSF-UP-TR	19º47’S	41º45’W	439	6

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Dionísio	MGdion	Brazil	MG	SSF-UP-TR	19º48'S	42º32'W	247	8
Paranaíba	MSpara	Brazil	MS	SSF-LH-TR	19º49'S	51º32'W	445	9
João Monlevade	MGmonl	Brazil	MG	SSF-LH-TR	19º51'S	42º07'W	878	8
Sacramento	MGsacr	Brazil	MG	SSF-LH-TR	19º52'S	47º29'W	914	9
Belo Horizonte	MGbelo	Brazil	MG	SSF-LH-TR	19º53'S	43º58'W	860	8
São Gonçalo do Rio Abaixo	MGsgra	Brazil	MG	SSF-LH-TR	19º54'S	43º22'W	746	8
Santa Teresa	ESsant	Brazil	ES	ERF-LH-TR	19º56'S	40º36'W	775	6
Paulo de Faria	SPpaul	Brazil	SP	SSF-UP-TR	19º57'S	49º32'W	468	9
Betim	MGbeti	Brazil	MG	SSF-LH-TR	19º57'S	44º13'W	825	8
Nova Lima	MGnovl	Brazil	MG	SSF-LH-TR	19º58'S	43º54'W	963	8
Conquista	MGconq	Brazil	MG	SSF-UP-TR	20º00'S	47º36'W	545	9
Lagoa da Prata	MGlagp	Brazil	MG	SSF-LH-TR	20º00'S	45º38'W	683	9
Mateus Leme	MGmate	Brazil	MG	SSF-LH-TR	20º01'S	44º22'W	794	9
Serra do Curral	MGcurr	Brazil	MG	SSF-UH-TR	20º02'S	44º00'W	1086	8
Ibirité	MGibir	Brazil	MG	SSF-UH-TR	20º04'S	44º03'W	1070	8
Rio Acima	MGrioa	Brazil	MG	SSF-UH-TR	20º04'S	43º46'W	1009	8
Caraça	MGcara	Brazil	MG	SSF-UH-TR	20º07'S	43º29'W	1381	8
Brumadinho	MGbrum	Brazil	MG	SSF-UH-TR	20º07'S	44º17'W	1084	8
Capitão do Mato e Fechos	MGcapi	Brazil	MG	SSF-UH-TR	20º08'S	43º55'W	1249	8
Iguatama	MGigua	Brazil	MG	SSF-LH-TR	20º09'S	45º39'W	634	9
Itabirito	MGitab	Brazil	MG	SSF-UH-TR	20º10'S	43º39'W	1087	8

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Serra	ESserr	Brazil	ES	ERD-CO-TR	20º11'S	40º21'W	58	5
Rio Doce	MGrdoc	Brazil	MG	SSF-UP-TR	20º16'S	42º55'W	444	8
Bambuí	MGbamb	Brazil	MG	SSF-LH-TR	20º17'S	45º57'W	669	9
Cariacica	EScari	Brazil	ES	ERF-UP-TR	20º18'S	40º29'W	506	6
Venda Nova do Imigrante	ESvnim	Brazil	ES	ECF-UH-TR	20º18'S	41º10'W	1319	4
Serra da Canastra	MGcana	Brazil	MG	SSF-UH-TR	20º18'S	46º31'W	1015	9
Doresopolis	MGdore	Brazil	MG	SDF-LH-TR	20º18'S	45º55'W	788	11
Arcos	MGarco	Brazil	MG	SDF-LH-TR	20º20'S	45º35'W	738	11
Vargem Bonita	MGvarg	Brazil	MG	SSF-LH-TR	20º21'S	46º17'W	771	9
Mariana	MGmari	Brazil	MG	SSF-LH-TR	20º22'S	43º23'W	791	8
Ouro Preto	MGouro	Brazil	MG	SSF-UH-TR	20º23'S	43º34'W	1319	8
Cristais Paulista	SPcris	Brazil	SP	SSF-LH-TR	20º25'S	47º25'W	990	8
Caparaó	MGcapa	Brazil	MG	ECF-UH-TR	20º26'S	41º51'W	1318	8
Ponte Nova	MGpont	Brazil	MG	SSF-UP-TR	20º26'S	42º56'W	455	8
Carmópolis	MGcarm	Brazil	MG	SSF-LH-TR	20º26'S	44º37'W	864	8
Campo Grande	MScpgd	Brazil	MS	SSF-LH-TR	20º26'S	54º38'W	601	9
Diogo de Vasconcelos	MGdiog	Brazil	MG	SSF-LH-TR	20º27'S	43º11'W	652	8
Cássia	MGcass	Brazil	MG	SSF-LH-TR	20º27'S	46º56'W	762	8
Ibitirama	ESibit	Brazil	ES	ECF-UH-TR	20º30'S	41º43'W	1150	4
Guaraciaba	MGguar	Brazil	MG	SSF-UP-TR	20º30'S	43º01'W	531	8
Congonhas	MGcong	Brazil	MG	SSF-LH-TR	20º30'S	43º44'W	968	8

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Delfinópolis, Babilônia	MGpium	Brazil	MG	SSF-LH-TR	20º31'S	46º34'W	875	9
Pinheiros Altos	MGpinh	Brazil	MG	SSF-LH-TR	20º33'S	43º17'W	806	8
Guarapari	ESguar	Brazil	ES	ERD-CO-TR	20º35'S	40º24'W	2	5
Catas Altas da Noruega	MGcata	Brazil	MG	SSF-UH-TR	20º36'S	43º33'W	1303	8
Castelo	EScast	Brazil	ES	SSF-LP-TR	20º37'S	41º10'W	175	6
Piranga	MGpira	Brazil	MG	SSF-LH-TR	20º37'S	43º24'W	755	8
Passos	MGpass	Brazil	MG	SDF-LH-TR	20º40'S	46º33'W	713	9
Araponga	MGarap	Brazil	MG	SSF-UH-TR	20º42'S	42º29'W	1445	8
Cachoeiro de Itapemirim	EScach	Brazil	ES	SSF-LP-TR	20º45'S	41º17'W	148	6
Viçosa	MGvico	Brazil	MG	SSF-LH-TR	20º45'S	42º55'W	690	8
Carangola	MGcarg	Brazil	MG	SSF-UP-TR	20º46'S	42º00'W	458	8
Patrocínio Paulista	SPpatr	Brazil	SP	SSF-LH-TR	20º46'S	47º14'W	825	8
Itaguaçu e Itarana	ESitag	Brazil	ES	ERF-LH-TR	20º49'S	40º56'W	721	4
Três Lagoas	MStres	Brazil	MS	SSF-UP-TR	20º49'S	51º40'W	283	9
Santo Antônio do Amparo	MGaamp	Brazil	MG	SSF-LH-TR	20º51'S	44º55'W	989	8
Tombos	MGtomb	Brazil	MG	SSF-UP-TR	20º54'S	42º04'W	357	8
Carandaí	MGcrnd	Brazil	MG	SSF-UH-TR	20º59'S	43º55'W	1089	8
Tiradentes	MGtira	Brazil	MG	SSF-UH-TR	21º05'S	44º09'W	1119	8
São João del Rei	MGsjdr	Brazil	MG	SSF-LH-TR	21º06'S	44º15'W	925	8
Araçatuba	SParac	Brazil	SP	SSF-UP-TR	21º08'S	50º36'W	328	8
Coqueiral	MGcoqu	Brazil	MG	SSF-LH-TR	21º09'S	45º28'W	830	8

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Funil	MGfuni	Brazil	MG	SSF-LH-TR	21º09'S	44º54'W	820	8
Muriaé	MGmrae	Brazil	MG	SSF-UP-TR	21º10'S	42º29'W	269	8
Nepomuceno	MGnepo	Brazil	MG	SSF-LH-TR	21º11'S	45º07'W	811	8
Barbacena	MGbarb	Brazil	MG	SSF-UH-TR	21º11'S	43º42'W	1207	8
Ribeirão Preto	SPribe	Brazil	SP	SSF-LH-TR	21º13'S	47º51'W	608	9
Miraí	MGmira	Brazil	MG	SSF-UP-TR	21º14'S	42º37'W	463	8
Itumirim	MGitum	Brazil	MG	SSF-LH-TR	21º14'S	44º48'W	862	8
Lavras	MGlavr	Brazil	MG	SSF-LH-TR	21º14'S	44º58'W	927	8
Barroso	MGbarr	Brazil	MG	SSF-UH-TR	21º14'S	43º57'W	1020	8
Rio Pomba	MGrpom	Brazil	MG	SSF-UP-TR	21º16'S	43º10'W	488	8
Jaboticabal	SPjabo	Brazil	SP	SSF-LH-TR	21º16'S	48º21'W	614	10
Lavras, Poço Bonito	MGpoco	Brazil	MG	SSF-UH-TR	21º20'S	44º59'W	1105	8
Itutinga	MGitut	Brazil	MG	SSF-LH-TR	21º21'S	44º37'W	930	8
Monte Belo	MGmont	Brazil	MG	SSF-LH-TR	21º22'S	46º17'W	847	8
São Francisco de Itabapoana	RJsaof	Brazil	RJ	SSF-LP-TR	21º24'S	41º04'W	20	5
Ingaí	MGinga	Brazil	MG	SSF-LH-TR	21º24'S	44º53'W	873	8
Descoberto	MGdesc	Brazil	MG	SSF-LH-TR	21º25'S	42º57'W	661	8
Luminárias	MGlumi	Brazil	MG	SSF-LH-TR	21º29'S	44º54'W	930	8
Madre de Deus de Minas	MGmadr	Brazil	MG	SSF-LH-TR	21º29'S	44º22'W	957	8
Piedade do Rio Grande	MGpied	Brazil	MG	SSF-UH-TR	21º29'S	44º06'W	1095	8
Coronel Pacheco	MGcelp	Brazil	MG	SSF-UP-TR	21º33'S	43º15'W	486	8

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Luiz Antônio	SPluiz	Brazil	SP	SSF-UP-TR	21º35'S	47º55'W	520	8
Varginha	MGvgin	Brazil	MG	SSF-LH-TR	21º37'S	45º24'W	848	8
Carrancas	MGcarr	Brazil	MG	SSF-UH-TR	21º37'S	44º37'W	1395	8
Matão	SPmata	Brazil	SP	SSF-UP-TR	21º38'S	48º32'W	567	8
Sta. Rita Passa Quatro	SPstar	Brazil	SP	SSF-LH-TR	21º38'S	47º38'W	636	8
Ibitipoca	MGibmn	Brazil	MG	ECD-UH-TR	21º41'S	43º53'W	1431	8
São Thomé das Letras	MGtome	Brazil	MG	SSF-UH-TR	21º41'S	44º57'W	1314	8
Ibitipoca, Mata Grande	MGibmg	Brazil	MG	ECF-UH-TR	21º43'S	43º53'W	1330	8
São João da Barra	RJbarr	Brazil	RJ	ERD-CO-TR	21º44'S	41º02'W	2	5
Ibitipoca, Entorno	MGiben	Brazil	MG	SSF-UH-TR	21º44'S	43º55'W	1178	8
Campos dos Goytacazes	RJcamp	Brazil	RJ	SSF-LP-TR	21º45'S	41º17'W	8	5
Juiz de Fora	MGjuiz	Brazil	MG	SSF-LH-TR	21º45'S	43º19'W	893	8
Poços de Caldas	MGpcal	Brazil	MG	SSF-UH-TR	21º46'S	46º34'W	1314	8
Lima Duarte	MGlima	Brazil	MG	SSF-LH-TR	21º48'S	43º56'W	955	8
Santa Maria Madalena	RJmada	Brazil	RJ	ERF-UP-TR	21º50'S	41º42'W	387	5
Porto Ferreira	SPport	Brazil	SP	SSF-UP-TR	21º51'S	47º25'W	585	8
Caldas	MGcald	Brazil	MG	SSF-UH-TR	21º52'S	46º16'W	1108	8
Baependi	MGbaep	Brazil	MG	SSF-LH-TR	21º53'S	44º54'W	992	8
Águas da Prata	SPagua	Brazil	SP	SSF-UH-TR	21º55'S	46º42'W	1046	8
Lambari, Nova Baden	MGlamb	Brazil	MG	SSF-UH-TR	21º56'S	45º19'W	1018	8
Ninho da Égua, Serra Negra	MGegu	Brazil	MG	ECF-UH-TR	21º58'S	43º53'W	1314	3

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
São Carlos	SPscar	Brazil	SP	SSF-LH-TR	21º58'S	47º50'W	839	8
Andradas	MGandr	Brazil	MG	SSF-UH-TR	21º59'S	46º35'W	1340	8
Rio Preto	MGrpr	Brazil	MG	ERF-LH-TR	22º00'S	43º53'W	938	8
Cantagalo e Cordeiro	RJgalo	Brazil	RJ	SSF-UP-TR	22º00'S	42º20'W	673	8
Aiuruoca	MGaiur	Brazil	MG	ECF-UH-TR	22º01'S	44º36'W	1084	8
Marília	SPmari	Brazil	SP	SSF-UP-TR	22º01'S	49º55'W	428	10
Santa Rita de Caldas	MGrita	Brazil	MG	SSF-UH-TR	22º05'S	46º21'W	1146	8
Jurubatiba	RJjuru	Brazil	RJ	ERD-CO-TR	22º06'S	41º24'W	7	5
São Sebastião da Bela Vista	MGssbv	Brazil	MG	SSF-LH-TR	22º06'S	45º48'W	809	8
Alagoa, Serra do Papagaio	MGalag	Brazil	MG	ECF-UH-TR	22º08'S	44º44'W	1752	8
Serra do Papagaio	MGpapa	Brazil	MG	ECM-UH-TR	22º09'S	44º44'W	1574	2
Bocaina de Minas	MGbmin	Brazil	MG	ECF-UH-TR	22º13'S	44º32'W	1285	8
Pouso Alegre	MGpalg	Brazil	MG	SSF-LH-TR	22º13'S	45º58'W	928	8
Bauru	SPbaur	Brazil	SP	SSF-UP-TR	22º14'S	49º05'W	542	8
Itirapina	SPitir	Brazil	SP	SSF-LH-TR	22º15'S	47º49'W	821	10
Mogi-Guaçu	SPmogg	Brazil	SP	SSF-UP-TR	22º17'S	47º10'W	582	8
Jahu	SPjahu	Brazil	SP	SSF-UP-TR	22º19'S	48º31'W	555	10
Brotas	SPbrot	Brazil	SP	SSF-LH-TR	22º19'S	48º05'W	667	8
Visconde de Mauá	RJvisc	Brazil	MG/RJ	ECM-UH-TR	22º20'S	44º36'W	1462	8
Valença	RJvale	Brazil	RJ	SSF-UP-TR	22º20'S	43º42'W	557	8
Rio Claro	SPrio	Brazil	SP	SSF-LH-TR	22º21'S	47º28'W	672	8

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Dourados	MSdour	Brazil	MS	SSF-UP-TR	22º23'S	54º55'W	337	10
Nova Friburgo	RJfrib	Brazil	RJ	ECF-UH-TR	22º24'S	42º31'W	1240	4
Gália	SPgali	Brazil	SP	SSF-LH-TR	22º24'S	49º42'W	603	10
Ipeúna	SPipeu	Brazil	SP	SSF-LH-TR	22º25'S	47º45'W	682	8
ReBio União	RJrebi	Brazil	RJ	ERF-LP-TR	22º26'S	42º02'W	56	5
Itatiaia	RJitat	Brazil	RJ	ECF-UH-TR	22º26'S	44º37'W	1166	4
Serra Fina	MGsfin	Brazil	MG/SP	ECD-UH-TR	22º26'S	44º53'W	2320	2
Teresópolis	RJtere	Brazil	RJ	ECF-UH-TR	22º27'S	42º57'W	1060	4
Cachoeiras de Macacu	RJcach	Brazil	RJ	ERF-LP-TR	22º29'S	42º45'W	96	5
Guapimirim	RJguap	Brazil	RJ	ERF-UP-TR	22º29'S	42º53'W	285	5
Petrópolis	RJpetr	Brazil	RJ	ECF-UH-TR	22º30'S	43º08'W	1044	4
Poço das Antas	RJpoco	Brazil	RJ	ERF-LP-TR	22º31'S	42º17'W	26	5
Wenceslau Brás	MGwenc	Brazil	MG	ECF-UH-TR	22º31'S	45º17'W	1353	8
Tinguá	RJting	Brazil	RJ	ERF-LH-TR	22º33'S	43º24'W	764	4
Volta Redonda	RJvolt	Brazil	RJ	SSF-UP-TR	22º33'S	44º05'W	439	8
Magé	RJmage	Brazil	RJ	ERF-LP-TR	22º35'S	43º01'W	81	5
Assis	SPassi	Brazil	SP	SSF-UP-TR	22º35'S	50º22'W	541	8
Teodoro Sampaio	SPteod	Brazil	SP	SSF-UP-TR	22º36'S	52º20'W	296	8
Cosmópolis	SPcosm	Brazil	SP	SSF-UP-TR	22º36'S	47º02'W	595	8
Silva Jardim	RJsilv	Brazil	RJ	ERF-LP-TR	22º37'S	42º28'W	141	5
Diamante do Norte	PRdiam	Brazil	PR	SSF-UP-TR	22º37'S	52º52'W	297	10

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
São José do Barreiro	SPjjbr	Brazil	SP	SSF-UP-TR	22º38'S	44°39.5'W	534	8
Areias	SParei	Brazil	SP	SSF-LH-TR	22º39'S	44º43'W	816	8
Anhembi	SPanhe	Brazil	SP	SSF-UP-TR	22º40'S	48º10'W	516	8
Amparo	SPampa	Brazil	SP	SSF-LH-TR	22º41'S	46º40'W	870	8
Rio Bonito	RJrbon	Brazil	RJ	ERF-LP-TR	22º43'S	42º33'W	58	5
Camanducaia	MGcmmn	Brazil	MG	ECD-UH-TR	22º43'S	45º56'W	1721	2
Porto São José	MSpjos	Brazil	MS	SSF-UP-TR	22º43'S	53º18'W	237	9
Tarumã	SPtaru	Brazil	SP	SSF-UP-TR	22º43'S	50º35'W	436	10
Taquaruçu	MStaqu	Brazil	MS	SSF-UP-TR	22º43'S	53º15'W	236	9
Pedreira	SPpedr	Brazil	SP	SSF-LH-TR	22º43'S	46º52'W	734	8
Gonçalves	MGgonc	Brazil	MG	ECF-UH-TR	22º45'S	45º54'W	1702	2
Campos do Jordão	SPcjor	Brazil	SP	ECM-UH-TR	22º45'S	45º38'W	1426	
Cruzeiro	SPcruz	Brazil	SP	SSF-LH-TR	22º45'S	44º58'W	632	8
Armação dos Búzios	RJbuzi	Brazil	RJ	ERD-CO-TR	22º46'S	41º54'W	35	5
Guaratinguetá	SPguar	Brazil	SP	SSF-UP-TR	22º46'S	45º14'W	549	8
Camanducaia	MGcama	Brazil	MG	ECM-UH-TR	22º47'S	46º06'W	1291	2
Porto Rico	PRport	Brazil	PR	SSF-UP-TR	22º47'S	53º19'W	255	10
Ivinheima	MSivin	Brazil	MS	SSF-UP-TR	22º47'S	53º32'W	246	9
Piracicaba	SPpira	Brazil	SP	SSF-UP-TR	22º47'S	47º50'W	553	8
Bananal	SPbana	Brazil	SP	ECF-UH-TR	22º49'S	44º24'W	1381	3
Araruama	RJArar	Brazil	RJ	SSF-LP-TR	22º49'S	42º11'W	78	5

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Campinas	SPcamp	Brazil	SP	SSF-LH-TR	22º49'S	47º07'W	621	8
Pindamonhangaba	SPpind	Brazil	SP	SSF-LH-TR	22º50.5'S	45º31'W	744	8
Botucatu	SPbotu	Brazil	SP	SSF-LH-TR	22º50'S	48º26'W	710	10
Monte Verde	MGmvma	Brazil	MG	ECM-UH-TR	22º52'S	46º04'W	1484	2
Monte Verde	MGmvmn	Brazil	MG	ECD-UH-TR	22º53'S	46º02'W	1602	2
Cabo Frio e Arraial do Cabo	RJcabo	Brazil	RJ	ERD-CO-TR	22º55'S	42º03'W	35	5
Maricá e Saquarema	RJmari	Brazil	RJ	ERD-CO-TR	22º57'S	42º49'W	4	5
Niterói	RJnite	Brazil	RJ	ERF-LP-TR	22º57'S	43º00'W	247	5
Pedra de Guaratiba	RJpedr	Brazil	RJ	ERF-LP-TR	22º57'S	43º38'W	73	5
Rio de Janeiro	RJrio	Brazil	RJ	ERF-UP-TR	22º57'S	43º16'W	385	5
Bofete	SPbofe	Brazil	SP	SSF-UP-TR	23º00'S	48º15'W	551	10
São José dos Campos	SPsjos	Brazil	SP	ERF-LH-TR	23º03'S	45º56'W	731	4
Ilha de Marambaia	RJmara	Brazil	RJ	ERF-LP-TR	23º04'S	43º58'W	145	5
Amaporã	PRamap	Brazil	PR	SSF-UP-TR	23º04'S	52º47'W	439	10
Jacarezinho	PRjaca	Brazil	PR	SSF-UP-TR	23º08'S	49º45'W	569	10
Ilha Grande	RJilha	Brazil	RJ	ERF-LP-TR	23º10'S	44º17'W	113	5
Cornélio Procópio	PRcorn	Brazil	PR	SSF-UP-TR	23º10'S	50º34'W	510	10
Atibaia	SPatib	Brazil	SP	ECF-UH-TR	23º11'S	46º31'W	1187	8
Cunha	SPcunh	Brazil	SP	ECF-UH-TR	23º14'S	45º02'W	1166	4
Jundiaí	SPjund	Brazil	SP	ERF-LH-TR	23º15'S	46º59'W	979	8
Ibiporã	PRibip	Brazil	PR	SSF-UP-TR	23º15'S	51º02'W	434	10

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Picinguaba, Corisco	SPpici	Brazil	SP	ECF-UH-TR	23º17'S	44º48'W	1000	4
Itatinga	SPitat	Brazil	SP	SSF-UP-TR	23º17'S	48º33'W	592	8
Picinguaba, Encosta	SPpic2	Brazil	SP	ERF-UP-TR	23º18'S	44º48'W	547	4
Parati	RJpara	Brazil	RJ	ERF-UP-TR	23º18'S	44º35'W	282	4
Iperó	SPiper	Brazil	SP	SSF-LH-TR	23º19'S	47º38'W	619	10
São Luiz do Paraitinga	SPslui	Brazil	SP	ECF-UH-TR	23º20'S	45º20'W	1078	4
Picinguaba, Planície	SPpic1	Brazil	SP	ERF-LP-TR	23º21'S	44º49'W	19	4
Picinguaba, Restinga	SPpicr	Brazil	SP	ERD-CO-TR	23º22'S	44º50'W	9	4
Itamambuca	SPitam	Brazil	SP	ERF-UP-TR	23º22'S	45º01'W	483	4
Serra da Cantareira	SPserr	Brazil	SP	ERF-LH-TR	23º22'S	46º33'W	974	4
Guarulhos	SPguru	Brazil	SP	ERF-LH-TR	23º24'S	46º29'W	788	8
Ubatuba	SPubat	Brazil	SP	ERF-UP-TR	23º25'S	45º08'W	255	4
Angatuba	SPanga	Brazil	SP	SSF-LH-TR	23º25'S	48º20'W	619	10
Londrina	PRlond	Brazil	PR	SSF-UP-TR	23º27'S	51º15'W	595	10
Mogi das Cruzes	SPmogc	Brazil	SP	ERF-LH-TR	23º28'S	46º09'W	842	4
São Roque	SProqu	Brazil	SP	ERF-LH-TR	23º31'S	47º06'W	957	3
Guapirama	PRguap	Brazil	PR	SSF-UP-TR	23º33'S	50º06'W	452	10
Salesópolis	SPsale	Brazil	SP	ERF-LH-TR	23º37'S	45º45'W	972	4
São Paulo	SPspau	Brazil	SP	ERF-LH-TR	23º39'S	46º37'W	815	4
São Jerônimo da Serra	PRsjer	Brazil	PR	SSF-LH-TR	23º45'S	50º46'W	867	2
São Bernardo do Campo	SPsber	Brazil	SP	ERF-LH-TR	23º46'S	46º30'W	927	4

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Alto da Serra, Paranapiacaba	SPprpc	Brazil	SP	ERF-LH-TR	23º46'S	46º19'W	785	3
Cotia	SPcoti	Brazil	SP	ERF-LH-TR	23º46'S	46º58'W	762	4
Bertioga	SPbert	Brazil	SP	ERD-CO-TR	23º48'S	46º08'W	2	4
Cubatão	SPcuba	Brazil	SP	ERF-UP-TR	23º51'S	46º26'W	358	4
Fênix	PRfeni	Brazil	PR	SSF-UP-TR	23º54'S	51º56'W	334	10
Curucutu	SPcuru	Brazil	SP	ERF-LH-TR	23º59'S	46º57'W	729	3
Sapopema	PRsapo	Brazil	PR	SSF-LH-ST	24º03'S	50º42'W	655	10
Itararé	SPitrr	Brazil	SP	SSF-LH-ST	24º04'S	49º25'W	636	1
Guaíra	PRguay	Brazil	PR	SSF-UP-TR	24º05'S	54º17'W	245	10
Jaguariaíva	PRjagu	Brazil	PR	ESM-LH-ST	24º07'S	49º43'W	817	2
Carlos Botelho	SPcarl	Brazil	SP	ERF-LH-ST	24º08'S	48º02'W	815	4
Ventania	PRvent	Brazil	PR	ESM-UH-ST	24º10'S	50º13'W	1003	2
Sete Barras	SPsete	Brazil	SP	ERF-LP-TR	24º14'S	48º04'W	106	4
Peruíbe	SPperu	Brazil	SP	ERF-LP-TR	24º15'S	47º03'W	180	4
Ribeirão Grande	SPribg	Brazil	SP	ERF-LH-ST	24º16'S	48º25'W	863	3
Telêmaco Borba	PRtele	Brazil	PR	SSF-LH-ST	24º20'S	50º35'W	760	10
Imbaú	PRimba	Brazil	PR	ESM-LH-ST	24º26'S	50º42'W	817	2
Tibagi	PRtiba	Brazil	PR	ESM-LH-ST	24º29'S	50º24'W	724	2
Juréia-Itatins	SPjure	Brazil	SP	ERF-UP-TR	24º31'S	47º15'W	394	4
Alto Ribeira	SPalto	Brazil	SP	ERF-LH-ST	24º32'S	48º40'W	631	3
Iguape	SPigua	Brazil	SP	ERD-CO-TR	24º33'S	47º14'W	57	4

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Nueva Esperanza	PAYnuev	Paraguay	APR	SSF-UP-TR	24º35'S	54º52'W	334	10
Pariquera-Açu	SPpari	Brazil	SP	ERF-LP-TR	24º36'S	47º53'W	13	4
Castro	PRcast	Brazil	PR	ESM-UH-ST	24º48'S	49º52'W	1025	2
Ilha Comprida	SPicom	Brazil	SP	ERD-CO-TR	24º54'S	47º48'W	7	4
Tunas do Paraná	PRtuna	Brazil	PR	ECF-UH-ST	24º58'S	49º07'W	964	3
Ipiranga	PRipir	Brazil	PR	ESM-LH-ST	25º00'S	50º39'W	809	2
Maracayu	PAYmara	Paraguay	APR	SSF-UP-ST	25º03'S	54º42'W	286	10
Campina Grande do Sul, Capivari	PRusin	Brazil	PR	ERF-LH-ST	25º06'S	48º49'W	781	3
Cascavel	PRcasc	Brazil	PR	ESM-LH-ST	25º06'S	53º40'W	652	2
Salto Morato	PRmora	Brazil	PR	ERF-LH-ST	25º09'S	48º19'W	505	3
Serra Gigante	SPgiga	Brazil	SP	ECD-UH-ST	25º09'S	48º10'W	1012	2
Ilha do Cardoso	SPilha	Brazil	SP	ERF-LP-ST	25º10'S	48º00'W	55	4
Rio Branco do Sul	PRrio	Brazil	PR	ECM-UH-ST	25º11'S	49º20'W	945	2
Guaraqueçaba	PRgrqc	Brazil	PR	ERF-UP-ST	25º13'S	48º15'W	165	4
Ponta Grossa	PRpont	Brazil	PR	ESM-UH-ST	25º13'S	50º02'W	907	2
Serra do Ibitiraquire	PRibit	Brazil	PR	ECD-UH-ST	25º15'S	48º50'W	1291	2
Colombo	PRcolo	Brazil	PR	ECM-UH-ST	25º16'S	49º15'W	1089	2
Morro do Quitumbê	PRmorr	Brazil	PR	ERF-UP-ST	25º17'S	48º18'W	114	4
Serra da Graciosa	PRgrac	Brazil	PR	ERF-LH-ST	25º21'S	48º53'W	785	3
Guarapuava	PRguar	Brazil	PR	ESM-UH-ST	25º21'S	51º28'W	1054	2

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Morro Mãe Catira	PRcati	Brazil	PR	ECD-UH-ST	25º22'S	48º55'W	1001	2
Teixeira Soares	PRteix	Brazil	PR	ESM-UH-ST	25º22'S	50º24'W	902	2
Mallorquin	PAYmall	Paraguay	APR	SSF-UP-ST	25º22'S	55º11'W	246	10
Ciudad del Este	PAYciud	Paraguay	APR	SSF-UP-ST	25º22'S	54º36'W	249	10
Superagüi	PRsupe	Brazil	PR	ERD-CO-ST	25º23'S	48º12'W	19	4
Morro do Anhangava	PRanha	Brazil	PR	ECD-UH-ST	25º23'S	49º00'W	1044	2
Curitiba	PRcuri	Brazil	PR	ECM-UH-ST	25º25'S	49º18'W	932	2
Irati	PRirat	Brazil	PR	ESM-LH-ST	25º26'S	50º25'W	861	2
Antonina	PRanto	Brazil	PR	ERF-LP-ST	25º28'S	48º43'W	30	4
Quatro Barras	PRquat	Brazil	PR	ECM-UH-ST	25º28'S	49º03'W	936	2
Ilha do Mel	PRilha	Brazil	PR	ERD-CO-ST	25º29'S	48º20'W	2	4
Quedas do Iguaçu	PRqued	Brazil	PR	ESM-LH-ST	25º29'S	52º49'W	618	1
Morretes	PRmor1	Brazil	PR	ERF-LP-ST	25º30'S	48º47'W	5	4
Capitão Leônidas Marques	PRcapi	Brazil	PR	SSF-UP-ST	25º30'S	53º33'W	310	10
Pico do Marumbi	PRmaru	Brazil	PR	ECD-UH-ST	25º31'S	48º58'W	1121	2
São João do Triunfo	PRsjtr	Brazil	PR	ESM-LH-ST	25º34'S	50º06'W	859	2
Araucária	PRarau	Brazil	PR	ESM-LH-ST	25º35'S	49º21'W	873	2
Pinhão	PRpinh	Brazil	PR	ESM-UH-ST	25º35'S	51º47'W	905	1
São José dos Pinhais	PRsaoj	Brazil	PR	ECM-UH-ST	25º36'S	49º12'W	906	2
Torre da Prata	PRtprt	Brazil	PR	ERF-LH-ST	25º37'S	48º42'W	771	3
Foz do Iguaçu	PRfozi	Brazil	PR	SSF-UP-ST	25º38'S	54º27'W	228	10

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Fazenda Rio Grande	PRfaze	Brazil	PR	ESM-LH-ST	25º39'S	49º16'W	895	2
Serra da Prata	PRspra	Brazil	PR	ERF-UP-ST	25º40'S	48º45'W	275	3
Serra do Salto	PRsalt	Brazil	PR	ECD-UH-ST	25º42'S	49º03'W	1036	2
Guairicana	PRguai	Brazil	PR	ERF-LH-ST	25º44'S	48º58'W	750	3
Morro do Cabaraquara	PRcaba	Brazil	PR	ERF-UP-ST	25º46'S	48º37'W	197	4
Santa Rosa del Monday	PAYsant	Paraguay	APR	SSF-UP-ST	25º49'S	54º50'W	296	1
Iguazu	ARGigua	Argentina	MIS	SSF-UP-ST	25º50'S	54º20'W	294	1
São Mateus do Sul	PRsaom	Brazil	PR	ESM-LH-ST	25º51'S	50º20'W	801	2
Morro do Araçatuba	PRarac	Brazil	PR	ECD-UH-ST	25º54'S	48º59'W	1278	2
Guaratuba	PRgua1	Brazil	PR	ERF-LP-ST	25º56'S	48º37'W	8	4
Itapoá	SCitap	Brazil	SC	ERF-LP-ST	26º04'S	48º39'W	18	4
Garuva	SCgaru	Brazil	SC	ERF-UP-ST	26º08'S	49º00'W	365	4
Três Barras	SCtres	Brazil	SC	ESM-LH-ST	26º10'S	50º17'W	821	2
Palmas	PRpalm	Brazil	PR	ESM-UH-ST	26º15'S	51º50'W	1004	2
Porto União	SCptun	Brazil	SC	ESM-LH-ST	26º16'S	51º04'W	785	2
Joinville	SCjoin	Brazil	SC	ERF-LP-ST	26º18'S	48º50'W	62	4
Inferninho	SCinfe	Brazil	SC	ERF-LP-ST	26º30'S	48º39'W	25	4
San Pedro, mata estacional	ARGpedr	Argentina	MIS	SSF-UP-ST	26º30'S	54º10'W	464	1
San Pedro	ARGspma	Argentina	MIS	ESM-LH-ST	26º31'S	53º59'W	620	2
Guaramirim	SCguar	Brazil	SC	ERF-UP-ST	26º32'S	49º03'W	397	4
São Miguel d'Oeste	SCsmig	Brazil	SC	SSF-LH-ST	26º36'S	53º31'W	720	1

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Ilhota	SCilho	Brazil	SC	ERF-UP-ST	26º48'S	48º56'W	324	4
Caçador	SCcaca	Brazil	SC	ESM-UH-ST	26º52'S	50º57'W	1035	2
Timbó	SCtimb	Brazil	SC	ERF-UP-ST	26º54'S	49º20'W	376	4
Descanso	SCdesc	Brazil	SC	SSF-LH-ST	26º56'S	53º31.5'W	590	1
Blumenau	SCblum	Brazil	SC	ERF-UP-ST	26º59'S	49º06'W	180	4
Derrubadas, Parque Estadual do Turvo	RSturv	Brazil	RS	SSF-UP-ST	27º01'S	53º52'W	221	1
Camboriú	SCcamb	Brazil	SC	ERF-UP-ST	27º05'S	48º38'W	210	4
Moconá	ARGmoc2	Argentina	MIS	SSF-UP-ST	27º06'S	53º58'W	276	1
Brusque	SCbrus	Brazil	SC	ERF-LP-ST	27º07'S	48º56'W	59	4
Chapecó	SCchap	Brazil	SC	SSF-LH-ST	27º09'S	52º41'W	527	1
Itapiranga	SCitpr	Brazil	SC	SSF-UP-ST	27º11.5'S	53º38'W	320	1
El Soberbio	ARGelso	Argentina	MIS	SSF-UP-ST	27º16'S	54º08'W	255	1
Teyú Cuaré	ARGteyu	Argentina	MIS	SSF-UP-ST	27º17'S	55º34'W	202	1
Curitibanos	SCcuri	Brazil	SC	ESM-UH-ST	27º18'S	50º36'W	1014	2
Rio do Sul	SCrsul	Brazil	SC	ERF-LH-ST	27º29'S	49º48'W	693	3
Entre Rios do Sul	RSersu	Brazil	RS	SSF-LH-ST	27º33'S	52º45'W	605	1
Florianópolis	SCflor	Brazil	SC	ERF-UP-ST	27º35'S	48º28'W	252	4
Erechim	RSerec	Brazil	RS	ESM-LH-ST	27º38'S	52º16'W	760	2
Ijuí-Turvo	RSijui	Brazil	RS	SSF-UP-ST	27º39'S	54º45'W	269	1
Tucunduva	RStucu	Brazil	RS	SSF-UP-ST	27º39'S	54º27'W	204	1

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
São Pedro de Alcântara	SCsped	Brazil	SC	ERF-LH-ST	27º40'S	48º55'W	638	4
San Javier	ARGjavi	Argentina	MIS	SSF-UP-ST	27º41'S	54º57'W	243	1
Apóstoles	ARGapos	Argentina	MIS	SSF-UP-ST	27º48'S	55º31'W	211	1
Serra do Tabuleiro	SCtabu	Brazil	SC	ECD-UH-ST	27º49'S	48º49'W	1050	2
Campo Belo do Sul	SCcamp	Brazil	SC	ESM-UH-ST	28º00'S	50º49'W	966	2
Urubici	SCurub	Brazil	SC	ECM-UH-ST	28º03'S	49º36'W	1325	2
Passo Fundo	RSpass	Brazil	RS	ESM-LH-ST	28º05'S	52º20'W	687	2
Serra do Corvo Branco	SCcorv	Brazil	SC	ECD-UH-ST	28º06'S	49º28'W	1501	2
Cerro Largo, RS	RScrlg	Brazil	RS	SSF-UP-ST	28º11'S	54º46'W	169	1
Esmeralda	RSesme	Brazil	RS	ESM-LH-ST	28º13'S	51º10'W	884	2
Imbituba	SCimbi	Brazil	SC	ERD-CO-ST	28º14'S	48º41'W	37	3
Orleans	SCorle	Brazil	SC	ERF-UP-ST	28º22'S	49º17'W	145	3
Serra do Rio do Rastro	SCrast	Brazil	SC	ECD-UH-ST	28º26'S	49º35'W	1314	2
Laguna	SClagu	Brazil	SC	ERD-CO-ST	28º29'S	48º53'W	35	3
Criciúma	SCcric	Brazil	SC	ERF-LP-ST	28º41'S	49º21'W	96	3
Morro da Fumaça	SCmorr	Brazil	SC	ERF-LP-ST	28º44'S	49º14'W	18	3
Nova Prata	RSnova	Brazil	RS	ESM-LH-ST	28º46'S	51º35'W	714	2
Serra da Rocinha	RSroci	Brazil	RS	ECD-UH-ST	28º52'S	50º00'W	1054	2
São Jorge	SCsaoj	Brazil	SC	ERF-LP-ST	28º53'S	49º32'W	7	3
Veranópolis	RSvera	Brazil	RS	SSF-LH-ST	28º54'S	51º31'W	690	1
São Marcos	RSsaom	Brazil	RS	ESM-LH-ST	28º58'S	51º01'W	854	2

APPENDIX A - Continued.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt. (m)	Sub-region
Turvo	SCturv	Brazil	SC	ERF-LP-ST	28º59'S	49º43'W	28	3
Araranguá	SCarar	Brazil	SC	ERF-LP-ST	28º59'S	49º30'W	13	3
Criúva	RScriu	Brazil	RS	ESM-LH-ST	29º01'S	50º56'W	854	2
Caxias do Sul	RScaxi	Brazil	RS	ESM-LH-ST	29º01'S	51º12'W	758	2
Sombrio	SCsomb	Brazil	SC	ERF-LP-ST	29º06'S	49º41'W	68	3
Jacinto Machado	SCjaci	Brazil	SC	ERF-LP-ST	29º08'S	49º52'W	29	3
Santa Tereza do RS	RSsant	Brazil	RS	SSF-UP-ST	29º09'S	51º42'W	396	1
Farroupilha	RSfarr	Brazil	RS	ESM-LH-ST	29º16'S	51º24'W	601	2
Faxinal	RSfaxi	Brazil	RS	ERD-CO-ST	29º21'S	49º45'W	5	3
Torres	RStorr	Brazil	RS	ERF-LP-ST	29º22'S	49º51'W	67	3
Morrinhos do Sul	RSmsul	Brazil	RS	ERF-UP-ST	29º22'S	49º59'W	365	3
Canela	RScane	Brazil	RS	SSF-LH-ST	29º23'S	50º47'W	745	1
São Francisco de Paula	RSsfpa	Brazil	RS	ESM-LH-ST	29º26'S	50º37'W	892	2
Morro Azul	RSmorr	Brazil	RS	ERF-LH-ST	29º27'S	50º00'W	609	3
Jaguari	RSjagu	Brazil	RS	SSF-UP-ST	29º30'S	54º43'W	347	1
Itaára	RSitaa	Brazil	RS	ESM-UP-ST	29º34'S	53º49'W	426	2
Vale do Sol	RSvale	Brazil	RS	SSF-UP-ST	29º34'S	52º41'W	228	1
Araricá	RSarar	Brazil	RS	SSF-UP-ST	29º36'S	50º55'W	140	1
Riozinho	RSrioz	Brazil	RS	SSF-LH-ST	29º36'S	50º22'W	821	1
São Pedro do Sul	RSsped	Brazil	RS	SSF-UP-ST	29º37'S	54º14'W	119	1
Maquiné	RSmaqu	Brazil	RS	ERF-UP-ST	29º38'S	50º12'W	230	3

APPENDIX A – Concluded.

Locality	Area Code	Country	State/ Province	Vegetation Code	Lat.	Long.	Alt (m)	Sub-region
Dona Francisca	RSdona	Brazil	RS	SSF-LP-ST	29º38'S	53º18'W	96	1
Rolante	RSrola	Brazil	RS	SSF-UP-ST	29º38'S	50º37'W	107	1
Candelária	RScand	Brazil	RS	SSF-UP-ST	29º38'S	52º51'W	335	1
Arroio do Sal	RSarrs	Brazil	RS	ERD-CO-ST	29º39'S	50º00'W	8	3
Parobé	RSparo	Brazil	RS	SSF-LP-ST	29º39'S	50º49'W	83	1
Santa Maria	RSsmar	Brazil	RS	SSF-UP-ST	29º40'S	53º46'W	187	1
Santa Cruz do Sul	RSscsu	Brazil	RS	SSF-UP-ST	29º42'S	52º22'W	162	1
Montenegro-Triunfo	RSmont	Brazil	RS	SSF-LP-ST	29º49'S	51º27'W	52	1
Morro Osório	RSmoro	Brazil	RS	ERF-UP-ST	29º50'S	50º17'W	345	3
Osório	RSosor	Brazil	RS	ERF-LP-ST	29º56'S	50º11'W	14	3
Cachoeira do Sul	RScach	Brazil	RS	SSF-LP-ST	29º58'S	52º51'W	25	1
Porto Alegre	RSport	Brazil	RS	SSF-UP-ST	30º04'S	51º08'W	124	1
Viamão	RSviam	Brazil	RS	SSF-LP-ST	30º05'S	50º50'W	37	1
Arroio dos Ratos	RSarro	Brazil	RS	SSF-LP-ST	30º11'S	51º45'W	70	1
Morro do Coco	RSmcoc	Brazil	RS	SSF-LP-ST	30º23'S	51º02'W	65	1
Camaquã	RScama	Brazil	RS	SSF-UP-ST	30º41'S	51º53'W	248	1
Arroio do Padre	RSarrp	Brazil	RS	SSF-UP-ST	31º27'S	52º28'W	303	1

APPENDIX B - Tree flora of 589 areas of Atlantic Forest in South America

* Endangered species (MMA, 2008).

Family		Species
ACANTHACEAE		*Avicennia germinans* (L.) L.
ACANTHACEAE		*Avicennia schaueriana* Stapf & Lechman ex Moldenke
ACHARIACEAE		*Carpotroche brasiliensis* (Raddi) Endl.
ACHARIACEAE		*Kuhlmanniodendron apterocarpum* (Kuhlm.) Fiaschi & Groppo
ACHARIACEAE		*Lindackeria ovata* (Benth.) Gilg
ACHATOCARPACEAE		*Achatocarpus praecox* Griseb.
ADOXACEAE		*Sambucus australis* Cham. & Schltdl.
ANACARDIACEAE		*Anacardium occidentale* L.
ANACARDIACEAE		*Astronium concinnum* Schott ex Spreng.
ANACARDIACEAE		*Astronium fraxinifolium* Schott ex Spreng.
ANACARDIACEAE		*Astronium graveolens* Jacq.
ANACARDIACEAE		*Astronium nelsonrosae* Santin
ANACARDIACEAE		*Cyrtocarpa caatingae* J.D.Mitch. & Daly
ANACARDIACEAE		*Lithraea brasiliensis* Marchand
ANACARDIACEAE		*Lithraea molleoides* (Vell.) Engl.
ANACARDIACEAE		*Myracrodruon balansae* (Engl.) Santin
ANACARDIACEAE	*	*Myracrodruon urundeuva* Allemão
ANACARDIACEAE	*	*Schinopsis brasiliensis* Engl.
ANACARDIACEAE		*Schinus lentiscifolius* Marchand
ANACARDIACEAE		*Schinus molle* L.
ANACARDIACEAE		*Schinus pearcei* Engl.
ANACARDIACEAE		*Schinus polygamus* (Cav.) Cabrera
ANACARDIACEAE		*Schinus terebinthifolius* Raddi
ANACARDIACEAE		*Spondias macrocarpa* Engl.
ANACARDIACEAE		*Spondias mombin* L.
ANACARDIACEAE		*Spondias tuberosa* Arruda
ANACARDIACEAE		*Spondias venulosa* Mart. ex Engl.
ANACARDIACEAE		*Tapirira guianensis* Aubl.
ANACARDIACEAE		*Tapirira obtusa* (Benth.) J.D.Mitch.
ANACARDIACEAE		*Thyrsodium spruceanum* Benth.

APPENDIX B - Continued.

Family	Species
ANNONACEAE	*Anaxagorea dolichocarpa* Sprague & Sandwith
ANNONACEAE	*Anaxagorea silvatica* R.E.Fr.
ANNONACEAE	*Annona acutiflora* Mart.
ANNONACEAE	*Annona amambayensis* Hassl. ex R.E.Fr.
ANNONACEAE	*Annona bahiensis* (Maas & Westra) H.Rainer
ANNONACEAE	*Annona cacans* Warm.
ANNONACEAE	*Annona coriacea* Mart.
ANNONACEAE	*Annona cornifolia* A.St.-Hil.
ANNONACEAE	*Annona crassiflora* Mart.
ANNONACEAE	*Annona dolabripetala* (Raddi) H.Rainer
ANNONACEAE	*Annona emarginata* (Schltdl.) H.Rainer
ANNONACEAE	*Annona exsucca* Dunal
ANNONACEAE	*Annona ferruginea* (R.E.Fr.) H.Rainer
ANNONACEAE	*Annona glabra* L.
ANNONACEAE	*Annona leptopetala* (R.E.Fr.) H.Rainer
ANNONACEAE	*Annona maritima* (Záchia) H.Rainer
ANNONACEAE	*Annona montana* Macfad.
ANNONACEAE	*Annona mucosa* Jacq.
ANNONACEAE	*Annona neosalicifolia* H.Rainer
ANNONACEAE	*Annona neosericea* H.Rainer
ANNONACEAE	*Annona pickelii* (Diels) H.Rainer
ANNONACEAE	*Annona rugulosa* (Schltdl.) H.Rainer
ANNONACEAE	*Annona salzmannii* A.DC.
ANNONACEAE	*Annona sericea* Dunal
ANNONACEAE	*Annona spinescens* Mart.
ANNONACEAE	*Annona sylvatica* A.St.-Hil.
ANNONACEAE	*Annona ubatubensis* (Maas & Westra) H.Rainer
ANNONACEAE	*Annona vepretorum* Mart.
ANNONACEAE	*Annona xylopiifolia* A.St.-Hil. & Tul.
ANNONACEAE	*Bocagea longepedunculata* Mart.
ANNONACEAE	*Bocagea viridis* A.St.-Hil.
ANNONACEAE	*Bocageopsis mattogrossensis* (R.E.Fr.) R.E.Fr.
ANNONACEAE	*Cardiopetalum calophyllum* Schltdl.

APPENDIX B - Continued.

Family	Species
ANNONACEAE	*Cymbopetalum brasiliense* (Vell.) Benth. ex Baill.
ANNONACEAE	*Duguetia bahiensis* Maas
ANNONACEAE	*Duguetia chrysocarpa* Maas
ANNONACEAE	*Duguetia dicholepidota* Mart.
ANNONACEAE	*Duguetia flagellaris* Huber
ANNONACEAE	*Duguetia gardneriana* Mart.
ANNONACEAE	*Duguetia lanceolata* A.St.-Hil.
ANNONACEAE	*Duguetia magnolioidea* Maas
ANNONACEAE	*Duguetia marcgraviana* Mart.
ANNONACEAE	*Duguetia microphylla* (R.E.Fr.) R.E.Fr.
ANNONACEAE	*Duguetia moricandiana* Mart.
ANNONACEAE	*Duguetia pohliana* Mart.
ANNONACEAE	*Duguetia restingae* Maas
ANNONACEAE	*Duguetia reticulata* Maas
ANNONACEAE	*Duguetia riedeliana* R.E.Fr.
ANNONACEAE	*Duguetia salicifolia* R.E.Fr.
ANNONACEAE	*Duguetia scottmori* Maas
ANNONACEAE	*Duguetia sessilis* (Vell.) Maas
ANNONACEAE	*Duguetia sooretamae* Maas
ANNONACEAE	*Ephedranthus* sp.1
ANNONACEAE	*Ephedranthus* sp.2
ANNONACEAE	*Ephedranthus* sp.3
ANNONACEAE	*Guatteria australis* A.St.-Hil.
ANNONACEAE	*Guatteria blepharophylla* Mart.
ANNONACEAE	*Guatteria campestris* R.E.Fr.
ANNONACEAE	*Guatteria candolleana* Schltdl.
ANNONACEAE	*Guatteria conspicua* R.E.Fr.
ANNONACEAE	*Guatteria ferruginea* A.St.-Hil.
ANNONACEAE	*Guatteria latifolia* (Mart.) R.E.Fr.
ANNONACEAE	*Guatteria macropus* Mart.
ANNONACEAE	*Guatteria minarum* R.E.Fr.
ANNONACEAE	*Guatteria notabilis* Mello-Silva & Pirani
ANNONACEAE	*Guatteria oligocarpa* Mart.

APPENDIX B - Continued.

Family	Species
ANNONACEAE	*Guatteria pogonopus* Mart.
ANNONACEAE	*Guatteria pohliana* Schltdl.
ANNONACEAE	*Guatteria rupestris* Mello Silva & Pirani
ANNONACEAE	*Guatteria schomburgkiana* Mart.
ANNONACEAE	*Guatteria sellowiana* Schltdl.
ANNONACEAE	*Guatteria villosissima* A.St.-Hil.
ANNONACEAE	*Hornschuchia bryotrophe* Nees
ANNONACEAE	*Hornschuchia cauliflora* Maas & van Setten
ANNONACEAE	*Hornschuchia citriodora* D.M.Johnson
ANNONACEAE	*Hornschuchia leptandra* D.M.Johnson
ANNONACEAE	*Hornschuchia lianarum* D.M.Johnson
ANNONACEAE	*Hornschuchia myrtillus* Nees
ANNONACEAE	*Hornschuchia obliqua* Maas & Setten
ANNONACEAE	*Hornschuchia polyantha* Maas
ANNONACEAE	*Hornschuchia santosii* D.M.Johnson
ANNONACEAE	*Malmea obovata* R.E.Fr.
ANNONACEAE	*Oxandra martiana* (Schltdl.) R.E.Fr.
ANNONACEAE	*Oxandra nitida* R.E.Fr.
ANNONACEAE	*Oxandra reticulata* Maas
ANNONACEAE	*Oxandra sessiliflora* R.E.Fr.
ANNONACEAE	*Porcelia macrocarpa* (Warm.) R.E.Fr.
ANNONACEAE	*Pseudoxandra bahiensis* Maas
ANNONACEAE	*Pseudoxandra spiritussancti* Maas
ANNONACEAE	*Trigynaea axilliflora* D.M.Johnson & N.A.Murray
ANNONACEAE	*Trigynaea oblongifolia* Schltdl.
ANNONACEAE	*Unonopsis aurantiaca* Maas & Westra
ANNONACEAE	*Unonopsis bahiensis* Maas & Westra
ANNONACEAE	*Unonopsis bauxitae* Maas et al.
ANNONACEAE	*Unonopsis guatterioides* (A.DC.) R.E.Fr.
ANNONACEAE	*Unonopsis renati* Maas & Westra
ANNONACEAE	*Unonopsis riedeliana* R.E.Fr.
ANNONACEAE	*Unonopsis sanctaeteresae* Maas & Westra
ANNONACEAE	*Xylopia aromatica* (Lam.) Mart.

APPENDIX B - Continued.

Family	Species
ANNONACEAE	*Xylopia brasiliensis Spreng.*
ANNONACEAE	*Xylopia decorticans* D.M.Johnson & Lobão
ANNONACEAE	*Xylopia emarginata* Mart.
ANNONACEAE	*Xylopia frutescens* Aubl.
ANNONACEAE	*Xylopia involucrata* M.C.Dias & Kinoshita
ANNONACEAE	*Xylopia laevigata* (Mart.) R.E.Fr.
ANNONACEAE	*Xylopia langsdorfiana* A.St.-Hil. & Tul.
ANNONACEAE	*Xylopia ochrantha* Mart
ANNONACEAE	*Xylopia sericea* A.St.-Hil.
APOCYNACEAE	*Aspidosperma australe* Müll.Arg.
APOCYNACEAE	*Aspidosperma camporum* Müll.Arg.
APOCYNACEAE	*Aspidosperma compactinervium* Kuhlm.
APOCYNACEAE	*Aspidosperma cuspa* (Kunth) S.F.Blake ex Pittier
APOCYNACEAE	*Aspidosperma cylindrocarpon* Müll.Arg.
APOCYNACEAE	*Aspidosperma discolor* A.DC.
APOCYNACEAE	*Aspidosperma dispermum* Müll.Arg.
APOCYNACEAE	*Aspidosperma illustre* (Vell.) Kuhlm. & Pirajá
APOCYNACEAE	*Aspidosperma macrocarpon* Mart.
APOCYNACEAE	*Aspidosperma multiflorum* A.DC.
APOCYNACEAE	*Aspidosperma olivaceum* Müll.Arg.
APOCYNACEAE	*Aspidosperma parvifolium* A.DC.
APOCYNACEAE	*Aspidosperma polyneuron* Müll.Arg.
APOCYNACEAE	*Aspidosperma pyrifolium* Mart.
APOCYNACEAE	*Aspidosperma quirandy* Hassl.
APOCYNACEAE	*Aspidosperma ramiflorum* Müll.Arg.
APOCYNACEAE	*Aspidosperma riedelii* Müll.Arg.
APOCYNACEAE	*Aspidosperma spruceanum* Benth. ex Müll.Arg.
APOCYNACEAE	*Aspidosperma subincanum* Mart. ex A.DC.
APOCYNACEAE	*Aspidosperma thomasii* Marcondes-Ferreira
APOCYNACEAE	*Aspidosperma tomentosum* Mart.
APOCYNACEAE	*Aspidosperma triternatum* Rojas Acosta
APOCYNACEAE	*Couma rigida* Müll.Arg.
APOCYNACEAE	*Geissospermum laeve* (Vell.) Miers

APPENDIX B - Continued.

Family	Species
APOCYNACEAE	*Hancornia speciosa* Gomes
APOCYNACEAE	*Himatanthus articulatus* (Vahl) Woodson
APOCYNACEAE	*Himatanthus bracteatus* (A.DC.) Woodson
APOCYNACEAE	*Himatanthus drasticus* (Mart.) Plumel
APOCYNACEAE	*Himatanthus obovatus* (Müll.Arg.) Woodson
APOCYNACEAE	*Lacmellea bahiensis* J.E.Morales
APOCYNACEAE	*Lacmellea pauciflora* (Kuhlm.) Markgr.
APOCYNACEAE	*Macoubea guianensis* Aubl.
APOCYNACEAE	*Malouetia arborea* (Vell.) Miers
APOCYNACEAE	*Plumeria rubra* L.
APOCYNACEAE	*Rauvolfia bahiensis* A.DC.
APOCYNACEAE	*Rauvolfia capixabae* I.Koch & Kin.-Gouv.
APOCYNACEAE	*Rauvolfia grandiflora* Mart. ex DC.
APOCYNACEAE	*Rauvolfia mattfeldiana* Markgr.
APOCYNACEAE	*Rauvolfia pruinosifolia* I.Koch & Kin.-Gouv.
APOCYNACEAE	*Rauvolfia sellowii* Müll.Arg.
APOCYNACEAE	*Tabernaemontana catharinensis* A.DC.
APOCYNACEAE	*Tabernaemontana flavicans* Willd. ex Roem. & Schult.
APOCYNACEAE	*Tabernaemontana hystrix* (Steud.) A.DC.
APOCYNACEAE	*Tabernaemontana laeta* Mart.
APOCYNACEAE	*Tabernaemontana salzmannii* A.DC.
APOCYNACEAE	*Tabernaemontana solanifolia* A.DC.
AQUIFOLIACEAE	*Ilex affinis* Gardner
AQUIFOLIACEAE	*Ilex asperula* Mart. ex Reissek
AQUIFOLIACEAE	*Ilex brasiliensis* (Spreng.) Loes.
AQUIFOLIACEAE	*Ilex brevicuspis* Reissek
AQUIFOLIACEAE	*Ilex cerasifolia* Reissek
AQUIFOLIACEAE	*Ilex conocarpa* Reissek
AQUIFOLIACEAE	*Ilex divaricata* Mart. ex Reissek
AQUIFOLIACEAE	*Ilex dumosa* Reissek
AQUIFOLIACEAE	*Ilex floribunda* Reissek & Maxim.
AQUIFOLIACEAE	*Ilex friburgensis* Loes.
AQUIFOLIACEAE	*Ilex grandis* Reissek

APPENDIX B - Continued.

Family	Species
AQUIFOLIACEAE	*Ilex integrifolia Hort.* ex Index Kew.
AQUIFOLIACEAE	*Ilex longipetiolata* Loes.
AQUIFOLIACEAE	*Ilex lundii* Warm.
AQUIFOLIACEAE	*Ilex microdonta* Reissek
AQUIFOLIACEAE	*Ilex oligoneura* Loes.
AQUIFOLIACEAE	*Ilex organensis* Loes.
AQUIFOLIACEAE	*Ilex paraguariensis* A.St.-Hil.
AQUIFOLIACEAE	*Ilex psammophila* Reissek
AQUIFOLIACEAE	*Ilex pseudobuxus* Reissek
AQUIFOLIACEAE	*Ilex pseudotheezans* Loes.
AQUIFOLIACEAE	*Ilex pseudovaccinium* Reissek & Maxim.
AQUIFOLIACEAE	*Ilex sapotifolia* Reissek
AQUIFOLIACEAE	*Ilex taubertiana* Loes.
AQUIFOLIACEAE	*Ilex theezans* Mart. ex Reissek
ARALIACEAE	*Aralia excelsa* (Griseb.) J.Wen
ARALIACEAE	*Aralia warmingiana* (Marchal) J.Wen
ARALIACEAE	*Dendropanax amorimii* Fiaschi
ARALIACEAE	*Dendropanax australis* Fiaschi & Jung-Mend.
ARALIACEAE	*Dendropanax bahiensis* Fiaschi
ARALIACEAE	*Dendropanax caudatus* Fiaschi
ARALIACEAE	*Dendropanax cuneatus* (DC.) Decne. & Planch.
ARALIACEAE	*Dendropanax denticulatus* Fiaschi
ARALIACEAE	*Dendropanax geniculatus* Fiaschi
ARALIACEAE	*Dendropanax langsdorffii* (Marchal) Frodin
ARALIACEAE	*Dendropanax monogynus* (Vell.) Seem.
ARALIACEAE	*Dendropanax nebulosus* Fiaschi & Jung-Mend.
ARALIACEAE	*Dendropanax trilobus* (Gardner) Seem.
ARALIACEAE	*Oreopanax capitatus* (Jacq.) Decne. & Planch.
ARALIACEAE	*Oreopanax fulvus* Marchal
ARALIACEAE	*Schefflera angustissima* (Marchal) Frodin
ARALIACEAE	*Schefflera aurata* Fiaschi
ARALIACEAE	*Schefflera burchellii* (Seem.) Frodin & Fiaschi
ARALIACEAE	*Schefflera calva* (Cham.) Frodin & Fiaschi

APPENDIX B - Continued.

Family		Species
ARALIACEAE		*Schefflera capixaba* Fiaschi
ARALIACEAE		*Schefflera grandigemma* Fiaschi
ARALIACEAE		*Schefflera kollmannii* Fiaschi
ARALIACEAE		*Schefflera longipetiolata* (Pohl ex DC.) Frodin & Fiaschi
ARALIACEAE		*Schefflera macrocarpa* (Cham. & Schltdl.) Frodin
ARALIACEAE		*Schefflera malmei* (Harms) Frodin
ARALIACEAE		*Schefflera morototoni* (Aubl.) Maguire et al.
ARALIACEAE		*Schefflera ruschiana* Fiaschi
ARALIACEAE		*Schefflera selloi* (Marchal) Frodin & Fiaschi
ARALIACEAE		*Schefflera succinea* Frodin & Fiaschi
ARALIACEAE		*Schefflera varisiana* Frodin
ARALIACEAE		*Schefflera vinosa* (Cham. & Schltdl.) Frodin & Fiaschi
ARAUCARIACEAE	*	*Araucaria angustifolia* (Bertol.) Kuntze
ARECACEAE		*Acrocomia aculeata* (Jacq.) Lodd. ex Mart.
ARECACEAE		*Astrocaryum aculeatissimum* (Schott) Burret
ARECACEAE		*Attalea dubia* (Mart.) Burret
ARECACEAE		*Attalea funifera* Mart. ex Spreng.
ARECACEAE		*Attalea oleifera* Barb.Rodr.
ARECACEAE		*Attalea phalerata* Mart. ex Spreng.
ARECACEAE		*Attalea pindobassu* Bondar
ARECACEAE		*Attalea speciosa* Mart. ex Spreng.
ARECACEAE		*Bactris ferruginea* Burret
ARECACEAE		*Bactris horridispatha* Noblick ex A.Hend.
ARECACEAE		*Bactris setosa* Mart.
ARECACEAE		*Butia capitata* (Mart.) Becc.
ARECACEAE	*	*Butia eriospatha* (Mart. ex Drude) Becc.
ARECACEAE		*Butia paraguayensis* (Barb.Rodr.) L.H.Bailey
ARECACEAE		*Butia yatay* (Mart.) Becc.
ARECACEAE		*Cocos nucifera* L.
ARECACEAE		*Copernicia prunifera* (Mill.) H.E.Moore
ARECACEAE	*	*Euterpe edulis* Mart.
ARECACEAE		*Geonoma brevispatha* Barb.Rodr.

APPENDIX B - Continued.

Family	Species
ARECACEAE	*Geonoma gamiova* Barb.Rodr.
ARECACEAE	*Geonoma pohliana* Mart.
ARECACEAE	*Geonoma rubescens* H.Wendl. ex Drude
ARECACEAE	*Geonoma schottiana* Mart.
ARECACEAE	*Lytocaryum hoehnei* (Burret) Tol.
ARECACEAE	*Lytocaryum weddellianum* (H.Wendl.) Tol.
ARECACEAE	*Mauritia flexuosa* L.f.
ARECACEAE	*Mauritiella armata* (Mart.) Burret
ARECACEAE	*Oenocarpus distichus* Mart.
ARECACEAE	*Polyandrococos caudescens* (Mart.) Barb.Rodr.
ARECACEAE	*Syagrus botryophora* (Mart.) Mart.
ARECACEAE	*Syagrus cearensis* Noblick
ARECACEAE	*Syagrus coronata* (Mart.) Becc.
ARECACEAE	*Syagrus flexuosa* (Mart.) Becc.
ARECACEAE	*Syagrus glaucescens* Glaz. ex Becc.
ARECACEAE	*Syagrus macrocarpa* Barb.Rodr.
ARECACEAE	*Syagrus oleracea* (Mart.) Becc.
ARECACEAE	*Syagrus picrophylla* Barb.Rodr.
ARECACEAE	*Syagrus pseudococos* (Raddi) Glassman
ARECACEAE	*Syagrus romanzoffiana* (Cham.) Glassman
ARECACEAE	*Syagrus ruschiana* (Bondar) Glassman
ARECACEAE	*Syagrus schizophylla* (Mart.) Glassman
ARECACEAE	*Trithrinax brasiliensis* Mart.
ASPARAGACEAE	*Cordyline spectabilis* Kunth & Bouché
ASTERACEAE	*Austrocritonia angulicaulis* (Sch.Bip. ex Baker) R.M.King & H.Rob.
ASTERACEAE	*Austrocritonia velutina* (Gardner) R.M.King & H.Rob.
ASTERACEAE	*Austroeupatorium inulifolium* (Kunth) R.M.King & H.Rob.
ASTERACEAE	*Baccharis calvescens* DC.
ASTERACEAE	*Baccharis caprariifolia* DC.
ASTERACEAE	*Baccharis dentata* (Vell.) G.Barroso
ASTERACEAE	*Baccharis dracunculifolia* DC.
ASTERACEAE	*Baccharis glaziovii* Baker

APPENDIX B - Continued.

Family	Species
ASTERACEAE	*Baccharis grandimucronata* Malag.
ASTERACEAE	*Baccharis intermixta* Gardner
ASTERACEAE	*Baccharis leucocephala* Dusén
ASTERACEAE	*Baccharis longoattenuata* A.S.Oliveira
ASTERACEAE	*Baccharis lychnophora* Gardner
ASTERACEAE	*Baccharis microdonta* DC.
ASTERACEAE	*Baccharis oblongifolia* (Ruiz & Pav.) Pers.
ASTERACEAE	*Baccharis oreophila* Malme
ASTERACEAE	*Baccharis psiadioides* (Less.) Joch.Müll.
ASTERACEAE	*Baccharis ramosissima* Gardner
ASTERACEAE	*Baccharis regnellii* Sch.-Bip. ex Baker
ASTERACEAE	*Baccharis retusa* DC.
ASTERACEAE	*Baccharis rufidula* (Spreng.) Joch.Müll.
ASTERACEAE	*Baccharis salicifolia* (Ruiz & Pav.) Pers.
ASTERACEAE	*Baccharis salzmannii* DC.
ASTERACEAE	*Baccharis semiserrata* DC.
ASTERACEAE	*Baccharis serrulata* DC.
ASTERACEAE	*Baccharis singularis* (Vell.) G.M.Barroso
ASTERACEAE	*Dasyphyllum brasiliense* (Spreng.) Cabrera
ASTERACEAE	*Dasyphyllum spinescens* (Less.) Cabrera
ASTERACEAE	*Dasyphyllum tomentosum* (Spreng.) Cabrera
ASTERACEAE	*Dendrophorbium glaziovii* (Baker) C.Jeffrey
ASTERACEAE	*Eremanthus capitatus* (Spreng.) MacLeish
ASTERACEAE	*Eremanthus crotonoides* (DC.) Sch.Bip.
ASTERACEAE	*Eremanthus elaeagnus* (Mart. ex DC.) Sch.Bip.
ASTERACEAE	*Eremanthus erythropappus* (DC.) MacLeish
ASTERACEAE	*Eremanthus glomerulatus* Less.
ASTERACEAE	*Eremanthus incanus* (Less.) Less.
ASTERACEAE	*Eremanthus polycephalus* (DC.) MacLeish
ASTERACEAE	*Gochnatia avicenniaefolia* (DC.) Cabrera
ASTERACEAE	*Gochnatia brasiliensis* Cabrera
ASTERACEAE	*Gochnatia hatschbachii* Cabrera
ASTERACEAE	*Gochnatia paniculata* (Less.) Cabrera

APPENDIX B - Continued.

Family	Species
ASTERACEAE	*Gochnatia polymorpha* (Less.) Cabrera
ASTERACEAE	*Gochnatia sordida* (Less.) Cabrera
ASTERACEAE	*Gochnatia velutina* (Bong.) Cabrera
ASTERACEAE	*Idiothamnus pseudorgyalis* R.M.King & H.Rob.
ASTERACEAE	*Kaunia rufescens* (Lund. ex DC.) R.M.King & H.Rob.
ASTERACEAE	*Malmeanthus subintegerrimus* (Malme) R.M.King
ASTERACEAE	*Moquinia racemosa* (Spreng.) DC.
ASTERACEAE	*Morithamnus ganophyllus* (Mattf. ex Pilg.) R.M.King & H.Rob.
ASTERACEAE	*Neocabreria pennivenia* (B.L.Rob.) R.M.King & H.Rob.
ASTERACEAE	*Paralychnophora bicolor* (DC.) MacLeish
ASTERACEAE	*Paralychnophora harleyi* (H.Rob.) D.J.N.Hind
ASTERACEAE	*Paralychnophora reflexoauriculata* (G.M.Barroso) MacLeish
ASTERACEAE	*Paralychnophora santosii* (H.Rob.) D.J.N.Hind
ASTERACEAE	*Piptocarpha angustifolia* Dusén
ASTERACEAE	*Piptocarpha axillaris* (Less.) Baker
ASTERACEAE	*Piptocarpha densifolia* Dusén
ASTERACEAE	*Piptocarpha macropoda* Baker
ASTERACEAE	*Piptocarpha organensis* Cabrera
ASTERACEAE	*Piptocarpha regnellii* (Sch.Bip.) Cabrera
ASTERACEAE	*Piptocarpha rotundifolia* (Less.) Baker
ASTERACEAE	*Raulinoreitzia leptophloebia* (B.L.Rob.) R.M.King & H.Rob.
ASTERACEAE	*Stifftia chrysantha* Mikan
ASTERACEAE	*Stifftia fruticosa* (Vell.) D.J.N.Hind & Semir
ASTERACEAE	*Stifftia parviflora* D.Don.
ASTERACEAE	*Symphyopappus itatiayensis* (Hieron.) R.M.King & H.Rob.
ASTERACEAE	*Symphyopappus lymansmithii* B.L.Rob.
ASTERACEAE	*Trixis praestans* (Vell.) Cabrera
ASTERACEAE	*Verbesina glabrata* Hook. & Arn.
ASTERACEAE	*Vernonanthura beyrichii* (Less.) H.Rob.

APPENDIX B - Continued.

Family	Species
ASTERACEAE	*Vernonanthura discolor* (Spreng.) H.Rob.
ASTERACEAE	*Vernonanthura divaricata* (Spreng.) H.Rob.
ASTERACEAE	*Vernonanthura petiolaris* (DC.) H.Rob.
ASTERACEAE	*Vernonanthura puberula* (Less.) H.Rob.
ASTERACEAE	*Wunderlichia azulensis* Maguire & G.Barroso
ASTERACEAE	*Wunderlichia bahiensis* B.Maguire & G.M.Barroso
ASTERACEAE	*Wunderlichia crulsiana* Taub.
ASTERACEAE	*Wunderlichia mirabilis* Riedel ex Baker
BERBERIDACEAE	*Berberis campos-portoi* Brade
BERBERIDACEAE	*Berberis laurina* Billb.
BIGNONIACEAE	*Arrabidaea bahiensis* (Schauer) Sandwith & Moldenke
BIGNONIACEAE	*Cybistax antisyphilitica* (Mart.) Mart.
BIGNONIACEAE	*Godmania dardanoi* (J.C.Gomes) A.H.Gentry
BIGNONIACEAE	*Handroanthus albus* (Cham.) Mattos
BIGNONIACEAE	*Handroanthus arianeae* (A.H.Gentry) S.O.Grose
BIGNONIACEAE	*Handroanthus botelhensis* (A.H.Gentry) S.O.Grose
BIGNONIACEAE	*Handroanthus bureavii* (Sandwith) S.O.Grose
BIGNONIACEAE	*Handroanthus catarinensis* (A.H.Gentry) S.O.Grose
BIGNONIACEAE	*Handroanthus chrysotrichus* (Mart. ex A.DC.) Mattos
BIGNONIACEAE	*Handroanthus cristatus* (A.H.Gentry) S.O.Grose
BIGNONIACEAE	*Handroanthus heptaphyllus* (Martius) Mattos
BIGNONIACEAE	*Handroanthus impetiginosus* (Mart. ex DC.) Mattos
BIGNONIACEAE	*Handroanthus ochraceus* (Cham.) Mattos
BIGNONIACEAE	*Handroanthus pedicellatus* (Bureau & K.Schum. ex Mart.) Mattos
BIGNONIACEAE	*Handroanthus pulcherrimus* (Sandwith) S.O.Grose
BIGNONIACEAE	*Handroanthus riodocensis* (A.H.Gentry) S.O.Grose
BIGNONIACEAE	*Handroanthus selachidentatus* (A.H.Gentry) S.O.Grose
BIGNONIACEAE	*Handroanthus serratifolius* (Vahl) S.O.Grose

APPENDIX B - Continued.

Family		Species
BIGNONIACEAE		*Handroanthus spongiosus* (Rizzini) S.O.Grose
BIGNONIACEAE		*Handroanthus umbellatus* (Sond.) Mattos
BIGNONIACEAE		*Handroanthus vellosoi* (Toledo) Mattos
BIGNONIACEAE		*Jacaranda bracteata* Bureau & K.Schum
BIGNONIACEAE		*Jacaranda brasiliana* (Lam.) Pers.
BIGNONIACEAE		*Jacaranda caroba* (Vell.) A.DC.
BIGNONIACEAE	*	*Jacaranda crassifolia* Morawetz
BIGNONIACEAE		*Jacaranda cuspidifolia* Mart. ex A.DC.
BIGNONIACEAE		*Jacaranda grandifoliolata* A.H.Gentry
BIGNONIACEAE		*Jacaranda irwinii* A.H.Gentry
BIGNONIACEAE		*Jacaranda jasminoides* (Thunb.) Sandwith
BIGNONIACEAE		*Jacaranda macrantha* Cham.
BIGNONIACEAE		*Jacaranda micrantha* Cham.
BIGNONIACEAE		*Jacaranda microcalyx* A.H.Gentry
BIGNONIACEAE		*Jacaranda montana* Morawetz
BIGNONIACEAE		*Jacaranda obovata* Cham.
BIGNONIACEAE		*Jacaranda praetermissa* Sandwith
BIGNONIACEAE		*Jacaranda puberula* Cham.
BIGNONIACEAE		*Jacaranda pulcherrima* Morawetz
BIGNONIACEAE	*	*Jacaranda rugosa* A.H.Gentry
BIGNONIACEAE	*	*Jacaranda subalpina* Morawetz
BIGNONIACEAE		*Paratecoma peroba* (Record & Mell) Kuhlm.
BIGNONIACEAE		*Sparattosperma catingae* A.H.Gentry
BIGNONIACEAE		*Sparattosperma leucanthum* (Vell.) K.Schum.
BIGNONIACEAE		*Tabebuia aurea* (Manso) Benth. & Hook.f. ex S.Moore
BIGNONIACEAE		*Tabebuia cassinoides* DC.
BIGNONIACEAE		*Tabebuia elliptica* (A.DC.) Sandwith
BIGNONIACEAE		*Tabebuia gemmiflora* Rizz. & Mattos
BIGNONIACEAE		*Tabebuia insignis* (Miq.) Sandwith
BIGNONIACEAE		*Tabebuia obtusifolia* (Cham.) Bureau
BIGNONIACEAE		*Tabebuia reticulata* A.H.Gentry
BIGNONIACEAE		*Tabebuia roseoalba* (Ridl.) Sandwith
BIGNONIACEAE		*Tabebuia stenocalyx* Sprague & Stapf

APPENDIX B - Continued.

Family		Species
BIGNONIACEAE		*Zeyheria montana* Mart.
BIGNONIACEAE		*Zeyheria tuberculosa* (Vell.) Bureau
BIXACEAE		*Bixa arborea* Huber
BIXACEAE		*Bixa orellana* L.
BIXACEAE		*Cochlospermum vitifolium* (Willd.) Spreng.
BONNETIACEAE		*Bonnetia stricta* (Nees) Nees & Mart.
BURSERACEAE		*Commiphora leptophloeus* (Mart.) J.B.Gillet
BURSERACEAE		*Crepidospermum atlanticum* Daly
BURSERACEAE		*Protium aracouchini* (Aubl.) Marchand
BURSERACEAE		*Protium bahianum* Daly
BURSERACEAE		*Protium brasiliense* (Spreng.) Engl.
BURSERACEAE		*Protium glaziovii* Swart
BURSERACEAE		*Protium hebepetalum* Daly
BURSERACEAE		*Protium heptaphyllum* (Aubl.) Marchand
BURSERACEAE		*Protium icicariba* (DC.) Marchand
BURSERACEAE		*Protium kleinii* Cuatrec.
BURSERACEAE		*Protium ovatum* Engl.
BURSERACEAE		*Protium spruceanum* (Benth.) Engl.
BURSERACEAE		*Protium tenuifolium* (Engl.) Engl.
BURSERACEAE		*Protium warmingianum* Marchand
BURSERACEAE		*Protium widgrenii* Engl.
BURSERACEAE		*Tetragastris breviacuminata* Swart
BURSERACEAE		*Tetragastris catuaba* Soares da Cunha
BURSERACEAE		*Tetragastris cerradicola* Daly
BURSERACEAE		*Tetragastris occhionii* (Rizzini) Daly
BURSERACEAE	*	*Trattinnickia ferruginea* Kuhlm.
BURSERACEAE	*	*Trattinnickia mensalis* Daly
CACTACEAE		*Arrojadoa rhodantha* (Gürke) Britton & Rose
CACTACEAE	*	*Arthrocereus melanurus* (K.Schum.) L.Diers et al.
CACTACEAE		*Brasiliopuntia brasiliensis* (Willd.) A.Berger
CACTACEAE		*Brasiliopuntia schulzii* (A.Cast. & Lelong) Backeb.
CACTACEAE		*Cereus fernambucensis* Lem.

APPENDIX B - Continued.

Family		Species
CACTACEAE		*Cereus hildmannianus* K.Schum.
CACTACEAE		*Cereus jamacaru* DC.
CACTACEAE		*Cereus* sp.nov.
CACTACEAE		*Cereus stenogonus* K.Schum.
CACTACEAE	*	*Facheiroa cephaliomelana* Buining & Brederoo
CACTACEAE		*Facheiroa ulei* (Gürke) Werderm.
CACTACEAE		*Leocereus bahiensis* Britton & Rose
CACTACEAE		*Micranthocereus albicephalus* (Buining & Brederoo) F.Ritter
CACTACEAE		*Micranthocereus purpureus* (Gürke) F.Ritter
CACTACEAE		*Opuntia monacantha* (Willd.) Haw.
CACTACEAE		*Pereskia aculeata* Mill.
CACTACEAE		*Pereskia aureiflora* F.Ritter
CACTACEAE		*Pereskia bahiensis* Gürke
CACTACEAE		*Pereskia grandifolia* Haw.
CACTACEAE		*Pereskia nemorosa* Rojas Acosta
CACTACEAE		*Pereskia stenantha* F.Ritter
CACTACEAE		*Pilosocereus arrabidae* (Lem.) Byles & G.D.Rowley
CACTACEAE	*	*Pilosocereus aurisetus* (Werderm.) Byles & G.D.Rowley
CACTACEAE	*	*Pilosocereus azulensis* N.P.Taylor & Zappi
CACTACEAE	*	*Pilosocereus brasiliensis* (Britton & Rose) Backeb.
CACTACEAE		*Pilosocereus catingicola* (Gürke) Byles & G.D.Rowley
CACTACEAE		*Pilosocereus densiareolatus* F.Ritter
CACTACEAE		*Pilosocereus floccosus* (Backeb. & Voll) Byles & G.D.Rowley
CACTACEAE		*Pilosocereus fulvilanatus* (Buining & Brederoo) F.Ritter
CACTACEAE		*Pilosocereus glaucochrous* (Wederm.) Byles & G.D.Rowley
CACTACEAE		*Pilosocereus gounellei* (F.A.C.Weber) Byles & G.D.Rowley
CACTACEAE		*Pilosocereus machrisii* (E.Y.Dawson) Backeb.
CACTACEAE		*Pilosocereus magnificus* (Buining & Brederoo) F.Ritter

APPENDIX B - Continued.

Family	Species
CACTACEAE	*Pilosocereus multicostatus* F.Ritter
CACTACEAE	*Pilosocereus pachycladus* F.Ritter
CACTACEAE	*Pilosocereus pentaedrophorus* (Labour.) Byles & G.D.Rowley
CACTACEAE	*Quiabentia zehntneri* (Britton & Rose) Britton & Rose
CALOPHYLLACEAE	*Calophyllum brasiliense* Cambess.
CALOPHYLLACEAE	*Caraipa densifolia* Mart.
CALOPHYLLACEAE	*Kielmeyera albopunctata* Saddi
CALOPHYLLACEAE	*Kielmeyera altissima* Saddi
CALOPHYLLACEAE	*Kielmeyera appariciana* Saddi
CALOPHYLLACEAE	*Kielmeyera bifaria* Saddi
CALOPHYLLACEAE	*Kielmeyera coriacea* Mart. & Zucc.
CALOPHYLLACEAE	*Kielmeyera cuspidata* Saddi
CALOPHYLLACEAE	*Kielmeyera decipiens* Saddi
CALOPHYLLACEAE	*Kielmeyera divergens* Saddi
CALOPHYLLACEAE	*Kielmeyera elata* Saddi
CALOPHYLLACEAE	*Kielmeyera excelsa* Cambess.
CALOPHYLLACEAE	*Kielmeyera gracilis* Wawra
CALOPHYLLACEAE	*Kielmeyera insignis* Saddi
CALOPHYLLACEAE	*Kielmeyera itacarensis* Saddi
CALOPHYLLACEAE	*Kielmeyera lathrophyton* Saddi
CALOPHYLLACEAE	*Kielmeyera marauensis* Saddi
CALOPHYLLACEAE	*Kielmeyera membranacea* Casar.
CALOPHYLLACEAE	*Kielmeyera neglecta* Saddi
CALOPHYLLACEAE	*Kielmeyera occhioniana* Saddi
CALOPHYLLACEAE	*Kielmeyera petiolaris* Mart.
CALOPHYLLACEAE	*Kielmeyera reticulata* Saddi
CALOPHYLLACEAE	*Kielmeyera rizziniana* Saddi
CALOPHYLLACEAE	*Kielmeyera rubriflora* Cambess.
CALOPHYLLACEAE	*Kielmeyera rugosa* Choisy
CALOPHYLLACEAE	*Kielmeyera sigillata* Saddi
CANELLACEAE	*Cinnamodendron axillare* (Nees & Mart.) Endl. ex Walp.
CANELLACEAE	*Cinnamodendron dinisii* Schwacke

APPENDIX B - Continued.

Family	Species
CANELLACEAE	*Cinnamodendron occhionianum* F.Barros & J.Salazar
CANELLACEAE	*Cinnamodendron sampaioanum* Occhioni
CANNABACEAE	*Celtis brasiliensis* (Gardner) Planch.
CANNABACEAE	*Celtis ehrenbergiana* (Klotzsch) Liebm.
CANNABACEAE	*Celtis iguanaea* (Jacq.) Sarg.
CANNABACEAE	*Celtis orthacanthos* Planch.
CANNABACEAE	*Trema micrantha* (L.) Blume
CAPPARACEAE	*Capparidastrum frondosum* (Jacq.) X.Cornejo & H.H.Iltis
CAPPARACEAE	*Colicodendron bahianum* X.Cornejo & H.H.Iltis
CAPPARACEAE	*Colicodendron yco* Mart.
CAPPARACEAE	*Crateva tapia* L.
CAPPARACEAE	*Cynophalla flexuosa* (L.) J.Presl
CAPPARACEAE	*Monilicarpa brasiliana* (Banks ex DC.), X.Cornejo & H.H.Iltis
CAPPARACEAE	*Neocalyptrocalyx grandipetala* (Maguire & Steyerm.) X.Cornejo & H.H.Iltis
CAPPARACEAE	*Neocalyptrocalyx longifolium* (Mart.) X.Cornejo & H.H.Iltis
CAPPARACEAE	*Neocalyptrocalyx nectarius* (Vell.) Hutch.
CARDIOPTERIDACEAE	*Citronella engleriana* (Loes.) R.A.Howard
CARDIOPTERIDACEAE	*Citronella gongonha* (Mart.) R.A.Howard
CARDIOPTERIDACEAE	*Citronella paniculata* (Mart.) R.A.Howard
CARICACEAE	*Jacaratia corumbensis* Kuntze
CARICACEAE	*Jacaratia heptaphylla* (Vell.) A.DC.
CARICACEAE	*Jacaratia* sp.nov.ined.
CARICACEAE	*Jacaratia spinosa* (Aubl.) A.DC.
CARICACEAE	*Vasconcellea glandulosa* A.DC.
CARICACEAE	*Vasconcellea quercifolia* A.St.-Hil.
CARYOCARACEAE	*Anthodiscus amazonicus* Gleason & A.C.Sm.
CARYOCARACEAE	*Caryocar brasiliense* Cambess.
CARYOCARACEAE	*Caryocar coriaceum* Wittm.
CARYOCARACEAE	*Caryocar cuneatum* Wittm.
CARYOCARACEAE	*Caryocar edule* Casar.
CELASTRACEAE	*Cheiloclinium cognatum* (Miers.) A.C.Sm.

APPENDIX B - Continued.

Family	Species
CELASTRACEAE	*Fraunhofera multiflora* Mart.
CELASTRACEAE	*Maytenus aquifolia* Mart.
CELASTRACEAE	*Maytenus ardisiifolia* Reissek
CELASTRACEAE	*Maytenus basidentata* Reissek
CELASTRACEAE	*Maytenus boaria* Molina
CELASTRACEAE	*Maytenus brasiliensis* Mart.
CELASTRACEAE	*Maytenus cassineformis* Reissek
CELASTRACEAE	*Maytenus catingarum* Reissek
CELASTRACEAE	*Maytenus cestrifolia* Reissek
CELASTRACEAE	*Maytenus communis* Reissek
CELASTRACEAE	*Maytenus dasyclada* Mart.
CELASTRACEAE	*Maytenus distichophylla* Mart. ex Reissek
CELASTRACEAE	*Maytenus erythroxyla* Reissek
CELASTRACEAE	*Maytenus evonymoides* Reissek
CELASTRACEAE	*Maytenus floribunda* Reissek
CELASTRACEAE	*Maytenus glaucescens* Reissek
CELASTRACEAE	*Maytenus gonoclada* Mart.
CELASTRACEAE	*Maytenus horrida* Reissek
CELASTRACEAE	*Maytenus ilicifolia* Mart. ex Reissek
CELASTRACEAE	*Maytenus imbricata* Mart.
CELASTRACEAE	*Maytenus littoralis* Car.-Okano
CELASTRACEAE	*Maytenus longifolia* Reissek ex Loes.
CELASTRACEAE	*Maytenus mucugensis* Car.-Okano
CELASTRACEAE	*Maytenus obtusifolia* Mart.
CELASTRACEAE	*Maytenus opaca* Reissek
CELASTRACEAE	*Maytenus patens* Reissek
CELASTRACEAE	*Maytenus quadrangulata* (Schrad.) Loes.
CELASTRACEAE	*Maytenus rigida* Mart.
CELASTRACEAE	*Maytenus salicifolia* Reissek
CELASTRACEAE	*Maytenus samydiformis* Reissek
CELASTRACEAE	*Maytenus schumanniana* Loes.
CELASTRACEAE	*Maytenus subalata* Reissek
CELASTRACEAE	*Peritassa flaviflora* A.C.Sm.

APPENDIX B - Continued.

Family	Species
CELASTRACEAE	*Peritassa sadleri* Lombardi
CELASTRACEAE	*Plenckia bahiensis* Loes.
CELASTRACEAE	*Plenckia populnea* Reissek
CELASTRACEAE	*Salacia arborea* (Leandro) Peyr
CELASTRACEAE	*Salacia crassifolia* (Mart.) G.Don
CELASTRACEAE	*Salacia elliptica* (Mart. ex Schult.) G.Don
CELASTRACEAE	*Salacia grandifolia* (Mart.) G.Don
CELASTRACEAE	*Schaefferia argentinensis* Speg.
CELASTRACEAE	*Tontelea fluminensis* (Peyr) A.C.Sm.
CELASTRACEAE	*Tontelea leptophylla* A.C.Sm.
CHLORANTHACEAE	*Hedyosmum brasiliense* Miq.
CHRYSOBALANACEAE	*Chrysobalanus icaco* L.
CHRYSOBALANACEAE	*Couepia belemii* Prance
CHRYSOBALANACEAE	*Couepia bondarii* Prance
CHRYSOBALANACEAE	*Couepia carautae* Prance
CHRYSOBALANACEAE	*Couepia coarctata* Prance
CHRYSOBALANACEAE	*Couepia grandiflora* (Mart. & Zucc.) Benth. ex Hook.f.
CHRYSOBALANACEAE	*Couepia impressa* Prance
CHRYSOBALANACEAE	*Couepia insignis* Fritsch
CHRYSOBALANACEAE	*Couepia leitaofilhoi* Prance
CHRYSOBALANACEAE	*Couepia longipetiolata* Prance
CHRYSOBALANACEAE	*Couepia meridionalis* Prance
CHRYSOBALANACEAE	*Couepia monteclarensis* Prance
CHRYSOBALANACEAE	*Couepia ovalifolia* (Schott) Benth.
CHRYSOBALANACEAE	*Couepia parvifolia* Prance
CHRYSOBALANACEAE	*Couepia pernambucensis* Prance
CHRYSOBALANACEAE	*Couepia rufa* Ducke
CHRYSOBALANACEAE	*Couepia schottii* Fritsch
CHRYSOBALANACEAE	*Couepia uiti* (Mart. & Zucc.) Benth. ex Hook.f.
CHRYSOBALANACEAE	*Couepia venosa* Prance
CHRYSOBALANACEAE	*Exellodendron cordatum* (Hook.f.) Prance
CHRYSOBALANACEAE	*Exellodendron gardneri* (Hook.f.) Prance
CHRYSOBALANACEAE	*Exellodendron gracile* (Kuhlm.) Prance

APPENDIX B - Continued.

Family		Species
CHRYSOBALANACEAE		*Hirtella angustifolia* Schott ex Spreng.
CHRYSOBALANACEAE		*Hirtella bahiensis* Prance
CHRYSOBALANACEAE		*Hirtella barrosoi* Prance
CHRYSOBALANACEAE		*Hirtella bicornis* Mart. & Zucc.
CHRYSOBALANACEAE		*Hirtella burchellii* Britton
CHRYSOBALANACEAE		*Hirtella ciliata* Mart. & Zucc.
CHRYSOBALANACEAE		*Hirtella floribunda* Cham. & Schltdl.
CHRYSOBALANACEAE		*Hirtella glandulosa* Spreng.
CHRYSOBALANACEAE		*Hirtella glaziovii* Taub.
CHRYSOBALANACEAE		*Hirtella gracilipes* (Hook.f.) Prance
CHRYSOBALANACEAE		*Hirtella hebeclada* Moric. ex DC.
CHRYSOBALANACEAE		*Hirtella hoehnei* Pilg.
CHRYSOBALANACEAE	*	*Hirtella insignis* Briq. ex Prance
CHRYSOBALANACEAE		*Hirtella martiana* Hook.f.
CHRYSOBALANACEAE	*	*Hirtella parviunguis* Prance
CHRYSOBALANACEAE		*Hirtella racemosa* Lam.
CHRYSOBALANACEAE	*	*Hirtella santosii* Prance
CHRYSOBALANACEAE		*Hirtella sprucei* Benth.
CHRYSOBALANACEAE		*Hirtella triandra* Sw.
CHRYSOBALANACEAE		*Licania apetala* (E.Mey.) Fritsch
CHRYSOBALANACEAE		*Licania araneosa* Taub.
CHRYSOBALANACEAE		*Licania arianeae* Prance
CHRYSOBALANACEAE		*Licania bahiensis* Prance
CHRYSOBALANACEAE		*Licania belemii* Prance
CHRYSOBALANACEAE		*Licania canescens* Benoist
CHRYSOBALANACEAE		*Licania caudata* Prance
CHRYSOBALANACEAE		*Licania cymosa* Fritsch
CHRYSOBALANACEAE		*Licania dealbata* Hook.f.
CHRYSOBALANACEAE		*Licania gardneri* (Hook.f.) Fritsch
CHRYSOBALANACEAE		*Licania glazioviana* Warm.
CHRYSOBALANACEAE		*Licania heteromorpha* Benth.
CHRYSOBALANACEAE		*Licania hoehnei* Pilg.
CHRYSOBALANACEAE		*Licania humilis* Cham. & Schltdl.

APPENDIX B - Continued.

Family		Species
CHRYSOBALANACEAE		*Licania hypoleuca* Benth.
CHRYSOBALANACEAE	*	*Licania indurata* Pilg.
CHRYSOBALANACEAE		*Licania kunthiana* Hook.f.
CHRYSOBALANACEAE		*Licania lamentanda* Prance
CHRYSOBALANACEAE		*Licania littoralis* Warm.
CHRYSOBALANACEAE		*Licania micrantha* Miq.
CHRYSOBALANACEAE		*Licania naviculistipula* Prance
CHRYSOBALANACEAE		*Licania nitida* Hook.f.
CHRYSOBALANACEAE		*Licania octandra* (Hoffmanns. ex Roem. & Schult.) Kuntze
CHRYSOBALANACEAE		*Licania riedelii* Prance
CHRYSOBALANACEAE		*Licania rigida* Benth.
CHRYSOBALANACEAE		*Licania salzmannii* (Hook.f.) Fritsch
CHRYSOBALANACEAE		*Licania santosii* Prance
CHRYSOBALANACEAE		*Licania spicata* Hook.f.
CHRYSOBALANACEAE		*Licania tomentosa* (Benth.) Fritsch
CHRYSOBALANACEAE		*Licania turbinata* Benth.
CHRYSOBALANACEAE		*Parinari alvimii* Prance
CHRYSOBALANACEAE	*	*Parinari brasiliensis* (Schott) Hook.f.
CHRYSOBALANACEAE		*Parinari excelsa* Sabine
CHRYSOBALANACEAE		*Parinari leontopitheci* Prance
CHRYSOBALANACEAE		*Parinari littoralis* Prance
CHRYSOBALANACEAE		*Parinari obtusifolia* Hook.f.
CLETHRACEAE		*Clethra scabra* Pers.
CLETHRACEAE		*Clethra uleana* Sleumer
CLUSIACEAE		*Chrysochlamys saldanhae* (Engl.) Oliveira-Filho
CLUSIACEAE		*Clusia aemygdioi* Gomes da Silva & Weinberg
CLUSIACEAE		*Clusia burlemarxii* Bittrich
CLUSIACEAE		*Clusia criuva* Cambess.
CLUSIACEAE		*Clusia dardanoi* G.Mariz & Maguire
CLUSIACEAE		*Clusia fluminensis* Planch. & Triana
CLUSIACEAE		*Clusia fragrans* Gardner
CLUSIACEAE		*Clusia hilariana* Schltdl.
CLUSIACEAE		*Clusia immersa* C.M.Vieira

APPENDIX B - Continued.

Family		Species
CLUSIACEAE		*Clusia lanceolata* Cambess.
CLUSIACEAE		*Clusia melchiori* Gleason
CLUSIACEAE		*Clusia nemorosa* G.Mey.
CLUSIACEAE		*Clusia obdeltifolia* V.Bittrich
CLUSIACEAE		*Clusia organensis* Planch. & Triana
CLUSIACEAE		*Clusia palmicida* Rich. ex Planch. & Triana
CLUSIACEAE		*Clusia panapanari* (Aubl.) Choisy
CLUSIACEAE		*Clusia pernambucensis* G.Mariz
CLUSIACEAE		*Clusia sellowiana* Schltdl.
CLUSIACEAE		*Clusia spiritusanctensis* G.Maris & Weinberg
CLUSIACEAE		*Clusia studartiana* C.M.Vieira & A.G.da Silva
CLUSIACEAE		*Garcinia brasiliensis* Mart.
CLUSIACEAE		*Oedematopus dodecandrus* Triana & Planch.
CLUSIACEAE		*Symphonia globulifera* L.f.
CLUSIACEAE		*Tovomita bahiensis* Engl.
CLUSIACEAE		*Tovomita brasiliensis* (Mart.) Walp.
CLUSIACEAE		*Tovomita brevistaminea* Engl.
CLUSIACEAE		*Tovomita leucantha* (Schltdl.) Cham. & Triana
CLUSIACEAE		*Tovomita mangle* G.Mariz
CLUSIACEAE		*Tovomita paniculata* (Spreng.) Cambess.
COMBRETACEAE		*Buchenavia hoehneana* N.F.Mattos
COMBRETACEAE		*Buchenavia igarataensis* N.F.Mattos
COMBRETACEAE		*Buchenavia kleinii* Exell
COMBRETACEAE	*	*Buchenavia pabstii* Marquete & C.Valente
COMBRETACEAE	*	*Buchenavia rabelloana* Mattos
COMBRETACEAE		*Buchenavia tetraphylla* (Aubl.) R.A.Howard
COMBRETACEAE		*Buchenavia tomentosa* Eichler
COMBRETACEAE		*Combretum duarteanum* Cambess.
COMBRETACEAE		*Combretum glaucocarpum* Mart.
COMBRETACEAE		*Combretum leprosum* Mart.
COMBRETACEAE		*Combretum pisonioides* Taub.
COMBRETACEAE		*Conocarpus erectus* L.
COMBRETACEAE		*Laguncularia racemosa* (L.) C.F.Gaertn.

APPENDIX B - Continued.

Family		Species
COMBRETACEAE		*Terminalia actinophylla* Mart.
COMBRETACEAE	*	*Terminalia acuminata* (Allemão) Eichler
COMBRETACEAE		*Terminalia argentea* (Cambess.) Mart.
COMBRETACEAE		*Terminalia australis* Cambess.
COMBRETACEAE		*Terminalia eichleriana* Alwan & Stace
COMBRETACEAE		*Terminalia fagifolia* Mart.
COMBRETACEAE		*Terminalia glabrescens* Mart.
COMBRETACEAE		*Terminalia hylobates* Eichler
COMBRETACEAE		*Terminalia januariensis* DC.
COMBRETACEAE		*Terminalia kuhlmannii* Alwan & Stace
COMBRETACEAE		*Terminalia mameluco* Pickel
COMBRETACEAE		*Terminalia phaeocarpa* Eichler
COMBRETACEAE		*Terminalia triflora* (Griseb.) Lillo
CONNARACEAE		*Bernardinia fluminensis* (Gardner) Planch.
CONNARACEAE		*Connarus beyrichii* Planch.
CONNARACEAE		*Connarus detersus* Planch.
CONNARACEAE		*Connarus regnellii* G.Schellenb.
CONNARACEAE		*Connarus rostratus* (Vell.) L.B.Sm.
CONNARACEAE		*Connarus suberosus* Planch.
CONNARACEAE		*Rourea bahiensis* Forero
CONNARACEAE		*Rourea discolor* Baker
CONNARACEAE		*Rourea induta* Planch.
CORDIACEAE		*Cordia aberrans* I.M.Johnst.
CORDIACEAE		*Cordia acutifolia* Fresen.
CORDIACEAE		*Cordia alliodora* (Ruiz & Pav.) Oken
CORDIACEAE		*Cordia americana* (L.) Gottschling & J.J.Mill.
CORDIACEAE		*Cordia bicolor* A.DC.
CORDIACEAE		*Cordia ecalyculata* Vell.
CORDIACEAE		*Cordia exaltata* Lam.
CORDIACEAE		*Cordia glabrata* (Mart.) DC.
CORDIACEAE		*Cordia glazioviana* (Taub.) Gottschling & J.J.Mill.
CORDIACEAE		*Cordia incognita* Gottschling & J.J.Mill.
CORDIACEAE		*Cordia latiloba* I.M.Johnst.

APPENDIX B - Continued.

Family	Species
CORDIACEAE	*Cordia magnoliifolia* Cham.
CORDIACEAE	*Cordia nodosa* Lam.
CORDIACEAE	*Cordia ochnacea* DC.
CORDIACEAE	*Cordia rufescens* A.DC.
CORDIACEAE	*Cordia sellowiana* Cham.
CORDIACEAE	*Cordia sericicalyx* A.DC.
CORDIACEAE	*Cordia silvestris* Fresen.
CORDIACEAE	*Cordia superba* Cham.
CORDIACEAE	*Cordia taguahyensis* Vell.
CORDIACEAE	*Cordia toqueve* Aubl.
CORDIACEAE	*Cordia trachyphylla* Mart.
CORDIACEAE	*Cordia trichoclada* DC.
CORDIACEAE	*Cordia trichotoma* (Vell.) Arrab. ex Steud.
CORDIACEAE	*Varronia globosa* Jacq.
CORDIACEAE	*Varronia leucocephala* (Moric.) J.S.Mill.
CUNONIACEAE	*Lamanonia brasiliensis* Zickel & Leitão
CUNONIACEAE	*Lamanonia chabertii* (Pamp.) L.B.Sm.
CUNONIACEAE	*Lamanonia cuneata* (Cambess.) O.Kuntze
CUNONIACEAE	*Lamanonia grandistipularis* (Taub.) Taub.
CUNONIACEAE	*Lamanonia ternata* Vell.
CUNONIACEAE	*Weinmannia discolor* Gardner
CUNONIACEAE	*Weinmannia humilis* Engl.
CUNONIACEAE	*Weinmannia organensis* Gardner
CUNONIACEAE	*Weinmannia paulliniifolia* Pohl
CUNONIACEAE	*Weinmannia pinnata* L.
CYATHEACEAE	*Alsophila setosa* Kaulf.
CYATHEACEAE	*Alsophila sternbergii* (Pohl ex Sternb.) Conant
CYATHEACEAE	*Cyathea abreviata* Fernandes
CYATHEACEAE	*Cyathea atrovirens* (Langsd.& Fisch.) Domin
CYATHEACEAE	*Cyathea corcovadensis* (Raddi) Domin
CYATHEACEAE	*Cyathea delgadii* Sternb.
CYATHEACEAE	*Cyathea dichromatolepis* (Fée) Domin
CYATHEACEAE	*Cyathea glaziovii* (Fée) Domin

APPENDIX B - Continued.

Family		Species
CYATHEACEAE		*Cyathea hirsuta* Presl
CYATHEACEAE		*Cyathea lasiosora* (Kuhn) Domin
CYATHEACEAE		*Cyathea leucofolis* Domin
CYATHEACEAE		*Cyathea macrocarpa* (C.Presl) Domin
CYATHEACEAE		*Cyathea microdonta* (Desv.) Domin
CYATHEACEAE		*Cyathea phalerata* Mart.
CYATHEACEAE		*Cyathea poeppigii* (Hook.) Domin
CYATHEACEAE		*Cyathea praecincta* (Kunze) Domin
CYATHEACEAE		*Cyathea pungens* (Willd.) Domin
CYATHEACEAE		*Cyathea rufa* (Fée) Lellinger
CYATHEACEAE		*Cyathea villosa* Willd.
CYATHEACEAE		*Sphaeropteris gardneri* (Hook.) Tryon
DICHAPETALACEAE		*Stephanopodium blanchetianum* Baill.
DICHAPETALACEAE		*Stephanopodium engleri* Baill.
DICHAPETALACEAE		*Stephanopodium estrellense* (Rizzini) Prance
DICHAPETALACEAE		*Stephanopodium magnifolium* Prance
DICHAPETALACEAE		*Stephanopodium organense* (Rizzini) Prance
DICHAPETALACEAE		*Stephanopodium sessile* Rizzini
DICHAPETALACEAE		*Tapura amazonica* Poepp. & Endl.
DICKSONIACEAE	*	*Dicksonia sellowiana* Hook.
DILLENIACEAE		*Curatella americana* L.
DILLENIACEAE		*Davilla elliptica* A.St.-Hil.
EBENACEAE		*Diospyros amabi* B.Walln.
EBENACEAE		*Diospyros apeibacarpus* Raddi
EBENACEAE		*Diospyros brasiliensis* Mart. ex Miq.
EBENACEAE		*Diospyros burchellii* Hiern.
EBENACEAE		*Diospyros capreifolia* Mart. ex Hiern.
EBENACEAE		*Diospyros duartei* Cavalcante
EBENACEAE		*Diospyros gaultheriifolia* Mart.
EBENACEAE		*Diospyros guatterioides* A.C.Sm.
EBENACEAE		*Diospyros hispida* A.DC.
EBENACEAE		*Diospyros inconstans* Jacq.
EBENACEAE		*Diospyros ketun* B.Walln.

APPENDIX B - Continued.

Family		Species
EBENACEAE		*Diospyros mexiae* Standl.
EBENACEAE		*Diospyros riedelii* (Hiern) B.Walln.
EBENACEAE		*Diospyros scottmorii* B.Walln.
EBENACEAE		*Diospyros sericea* A.DC.
EBENACEAE		*Diospyros ubaita* B.Walln.
ELAEOCARPACEAE		*Crinodendron brasiliense* Reitz & L.B.Sm.
ELAEOCARPACEAE		*Sloanea garckeana* K.Schum.
ELAEOCARPACEAE		*Sloanea guianensis* (Aubl.) Benth.
ELAEOCARPACEAE		*Sloanea monosperma* Vell.
ELAEOCARPACEAE		*Sloanea obtusifolia* (Moric.) K.Schum.
ELAEOCARPACEAE		*Sloanea retusa* Uittien
ELAEOCARPACEAE		*Sloanea stipitata* Spruce ex Benth.
ERICACEAE		*Agarista chapadensis* (Kinoshita-Gouvêa) Judd
ERICACEAE		*Agarista coriifolia* (Thunb.) Hook.f. ex Nied.
ERICACEAE		*Agarista eucalyptoides* (Cham. & Schltdl.) G.Don
ERICACEAE		*Agarista niederleinii* (Sleumer) Judd
ERICACEAE		*Agarista oleifolia* (Cham.) G.Don
ERICACEAE		*Agarista revoluta* (Spreng.) Hook.f. ex Nied.
ERICACEAE		*Gaultheria eriophylla* (Pers.) Sleumer ex Burtt
ERYTHROXYLACEAE		*Erythroxylum affine* A.St.-Hil.
ERYTHROXYLACEAE		*Erythroxylum anguifugum* Mart.
ERYTHROXYLACEAE		*Erythroxylum argentinum* O.E.Schulz
ERYTHROXYLACEAE		*Erythroxylum betulaceum* Mart.
ERYTHROXYLACEAE		*Erythroxylum buxus* Peyr.
ERYTHROXYLACEAE		*Erythroxylum caatingae* Plowman
ERYTHROXYLACEAE		*Erythroxylum citrifolium* A.St.-Hil.
ERYTHROXYLACEAE		*Erythroxylum coelophlebium* Mart.
ERYTHROXYLACEAE		*Erythroxylum columbinum* (Mart.) Vell.
ERYTHROXYLACEAE	*	*Erythroxylum compressum* Peyr.
ERYTHROXYLACEAE		*Erythroxylum cuneifolium* (Mart.) O.E.Schulz
ERYTHROXYLACEAE		*Erythroxylum cuspidifolium* Mart.
ERYTHROXYLACEAE		*Erythroxylum daphnites* Mart.
ERYTHROXYLACEAE		*Erythroxylum deciduum* A.St.-Hil.

APPENDIX B - Continued.

Family		Species
ERYTHROXYLACEAE	*	*Erythroxylum distortum* Mart.
ERYTHROXYLACEAE		*Erythroxylum hamigerum* O.E.Schulz
ERYTHROXYLACEAE		*Erythroxylum loefgrenii* Diogo
ERYTHROXYLACEAE		*Erythroxylum maracasense* Plowman
ERYTHROXYLACEAE	*	*Erythroxylum mattossilvae* Plowman
ERYTHROXYLACEAE		*Erythroxylum mucronatum* Benth.
ERYTHROXYLACEAE		*Erythroxylum myrsinites* Mart.
ERYTHROXYLACEAE		*Erythroxylum nobile* O.E.Schulz
ERYTHROXYLACEAE		*Erythroxylum occultum* Plowman
ERYTHROXYLACEAE		*Erythroxylum ochrantum* Mart.
ERYTHROXYLACEAE		*Erythroxylum passerinum* Mart.
ERYTHROXYLACEAE		*Erythroxylum pelleterianum* A.St.-Hil.
ERYTHROXYLACEAE		*Erythroxylum petraecaballi* Plowman
ERYTHROXYLACEAE		*Erythroxylum polygonoides* Mart.
ERYTHROXYLACEAE		*Erythroxylum pulchrum* A.St.-Hil.
ERYTHROXYLACEAE		*Erythroxylum revolutum* Mart.
ERYTHROXYLACEAE		*Erythroxylum splendidum* Plowman
ERYTHROXYLACEAE		*Erythroxylum squamatum* Sw.
ERYTHROXYLACEAE		*Erythroxylum subracemosum* Turcz.
ERYTHROXYLACEAE		*Erythroxylum subrotundum* A.St.-Hil.
ERYTHROXYLACEAE		*Erythroxylum tortuosum* Mart.
ERYTHROXYLACEAE		*Erythroxylum vaccinifolium* Mart.
ESCALLONIACEAE		*Escallonia bifida* Link. & Otto
ESCALLONIACEAE		*Escallonia chlorophylla* Cham. & Schltdl.
ESCALLONIACEAE		*Escallonia hispida* (Vell.) Sleumer
ESCALLONIACEAE		*Escallonia megapotamica* Spreng.
ESCALLONIACEAE		*Escallonia petrophila* Rambo & Sleumer
EUPHORBIACEAE		*Actinostemon klotzschii* (Didr.) Pax
EUPHORBIACEAE		*Actinostemon lasiocarpus* (Müll.Arg.) Baill.
EUPHORBIACEAE		*Actinostemon macrocarpus* Müll.Arg.
EUPHORBIACEAE		*Actinostemon verticillatus* (Klotzsch) Baill.
EUPHORBIACEAE		*Adelia membranifolia* (Müll.Arg.) Chodat & Hassl.
EUPHORBIACEAE		*Adelia spinosa* (Chodat & Hassl.) Pax &

APPENDIX B - Continued.

Family	Species
	K.Hoffm.
EUPHORBIACEAE	*Adenophaedra megalophylla* (Müll.Arg.) Müll.Arg.
EUPHORBIACEAE	*Alchornea castaneifolia* (Humb. & Bonpl. ex Willd.) A.Juss.
EUPHORBIACEAE	*Alchornea discolor* Poepp. & Endl.
EUPHORBIACEAE	*Alchornea glandulosa* Poepp. & Endl.
EUPHORBIACEAE	*Alchornea sidifolia* Müll.Arg.
EUPHORBIACEAE	*Alchornea triplinervia* (Spreng.) Müll.Arg.
EUPHORBIACEAE	*Algernonia bahiensis* (Emmerich) G.L.Webster
EUPHORBIACEAE	*Algernonia brasiliensis* Baill.
EUPHORBIACEAE	*Algernonia dimitrii* (Emmerich) G.L.Webster
EUPHORBIACEAE	*Algernonia gibbosa* (Pax & K.Hoffm.) Emmerich
EUPHORBIACEAE	*Algernonia glazioui* Emmerich
EUPHORBIACEAE	*Algernonia kuhlmannii* (Emmerich) G.L.Webster
EUPHORBIACEAE	*Algernonia leandrii* (Baill.) G.L.Webster
EUPHORBIACEAE	*Algernonia obovata* (Müll.Arg.) Müll.Arg.
EUPHORBIACEAE	*Algernonia pardina* Croizat
EUPHORBIACEAE	*Algernonia riedelii* (Müll.Arg.) G.L.Webster
EUPHORBIACEAE	*Aparisthmium cordatum* (Juss.) Baill.
EUPHORBIACEAE	*Bernardia pulchella* (Baill.) Müll.Arg.
EUPHORBIACEAE	*Brasiliocroton mamoninha* P.E.Berry & Cordeiro
EUPHORBIACEAE	*Caryodendron janeirense* Müll.Arg.
EUPHORBIACEAE	*Cnidoscolus bahianus* (Ule) Pax & K.Hoffm.
EUPHORBIACEAE	*Cnidoscolus oligandrus* (Müll.Arg.) Pax
EUPHORBIACEAE	*Cnidoscolus pubescens* Pohl
EUPHORBIACEAE	*Cnidoscolus quercifolius* Pohl
EUPHORBIACEAE	*Cnidoscolus vitifolius* (Mill.) Pohl
EUPHORBIACEAE	*Croton alchorneicarpus* Croizat
EUPHORBIACEAE	*Croton argyrophylloides* Müll.Arg.
EUPHORBIACEAE	*Croton blanchetianus* Baill.
EUPHORBIACEAE	*Croton campanulatus* Caruzo & Cordeiro
EUPHORBIACEAE	*Croton celtidifolius* Baill.
EUPHORBIACEAE	*Croton compressus* Lam.

APPENDIX B - Continued.

Family	Species
EUPHORBIACEAE	*Croton echinocarpus* Müll.Arg.
EUPHORBIACEAE	*Croton eichleri* Müll.Arg.
EUPHORBIACEAE	*Croton exuberans* Müll.Arg.
EUPHORBIACEAE	*Croton floribundus* Spreng.
EUPHORBIACEAE	*Croton hecatonandrus* Müll.Arg.
EUPHORBIACEAE	*Croton heliotropiifolius* Kunth
EUPHORBIACEAE	*Croton macrobothrys* Baill.
EUPHORBIACEAE	*Croton micans* Sw.
EUPHORBIACEAE	*Croton oliganthus* Müll.Arg.
EUPHORBIACEAE	*Croton organensis* Baill.
EUPHORBIACEAE	*Croton oxyphyllus* Müll.Arg.
EUPHORBIACEAE	*Croton piptocalyx* Müll.Arg.
EUPHORBIACEAE	*Croton polyandrus* Spreng.
EUPHORBIACEAE	*Croton priscus* Croizat
EUPHORBIACEAE	*Croton rottlerifolius* Baill.
EUPHORBIACEAE	*Croton salutaris* Casar.
EUPHORBIACEAE	*Croton sincorensis* Mart. ex Müll.Arg.
EUPHORBIACEAE	*Croton sphaerogynus* Baill.
EUPHORBIACEAE	*Croton urticifolius* Lam.
EUPHORBIACEAE	*Croton urucurana* Baill.
EUPHORBIACEAE	*Croton warmingii* Müll.Arg.
EUPHORBIACEAE	*Euphorbia phosphorea* Mart.
EUPHORBIACEAE	*Glycydendron espiritosantense* Kuhlm.
EUPHORBIACEAE	*Gymnanthes bahiensis* Müll.Arg.
EUPHORBIACEAE	*Gymnanthes concolor* (Spreng.) Müll.Arg.
EUPHORBIACEAE	*Gymnanthes glabrata* (Mart.) Govaerts
EUPHORBIACEAE	*Gymnanthes hypoleuca* Benth.
EUPHORBIACEAE	*Gymnanthes klotzschiana* Müll.Arg.
EUPHORBIACEAE	*Gymnanthes nervosa* Müll.Arg.
EUPHORBIACEAE	*Gymnanthes schottiana* Müll.Arg.
EUPHORBIACEAE	*Gymnanthes serrata* Baill.ex Müll.Arg.
EUPHORBIACEAE	*Jatropha mollissima* (Pohl) Baill.
EUPHORBIACEAE	*Jatropha palmatifolia* Ule

APPENDIX B - Continued.

Family	Species
EUPHORBIACEAE	*Joannesia princeps* Vell.
EUPHORBIACEAE	*Mabea angustifolia* Spruce ex Benth.
EUPHORBIACEAE	*Mabea fistulifera* Mart.
EUPHORBIACEAE	*Mabea glaziovii* Pax & K.Hoffm.
EUPHORBIACEAE	*Mabea occidentalis* Benth.
EUPHORBIACEAE	*Mabea piriri* Aubl.
EUPHORBIACEAE	*Mabea pohliana* (Benth.) Müll.Arg.
EUPHORBIACEAE	*Manihot anomala* Pohl
EUPHORBIACEAE	*Manihot caerulescens* Pohl
EUPHORBIACEAE	*Manihot catingae* Ule
EUPHORBIACEAE	*Manihot dichotoma* Ule
EUPHORBIACEAE	*Manihot epruinosa* Pax & K.Hoffm.
EUPHORBIACEAE	*Manihot glaziovii* Müll.Arg.
EUPHORBIACEAE	*Manihot grahamii* Hook.
EUPHORBIACEAE	*Manihot jacobinensis* Müll.Arg.
EUPHORBIACEAE	*Manihot maracasensis* Ule
EUPHORBIACEAE	*Manihot pilosa* Pohl
EUPHORBIACEAE	*Manihot tripartita* (Spreng.) Müll.Arg.
EUPHORBIACEAE	*Maprounea guianensis* Aubl.
EUPHORBIACEAE	*Micrandra elata* Müll.Arg.
EUPHORBIACEAE	*Ophthalmoblapton crassipes* Müll.Arg.
EUPHORBIACEAE	*Ophthalmoblapton macrophyllum* Allemão
EUPHORBIACEAE	*Ophthalmoblapton parviflorum* Emmerich
EUPHORBIACEAE	*Ophthalmoblapton pedunculare* Müll.Arg.
EUPHORBIACEAE	*Pachystroma longifolium* (Nees) I.M.Johnst.
EUPHORBIACEAE	*Pausandra megalophylla* Müll.Arg.
EUPHORBIACEAE	*Pausandra morisiana* (Casar.) Radlk.
EUPHORBIACEAE	*Philyra brasiliensis* Klotzsch
EUPHORBIACEAE	*Sapium glandulosum* (L.) Morong
EUPHORBIACEAE	*Sapium haematospermum* Müll.Arg.
EUPHORBIACEAE	*Sapium obovatum* Klotzsch ex Müll.Arg.
EUPHORBIACEAE	*Sapium paucinervium* Hemsl.
EUPHORBIACEAE	*Sapium sellowianum* (Müll.Arg.) Klotzsch ex Baill.

APPENDIX B - Continued.

Family	Species
EUPHORBIACEAE	*Sebastiania argutidens* Pax & K.Hoffm.
EUPHORBIACEAE	*Sebastiania brasiliensis* var. genuina Müll.Arg.
EUPHORBIACEAE	*Sebastiania brasiliensis* var. ramosissima Müll.Arg.
EUPHORBIACEAE	*Sebastiania brevifolia* (Klotzsch ex Müll.Arg.) Müll.Arg.
EUPHORBIACEAE	*Sebastiania edwalliana* Pax & K.Hoffm.
EUPHORBIACEAE	*Sebastiania jacobinensis* (Müll.Arg.) Müll.Arg.
EUPHORBIACEAE	*Sebastiania membranifolia* Müll.Arg.
EUPHORBIACEAE	*Sebastiania pteroclada* (Müll.Arg.) Müll.Arg.
EUPHORBIACEAE	*Sebastiania riparia* Schrad.
EUPHORBIACEAE	*Senefeldera verticillata* (Vell.) Croizat
EUPHORBIACEAE	*Stillingia oppositifolia* Baill.
EUPHORBIACEAE	*Stillingia saxatilis* Müll.Arg.
EUPHORBIACEAE	*Stillingia trapezoidea* Ule
EUPHORBIACEAE	*Stillingia uleana* Pax & K.Hoffm.
EUPHORBIACEAE	*Tetrorchidium dusenii* Pax & K.Hoffm.
EUPHORBIACEAE	*Tetrorchidium parvulum* Müll.Arg.
EUPHORBIACEAE	*Tetrorchidium rubrivenium* Poepp. & Endl.
FABACEAE	*Abarema barnebyana* Iganci & Morim
FABACEAE	*Abarema brachystachya* (DC.) Barneby & J.W.Grimes
FABACEAE	*Abarema cochliacarpa* (Gomes) Barneby & J.W.Grimes
FABACEAE	*Abarema filamentosa* (Benth.) Pittier
FABACEAE	*Abarema jupunba* (Willd.) Britton & Killip
FABACEAE	*Abarema langsdorffii* (Benth.) Barneby & J.W.Grimes
FABACEAE	*Abarema limae* Iganci & Morim
FABACEAE	*Abarema obovata* (Benth.) Barneby & J.W.Grimes
FABACEAE	*Abarema turbinata* (Benth.) Barneby & J.W.Grimes
FABACEAE	*Abarema villosa* Iganci & Morim
FABACEAE	*Acosmium cardenasii* H.S.Irwin & Arroyo
FABACEAE	*Acosmium diffusissimum* (Mohlenbr.) Yakovlev

APPENDIX B - Continued.

Family		Species
FABACEAE		*Acosmium lentiscifolium* Schott
FABACEAE		*Albizia burkartiana* Barneby & J.W.Grimes
FABACEAE		*Albizia edwallii* (Hoehne) Barneby & J.W.Grimes
FABACEAE		*Albizia inundata* (Mart.) Barneby & J.W.Grimes
FABACEAE		*Albizia niopoides* (Spruce ex Benth.) Burkart
FABACEAE		*Albizia pedicellaris* (DC.) L.Rico
FABACEAE		*Albizia polycephala* (Benth.) Killip
FABACEAE	*	*Amburana cearensis* (Allemão) A.C.Sm.
FABACEAE		*Anadenanthera colubrina* (Vell.) Brenan
FABACEAE		*Anadenanthera peregrina* (L.) Speg.
FABACEAE		*Andira anthelmia* (Vell.) Benth.
FABACEAE		*Andira carvalhoi* R.T.Penn. & H.C.Lima
FABACEAE		*Andira cordata* Arroyo
FABACEAE		*Andira cujabensis* Benth.
FABACEAE		*Andira fraxinifolia* Benth.
FABACEAE		*Andira inermis* (W.Wright) DC.
FABACEAE		*Andira legalis* (Vell.) Toledo
FABACEAE		*Andira marauensis* N.F.Mattos
FABACEAE		*Andira nitida* Mart. ex Benth.
FABACEAE		*Andira ormosioides* Benth.
FABACEAE		*Andira vermifuga* (Mart.) Benth.
FABACEAE		*Apuleia leiocarpa* (Vogel) J.F.Macbr.
FABACEAE		*Arapatiella emarginata* R.S.Cowan
FABACEAE		*Arapatiella psilophylla* (Harms) R.S.Cowan
FABACEAE		*Ateleia glazioviana* Baill.
FABACEAE		*Barnebydendron riedelii* (Tul.) J.H.Kirkbr.
FABACEAE		*Bauhinia acuruana* Moric.
FABACEAE		*Bauhinia affinis* Vogel
FABACEAE		*Bauhinia albicans* Vogel
FABACEAE		*Bauhinia brevipes* Vogel
FABACEAE		*Bauhinia caatingae* Harms
FABACEAE		*Bauhinia cacovia* R.Wunderlin
FABACEAE		*Bauhinia cheilantha* (Bong.) Steud.

APPENDIX B - Continued.

Family	Species
FABACEAE	*Bauhinia cupulata* Benth.
FABACEAE	*Bauhinia dubia* G.Don
FABACEAE	*Bauhinia forficata* Link
FABACEAE	*Bauhinia fusconervis* (Bong.) Steud.
FABACEAE	*Bauhinia holophylla* (Bong.) Steud.
FABACEAE	*Bauhinia longifolia* (Bong.) D.Dietr.
FABACEAE	*Bauhinia membranacea* Benth.
FABACEAE	*Bauhinia mollis* (Bong.) D.Dietr.
FABACEAE	*Bauhinia ovata* (Bong.) Vogel
FABACEAE	*Bauhinia pentandra* (Bong.) Vogel
FABACEAE	*Bauhinia pinheiroi* Wunderlin
FABACEAE	*Bauhinia pulchella* Benth.
FABACEAE	*Bauhinia rufa* (Bong.) Steud.
FABACEAE	*Bauhinia subclavata* Benth.
FABACEAE	*Bauhinia ungulata* L.
FABACEAE	*Bauhinia uruguayensis* Benth.
FABACEAE	*Bauhinia vespertillo* S.Moore
FABACEAE	*Blanchetiodendron blanchetii* (Benth.) Barneby & J.W.Grimes
FABACEAE	*Bowdichia virgilioides* Kunth
FABACEAE	*Brodriguesia santosii* R.S.Cowan
FABACEAE	*Calliandra asplenioides* (Nees) Renvoize
FABACEAE	*Calliandra bella* Benth.
FABACEAE	*Calliandra calycina* Benth.
FABACEAE	*Calliandra elegans* Renvoize
FABACEAE	*Calliandra erubescens* Renvoize
FABACEAE	*Calliandra foliolosa* Benth.
FABACEAE	*Calliandra harrisii* (Lindl.) Benth.
FABACEAE	*Calliandra lintea* Barneby
FABACEAE	*Calliandra macrocalyx* Harms
FABACEAE	*Calliandra renvoizeana* Barneby
FABACEAE	*Calliandra selloi* (Spreng.) J.F.Macbr.
FABACEAE	*Calliandra tweediei* Benth.
FABACEAE	*Calliandra yucunensis* N.F.Mattos

APPENDIX B - Continued.

Family	Species
FABACEAE	*Camptosema coriaceum* (Nees & Mart.) Benth.
FABACEAE	*Cassia ferruginea* (Schrad.) Schrad. ex DC.
FABACEAE	*Cassia leptophylla* Vogel
FABACEAE	*Cenostigma macrophyllum* Tul.
FABACEAE	*Centrolobium microchaete* (Mart. ex Benth.) H.C.Lima
FABACEAE	*Centrolobium robustum* (Vell.) Mart. ex Benth.
FABACEAE	*Centrolobium sclerophyllum* H.C.Lima
FABACEAE	*Centrolobium tomentosum* Guillem. ex Benth.
FABACEAE	*Chamaecrista amabilis* H.S.Irwin & Barneby
FABACEAE	*Chamaecrista aspidiifolia* H.S.Irwin & Barneby
FABACEAE	*Chamaecrista aspleniifolia* (H.S.Irwin & Barneby) H.S.Irwin & Barneby
FABACEAE	*Chamaecrista bahiae* (H.S.Irwin) H.S.Irwin & Barneby
FABACEAE	*Chamaecrista catharticoides* (H.S.Irwin & Barneby) H.S.Irwin & Barneby
FABACEAE	*Chamaecrista duartei* (Vogel) H.S.Irwin & Barneby
FABACEAE	*Chamaecrista eitenorum* (H.S.Irwin & Barneby) H.S.Irwin & Barneby
FABACEAE	*Chamaecrista ensiformis* (Vell.) H.S.Irwin & Barneby
FABACEAE	*Chamaecrista onusta* H.S.Irwin & Barneby
FABACEAE	*Chamaecrista orbiculata* (Benth.) H.S. Irwin & Barneby
FABACEAE	*Chamaecrista pteropoda* Barneby
FABACEAE	*Chamaecrista sincorana* (Harms) H.S.Irwin & Barneby
FABACEAE	*Chamaecrista xinguensis* (Ducke) H.S.Irwin & Barneby
FABACEAE	Chamaecrista zygophylloides (Taub.) H.S.Irwin & Barneby
FABACEAE	*Chloroleucon dumosum* (Benth.) G.P.Lewis
FABACEAE	*Chloroleucon foliolosum* (Benth.) G.P.Lewis
FABACEAE	*Chloroleucon tenuiflorum* (Benth.) Barneby & J.W.Grimes
FABACEAE	*Chloroleucon tortum* (Mart.) Pittier
FABACEAE	*Copaifera arenicola* (Ducke) J.Costa &

APPENDIX B - Continued.

Family		Species
		L.P.Queiroz
FABACEAE		*Copaifera langsdorffii* Desf.
FABACEAE		*Copaifera lucens* Dwyer
FABACEAE		*Copaifera luetzelburgii* Harms
FABACEAE		*Copaifera magnifolia* Dwyer
FABACEAE		*Copaifera majorina* Dwyer
FABACEAE		*Copaifera malmei* Harms
FABACEAE		*Copaifera rigida* Benth.
FABACEAE		*Copaifera sabulicola* J.A.S.Costa & L.P.Queiroz
FABACEAE		*Copaifera trapezifolia* Hayne
FABACEAE		*Coursetia rostrata* Benth.
FABACEAE		*Coursetia* sp.nov.ined.
FABACEAE		*Cyclolobium brasiliense* Benth.
FABACEAE		*Dahlstedtia pentaphylla* (Taub.) Malme
FABACEAE		*Dahlstedtia pinnata* (Benth.) Malme
FABACEAE		*Dalbergia acuta* Benth.
FABACEAE		*Dalbergia brasiliensis* Vogel
FABACEAE		*Dalbergia catingicola* Harms
FABACEAE		*Dalbergia cearensis* Ducke
FABACEAE		*Dalbergia decipularis* Rizzini & A.Mattos
FABACEAE	*	*Dalbergia elegans* A.M.Carvalho
FABACEAE		*Dalbergia ernestulei* Hoehne
FABACEAE		*Dalbergia foliolosa* Benth.
FABACEAE		*Dalbergia frutescens* (Vell.) Britton
FABACEAE		*Dalbergia glaucescens* (Mart. ex Benth) Benth.
FABACEAE		*Dalbergia glaziovii* Harms
FABACEAE		*Dalbergia hortensis* Heringer
FABACEAE		*Dalbergia miscolobium* Benth.
FABACEAE	*	*Dalbergia nigra* (Vell.) Allemão ex Benth.
FABACEAE		*Dalbergia villosa* (Benth.) Benth.
FABACEAE		*Deguelia costata* (Benth.) Az.-Tozzi
FABACEAE		*Deguelia hatschbachii* Az.-Tozzi
FABACEAE		*Deguelia longeracemosa* (Benth.) Az.-Tozzi

APPENDIX B - Continued.

Family		Species
FABACEAE		*Deguelia nitidula* (Benth.) Az.-Tozzi
FABACEAE		*Dialium guianense* (Aubl.) Sandwith
FABACEAE		*Dimorphandra exaltata* Schott
FABACEAE		*Dimorphandra gardneriana* Tul.
FABACEAE		*Dimorphandra jorgei* M.F.Silva
FABACEAE		*Dimorphandra mollis* Benth.
FABACEAE	*	*Dimorphandra wilsonii* Rizzini
FABACEAE		*Diplotropis ferruginea* Benth.
FABACEAE		*Diplotropis incexis* Rizzini & A.Mattos
FABACEAE		*Dipteryx alata* Vogel
FABACEAE		*Diptychandra aurantiaca* Tul.
FABACEAE		*Enterolobium contortisiliquum* (Vell.) Morong
FABACEAE		*Enterolobium glaziovii* (Benth.) Mesquita
FABACEAE		*Enterolobium gummiferum* (Mart.) J.F.Macbr.
FABACEAE		*Enterolobium monjollo* (Vell.) Mart.
FABACEAE		*Enterolobium schomburgkii* Benth.
FABACEAE		*Enterolobium timboüva* Mart.
FABACEAE		*Erythrina cristagalli* L.
FABACEAE		*Erythrina dominguezii* Hassl.
FABACEAE		*Erythrina falcata* Benth.
FABACEAE		*Erythrina fusca* Loureiro
FABACEAE		*Erythrina speciosa* Andrews
FABACEAE		*Erythrina velutina* Willd.
FABACEAE		*Erythrina verna* Vell.
FABACEAE		*Exostyles glabra* Vogel
FABACEAE		*Exostyles godoyensis* Soares-Silva & Mansano
FABACEAE		*Exostyles venusta* Schott ex Spreng.
FABACEAE		*Geoffroea spinosa* Jacq.
FABACEAE		*Gleditsia amorphoides* (Griseb.) Taub.
FABACEAE		Goniorrhachis marginata Taub.
FABACEAE		*Grazielodendron riodocensis* H.C.Lima
FABACEAE		*Guibourtia hymenaefolia* (Moric.) J.Léonard
FABACEAE		*Guilandina bonduc* L.

APPENDIX B - Continued.

Family	Species
FABACEAE	*Harleyodendron unifoliolatum* R.S.Cowan
FABACEAE	*Holocalyx balansae* Micheli
FABACEAE	*Hymenaea aurea* Y.-T.Lee & Langenh.
FABACEAE	*Hymenaea courbaril* L.
FABACEAE	*Hymenaea eriogyne* Benth.
FABACEAE	*Hymenaea martiana* Hayne
FABACEAE	*Hymenaea oblongifolia* Huber
FABACEAE	*Hymenaea rubriflora* Ducke
FABACEAE	*Hymenaea stigonocarpa* Mart. ex Hayne
FABACEAE	*Hymenaea velutina* Ducke
FABACEAE	*Hymenolobium alagoanum* Ducke
FABACEAE	*Hymenolobium heringerianum* Rizzini
FABACEAE	*Hymenolobium janeirense* Kuhlm.
FABACEAE	*Inga alba* (Sw.) Willd.
FABACEAE	*Inga aptera* (Vinha) T.D.Penn.
FABACEAE	*Inga arenicola* T.D.Penn.
FABACEAE	*Inga barbata* Benth.
FABACEAE	*Inga blanchetiana* Benth.
FABACEAE	*Inga bollandi* Spraghe & Sandwith
FABACEAE	*Inga bullata* Benth.
FABACEAE	*Inga cabelo* T.D.Penn.
FABACEAE	*Inga capitata* Desv.
FABACEAE	*Inga cayennensis* Sagot ex Benth.
FABACEAE	*Inga ciliata* C.Presl
FABACEAE	*Inga conchifolia* L.P.Queiroz
FABACEAE	*Inga congesta* T.D.Penn.
FABACEAE	*Inga cordistipula* Mart.
FABACEAE	*Inga cylindrica* (Vell.) Mart.
FABACEAE	*Inga edulis* Mart.
FABACEAE	*Inga edwallii* (Harms) T.D.Penn.
FABACEAE	*Inga enterolobioides* T.D.Penn.
FABACEAE	*Inga exfoliata* T.D.Penn. & F.C.P.García
FABACEAE	*Inga flagelliformis* (Vell.) Mart.

APPENDIX B - Continued.

Family	Species
FABACEAE	*Inga globularis* T.D.Penn.
FABACEAE	*Inga grazielae* (Vinha) T.D.Penn.
FABACEAE	*Inga hispida* Schott ex Benth.
FABACEAE	*Inga ingoides* (Rich.) Willd.
FABACEAE	*Inga lanceifolia* Benth.
FABACEAE	*Inga laurina* (Sw.) Willd.
FABACEAE	*Inga lenticellata* Benth.
FABACEAE	*Inga lentiscifolia* Benth.
FABACEAE	*Inga leptantha* Benth.
FABACEAE	*Inga marginata* Willd.
FABACEAE	*Inga maritima* Benth.
FABACEAE	*Inga mendoncaei* Harms
FABACEAE	*Inga nobilis* Willd.
FABACEAE	*Inga pedunculata* (Vinha) T.D.Penn.
FABACEAE	*Inga platyptera* Benth.
FABACEAE	*Inga pleiogyna* T.D.Penn.
FABACEAE	*Inga praegnans* T.D.Penn.
FABACEAE	*Inga sellowiana* Benth.
FABACEAE	*Inga sessilis* (Vell.) Mart.
FABACEAE	*Inga striata* Benth.
FABACEAE	*Inga subnuda* Salzm. ex Benth.
FABACEAE	*Inga suborbicularis* T.D.Penn.
FABACEAE	*Inga tenuis* (Vell.) Mart.
FABACEAE	*Inga thibaudiana* DC.
FABACEAE	*Inga tripa* F.C.P.Garcia
FABACEAE	*Inga unica* Barneby & J.W.Grimes
FABACEAE	*Inga vera* Willd.
FABACEAE	*Inga vestita* Benth.
FABACEAE	*Inga virescens* Benth.
FABACEAE	*Inga vulpina* Mart. ex Benth.
FABACEAE	*Leptolobium bijugum* (Spreng.) Vogel
FABACEAE	*Leptolobium brachystachyum* (Benth.) Sch.Rodr. & A.M.G.Azevedo
FABACEAE	*Leptolobium dasycarpum* Vogel

APPENDIX B - Continued.

Family	Species
FABACEAE	*Leptolobium elegans* Vogel
FABACEAE	*Leptolobium tenuifolium* Vogel
FABACEAE	Leucochloron *foederale* (Barneby & J.W.Grimes) Barneby & J.W.Grimes
FABACEAE	*Leucochloron incuriale* (Vell.) Barneby & J.W.Grimes
FABACEAE	*Leucochloron limae* Barneby & J.W.Grimes
FABACEAE	*Libidibia ferrea* (Mart. ex Tul.) L.P.Queiroz
FABACEAE	*Libidibia paraguariensis* (D.Parodi) comb.ined.
FABACEAE	*Lonchocarpus araripensis* Benth.
FABACEAE	*Lonchocarpus bahianus* Az.-Tozzi
FABACEAE	*Lonchocarpus campestris* Mart. ex Benth.
FABACEAE	*Lonchocarpus cultratus* (Vell.) Az.-Tozzi & H.C.Lima
FABACEAE	*Lonchocarpus filipes* Benth.
FABACEAE	*Lonchocarpus glaziovii* Taub.
FABACEAE	*Lonchocarpus grandiflorus* Az.-Tozzi
FABACEAE	*Lonchocarpus latifolius* (Willd.) DC.
FABACEAE	*Lonchocarpus montanus* Az.-Tozzi
FABACEAE	*Lonchocarpus muehlbergianus* Hassl.
FABACEAE	*Lonchocarpus nitidus* (Vogel) Benth.
FABACEAE	*Lonchocarpus obtusus* Benth.
FABACEAE	*Lonchocarpus peckoltii* Wawra
FABACEAE	*Lonchocarpus praecox* Mart. ex Benth.
FABACEAE	*Lonchocarpus sericeus* (Poir.) DC.
FABACEAE	*Lonchocarpus subglaucescens* Mart. ex Benth.
FABACEAE	*Lonchocarpus torrensis* N.F.Mattos
FABACEAE	*Lonchocarpus virgilioides* (Vogel) Benth.
FABACEAE	*Luetzelburgia andradelimae* H.C.Lima
FABACEAE	*Luetzelburgia auriculata* (Allemão) Ducke
FABACEAE	*Luetzelburgia bahiensis* Yakovlev
FABACEAE	*Luetzelburgia guaissara* Toledo
FABACEAE	*Luetzelburgia harleyi* D.Cardoso, L.P.Queiroz & H.C.Lima
FABACEAE	*Luetzelburgia pallidiflora* (Rizzini) H.C.Lima

APPENDIX B - Continued.

Family		Species
FABACEAE		*Luetzelburgia trialata* (Ducke) Ducke
FABACEAE		*Machaerium acutifolium* Vogel
FABACEAE		*Machaerium brasiliense* Vogel
FABACEAE		*Machaerium cantarellianum* Hoehne
FABACEAE		*Machaerium firmum* (Vell.) Benth.
FABACEAE		*Machaerium floridum* (Mart. ex Benth.) Ducke
FABACEAE		*Machaerium fluminense* Rudd
FABACEAE		*Machaerium fruticosum* Hoehne
FABACEAE		*Machaerium fulvovenosum* H.C.Lima
FABACEAE		*Machaerium glabrum* Vogel
FABACEAE		*Machaerium hatschbachii* Rudd
FABACEAE		*Machaerium hirtum* (Vell.) Stellfeld
FABACEAE		*Machaerium incorruptibile* Allemão
FABACEAE		*Machaerium lanceolatum* (Vell.) J.F.Macbr.
FABACEAE		*Machaerium legale* (Vell.) Benth.
FABACEAE		*Machaerium leucopterum* Vogel
FABACEAE		*Machaerium nyctitans* (Vell.) Benth.
FABACEAE	*	*Machaerium obovatum* Kuhlm. & Hoehne
FABACEAE		*Machaerium opacum* Vogel
FABACEAE		*Machaerium ovalifolium* Glaz. ex Rudd
FABACEAE		*Machaerium paraguariense* Hassl.
FABACEAE		*Machaerium pedicellatum* Vogel
FABACEAE		*Machaerium punctatum* (Poir.) Pers.
FABACEAE		*Machaerium ruddianum* C.V.Mend.F. & A.M.G.Azevedo
FABACEAE		*Machaerium scleroxylon* Tul.
FABACEAE		*Machaerium* sp.nov.ined.
FABACEAE		*Machaerium stipitatum* (DC.) Vogel
FABACEAE		*Machaerium vestitum* Vogel
FABACEAE		*Machaerium villosum* Vogel
FABACEAE		*Macrolobium latifolium* Vogel
FABACEAE		*Macrolobium rigidum* R.S.Cowan
FABACEAE		*Martiodendron fluminense* Lombardi
FABACEAE		*Martiodendron mediterraneum* (Mart. ex Benth.)

APPENDIX B - Continued.

Family		Species
		R.Koeppen
FABACEAE	*	*Melanoxylon brauna* Schott
FABACEAE		*Mimosa acutistipula* Benth.
FABACEAE		*Mimosa adenophylla* Taub.
FABACEAE		*Mimosa arenosa* (Willd.) Poir.
FABACEAE		*Mimosa artemisiana* Heringer & Paula
FABACEAE	*	*Mimosa balduinii* Burkart
FABACEAE		*Mimosa bimucronata* (DC.) Kuntze
FABACEAE		*Mimosa caesalpiniifolia* Benth.
FABACEAE		*Mimosa cubatanensis* Hoehne
FABACEAE		*Mimosa exalbescens* Barneby
FABACEAE		*Mimosa gemmulata* Barneby
FABACEAE		*Mimosa hexandra* Micheli
FABACEAE		*Mimosa incana* (Spreng.) Benth.
FABACEAE		*Mimosa irrigua* Barneby
FABACEAE		*Mimosa lewisii* Barneby
FABACEAE		*Mimosa micropteris* Benth.
FABACEAE		*Mimosa ophtalmocentra* Mart.
FABACEAE		*Mimosa pilulifera* Benth.
FABACEAE		*Mimosa pithecolobioides* Benth.
FABACEAE		*Mimosa pseudosepiaria* Harms
FABACEAE		*Mimosa pteridifolia* Benth.
FABACEAE		*Mimosa regnellii* Benth.
FABACEAE		*Mimosa scabrella* Benth.
FABACEAE		*Mimosa sericantha* Benth.
FABACEAE		*Mimosa taimbensis* Burkart
FABACEAE		*Mimosa tenuiflora* (Willd.) Poir.
FABACEAE		*Mimosa verrucosa* Benth.
FABACEAE		*Moldenhawera blanchetiana* Tul.
FABACEAE		*Moldenhawera emarginata* (Spreng.) L.P.Queiroz & Allkin
FABACEAE		*Moldenhawera floribunda* Schrad.
FABACEAE		*Moldenhawera lushnathiana* Yakovlev
FABACEAE		*Moldenhawera nutans* L.P.Queiroz et al.

APPENDIX B - Continued.

Family	Species
FABACEAE	*Moldenhawera papillanthera* L.P.Queiroz et al.
FABACEAE	*Moldenhawera polysperma* (Vell.) Stellfeld
FABACEAE	*Myrocarpus fastigiatus* Allemão
FABACEAE	*Myrocarpus frondosus* Allemão
FABACEAE	*Myrocarpus leprosus* Pickel
FABACEAE	*Myroxylon peruiferum* L.f.
FABACEAE	*Ormosia arborea* (Vell.) Harms
FABACEAE	*Ormosia costulata* (Miq.) Kleinhoonte
FABACEAE	*Ormosia fastigiata* Tul.
FABACEAE	*Ormosia friburgensis* Taub. ex Harms
FABACEAE	*Ormosia minor* Vogel
FABACEAE	*Ormosia nitida* Vogel
FABACEAE	*Ormosia ruddiana* Yakovlev
FABACEAE	*Ormosia timboënsis* D.Cardoso et al.
FABACEAE	*Ormosia vicosana* Rudd
FABACEAE	*Parapiptadenia blanchetii* (Benth.) Vaz & M.P.Lima
FABACEAE	*Parapiptadenia ilheusana* G.P.Lewis
FABACEAE	*Parapiptadenia pterosperma* (Benth.) Brenan
FABACEAE	*Parapiptadenia rigida* (Benth.) Brenan
FABACEAE	*Parapiptadenia zehntneri* (Harms) M.P.Lima & H.P.Lima
FABACEAE	*Parkia bahiae* H.C.Hopkins
FABACEAE	*Parkia pendula* (Willd.) Benth. ex Walp.
FABACEAE	*Parkia platycephala* Benth.
FABACEAE	*Parkinsonia aculeata* L.
FABACEAE	*Peltogyne angustiflora* Ducke
FABACEAE	*Peltogyne chrysopis* Barneby
FABACEAE	*Peltogyne confertiflora* (Mart. ex Hayne) Benth.
FABACEAE	*Peltogyne discolor* Vogel
FABACEAE	*Peltogyne mattosiana* Rizzini
FABACEAE	*Peltogyne pauciflora* Benth.
FABACEAE	*Peltogyne recifensis* Ducke
FABACEAE	*Peltophorum dubium* (Spreng.) Taub.

APPENDIX B - Continued.

Family	Species
FABACEAE	*Piptadenia adiantoides* (Spreng.) J.F.Macbr.
FABACEAE	*Piptadenia gonoacantha* (Mart.) J.F.Macbr.
FABACEAE	*Piptadenia macradenia* Benth.
FABACEAE	*Piptadenia paniculata* Benth.
FABACEAE	*Piptadenia stipulacea* (Benth.) Ducke
FABACEAE	*Piptadenia viridiflora* (Kunth) Benth.
FABACEAE	*Pithecellobium diversifolium* Benth.
FABACEAE	*Pityrocarpa moniliformis* (Benth.) Luckow & R.W.Jobson
FABACEAE	*Pityrocarpa obliqua* (Pers.) Brenan
FABACEAE	*Plathymenia reticulata* Benth.
FABACEAE	*Platycyamus regnellii* Benth.
FABACEAE	*Platymiscium floribundum* Vogel
FABACEAE	*Platymiscium pubescens* Micheli
FABACEAE	*Platymiscium speciosum* Vogel
FABACEAE	*Platypodium elegans* Vogel
FABACEAE	*Poecilanthe falcata* (Vell.) Heringer
FABACEAE	*Poecilanthe grandiflora* Benth.
FABACEAE	*Poecilanthe itapuana* G.P.Lewis
FABACEAE	*Poecilanthe parviflora* Benth.
FABACEAE	*Poecilanthe subcordata* Benth.
FABACEAE	*Poecilanthe ulei* (Harms) Arroyo & Rudd
FABACEAE	*Poeppigia procera* C.Presl.
FABACEAE	*Poincianella bracteosa* (Tul.) L.P.Queiroz
FABACEAE	*Poincianella echinata* (Lam.) L.P.Queiroz
FABACEAE	*Poincianella laxiflora* (Tul.) L.P.Queiroz
FABACEAE	Poincianella *microphylla* (Mart. ex G.Don) L.P.Queiroz
FABACEAE	*Poincianella pluviosa* (DC.) L.P.Queiroz
FABACEAE	*Poincianella pyramidalis* (Tul.) L.P.Queiroz
FABACEAE	*Pseudopiptadenia bahiana* G.P.Lewis & M.P.Lima
FABACEAE	*Pseudopiptadenia brenanii* G.P.Lewis & M.P.Lima
FABACEAE	*Pseudopiptadenia contorta* (DC.) G.P.Lewis & M.P.Lima

APPENDIX B - Continued.

Family	Species
FABACEAE	*Pseudopiptadenia inaequalis* (Benth.) Rausch.
FABACEAE	*Pseudopiptadenia leptostachya* (Benth.) Rausch.
FABACEAE	*Pseudopiptadenia schumanniana* (Taub.) G.P.Lewis & M.P.Lima
FABACEAE	*Pseudopiptadenia warmingii* (Benth.) G.P.Lewis & M.P.Lima
FABACEAE	*Pterocarpus rohri* Vahl
FABACEAE	*Pterocarpus villosus* (Mart. ex Benth.) Benth.
FABACEAE	*Pterocarpus zehntneri* Harms
FABACEAE	*Pterodon emarginatus* Vogel
FABACEAE	*Pterodon pubescens* (Benth) Benth.
FABACEAE	*Pterogyne nitens* Tul.
FABACEAE	*Riedeliella graciliflora* Harms
FABACEAE	*Riedeliella magalhaesii* (Rizzini) H.C.Lima & A.Vaz
FABACEAE	*Samanea inopinata* (Harms) Barneby & J.W.Grimes
FABACEAE	*Samanea tubulosa* (Benth.) Barneby & J.W.Grimes
FABACEAE	*Schizolobium parahyba* (Vell.) S.F.Blake
FABACEAE	*Senegalia amazonica* (Benth.) Seigler & Ebinger
FABACEAE	*Senegalia bahiensis* (Benth.) Seigler & Ebinger
FABACEAE	*Senegalia bonariensis* (Gillies ex Hook. & Arn.) Seigler & Ebinger
FABACEAE	*Senegalia globosa* (Bocage & Miotto) L.P.Queiroz
FABACEAE	*Senegalia langsdorffii* (Benth.) Seigler & Ebinger
FABACEAE	*Senegalia lewisii* (Bocage & Miotto) L.P.Queiroz
FABACEAE	*Senegalia limae* (Bocage & Miotto) L.P.Queiroz
FABACEAE	*Senegalia martii* (Benth.) Seigler & Ebinger
FABACEAE	*Senegalia monacantha* (Willd.) Seigler & Ebinger
FABACEAE	*Senegalia piauhiensis* (Benth.) Seigler & Ebinger
FABACEAE	*Senegalia polyphylla* (DC.) Britton & Rose
FABACEAE	*Senegalia riparia* Britton & Rose ex Britton & Killip
FABACEAE	*Senegalia santosii* (G.P.Lewis) Seigler &

APPENDIX B - Continued.

Family	Species
	Ebinger
FABACEAE	*Senegalia tenuifolia* (L.) Britton & Rose
FABACEAE	*Senna acuruensis* (Benth.) H.S.Irwin & Barneby
FABACEAE	*Senna affinis* (Benth.) H.S.Irwin & Barneby
FABACEAE	*Senna appendiculata* (Vogel) Wiersema
FABACEAE	*Senna araucarietorum* H.S.Irwin & Barneby
FABACEAE	*Senna aristeguietae* H.S.Irwin & Barneby
FABACEAE	*Senna cana* (Nees & Mart.) H.S.Irwin & Barneby
FABACEAE	*Senna catingae* (Harms) L.P.Queiroz
FABACEAE	*Senna corifolia* (Benth.) H.S.Irwin & Barneby
FABACEAE	*Senna corymbosa* (Lam.) H.S.Irwin & Barneby
FABACEAE	*Senna formosa* H.S.Irwin & Barneby
FABACEAE	*Senna gardneri* (Benth.) H.S.Irwin & Barneby
FABACEAE	*Senna georgica* H.S.Irwin & Barneby
FABACEAE	*Senna itatiaiae* H.S.Irwin & Barneby
FABACEAE	*Senna lechriosperma* H.S.Irwin & Barneby
FABACEAE	*Senna macranthera* (DC. ex Collad.) H.S.Irwin & Barneby
FABACEAE	*Senna multijuga* (Rich.) H.S.Irwin & Barneby
FABACEAE	*Senna oblongifolia* (Vogel) H.S.Irwin & Barneby
FABACEAE	*Senna organensis* (Harms) H.S.Irwin & Barneby
FABACEAE	*Senna pendula* (Willd.) H.S.Irwin & Barneby
FABACEAE	*Senna quinquangulata* (Rich.) H.S.Irwin & Barneby
FABACEAE	*Senna reniformis* (G.Don) H.S.Irwin & Barneby
FABACEAE	*Senna reticulata* (Willd.) H.S.Irwin & Barneby
FABACEAE	*Senna rizzinii* H.S.Irwin & Barneby
FABACEAE	*Senna rugosa* (G.Don) H.S.Irwin & Barneby
FABACEAE	*Senna silvestris* (Vell.) H.S.Irwin & Barneby
FABACEAE	*Senna spectabilis* (DC.) H.S.Irwin & Barneby
FABACEAE	*Senna splendida* (Vogel) H.S.Irwin & Barneby
FABACEAE	*Senna trachypus* (Benth.) H.S.Irwin & Barneby
FABACEAE	*Senna velutina* (Vogel) H.S.Irwin & Barneby
FABACEAE	*Stryphnodendron adstringens* (Mart.) Cov.

APPENDIX B - Continued.

Family		Species
FABACEAE		*Stryphnodendron coriaceum* Benth.
FABACEAE		*Stryphnodendron obovatum* Benth.
FABACEAE		*Stryphnodendron polyphyllum* Mart.
FABACEAE		*Stryphnodendron pulcherrimum* (Willd.) Hochr.
FABACEAE		*Stryphnodendron rotundifolium* Mart.
FABACEAE		*Swartzia acutifolia* Vogel
FABACEAE		*Swartzia alternifoliolata* Mansano
FABACEAE		*Swartzia apetala* Raddi
FABACEAE		*Swartzia bahiensis* R.S.Cowan
FABACEAE		*Swartzia capixabensis* Mansano
FABACEAE		*Swartzia curranii* R.S.Cowan
FABACEAE		*Swartzia dipetala* Willd. ex Vogel
FABACEAE		*Swartzia flaemingii* Vogel
FABACEAE	*	*Swartzia glazioviana* (Taub.) Glaz.
FABACEAE		*Swartzia langsdorffii* Raddi
FABACEAE		*Swartzia linharensis* Mansano
FABACEAE		*Swartzia macrostachya* Benth.
FABACEAE		*Swartzia micrantha* R.S.Cowan
FABACEAE		*Swartzia multijuga* Hayne
FABACEAE		*Swartzia myrtifolia* J.E.Sm.
FABACEAE		*Swartzia oblata* R.S.Cowan
FABACEAE		*Swartzia peremarginata* R.S.Cowan
FABACEAE	*	*Swartzia pickelii* Killip ex Ducke
FABACEAE		*Swartzia pilulifera* Benth.
FABACEAE		*Swartzia pinheiroana* R.S.Cowan
FABACEAE		*Swartzia polita* B.M.Torke
FABACEAE		*Swartzia reticulata* Ducke
FABACEAE		*Swartzia riedelii* R.S.Cowan
FABACEAE		*Swartzia simplex* (DC.) R.S.Cowan
FABACEAE		*Swartzia submarginata* (Benth.) Mansano
FABACEAE		*Sweetia fruticosa* Spreng.
FABACEAE		*Tabaroa insignis* L.P.Queiroz
FABACEAE		*Tachigali aurea* Tul.

APPENDIX B - Continued.

Family	Species
FABACEAE	*Tachigali beaurepairei* (Harms) L.G.Silva & H.C.Lima
FABACEAE	*Tachigali densiflora* (Benth.) L.G.Silva & H.C.Lima
FABACEAE	*Tachigali denudata* (Vogel) Oliveira-Filho
FABACEAE	*Tachigali duckei* (Dwyer) Oliveira-Filho
FABACEAE	*Tachigali friburgensis* (Harms) L.G.Silva & H.C.Lima
FABACEAE	*Tachigali paratyensis* (Vell.) H.C.Lima
FABACEAE	*Tachigali pilgeriana* (Harms) Oliveira-Filho
FABACEAE	*Tachigali rubiginosa* (Mart. ex Tul.) Oliveira-Filho
FABACEAE	*Tachigali rugosa* (Mart. ex Benth.) Zarucchi & Pipoly
FABACEAE	*Tachigali subvelutina* (Benth.) Oliveira-Filho
FABACEAE	*Tachigali urbaniana* (Harms) L.G.Silva & H.C.Lima
FABACEAE	*Tachigali vulgaris* L.G.Silva & H.C.Lima
FABACEAE	*Trischidium limae* (R.S.Cowan) H.Ireland
FABACEAE	*Trischidium molle* (Benth.) H.Ireland
FABACEAE	*Vachellia caven* (Molina) Seigler & Ebinger
FABACEAE	*Vachellia farnesiana* (L.) Wight & Arn.
FABACEAE	*Vatairea heteroptera* (Allemão) Ducke ex de Assis Iglesias
FABACEAE	*Vatairea macrocarpa* (Benth.) Ducke
FABACEAE	*Vataireopsis araroba* (Aguiar) Ducke
FABACEAE	*Zollernia cowanii* Mansano
FABACEAE	*Zollernia glabra* (Spreng.) Yakovlev
FABACEAE	*Zollernia glaziovii* Yakovlev
FABACEAE	*Zollernia ilicifolia* (Brongn.) Vogel
FABACEAE	*Zollernia magnifica* A.M.Carvalho & Barneby
FABACEAE	*Zollernia modesta* A.M.Carvalho & Barneby
FABACEAE	*Zygia cataractae* (Kunth) L.Rico
FABACEAE	*Zygia latifolia* (L.) Fawc. & Rendle
FABACEAE	*Zygia morongii* Barneby & J.W.Grimes
FABACEAE	*Zygia pithecolobioides* (O.Kuntze) Barneby & J.W.Grimes

APPENDIX B - Continued.

Family	Species
FABACEAE	*Zygia selloi* (Benth.) L.Rico
HERNANDIACEAE	*Gyrocarpus acuminatus* Meisn.
HERNANDIACEAE	*Sparattanthelium botocudorum* Mart.
HERNANDIACEAE	*Sparattanthelium tupinambazum* Mart.
HERNANDIACEAE	*Sparattanthelium tupiniquinorum* Mart.
HUMIRIACEAE	*Humiria balsamifera* Aubl.
HUMIRIACEAE	*Humiriastrum dentatum* (Casar.) Cuatrec.
HUMIRIACEAE	*Humiriastrum glaziovii* (Urb.) Cuatrec.
HUMIRIACEAE	*Humiriastrum mussunungense* Cuatrec.
HUMIRIACEAE	*Humiriastrum spiritusancti* Cuatrec.
HUMIRIACEAE	*Sacoglottis guianensis* Benth.
HUMIRIACEAE	*Sacoglottis mattogrossensis* Malme
HUMIRIACEAE	*Schistostemon retusum* (Ducke) Cuatrec.
HUMIRIACEAE	*Vantanea bahiaensis* Cuatrec.
HUMIRIACEAE	*Vantanea compacta* (Schnizl.) Cuatrec.
HUMIRIACEAE	*Vantanea guianensis* Aubl.
HUMIRIACEAE	*Vantanea morii* Cuatrec.
HUMIRIACEAE	*Vantanea obovata* (Nees & Mart.) Benth.
HYPERICACEAE	*Vismia brasiliensis* Choisy
HYPERICACEAE	*Vismia guianensis* (Aubl.) Pers.
HYPERICACEAE	*Vismia magnoliifolia* Schltdl. & Cham.
HYPERICACEAE	*Vismia micrantha* Mart.
ICACINACEAE	*Emmotum affine* Miers
ICACINACEAE	*Emmotum nitens* (Benth.) Miers
LACISTEMATACEAE	*Lacistema hasslerianum* Chodat
LACISTEMATACEAE	*Lacistema pubescens* Mart.
LACISTEMATACEAE	*Lacistema robustum* Schnizl.
LAMIACEAE	*Aegiphila brachiata* Vell.
LAMIACEAE	*Aegiphila candelabrum* Briq. ex Chodat & Hassl.
LAMIACEAE	*Aegiphila graveolens* Mart. & Schauer
LAMIACEAE	*Aegiphila integrifolia* (Jacq.) B.D.Jackson
LAMIACEAE	*Aegiphila lhotskiana* Cham.
LAMIACEAE	*Aegiphila luschnatii* Schauer

APPENDIX B - Continued.

Family		Species
LAMIACEAE		*Aegiphila mediterranea* Vell.
LAMIACEAE		*Aegiphila obducta* Vell.
LAMIACEAE		*Aegiphila paraguariensis* Briq.
LAMIACEAE		*Aegiphila pernambucensis* Moldenke
LAMIACEAE		*Aegiphila riedeliana* Schauer
LAMIACEAE		*Aegiphila tomentosa* Cham.
LAMIACEAE		*Aegiphila verticillata* Vell.
LAMIACEAE		*Hyptidendron asperrimum* (Epling) Harley
LAMIACEAE		*Hyptidendron canum* (Pohl) Harley
LAMIACEAE	*	*Hyptidendron claussenii* (Benth.) Harley
LAMIACEAE		*Vitex capitata* Vahl.
LAMIACEAE		*Vitex chrysleriana* Moldenke
LAMIACEAE		*Vitex cymosa* Bert. ex Spreng.
LAMIACEAE		*Vitex gardneriana* Schauer
LAMIACEAE		*Vitex hypoleuca* Schauer
LAMIACEAE		*Vitex laciniosa* Turcz.
LAMIACEAE		*Vitex maranhana* Moldenke
LAMIACEAE		*Vitex martii* Moldenke
LAMIACEAE		*Vitex megapotamica* (Spreng.) Moldenke
LAMIACEAE		*Vitex orinocensis* Kunth
LAMIACEAE		*Vitex polygama* Cham.
LAMIACEAE		*Vitex regnelliana* Moldenke
LAMIACEAE		*Vitex rufescens* A.Juss.
LAMIACEAE		*Vitex schaueriana* Moldenke
LAMIACEAE		*Vitex sellowiana* Cham.
LAMIACEAE		*Vitex vauthieri* DC. ex Schauer
LAURACEAE		*Aiouea acaradomatifera* Kosterm.
LAURACEAE		*Aiouea bracteata* Kosterm.
LAURACEAE		*Aiouea laevis* (Mart.) Kosterm.
LAURACEAE		*Aiouea saligna* Meisn.
LAURACEAE		*Aiouea trinervis* Meisn.
LAURACEAE		*Aniba desertorum* (Nees) Mez
LAURACEAE		*Aniba firmula* (Nees & Mart.) Mez

APPENDIX B - Continued.

Family		Species
LAURACEAE		*Aniba heringeri* Vattimo-Gil
LAURACEAE		*Aniba intermedia* (Meisn.) Mez
LAURACEAE		*Aniba pedicellata* Kosterm.
LAURACEAE		*Beilschmiedia angustifolia* Kosterm.
LAURACEAE		*Beilschmiedia emarginata* (Meisn.) Kosterm.
LAURACEAE		*Beilschmiedia fluminensis* Kosterm.
LAURACEAE		*Beilschmiedia linharensis* Sa.Nishida & van der Werff
LAURACEAE	*	*Beilschmiedia rigida* (Mez) Kosterm.
LAURACEAE		*Beilschmiedia stricta* Kosterm.
LAURACEAE		*Beilschmiedia taubertiana* (Schwacke & Mez) Kosterm.
LAURACEAE		*Beilschmiedia vestita* L.C.S.Assis & M.F.Santos
LAURACEAE		*Cinnamomum amoenum* (Nees & Mart.) Kosterm.
LAURACEAE		*Cinnamomum caratingae* Vattimo-Gil
LAURACEAE		*Cinnamomum erythropus* (Nees & Mart.) Kosterm.
LAURACEAE		*Cinnamomum glaziovii* (Mez) Kosterm.
LAURACEAE		*Cinnamomum hatschbachii* Vattimo-Gil
LAURACEAE		*Cinnamomum haussknechtii* (Mez) Kosterm.
LAURACEAE		*Cinnamomum hirsutum* Loréa-Hern.
LAURACEAE		*Cinnamomum riedelianum* Kosterm.
LAURACEAE		*Cinnamomum rubrinerveum* Loréa-Hern.
LAURACEAE		*Cinnamomum sellowianum* (Nees & Mart. ex Nees) Kosterm.
LAURACEAE		*Cinnamomum stenophyllum* (Meisn.) Vattimo-Gil
LAURACEAE		*Cinnamomum tomentulosum* Kosterm.
LAURACEAE		*Cinnamomum triplinerve* (Ruiz & Pav.) Kosterm.
LAURACEAE		*Cryptocarya aschersoniana* Mez
LAURACEAE		*Cryptocarya botelhensis* P.L.R. de Moraes
LAURACEAE		*Cryptocarya citriformis* (Vellozo) P.L.R. de Moraes
LAURACEAE		*Cryptocarya guianensis* Meisn.
LAURACEAE		*Cryptocarya mandioccana* Meisn.

APPENDIX B - Continued.

Family	Species
LAURACEAE	*Cryptocarya micrantha* Meisn.
LAURACEAE	*Cryptocarya moschata* Nees & Mart. ex Nees
LAURACEAE	*Cryptocarya riedeliana* P.L.R. de Moraes
LAURACEAE	*Cryptocarya saligna* Mez
LAURACEAE	*Cryptocarya sellowiana* P.L.R. de Moraes
LAURACEAE	*Cryptocarya subcorymbosa* Mez
LAURACEAE	*Cryptocarya velloziana* P.L.R. de Moraes
LAURACEAE	*Cryptocarya wiedensis* P.L.R. de Moraes
LAURACEAE	*Endlicheria glomerata* Mez
LAURACEAE	*Endlicheria paniculata* (Spreng.) J.F.Macbr.
LAURACEAE	*Licaria armeniaca* (Nees) Kosterm.
LAURACEAE	*Licaria bahiana* Kurz
LAURACEAE	*Licaria cannella* (Meisn.) Kosterm.
LAURACEAE	*Licaria debilis* (Mez) Kosterm.
LAURACEAE	*Licaria guianensis* Aubl.
LAURACEAE	*Licaria triplicalyx* Pedralli
LAURACEAE	*Mezilaurus navalium* (Allemão) Taub. ex Mez
LAURACEAE	*Nectandra angustifolia* (Schrad.) Nees & Mart.
LAURACEAE	*Nectandra barbellata* Coe-Teixeira
LAURACEAE	*Nectandra cissiflora* Nees
LAURACEAE	*Nectandra cuspidata* Nees
LAURACEAE	*Nectandra debilis* Mez
LAURACEAE	*Nectandra gardneri* Meisn.
LAURACEAE	*Nectandra grandiflora* Nees
LAURACEAE	*Nectandra hihua* (Ruiz & Pav.) Rohwer
LAURACEAE	*Nectandra lanceolata* Nees
LAURACEAE	*Nectandra leucantha* Nees
LAURACEAE	*Nectandra matogrossensis* Coe-Teixeira
LAURACEAE	*Nectandra megapotamica* (Spreng.) Mez
LAURACEAE	*Nectandra membranacea* (Sw.) Griseb.
LAURACEAE	*Nectandra micranthera* Rohwer
LAURACEAE	*Nectandra nitidula* Nees
LAURACEAE	*Nectandra oppositifolia* Nees

APPENDIX B - Continued.

Family		Species
LAURACEAE		*Nectandra paranaensis* Coe-Teixeira
LAURACEAE		*Nectandra psammophila* Nees
LAURACEAE		*Nectandra puberula* (Schott) Nees
LAURACEAE		*Nectandra purpurea* (Ruiz & Pav.) Mez
LAURACEAE		*Nectandra reticulata* (Ruiz & Pav.) Mez
LAURACEAE		*Nectandra spicata* Meisn.
LAURACEAE		*Nectandra turbacensis* (Kunth) Nees
LAURACEAE		*Nectandra venulosa* Meisn.
LAURACEAE		*Nectandra warmingii* Meisn.
LAURACEAE		*Nectandra weddellii* Meisn.
LAURACEAE		*Ocotea aciphylla* (Nees) Mez
LAURACEAE		*Ocotea acutifolia* (Nees) Mez
LAURACEAE		*Ocotea adenotrachelium* (Nees) Mez
LAURACEAE		*Ocotea aniboides* Mez
LAURACEAE		*Ocotea argentea* Mez
LAURACEAE	*	*Ocotea basicordatifolia* Vattimo-Gil
LAURACEAE		*Ocotea beulahiae* Baitello
LAURACEAE		*Ocotea beyrichii* (Nees) Mez
LAURACEAE		*Ocotea bicolor* Vattimo-Gil
LAURACEAE		*Ocotea brachybotrya* (Meisn.) Mez
LAURACEAE		*Ocotea bragai* Coe-Teixeira
LAURACEAE		*Ocotea caesia* Mez
LAURACEAE		*Ocotea calliscypha* L.C.S.Assis & Mello-Silva
LAURACEAE		*Ocotea canaliculata* (Rich.) Mez
LAURACEAE	*	*Ocotea catharinensis* Mez
LAURACEAE		*Ocotea cernua* (Nees) Mez
LAURACEAE		*Ocotea ciliata* L.C.S.Assis & Mello-Silva
LAURACEAE		*Ocotea complicata* (Meisn.) Mez
LAURACEAE		*Ocotea confertiflora* (Meisn.) Mez
LAURACEAE		*Ocotea corymbosa* (Meisn.) Mez
LAURACEAE		*Ocotea cryptocarpa* J.B.Baitello
LAURACEAE		*Ocotea curucutuensis* Baitello
LAURACEAE		*Ocotea daphnifolia* (Meisn.) Mez

APPENDIX B - Continued.

Family		Species
LAURACEAE		*Ocotea deflexa* (Meisn.) Rohwer
LAURACEAE		*Ocotea diospyrifolia* (Meisn.) Mez
LAURACEAE		*Ocotea dispersa* (Nees) Mez
LAURACEAE		*Ocotea divaricata* (Nees) Mez
LAURACEAE		*Ocotea domatiata* Mez
LAURACEAE		*Ocotea duckei* Vattimo-Gil
LAURACEAE		*Ocotea felix* Coe-Teixeira
LAURACEAE		*Ocotea frondosa* (Meisn.) Mez
LAURACEAE		*Ocotea glauca* (Nees) Mez
LAURACEAE		*Ocotea glaziovii* Mez
LAURACEAE		*Ocotea glomerata* (Nees) Mez
LAURACEAE		*Ocotea hypoglauca* (Nees & Mart.) Mez
LAURACEAE		*Ocotea indecora* (Schott) Mez
LAURACEAE		*Ocotea insignis* Mez
LAURACEAE		*Ocotea itatiaiae* Vattimo-Gil
LAURACEAE		*Ocotea lanata* (Nees) Mez
LAURACEAE		*Ocotea lancifolia* (Schott) Mez
LAURACEAE	*	*Ocotea langsdorffii* (Meisn.) Mez
LAURACEAE		*Ocotea laxa* (Nees) Mez
LAURACEAE		*Ocotea lobbii* (Meisn.) Rohwer
LAURACEAE		*Ocotea longifolia* Kunth
LAURACEAE		*Ocotea megaphylla* (Meisn.) Mez
LAURACEAE		*Ocotea microbotrys* (Meisn.) Mez
LAURACEAE		*Ocotea minarum* (Nees) Mez
LAURACEAE		*Ocotea montana* (Meisn.) Mez
LAURACEAE		*Ocotea nectandrifolia* Mez
LAURACEAE		*Ocotea nitida* (Meisn.) Rohwer
LAURACEAE		*Ocotea notata* (Nees & Mart.) Mez
LAURACEAE		*Ocotea nutans* (Nees) Mez
LAURACEAE		*Ocotea odorata* (Meisn.) Mez
LAURACEAE	*	*Ocotea odorifera* (Vell.) Rohwer
LAURACEAE		*Ocotea oppositifolia* S.Yasuda
LAURACEAE		*Ocotea percoriacea* (Meisn.) Kosterm.

APPENDIX B - Continued.

Family		Species
LAURACEAE		*Ocotea percurrens* Vicent.
LAURACEAE		*Ocotea pluridomatiata* A.Quinet
LAURACEAE		*Ocotea polyantha* (Nees) Mez
LAURACEAE		*Ocotea pomaderroides* (Meisn.) Mez
LAURACEAE	*	*Ocotea porosa* (Mez) L.Barroso
LAURACEAE		*Ocotea puberula* (Rich.) Nees
LAURACEAE		*Ocotea pulchella* Mart.
LAURACEAE		*Ocotea pulchra* Vattimo-Gil
LAURACEAE		*Ocotea sassafras* (Meisn.) Mez
LAURACEAE		*Ocotea schwackeana* Mez
LAURACEAE		*Ocotea serrana* Coe-Teixeira
LAURACEAE		*Ocotea silvestris* Vattimo-Gil
LAURACEAE		*Ocotea spectabilis* (Meisn.) Mez
LAURACEAE		*Ocotea spixiana* (Nees) Mez
LAURACEAE		*Ocotea sulcata* Vattimo-Gil
LAURACEAE		*Ocotea tabacifolia* (Meisn.) Rohwer
LAURACEAE		*Ocotea teleiandra* (Meisn.) Mez
LAURACEAE		*Ocotea tenuiflora* (Nees) Mez
LAURACEAE		*Ocotea tristis* (Nees) Mez
LAURACEAE		*Ocotea urbaniana* Mez
LAURACEAE		*Ocotea vaccinioides* (Meisn.) Mez
LAURACEAE		*Ocotea velloziana* (Meisn.) Mez
LAURACEAE		*Ocotea velutina* (Nees) Rohwer
LAURACEAE		*Ocotea villosa* Kosterm.
LAURACEAE		*Ocotea xanthocalyx* (Nees) Mez
LAURACEAE		*Persea alba* Nees
LAURACEAE		*Persea aurata* Miq.
LAURACEAE		*Persea caesia* Meisn.
LAURACEAE		*Persea fulva* L.E.Kopp
LAURACEAE		*Persea fusca* Mez
LAURACEAE		*Persea glabra* van der Werff
LAURACEAE		*Persea major* L.E.Kopp
LAURACEAE		*Persea obovata* Nees & Mart. ex Nees

APPENDIX B - Continued.

Family		Species
LAURACEAE	*	*Persea punctata* Meisn.
LAURACEAE		*Persea rufotomentosa* Nees & Mart. ex Nees
LAURACEAE		*Persea splendens* Meisn.
LAURACEAE		*Persea venosa* Nees
LAURACEAE		*Persea willdenowii* Kosterm.
LAURACEAE	*	*Phyllostemonodaphne geminiflora* (Mez) Kosterm.
LAURACEAE		*Pleurothyrium amplifolium* (Mez) Rohwer
LAURACEAE	*	*Rhodostemonodaphne capixabensis* Baitello & Coe-Teixeira
LAURACEAE		*Rhodostemonodaphne macrocalyx* (Meisn.) Rohwer ex Madriñán
LAURACEAE		*Urbanodendron bahiense* (Meisn.) Rohwer
LAURACEAE		*Urbanodendron macrophyllum* Rohwer
LAURACEAE		*Urbanodendron verrucosum* (Nees) Mez
LAURACEAE		*Williamodendron cinnamomeum* van der Werff
LECYTHIDACEAE		*Cariniana estrellensis* (Raddi) Kuntze
LECYTHIDACEAE	*	*Cariniana ianeirensis* R.Knuth
LECYTHIDACEAE		*Cariniana legalis* (Mart.) Kuntze
LECYTHIDACEAE	*	*Cariniana parvifolia* S.A.Mori et al.
LECYTHIDACEAE		*Cariniana rubra* Miers
LECYTHIDACEAE		*Couratari asterophora* Rizzini
LECYTHIDACEAE		*Couratari macrosperma* A.C.Sm.
LECYTHIDACEAE		*Couratari pyramidata* (Vell.) R.Knuth
LECYTHIDACEAE		*Eschweilera alvimii* S.A.Mori
LECYTHIDACEAE		*Eschweilera complanata* S.A.Mori
LECYTHIDACEAE		*Eschweilera compressa* (Vell.) Miers
LECYTHIDACEAE		*Eschweilera mattossilvae* S.A.Mori
LECYTHIDACEAE		*Eschweilera nana* (O.Berg) Miers
LECYTHIDACEAE		*Eschweilera ovata* (Cambess.) Miers
LECYTHIDACEAE		*Eschweilera parvifolia* Miers
LECYTHIDACEAE		*Eschweilera tetrapetala* S.A.Mori
LECYTHIDACEAE		*Lecythis lanceolata* Poir.
LECYTHIDACEAE		*Lecythis lurida* (Miers) S.A.Mori
LECYTHIDACEAE		*Lecythis pisonis* Cambess.

APPENDIX B - Continued.

Family	Species
LECYTHIDACEAE	*Lecythis schwackei* (R.Knuth) S.A.Mori
LOGANIACEAE	*Antonia ovata* Pohl
LOGANIACEAE	*Strychnos brasiliensis* (Spreng.) Mart.
LOGANIACEAE	*Strychnos pseudoquina* A.St.-Hil.
LYTHRACEAE	*Lafoensia glyptocarpa* Koehne
LYTHRACEAE	*Lafoensia pacari* A.St.-Hil.
LYTHRACEAE	*Physocalymma scaberrimum* Pohl
MAGNOLIACEAE	*Magnolia ovata* (A.St.-Hil.) Spreng.
MALPIGHIACEAE	*Banisteriopsis latifolia* (A.Juss.) Cuatrec.
MALPIGHIACEAE	*Barnebya dispar* (Griseb.) W.R.Anderson & B.Gates
MALPIGHIACEAE	*Barnebya harleyi* W.R.Anderson & B.Gates
MALPIGHIACEAE	*Bunchosia itacarensis* W.R.Anderson
MALPIGHIACEAE	*Bunchosia maritima* (Vell.) J.F.Macbr.
MALPIGHIACEAE	*Bunchosia pallescens* Skottsb.
MALPIGHIACEAE	*Bunchosia pernambucana* W.R.Anderson
MALPIGHIACEAE	*Byrsonima aerugo* Sagot
MALPIGHIACEAE	*Byrsonima alvimii* W.R.Anderson
MALPIGHIACEAE	*Byrsonima bahiana* W.R.Anderson
MALPIGHIACEAE	*Byrsonima blanchetiana* Miq.
MALPIGHIACEAE	*Byrsonima cacaophila* W.R.Anderson
MALPIGHIACEAE	*Byrsonima coccolobifolia* Kunth
MALPIGHIACEAE	*Byrsonima coriacea* (Sw.) DC.
MALPIGHIACEAE	*Byrsonima correifolia* A.Juss.
MALPIGHIACEAE	*Byrsonima crassa* Nied.
MALPIGHIACEAE	*Byrsonima crassifolia* (L.) Kunth
MALPIGHIACEAE	*Byrsonima crispa* A.Juss.
MALPIGHIACEAE	*Byrsonima cydoniifolia* A.Juss.
MALPIGHIACEAE	*Byrsonima gardneriana* A.Juss.
MALPIGHIACEAE	*Byrsonima intermedia* A.Juss.
MALPIGHIACEAE	*Byrsonima laevigata* (Poir.) DC.
MALPIGHIACEAE	*Byrsonima lancifolia* A.Juss.
MALPIGHIACEAE	*Byrsonima laxiflora* Griseb.
MALPIGHIACEAE	*Byrsonima ligustrifolia* A.Juss.

APPENDIX B - Continued.

Family	Species
MALPIGHIACEAE	*Byrsonima macrophylla* (Pers.) W.R.Anderson
MALPIGHIACEAE	*Byrsonima myricifolia* Griseb.
MALPIGHIACEAE	*Byrsonima niedenzuiana* Skottsb.
MALPIGHIACEAE	*Byrsonima nitidifolia* A.Juss.
MALPIGHIACEAE	*Byrsonima oblanceolata* Nied.
MALPIGHIACEAE	*Byrsonima perseifolia* Griseb.
MALPIGHIACEAE	*Byrsonima sericea* DC.
MALPIGHIACEAE	*Byrsonima spinensis* W.R.Anderson
MALPIGHIACEAE	*Byrsonima stannardii* W.R.Anderson
MALPIGHIACEAE	*Byrsonima stipulacea* A.Juss.
MALPIGHIACEAE	*Byrsonima umbellata* Mart.
MALPIGHIACEAE	*Byrsonima vacciniifolia* A.Juss.
MALPIGHIACEAE	*Byrsonima variabilis* A.Juss.
MALPIGHIACEAE	*Byrsonima verbascifolia* (L.) DC.
MALPIGHIACEAE	*Heteropterys byrsonimifolia* A.Juss.
MALPIGHIACEAE	*Heteropterys sincorensis* W.R.Anderson
MALPIGHIACEAE	*Ptilochaeta bahiensis* Turcz.
MALPIGHIACEAE	*Ptilochaeta glabra* Nied.
MALVACEAE	*Abutilon amoenum* K.Schum.
MALVACEAE	*Abutilon bedfordianum* A.St.-Hil.
MALVACEAE	*Abutilon peltatum* K.Schum.
MALVACEAE	*Abutilon rufinerve* A.St.-Hil.
MALVACEAE	*Apeiba albiflora* Ducke
MALVACEAE	*Apeiba echinata* Gaertn.
MALVACEAE	*Apeiba tibourbou* Aubl.
MALVACEAE	*Bastardiopsis densiflora* (Hook. & Arn.) Hassl.
MALVACEAE	*Cavanillesia arborea* (Willd.) K.Schum.
MALVACEAE	*Ceiba crispiflora* (Kunth) Ravenna
MALVACEAE	*Ceiba erianthos* (Cav.) K.Schum.
MALVACEAE	*Ceiba glaziovii* (Kuntze) K.Schum.
MALVACEAE	*Ceiba insignis* (Kunth) P.E.Gibbs & Semir
MALVACEAE	*Ceiba jasminodora* (A.St.-Hil.) K.Schum.
MALVACEAE	*Ceiba pubiflora* (A.St.-Hil.) K.Schum.

APPENDIX B - Continued.

Family	Species
MALVACEAE	*Ceiba rubriflora* Carvalho-Sobr. & L.P.Queiroz
MALVACEAE	*Ceiba speciosa* (A.St.-Hil.) Ravenna
MALVACEAE	*Ceiba ventricosa* (Nees & Mart.) Ravenna
MALVACEAE	*Christiana africana* DC.
MALVACEAE	*Christiana macrodon* Toledo
MALVACEAE	*Eriotheca candolleana* (K.Schum.) A.Robyns
MALVACEAE	*Eriotheca crenulaticalyx* A.Robyns
MALVACEAE	*Eriotheca dolichopoda* A.Robyns
MALVACEAE	*Eriotheca globosa* (Aubl.) A.Robyns
MALVACEAE	*Eriotheca gracilipes* (K.Schum.) A.Robyns
MALVACEAE	*Eriotheca macrophylla* (K.Schum.) A.Robyns
MALVACEAE	*Eriotheca obcordata* A.Robyns & S.Nilsson
MALVACEAE	*Eriotheca parvifolia* (Mart. & Zucc.) A.Robyns
MALVACEAE	*Eriotheca pentaphylla* (Vell.) A.Robyns
MALVACEAE	*Eriotheca pubescens* (Mart. & Zucc.) Schott & Endl.
MALVACEAE	*Guazuma crinita* Mart.
MALVACEAE	*Guazuma ulmifolia* Lam.
MALVACEAE	*Helicteres baruensis* Jacq.
MALVACEAE	*Helicteres brevispira* A.St.-Hil.
MALVACEAE	*Helicteres eichleri* K.Schum.
MALVACEAE	*Helicteres lhotzkyana* (Schott & Endl.) K.Schum.
MALVACEAE	*Helicteres ovata* Lam.
MALVACEAE	*Heliocarpus popayanensis* Kunth
MALVACEAE	*Hydrogaster trinervis* Kuhlm.
MALVACEAE	*Luehea candicans* Mart. & Zucc.
MALVACEAE	*Luehea conwentzii* K.Schum.
MALVACEAE	*Luehea cymulosa* Spruce
MALVACEAE	*Luehea divaricata* Mart.
MALVACEAE	*Luehea grandiflora* Mart. & Zucc.
MALVACEAE	*Luehea microcarpa* R.E.Fr.
MALVACEAE	*Luehea ochrophylla* Mart.
MALVACEAE	*Luehea paniculata* Mart. & Zucc.
MALVACEAE	*Pachira calophylla* (K.Schum.) Fern.-Alonso

APPENDIX B - Continued.

Family		Species
MALVACEAE		*Pachira glabra* (Pasq.) A.Robyns
MALVACEAE		*Pachira stenopetala* Casar.
MALVACEAE	*	*Pavonia alnifolia* A.St.-Hil.
MALVACEAE		*Pavonia calyculosa* A.St.-Hil. & Naudin
MALVACEAE		*Pavonia crassipedicellata* Krapov.
MALVACEAE		*Pavonia crispa* Krapov
MALVACEAE		*Pavonia luetzelburgii* Ulbr.
MALVACEAE		*Pavonia makoyana* E.Morren
MALVACEAE		*Pavonia malacophylla* (Link & Otto) Garcke
MALVACEAE		*Pavonia malvaviscoides* A.St.-Hil.
MALVACEAE		*Pavonia sanctii* Krapov.
MALVACEAE		*Pavonia semiserrata* (Schrad.) Steud.
MALVACEAE		*Pavonia spectabilis* Krapov
MALVACEAE		*Pseudobombax crassipes* Ravenna
MALVACEAE		*Pseudobombax endecaphyllum* (Vell.) A.Robyns
MALVACEAE		*Pseudobombax euryandrum* Ravenna
MALVACEAE		*Pseudobombax grandiflorum* (Cav.) A.Robyns
MALVACEAE		*Pseudobombax longiflorum* (Mart. & Zucc.) A.Robyns
MALVACEAE		*Pseudobombax marginatum* (A.St.-Hil.) A.Robyns
MALVACEAE		*Pseudobombax minimum* sp.nov.ined.
MALVACEAE		*Pseudobombax parviflorum* sp.nov.ined.
MALVACEAE		*Pseudobombax riopretensis* Ravenna
MALVACEAE		*Pseudobombax simplicifolium* A.Robyns
MALVACEAE		*Pseudobombax tomentosum* (Mart. & Zucc.) A.Robyns
MALVACEAE		*Pterygota brasiliensis* Allemão
MALVACEAE		*Quararibea floribunda* K.Schum.
MALVACEAE		*Quararibea turbinata* (Sw.) Poir.
MALVACEAE		*Spirotheca rivieri* (Decne.) Ulbr.
MALVACEAE		*Sterculia apetala* (Jacq.) H.Karst.
MALVACEAE		*Sterculia curiosa* (Vell.) Taroda
MALVACEAE		*Sterculia striata* A.St.-Hill. & Naudin
MALVACEAE		*Taliparititi tiliaceum* (L.) Fryxell

APPENDIX B - Continued.

Family	Species
MARCGRAVIACEAE	*Norantea guianensis* (Aubl.) Choisy
MARCGRAVIACEAE	*Schwartzia brasiliensis* (Choisy) Bedell ex Giraldo-Cañas
MARCGRAVIACEAE	*Souroubea guianensis* Aubl.
MELASTOMATACEAE	*Behuria insignis* Cham.
MELASTOMATACEAE	*Graffenrieda intermedia* Triana
MELASTOMATACEAE	*Graffenrieda weddellii* Naudin
MELASTOMATACEAE	*Henriettea saldanhaei* Cogn.
MELASTOMATACEAE	*Henriettea succosa* (Aubl.) DC.
MELASTOMATACEAE	*Henriettella glabra* Vell.
MELASTOMATACEAE	*Huberia carvalhoana* Baumgratz
MELASTOMATACEAE	*Huberia consimilis* Baumgratz
MELASTOMATACEAE	*Huberia espiritosantensis* Baumgratz
MELASTOMATACEAE	*Huberia glazioviana* Cogn.
MELASTOMATACEAE	*Huberia laurina* DC.
MELASTOMATACEAE	*Huberia minor* Cogn.
MELASTOMATACEAE	*Huberia nettoana* Brade
MELASTOMATACEAE	*Huberia ovalifolia* DC.
MELASTOMATACEAE	*Huberia parvifolia* Cogn.
MELASTOMATACEAE	*Huberia piranii* Baumgratz
MELASTOMATACEAE	*Huberia semiserrata* DC.
MELASTOMATACEAE	*Huberia triplinervis* Cogn.
MELASTOMATACEAE	*Leandra acutiflora* Cogn.
MELASTOMATACEAE	*Leandra aurea* (Cham.) Cogn.
MELASTOMATACEAE	*Leandra barbinervis* (Cham. ex Triana) Cogn.
MELASTOMATACEAE	*Leandra brackenridgei* (A.Gray) Cogn.
MELASTOMATACEAE	*Leandra breviflora* Cogn.
MELASTOMATACEAE	*Leandra carassana* (DC.) Cogn.
MELASTOMATACEAE	*Leandra clidemioides* (Naud.) Wurdack
MELASTOMATACEAE	*Leandra dasytricha* (A.Gray) Cogn.
MELASTOMATACEAE	*Leandra dentata* Cogn.
MELASTOMATACEAE	*Leandra fallacissima* Markgraf
MELASTOMATACEAE	*Leandra fallax* (Cham.) Cogn.
MELASTOMATACEAE	*Leandra fragilis* Cogn.

APPENDIX B - Continued.

Family	Species
MELASTOMATACEAE	*Leandra melastomoides* Raddi
MELASTOMATACEAE	*Leandra quinquedentata* (DC.) Cogn.
MELASTOMATACEAE	*Leandra regnellii* (Triana) Cogn.
MELASTOMATACEAE	*Leandra reitzii* Wurdack
MELASTOMATACEAE	*Leandra rufescens* (DC.) Cogn.
MELASTOMATACEAE	*Meriania callophylla* (Cham.) Triana
MELASTOMATACEAE	*Meriania calyptrata* (Naudin) Triana
MELASTOMATACEAE	*Meriania claussenii* Triana
MELASTOMATACEAE	*Meriania excelsa* (Gardner) Cogn.
MELASTOMATACEAE	*Meriania glabra* (DC.) Triana
MELASTOMATACEAE	*Meriania glazioviana* Cogn.
MELASTOMATACEAE	*Meriania longipes* Triana
MELASTOMATACEAE	*Meriania paniculata* Triana
MELASTOMATACEAE	*Meriania robusta* Cogn.
MELASTOMATACEAE	*Meriania sanchezii* R.Goldenb.
MELASTOMATACEAE	*Meriania tetramera* Wurdack
MELASTOMATACEAE	*Merianthera pulchra* Kulmann & Char.
MELASTOMATACEAE	*Merianthera sipolisii* (Glaz. & Cogn.) Wurdack
MELASTOMATACEAE	*Miconia affinis* DC.
MELASTOMATACEAE	*Miconia alata* (Aubl.) DC.
MELASTOMATACEAE	*Miconia albicans* (Sw.) Triana
MELASTOMATACEAE	*Miconia altissima* Cogn.
MELASTOMATACEAE	*Miconia amoena* Triana
MELASTOMATACEAE	*Miconia brasiliensis* (Spreng.) Triana
MELASTOMATACEAE	*Miconia brunnea* DC.
MELASTOMATACEAE	*Miconia budlejoides* Triana
MELASTOMATACEAE	*Miconia burchellii* Triana
MELASTOMATACEAE	*Miconia cabucu* Hoehne
MELASTOMATACEAE	*Miconia calvescens* Schrank & Mart. ex DC.
MELASTOMATACEAE	*Miconia capixaba* R.Goldemberg
MELASTOMATACEAE	*Miconia caudigera* DC.
MELASTOMATACEAE	*Miconia chamissois* Naudin
MELASTOMATACEAE	*Miconia chartacea* Triana

APPENDIX B - Continued.

Family	Species
MELASTOMATACEAE	*Miconia cinerascens* Miq.
MELASTOMATACEAE	*Miconia cinnamomifolia* (DC.) Naudin
MELASTOMATACEAE	*Miconia collatata* Wurdack
MELASTOMATACEAE	*Miconia cubatanensis* Hoehne
MELASTOMATACEAE	*Miconia cuspidata* Mart. ex Naudin
MELASTOMATACEAE	*Miconia discolor* DC.
MELASTOMATACEAE	*Miconia dodecandra* (Desr.) Cogn.
MELASTOMATACEAE	*Miconia fasciculata* Gardner
MELASTOMATACEAE	*Miconia flammea* Casar.
MELASTOMATACEAE	*Miconia formosa* Cogn.
MELASTOMATACEAE	*Miconia herpetica* DC.
MELASTOMATACEAE	*Miconia hirtella* Cogn.
MELASTOMATACEAE	*Miconia holosericea* (L.) DC.
MELASTOMATACEAE	*Miconia hypoleuca* (Benth.) Triana
MELASTOMATACEAE	*Miconia inconspicua* Miq.
MELASTOMATACEAE	*Miconia irwinii* Wurdack
MELASTOMATACEAE	*Miconia jucunda* (DC.) Triana
MELASTOMATACEAE	*Miconia kriegeriana* Baumgratz & Chiavegatto
MELASTOMATACEAE	*Miconia langsdorffii* Cogn.
MELASTOMATACEAE	*Miconia latecrenata* (DC.) Naudin
MELASTOMATACEAE	*Miconia lepidota* Schrank & Mart. ex DC.
MELASTOMATACEAE	*Miconia leucocarpa* DC.
MELASTOMATACEAE	*Miconia ligustroides* (DC.) Naudin
MELASTOMATACEAE	*Miconia longicuspis* Cogn.
MELASTOMATACEAE	*Miconia lurida* Cogn.
MELASTOMATACEAE	*Miconia lymanii* Wurdack
MELASTOMATACEAE	*Miconia mellina* DC.
MELASTOMATACEAE	*Miconia mendoncaei* Cogn.
MELASTOMATACEAE	*Miconia minutiflora* (Bonpl.) DC.
MELASTOMATACEAE	*Miconia mirabilis* (Aubl.) L.Wms.
MELASTOMATACEAE	*Miconia octopetala* Cogn.
MELASTOMATACEAE	*Miconia pepericarpa* DC.
MELASTOMATACEAE	*Miconia petroniana* Cogn. & Saldanha

APPENDIX B - Continued.

Family	Species
MELASTOMATACEAE	*Miconia petropolitana* Cogn.
MELASTOMATACEAE	*Miconia picinguabensis* R.Goldenb. & A.B.Martins
MELASTOMATACEAE	*Miconia polyandra* Gardner
MELASTOMATACEAE	*Miconia prasina* (Sw.) DC.
MELASTOMATACEAE	*Miconia punctata* (Desr.) D.Don ex DC.
MELASTOMATACEAE	*Miconia pusilliflora* (DC.) Triana
MELASTOMATACEAE	*Miconia racemifera* (DC.) Triana
MELASTOMATACEAE	*Miconia ramboi* Brade
MELASTOMATACEAE	*Miconia rimalis* Naudin
MELASTOMATACEAE	*Miconia ruficalyx* Gleason
MELASTOMATACEAE	*Miconia sclerophylla* Triana
MELASTOMATACEAE	*Miconia sellowiana* Naudin
MELASTOMATACEAE	*Miconia setosociliata* Cogn.
MELASTOMATACEAE	*Miconia shepherdii* R.Goldenb. & Reginato
MELASTOMATACEAE	*Miconia speciosa* (A.St.-Hil. & Naudin) Naudin
MELASTOMATACEAE	*Miconia splendens* (Sw.) Griseb.
MELASTOMATACEAE	*Miconia tentaculifera* Naudin
MELASTOMATACEAE	*Miconia theaezans* (Bonpl.) Cogn.
MELASTOMATACEAE	*Miconia tomentosa* (Rich.) D.Don ex DC.
MELASTOMATACEAE	*Miconia trianae* Cogn.
MELASTOMATACEAE	*Miconia tristis* Spring
MELASTOMATACEAE	*Miconia valtherii* Naudin
MELASTOMATACEAE	*Miconia willdenowii* Klotzsch
MELASTOMATACEAE	*Mouriri arborea* Gardner
MELASTOMATACEAE	*Mouriri arenicola* Morley
MELASTOMATACEAE	*Mouriri bahiensis* Morley
MELASTOMATACEAE	*Mouriri chamissoana* Cogn.
MELASTOMATACEAE	*Mouriri doriana* Saldanha ex Cogn.
MELASTOMATACEAE	*Mouriri elliptica* Mart.
MELASTOMATACEAE	*Mouriri gardneri* Triana
MELASTOMATACEAE	*Mouriri glazioviana* Cogn.
MELASTOMATACEAE	*Mouriri guianensis* Aubl.
MELASTOMATACEAE	*Mouriri megasperma* Morley

APPENDIX B - Continued.

Family	Species
MELASTOMATACEAE	*Mouriri myrtilloides* (Sw.) Poir.
MELASTOMATACEAE	*Mouriri pusa* Gardner
MELASTOMATACEAE	*Mouriri regeliana* Cogn.
MELASTOMATACEAE	*Ossaea angustifolia* (DC.) Triana
MELASTOMATACEAE	*Ossaea marginata* Triana
MELASTOMATACEAE	*Tibouchina apparicioi* Brade
MELASTOMATACEAE	*Tibouchina arborea* (Gardner) Cogn.
MELASTOMATACEAE	*Tibouchina boraceiensis* Brade
MELASTOMATACEAE	*Tibouchina boudetii* P.J.F.Guim. & R.Goldenb.
MELASTOMATACEAE	*Tibouchina candolleana* (Mart. ex DC.) Cogn.
MELASTOMATACEAE	*Tibouchina canescens* (D.Don) Cogn.
MELASTOMATACEAE	*Tibouchina corymbosa* (Raddi) Cogn.
MELASTOMATACEAE	*Tibouchina dusenii* Cogn.
MELASTOMATACEAE	*Tibouchina elegans* (Gardner) Cogn.
MELASTOMATACEAE	*Tibouchina estrellensis* (Raddi) Cogn.
MELASTOMATACEAE	*Tibouchina fissinervia* (Schrank & Mart. ex DC.) Cogn.
MELASTOMATACEAE	*Tibouchina fothergillae* (DC.) Cogn.
MELASTOMATACEAE	*Tibouchina francavillana* Cogn.
MELASTOMATACEAE	*Tibouchina granulosa* Cogn.
MELASTOMATACEAE	*Tibouchina kuhlmannii* Brade
MELASTOMATACEAE	*Tibouchina microphylla* Cogn. ex Schwake
MELASTOMATACEAE	*Tibouchina mutabilis* Cogn.
MELASTOMATACEAE	*Tibouchina pilosa* Cogn.
MELASTOMATACEAE	*Tibouchina pulchra* Cogn.
MELASTOMATACEAE	*Tibouchina regnellii* Cogn.
MELASTOMATACEAE	*Tibouchina reitzii* Brade
MELASTOMATACEAE	*Tibouchina rigidula* (Naudin) Wurdack
MELASTOMATACEAE	*Tibouchina rubrobracteata* R.Romero & P.J.F.Guim.
MELASTOMATACEAE	*Tibouchina schenckii* Cogn.
MELASTOMATACEAE	*Tibouchina sellowiana* (Cham.) Cogn.
MELASTOMATACEAE	*Tibouchina stenocarpa* (DC.) Cogn.
MELASTOMATACEAE	*Tococa guianensis* Aubl.

APPENDIX B - Continued.

Family	Species
MELASTOMATACEAE	*Trembleya parviflora* (D.Don) Cogn.
MELIACEAE	*Cabralea canjerana* (Vell.) Mart.
MELIACEAE	*Cedrela fissilis* Vell.
MELIACEAE	*Cedrela lilloi* C.DC.
MELIACEAE	*Cedrela odorata* L.
MELIACEAE	*Guarea blanchetii* C.DC.
MELIACEAE	*Guarea guidonia* (L.) Sleumer
MELIACEAE	*Guarea kunthiana* A.Juss.
MELIACEAE	*Guarea macrophylla* Vahl
MELIACEAE	*Guarea pendula* R.S.Ramalho et al.
MELIACEAE	*Trichilia blanchetii* C.DC.
MELIACEAE	*Trichilia casarettoi* C.DC.
MELIACEAE	*Trichilia catigua* A.Juss.
MELIACEAE	*Trichilia claussenii* C.DC.
MELIACEAE	*Trichilia elegans* A.Juss.
MELIACEAE	*Trichilia emarginata* (Turcz.) C.DC.
MELIACEAE	*Trichilia florbranca* T.D.Penn.
MELIACEAE	*Trichilia hirta* L.
MELIACEAE	*Trichilia lepidota* Mart.
MELIACEAE	*Trichilia magnifoliola* T.D.Penn.
MELIACEAE	*Trichilia martiana* C.DC.
MELIACEAE	*Trichilia pallens* C.DC.
MELIACEAE	*Trichilia pallida* Sw.
MELIACEAE	*Trichilia pleeana* (A.Juss.) C.DC.
MELIACEAE	*Trichilia pseudostipularis* (A.Juss) C.DC.
MELIACEAE	*Trichilia quadrijuga* Kunth
MELIACEAE	*Trichilia ramalhoi* Rizzini
MELIACEAE	*Trichilia silvatica* C.DC.
MELIACEAE	*Trichilia tetrapetala* C.DC.
MELIACEAE	*Trichilia trifolia* subsp. *pteleifolia* (A. Juss.) T.D. Penn.
MENISPERMACEAE	*Abuta selloana* Eichler
MONIMIACEAE	*Hennecartia omphalandra* J.Poiss.
MONIMIACEAE	*Macropeplus dentatus* (Perkins) I.Santos &

APPENDIX B - Continued.

Family		Species
		Peixoto
MONIMIACEAE	*	*Macropeplus friburgensis* (Perkins) I.Santos & Peixoto
MONIMIACEAE		*Macropeplus ligustrinus* (Tul.) Perkins
MONIMIACEAE		*Macropeplus schwackeanus* (Perkins) I.Santos & Peixoto
MONIMIACEAE	*	*Macrotorus utriculatus* (Mart.) Perkins
MONIMIACEAE		*Mollinedia acutissima* Perkins
MONIMIACEAE		*Mollinedia argyrogyna* Perkins
MONIMIACEAE		*Mollinedia blumenaviana* Perkins
MONIMIACEAE	*	*Mollinedia boracensis* Peixoto
MONIMIACEAE		*Mollinedia calodonta* Perkins
MONIMIACEAE		*Mollinedia chrysolaena* Perkins
MONIMIACEAE		*Mollinedia clavigera* Tul.
MONIMIACEAE		*Mollinedia corcovadensis* Perkins
MONIMIACEAE		*Mollinedia elegans* Tul.
MONIMIACEAE		*Mollinedia engleriana* Perkins
MONIMIACEAE		*Mollinedia fruticulosa* Perkins
MONIMIACEAE	*	*Mollinedia gilgiana* Perkins
MONIMIACEAE	*	*Mollinedia glabra* (Spreng.) Perkins
MONIMIACEAE		*Mollinedia glaziovii* Perkins
MONIMIACEAE		*Mollinedia heteranthera* Perkins
MONIMIACEAE	*	*Mollinedia lamprophylla* Perkins
MONIMIACEAE		*Mollinedia longifolia* Tul.
MONIMIACEAE		*Mollinedia luizae* Peixoto
MONIMIACEAE		*Mollinedia marliae* Peixoto & V.Pereira
MONIMIACEAE		*Mollinedia marqueteana* Peixoto
MONIMIACEAE		*Mollinedia micrantha* Tul.
MONIMIACEAE		*Mollinedia oligantha* Perkins
MONIMIACEAE		*Mollinedia ovata* Ruiz & Pav.
MONIMIACEAE		*Mollinedia pachysandra* Perkins
MONIMIACEAE		*Mollinedia salicifolia* Perkins
MONIMIACEAE		*Mollinedia schottiana* (Spreng.) Perkins
MONIMIACEAE	*	*Mollinedia stenophylla* Perkins

APPENDIX B - Continued.

Family		Species
MONIMIACEAE		*Mollinedia triflora* (Spreng.) Tul.
MONIMIACEAE		*Mollinedia uleana* Perk.
MONIMIACEAE		*Mollinedia widgrenii* A.DC.
MORACEAE		*Brosimum gaudichaudii* Trécul
MORACEAE	*	*Brosimum glaucum* Taub.
MORACEAE		*Brosimum glazioui* Taub.
MORACEAE		*Brosimum guianense* (Aubl.) Huber
MORACEAE		*Brosimum lactescens* (S.Moore) C.C.Berg
MORACEAE		*Brosimum rubescens* Taub.
MORACEAE		*Clarisia ilicifolia* (Spreng.) Lanj. & Rossb.
MORACEAE		*Clarisia racemosa* Ruiz & Pav.
MORACEAE		*Ficus adhatodifolia* Schott
MORACEAE		*Ficus bahiensis* C.C.Berg & Carauta
MORACEAE		*Ficus bonijesulapensis* R.M.Castro
MORACEAE		*Ficus broadwayi* Urb.
MORACEAE		*Ficus caatingae* R.M.Castro
MORACEAE		*Ficus calyptroceras* (Miq.) Miq.
MORACEAE		*Ficus castellviana* Dugand
MORACEAE		*Ficus cestrifolia* Schott
MORACEAE		*Ficus citrifolia* Mill.
MORACEAE		*Ficus clusiifolia* Schott
MORACEAE		*Ficus crocata* (Miq.) Miq.
MORACEAE		*Ficus donnellsmithii* Standl.
MORACEAE		*Ficus duartei* C.C.Berg & Carauta
MORACEAE		*Ficus enormis* (Mart. ex Miq.) Mart.
MORACEAE		*Ficus eximia* Schott
MORACEAE		*Ficus gomelleira* Kunth & Bouché
MORACEAE		*Ficus guianensis* Desv.
MORACEAE		*Ficus hirsuta* Schott
MORACEAE		*Ficus holosericea* Schott
MORACEAE		*Ficus insipida* Willd.
MORACEAE		*Ficus lagoensis* C.C.Berg & Carauta
MORACEAE		*Ficus laureola* Warb. ex C.C.Berg

APPENDIX B - Continued.

Family	Species
MORACEAE	*Ficus longifolia* Schott
MORACEAE	*Ficus luschnathiana* (Miq.) Miq.
MORACEAE	*Ficus mariae* C.C.Berg et al.
MORACEAE	*Ficus nymphaeifolia* P.Miller
MORACEAE	*Ficus obtusifolia* (Miq.) Miq.
MORACEAE	*Ficus obtusiuscula* (Miq.) Miq.
MORACEAE	*Ficus pertusa* L.f.
MORACEAE	*Ficus pulchella* Schott
MORACEAE	*Ficus rupicola* C.C.Berg & Carauta
MORACEAE	*Ficus trigona* L.f.
MORACEAE	*Helicostylis pedunculata* Benoist
MORACEAE	*Helicostylis tomentosa* (Poepp. & Endl.) Rusby
MORACEAE	*Maclura brasiliensis* (Mart.) Endl.
MORACEAE	*Maclura tinctoria* (L.) Steud.
MORACEAE	*Naucleopsis oblongifolia* (Kuhlm.) Carauta
MORACEAE	*Pseudolmedia hirtula* Kuhlm.
MORACEAE	*Pseudolmedia laevigata* Trécul
MORACEAE	*Pseudolmedia macrophylla* Trécul
MORACEAE	*Sorocea bonplandii* (Baill.) W.C.Burger et al.
MORACEAE	*Sorocea guilleminiana* Gaudich.
MORACEAE	*Sorocea hilarii* Gaudich.
MYRISTICACEAE	*Virola bicuhyba* (Schott) Warb.
MYRISTICACEAE	*Virola gardneri* (A.DC.) Warb.
MYRISTICACEAE	*Virola officinalis* Warb.
MYRISTICACEAE	*Virola sebifera* Aubl.
MYRISTICACEAE	*Virola subsessilis* Warb.
MYRISTICACEAE	*Virola urbaniana* Warb.
MYRSINACEAE	*Ardisia ambigua* Mez
MYRSINACEAE	*Ardisia guyanensis* (Aubl.) Mez
MYRSINACEAE	*Ardisia semicrenata* Mez
MYRSINACEAE	*Ardisia warmingii* (Mez) Bernacci & Jung-Mend.
MYRSINACEAE	*Cybianthus amplus* (Mez) G.Agostini
MYRSINACEAE	*Cybianthus bahiensis* G.Agostini

APPENDIX B - Continued.

Family	Species
MYRSINACEAE	*Cybianthus fulvopulverulentus* (Mez) G.Agostini
MYRSINACEAE	*Cybianthus gardneri* (A.DC.) G.Agostini
MYRSINACEAE	*Cybianthus peruvianus* (A.DC.) Miq.
MYRSINACEAE	*Myrsine altomontana* M.F.Freitas & L.S.Kinoshita
MYRSINACEAE	*Myrsine balansae* (Mez) Otegui
MYRSINACEAE	*Myrsine coriacea* (Sw.) Roem. & Schult.
MYRSINACEAE	*Myrsine daphnites* Mart.
MYRSINACEAE	*Myrsine emarginella* Miq.
MYRSINACEAE	*Myrsine gardneriana* A.DC.
MYRSINACEAE	*Myrsine guianensis* (Aubl.) Kuntze
MYRSINACEAE	*Myrsine hermogenesii* (Jung-Mend. & Bernacci) M.F.Freitas
MYRSINACEAE	*Myrsine laetevirens* (Mez) Arechav.
MYRSINACEAE	*Myrsine lancifolia* Mart.
MYRSINACEAE	*Myrsine leuconeura* Mart.
MYRSINACEAE	*Myrsine lineata* (Mez) Imkhan.
MYRSINACEAE	*Myrsine loefgrenii* (Mez) Imkhan.
MYRSINACEAE	*Myrsine lorentziana* (Mez) Arechav.
MYRSINACEAE	*Myrsine matensis* (Mez) Otegui
MYRSINACEAE	*Myrsine parvifolia* DC.
MYRSINACEAE	*Myrsine rubra* M.F.Freitas & L.S.Kinoshita
MYRSINACEAE	*Myrsine umbellata* Mart.
MYRSINACEAE	*Myrsine venosa* A.DC.
MYRSINACEAE	*Myrsine villosissima* Mart.
MYRSINACEAE	*Stylogyne depauperata* Mez
MYRSINACEAE	*Stylogyne laevigata* (Miq. ex Mart.) Mez
MYRSINACEAE	*Stylogyne leptantha* (Miq.) Mez
MYRTACEAE	*Acca sellowiana* (O.Berg) Burret
MYRTACEAE	*Blepharocalyx eggersii* (Kiaersk.) Landrum
MYRTACEAE	*Blepharocalyx salicifolius* (Kunth) O.Berg
MYRTACEAE	*Calyptranthes affinis* O.Berg
MYRTACEAE	*Calyptranthes angustifolia* Kiaersk.
MYRTACEAE	*Calyptranthes aromatica* A.St.-Hil.

APPENDIX B - Continued.

Family		Species
MYRTACEAE		*Calyptranthes bimarginata* O.Berg
MYRTACEAE		*Calyptranthes brasiliensis* Spreng.
MYRTACEAE		*Calyptranthes clusiifolia* O.Berg
MYRTACEAE		*Calyptranthes concinna* DC.
MYRTACEAE		*Calyptranthes dardanoi* Mattos
MYRTACEAE		*Calyptranthes dichotoma* Casar.
MYRTACEAE		*Calyptranthes dryadica* M.L.Kawas.
MYRTACEAE		*Calyptranthes eugenioides* Cambess.
MYRTACEAE		*Calyptranthes glazioviana* Kiaersk.
MYRTACEAE		*Calyptranthes grammica* (Spreng.) D.Legrand
MYRTACEAE		*Calyptranthes grandiflora* O.Berg
MYRTACEAE		*Calyptranthes grandifolia* O.Berg
MYRTACEAE		*Calyptranthes hatschbachii* D.Legrand
MYRTACEAE		*Calyptranthes lanceolata* O.Berg
MYRTACEAE		*Calyptranthes langsdorffii* O.Berg
MYRTACEAE		*Calyptranthes lucida* Mart. ex DC.
MYRTACEAE		*Calyptranthes martiusiana* DC.
MYRTACEAE		*Calyptranthes obovata* Kiaersk.
MYRTACEAE		*Calyptranthes obversa* O.Berg
MYRTACEAE		*Calyptranthes pauciflora* O.Berg
MYRTACEAE		*Calyptranthes pileata* D.Legrand
MYRTACEAE		*Calyptranthes pteropoda* O.Berg
MYRTACEAE		*Calyptranthes pulchella* DC.
MYRTACEAE		*Calyptranthes regeliana* O.Berg
MYRTACEAE	*	*Calyptranthes restingae* Sobral
MYRTACEAE		*Calyptranthes rubella* (O.Berg) D.Legrand
MYRTACEAE		*Calyptranthes strigipes* O.Berg
MYRTACEAE		*Calyptranthes tetraptera* O.Berg
MYRTACEAE		*Calyptranthes tricona* D.Legrand
MYRTACEAE		*Calyptranthes ursina* Barroso & Peixoto
MYRTACEAE		*Calyptranthes widgreniana* O.Berg
MYRTACEAE		*Campomanesia anemonea* Landrum
MYRTACEAE		*Campomanesia aromatica* (Aubl.) Griseb.

APPENDIX B - Continued.

Family	Species
MYRTACEAE	*Campomanesia dichotoma* (O.Berg) Mattos
MYRTACEAE	*Campomanesia espiritosantensis* Landrum
MYRTACEAE	*Campomanesia eugenioides* (Cambess.) D.Legrand
MYRTACEAE	*Campomanesia grandiflora* Sagot
MYRTACEAE	*Campomanesia guaviroba* (DC.) Kiaersk.
MYRTACEAE	*Campomanesia guazumifolia* (Cambess.) O.Berg
MYRTACEAE	*Campomanesia hirsuta* Gardner
MYRTACEAE	*Campomanesia laurifolia* Gardner
MYRTACEAE	*Campomanesia lundiana* (Kiaersk.) Mattos
MYRTACEAE	*Campomanesia neriiflora* (O.Berg) Nied.
MYRTACEAE	*Campomanesia phaea* (O.Berg) Landrum
MYRTACEAE	*Campomanesia prosthecesepala* Kiaersk.
MYRTACEAE	*Campomanesia reitziana* D.Legrand
MYRTACEAE	*Campomanesia rhombea* O.Berg
MYRTACEAE	*Campomanesia schlechtendaliana* (O.Berg) Nied.
MYRTACEAE	*Campomanesia sessiliflora* (O.Berg) Mattos
MYRTACEAE	*Campomanesia simulans* M.L.Kawas.
MYRTACEAE	*Campomanesia velutina* (Cambess.) O.Berg
MYRTACEAE	*Campomanesia viatoris* Landrum
MYRTACEAE	*Campomanesia xanthocarpa* (Mart.) O.Berg
MYRTACEAE	*Curitiba prismatica* (D.Legrand) Salywon & Landrum
MYRTACEAE	*Eugenia acutata* Miq.
MYRTACEAE	*Eugenia adenantha* O.Berg
MYRTACEAE	*Eugenia adenocarpa* O.Berg
MYRTACEAE	*Eugenia apiocarpa* O.Berg
MYRTACEAE	*Eugenia arenaria* Cambess.
MYRTACEAE	*Eugenia arvensis* Vell.
MYRTACEAE	*Eugenia aurata* O.Berg
MYRTACEAE	*Eugenia ayacuchae* Steyerm.
MYRTACEAE	*Eugenia bacopari* D.Legrand
MYRTACEAE	*Eugenia badia* O.Berg
MYRTACEAE	*Eugenia bahiensis* DC.

APPENDIX B - Continued.

Family	Species
MYRTACEAE	*Eugenia batingabranca* Sobral
MYRTACEAE	*Eugenia biflora* (L.) DC.
MYRTACEAE	*Eugenia blanchetiana* O.Berg
MYRTACEAE	*Eugenia blastantha* (O.Berg) D.Legrand
MYRTACEAE	*Eugenia bocainensis* Mattos
MYRTACEAE	*Eugenia botequimensis* Kiaersk.
MYRTACEAE	*Eugenia brasiliensis* Lam.
MYRTACEAE	*Eugenia brevistyla* D.Legrand
MYRTACEAE	*Eugenia brunneopubescens* Mazine
MYRTACEAE	*Eugenia brunoi* Mattos
MYRTACEAE	*Eugenia bunchosiifolia* Nied.
MYRTACEAE	*Eugenia burkartiana* (D.Legrand) D.Legrand
MYRTACEAE	*Eugenia cambucae* Mattos
MYRTACEAE	*Eugenia candolleana* DC.
MYRTACEAE	*Eugenia capitulifera* O.Berg
MYRTACEAE	*Eugenia capixaba* Mazine
MYRTACEAE	*Eugenia catharinae* O.Berg
MYRTACEAE	*Eugenia catharinensis* D.Legrand
MYRTACEAE	*Eugenia cerasiflora* Miq.
MYRTACEAE	*Eugenia cereja* D.Legrand
MYRTACEAE	*Eugenia chlorophylla* O.Berg
MYRTACEAE	*Eugenia coccifera* O.Berg
MYRTACEAE	*Eugenia complicata* O.Berg
MYRTACEAE	*Eugenia convexinervia* D.Legrand
MYRTACEAE	*Eugenia copacabanensis* Kiaersk.
MYRTACEAE	*Eugenia corcovadensis* Kiaersk.
MYRTACEAE	*Eugenia costatifructa* Mazine
MYRTACEAE	*Eugenia cuprea* (O.Berg) Nied.
MYRTACEAE	*Eugenia cymatodes* O.Berg
MYRTACEAE	*Eugenia dichroma* O.Berg
MYRTACEAE	*Eugenia disperma* Vell.
MYRTACEAE	*Eugenia dodonaeifolia* Cambess.
MYRTACEAE	*Eugenia duarteana* Cambess.

APPENDIX B - Continued.

Family		Species
MYRTACEAE		*Eugenia dysenterica* DC.
MYRTACEAE		*Eugenia egensis* DC.
MYRTACEAE		*Eugenia ellipsoidea* Kiaersk.
MYRTACEAE		*Eugenia elongata* Nied.
MYRTACEAE		*Eugenia excelsa* O.Berg
MYRTACEAE		*Eugenia excoriata* O.Berg
MYRTACEAE		*Eugenia expansa* Spring ex Mart.
MYRTACEAE		*Eugenia falkenbergiana* Mattos
MYRTACEAE		*Eugenia fissurata* Mattos
MYRTACEAE		*Eugenia flamingensis* O.Berg
MYRTACEAE		*Eugenia flavescens* DC.
MYRTACEAE		*Eugenia florida* DC.
MYRTACEAE		*Eugenia fluminensis* O.Berg
MYRTACEAE		*Eugenia francavilleana* O.Berg
MYRTACEAE		*Eugenia fusca* O.Berg
MYRTACEAE		*Eugenia gaudichaudiana* O.Berg
MYRTACEAE		*Eugenia glandulosissima* Kiaersk.
MYRTACEAE		*Eugenia gracilis* O.Berg
MYRTACEAE		*Eugenia gracillima* Kiaersk.
MYRTACEAE		*Eugenia grazielae* Mattos & D.Legrand
MYRTACEAE		*Eugenia handroana* D.Legrand
MYRTACEAE		*Eugenia handroi* (Mattos) Mattos
MYRTACEAE		*Eugenia hiemalis* Cambess.
MYRTACEAE		*Eugenia hirta* O.Berg
MYRTACEAE		*Eugenia ilhensis* O.Berg
MYRTACEAE		*Eugenia imaruiensis* D.Legrand
MYRTACEAE		*Eugenia inundata* DC.
MYRTACEAE		*Eugenia inversa* Sobral
MYRTACEAE		*Eugenia involucrata* DC.
MYRTACEAE	*	*Eugenia itacarensis* Mattos
MYRTACEAE		*Eugenia itaguahiensis* Nied.
MYRTACEAE		*Eugenia itajurensis* Cambess.
MYRTACEAE		*Eugenia itapemirimensis* Cambess.

APPENDIX B - Continued.

Family	Species
MYRTACEAE	*Eugenia janeirensis* O.Berg
MYRTACEAE	*Eugenia kleinii* D.Legrand
MYRTACEAE	*Eugenia klotzschiana* O.Berg
MYRTACEAE	*Eugenia kuhlmanniana* Mattos & D.Legrand
MYRTACEAE	*Eugenia lagoensis* Kiaersk.
MYRTACEAE	*Eugenia lambertiana* DC.
MYRTACEAE	*Eugenia laruotteana* Cambess.
MYRTACEAE	*Eugenia leitonii* ined.
MYRTACEAE	*Eugenia leonorae* Mattos
MYRTACEAE	*Eugenia leptoclada* O.Berg
MYRTACEAE	*Eugenia ligustrina* (Sw.) Willd.
MYRTACEAE	*Eugenia linguiformis* O.Berg
MYRTACEAE	*Eugenia longibracteata* Mazine
MYRTACEAE	*Eugenia longifolia* DC.
MYRTACEAE	*Eugenia longipetiolata* Mattos
MYRTACEAE	*Eugenia luschnathiana* (O.Berg) Klotzsch ex B.D.Jacks.
MYRTACEAE	*Eugenia macahensis* O.Berg
MYRTACEAE	*Eugenia macrantha* O.Berg
MYRTACEAE	*Eugenia macrosperma* DC.
MYRTACEAE	*Eugenia magnibracteolata* Mattos & D.Legrand
MYRTACEAE	*Eugenia magnifica* Spring ex Mart.
MYRTACEAE	*Eugenia malacantha* D.Legrand
MYRTACEAE	*Eugenia mandioccensis* O.Berg
MYRTACEAE	*Eugenia mansoi* O.Berg
MYRTACEAE	*Eugenia marambaiensis* M.C.Souza & M.P.Morim
MYRTACEAE	*Eugenia martiana* (O.Berg) Mattos
MYRTACEAE	*Eugenia melanogyna* (D.Legrand) Sobral
MYRTACEAE	*Eugenia modesta* DC.
MYRTACEAE	*Eugenia monosperma* Vell.
MYRTACEAE	*Eugenia moonioides* O.Berg
MYRTACEAE	*Eugenia moraviana* O.Berg
MYRTACEAE	*Eugenia multicostata* D.Legrand

APPENDIX B - Continued.

Family	Species
MYRTACEAE	*Eugenia myrcianthes* Nied.
MYRTACEAE	*Eugenia myrciariifolia* Soares-Silva & Sobral
MYRTACEAE	*Eugenia neoglomerata* Sobral
MYRTACEAE	*Eugenia neolaurifolia* Sobral
MYRTACEAE	*Eugenia neomyrtifolia* Sobral
MYRTACEAE	*Eugenia neonitida* Sobral
MYRTACEAE	*Eugenia neosilvestris* Sobral
MYRTACEAE	*Eugenia neotristis* Sobral
MYRTACEAE	*Eugenia neoverrucosa* Sobral
MYRTACEAE	*Eugenia nutans* O.Berg
MYRTACEAE	*Eugenia oblongata* O.Berg
MYRTACEAE	*Eugenia oeidocarpa* O.Berg
MYRTACEAE	*Eugenia ophthalmantha* Kiaersk.
MYRTACEAE	*Eugenia pachnantha* O.Berg
MYRTACEAE	*Eugenia pachyclada* D.Legrand
MYRTACEAE	*Eugenia pantagensis* O.Berg
MYRTACEAE	*Eugenia pauciflora* DC.
MYRTACEAE	*Eugenia persicifolia* O.Berg
MYRTACEAE	*Eugenia peruibensis* Mattos
MYRTACEAE	*Eugenia piloensis* Cambess.
MYRTACEAE	*Eugenia piresiana* Cambess.
MYRTACEAE	*Eugenia pisiformis* Cambess.
MYRTACEAE	*Eugenia platyphylla* O.Berg
MYRTACEAE	*Eugenia platysema* O.Berg
MYRTACEAE	*Eugenia pleurantha* O.Berg
MYRTACEAE	*Eugenia plicata* Nied.
MYRTACEAE	*Eugenia plicatocostata* O.Berg
MYRTACEAE	*Eugenia pluriflora* DC.
MYRTACEAE	*Eugenia prasina* O.Berg
MYRTACEAE	*Eugenia pruinosa* D.Legrand
MYRTACEAE	*Eugenia pruniformis* Cambess.
MYRTACEAE	*Eugenia pseudomalacantha* D.Legrand
MYRTACEAE	*Eugenia pulcherrima* Kiaersk.

APPENDIX B - Continued.

Family	Species
MYRTACEAE	*Eugenia punicifolia* (Kunth) DC.
MYRTACEAE	*Eugenia pyriflora* O.Berg
MYRTACEAE	*Eugenia pyriformis* Cambess.
MYRTACEAE	*Eugenia ramboi* D.Legrand
MYRTACEAE	*Eugenia repanda* O.Berg
MYRTACEAE	*Eugenia robustovenosa* Kiaersk.
MYRTACEAE	*Eugenia rostrata* O.Berg
MYRTACEAE	*Eugenia rostrifolia* D.Legrand
MYRTACEAE	*Eugenia rotundicosta* D.Legrand
MYRTACEAE	*Eugenia rugosissima* Sobral
MYRTACEAE	*Eugenia schottiana* O.Berg
MYRTACEAE	*Eugenia schuechiana* O.Berg
MYRTACEAE	*Eugenia sclerocalyx* D.Legrand
MYRTACEAE	*Eugenia sonderiana* O.Berg
MYRTACEAE	*Eugenia speciosa* Cambess.
MYRTACEAE	*Eugenia sphenoides* O.Berg
MYRTACEAE	*Eugenia sprengelii* DC.
MYRTACEAE	*Eugenia squamiflora* Mattos
MYRTACEAE	*Eugenia stictopetala* DC.
MYRTACEAE	*Eugenia stigmatosa* DC.
MYRTACEAE	*Eugenia stricta* (O.Berg) Nied.
MYRTACEAE	*Eugenia subavenia* O.Berg
MYRTACEAE	*Eugenia suberosa* Cambess.
MYRTACEAE	*Eugenia subreticulata* Glaz.
MYRTACEAE	*Eugenia subterminalis* DC.
MYRTACEAE	*Eugenia subundulata* Kiaersk.
MYRTACEAE	*Eugenia sulcata* Spring ex Mart.
MYRTACEAE	*Eugenia supraaxillaris* Spring
MYRTACEAE	*Eugenia tenuipedunculata* Kiaersk.
MYRTACEAE	*Eugenia ternatifolia* Cambess.
MYRTACEAE	*Eugenia tinguyensis* Cambess.
MYRTACEAE	*Eugenia umbelliflora* O.Berg
MYRTACEAE	*Eugenia umbrosa* O.Berg

APPENDIX B - Continued.

Family	Species
MYRTACEAE	*Eugenia uniflora* L.
MYRTACEAE	*Eugenia uruguayensis* Cambess.
MYRTACEAE	*Eugenia vattimoana* Mattos
MYRTACEAE	*Eugenia vernicosa* O.Berg
MYRTACEAE	*Eugenia vetula* DC.
MYRTACEAE	*Eugenia villaenovae* Kiaersk.
MYRTACEAE	*Eugenia viridiflora* Cambess.
MYRTACEAE	*Eugenia widgrenii* Sonder ex O.Berg
MYRTACEAE	*Eugenia xanthoxyloides* Cambess.
MYRTACEAE	*Eugenia xiriricana* Mattos
MYRTACEAE	*Eugenia zuccarini* O.Berg
MYRTACEAE	*Marlierea acuminatissima* (O.Berg) D.Legrand
MYRTACEAE	*Marlierea affinis* (O.Berg) D.Legrand
MYRTACEAE	*Marlierea angustifolia* (O.Berg) Mattos
MYRTACEAE	*Marlierea antonia* (O.Berg) D.Legrand
MYRTACEAE	*Marlierea bipennis* (O.Berg) McVaugh
MYRTACEAE	*Marlierea choriophylla* Kiaersk.
MYRTACEAE	*Marlierea clausseniana* (O.Berg) Kiaersk.
MYRTACEAE	*Marlierea dimorpha* O.Berg
MYRTACEAE	*Marlierea estrellensis* O.Berg
MYRTACEAE	*Marlierea eugenioides* (Cambess.) D.Legrand
MYRTACEAE	*Marlierea eugeniopsoides* (D.Legrand & Kausel) D.Legrand
MYRTACEAE	*Marlierea excoriata* Mart.
MYRTACEAE	*Marlierea gardneriana* (O.Berg) Nied.
MYRTACEAE	*Marlierea gaudichaudiana* (O.Berg) Loefgren & Everett
MYRTACEAE	*Marlierea glabra* Cambess.
MYRTACEAE	*Marlierea glazioviana* Kiaersk.
MYRTACEAE	*Marlierea grandifolia* O.Berg
MYRTACEAE	*Marlierea guanabarina* Mattos & D.Legrand
MYRTACEAE	*Marlierea involucrata* (O.Berg) Nied.
MYRTACEAE	*Marlierea krapovickae* D.Legrand
MYRTACEAE	*Marlierea laevigata* (DC.) Kiaersk.

APPENDIX B - Continued.

Family	Species
MYRTACEAE	*Marlierea lealcostae* G.M.Barroso & Peixoto
MYRTACEAE	*Marlierea lituatinervea* (O.Berg) McVaugh
MYRTACEAE	*Marlierea luschnathiana* (O.Berg) D.Legrand
MYRTACEAE	*Marlierea martinellii* G.Barroso & Peixoto
MYRTACEAE	*Marlierea neuwiediana* (O.Berg) Nied.
MYRTACEAE	*Marlierea obscura* O.Berg
MYRTACEAE	*Marlierea obversa* D.Legrand
MYRTACEAE	*Marlierea polygama* (O.Berg) D.Legrand
MYRTACEAE	*Marlierea racemosa* (Vell.) Kiaersk.
MYRTACEAE	*Marlierea regeliana* O.Berg
MYRTACEAE	*Marlierea reitzii* D.Legrand
MYRTACEAE	*Marlierea riedeliana* (O.Berg) D.Legrand
MYRTACEAE	*Marlierea rubiginosa* (Cambess.) D.Legrand
MYRTACEAE	*Marlierea rufa* O.Berg
MYRTACEAE	*Marlierea schottiana* O.Berg
MYRTACEAE	*Marlierea schottii* D.Legrand
MYRTACEAE	*Marlierea silvatica* (O.Berg) Kiaersk.
MYRTACEAE	*Marlierea skortzoviana* Mattos
MYRTACEAE	*Marlierea spruceana* O.Berg
MYRTACEAE	*Marlierea strigipes* (Mart.) O.Berg
MYRTACEAE	*Marlierea suaveolens* Cambess.
MYRTACEAE	*Marlierea subacuminata* Kiaersk.
MYRTACEAE	*Marlierea sucrei* G.Barroso & Peixoto
MYRTACEAE	*Marlierea teuscheriana* (O.Berg) D.Legrand
MYRTACEAE	*Marlierea tomentosa* Cambess.
MYRTACEAE	*Marlierea verticillaris* O. Berg
MYRTACEAE	*Myrceugenia acutiflora* (Kiaersk.) D.Legrand & Kausel
MYRTACEAE	*Myrceugenia alpigena* (DC.) Landrum
MYRTACEAE	*Myrceugenia bracteosa* (DC.) D.Legrand & Kausel
MYRTACEAE	*Myrceugenia brevipedicellata* (Burret) D.Legrand & Kausel
MYRTACEAE	*Myrceugenia campestris* (DC.) D.Legrand & Kausel

APPENDIX B - Continued.

Family	Species
MYRTACEAE	*Myrceugenia cucullata* D.Legrand
MYRTACEAE	*Myrceugenia euosma* (O.Berg) D.Legrand
MYRTACEAE	*Myrceugenia foveolata* (O.Berg.) Sobral
MYRTACEAE	*Myrceugenia gertii* Landrum
MYRTACEAE	*Myrceugenia glaucescens* (Cambess.) D.Legrand & Kausel
MYRTACEAE	*Myrceugenia hoehnei* (Burret) D.Legrand & Kausel
MYRTACEAE	*Myrceugenia kleinii* D.Legrand & Kausel
MYRTACEAE	*Myrceugenia mesomischa* (Burret) D.Legrand
MYRTACEAE	*Myrceugenia miersiana* (Gardner) D.Legrand & Kausel
MYRTACEAE	*Myrceugenia myrcioides* (Cambess.) O.Berg
MYRTACEAE	*Myrceugenia myrtoides* O.Berg
MYRTACEAE	*Myrceugenia ovalifolia* (O.Berg) Landrum
MYRTACEAE	*Myrceugenia ovata* (Hook. & Arn.) O.Berg
MYRTACEAE	*Myrceugenia oxysepala* (Burret) D.Legrand & Kausel
MYRTACEAE	*Myrceugenia pilotantha* (Kiaersk.) Landrum
MYRTACEAE	*Myrceugenia reitzii* D.Legrand & Kausel
MYRTACEAE	*Myrceugenia rufescens* (DC.) D.Legrand & Kausel
MYRTACEAE	*Myrceugenia scutellata* D.Legrand
MYRTACEAE	*Myrceugenia seriatoramosa* (Kiaersk.) D.Legrand & Kausel
MYRTACEAE	*Myrceugenia smithii* Landrum
MYRTACEAE	*Myrceugenia venosa* D.Legrand
MYRTACEAE	*Myrcia amazonica* DC.
MYRTACEAE	*Myrcia amblyphylla* Kiaersk.
MYRTACEAE	*Myrcia amplexicaulis* (O.Berg) Hook.f.
MYRTACEAE	*Myrcia anacardiifolia* Gardner
MYRTACEAE	*Myrcia anceps* (Spreng.) O.Berg
MYRTACEAE	*Myrcia barituensis* (Legname) comb.ined.
MYRTACEAE	*Myrcia bergiana* O.Berg
MYRTACEAE	*Myrcia bicolor* Kiaersk.
MYRTACEAE	*Myrcia blanchetiana* (O.Berg) Mattos

APPENDIX B - Continued.

Family		Species
MYRTACEAE		*Myrcia bombycina* (O.Berg) Nied.
MYRTACEAE		*Myrcia brasiliensis* Kiaersk.
MYRTACEAE		*Myrcia calyptranthoides* (O.Berg) Mattos
MYRTACEAE		*Myrcia carvalhoi* (Nic Lughada) comb.ined.
MYRTACEAE		*Myrcia cerqueiria* (Nied.) comb.ined.
MYRTACEAE		*Myrcia clavija* Sobral
MYRTACEAE		*Myrcia coelosepala* Kiaersk.
MYRTACEAE		*Myrcia colpodes* Kiaersk.
MYRTACEAE		*Myrcia cordiifolia* DC.
MYRTACEAE		*Myrcia crocea* Kiaersk.
MYRTACEAE		*Myrcia cuprea* (O.Berg) Kiaersk.
MYRTACEAE		*Myrcia decorticans* DC.
MYRTACEAE		*Myrcia densa* (DC.) Sobral
MYRTACEAE		*Myrcia diaphana* (O.Berg) N.Silveira
MYRTACEAE		*Myrcia dichrophylla* D.Legrand
MYRTACEAE		*Myrcia eriocalyx* DC.
MYRTACEAE		*Myrcia eriopus* DC.
MYRTACEAE		*Myrcia eumecephylla* (O.Berg) Nied.
MYRTACEAE		*Myrcia eximia* DC.
MYRTACEAE		*Myrcia felisberti* (DC.) O.Berg
MYRTACEAE		*Myrcia flagellaris* (D.Legrand) comb.ined.
MYRTACEAE	*	*Myrcia follii* G.Barroso & Peixoto
MYRTACEAE		*Myrcia freyreissiana* (O.Berg) Kiaersk.
MYRTACEAE		*Myrcia gestasiana* Cambess.
MYRTACEAE		*Myrcia gigantea* (O.Berg) Nied.
MYRTACEAE	*	*Myrcia gilsoniana* G.Barroso & Peixoto
MYRTACEAE		*Myrcia glabra* (O.Berg) D.Legrand
MYRTACEAE		*Myrcia glazioviana* Kiaersk.
MYRTACEAE		*Myrcia grandifolia* Cambess.
MYRTACEAE		*Myrcia guianensis* (Aubl.) DC.
MYRTACEAE		*Myrcia hartwegiana* (O.Berg) Kiaersk.
MYRTACEAE		*Myrcia hatschbachii* D.Legrand
MYRTACEAE		*Myrcia hebepetala* DC.

APPENDIX B - Continued.

Family		Species
MYRTACEAE		*Myrcia heringii* D.Legrand
MYRTACEAE		*Myrcia hexasticha* Kiaersk.
MYRTACEAE		*Myrcia ilheosensis* Kiaersk.
MYRTACEAE		*Myrcia inconspicua* L.Kollmann & Sobral
MYRTACEAE		*Myrcia innovans* Kiaersk.
MYRTACEAE		*Myrcia insularis* Gardner
MYRTACEAE	*	*Myrcia isaiana* G.Barroso & Peixoto
MYRTACEAE		*Myrcia jacobinensis* Mattos
MYRTACEAE		*Myrcia lacerdaeana* O.Berg
MYRTACEAE		*Myrcia lacunosa* (O.Berg) N.Silveira
MYRTACEAE		*Myrcia lajeana* D.Legrand
MYRTACEAE		*Myrcia laruotteana* Cambess.
MYRTACEAE		*Myrcia laxiflora* Cambess.
MYRTACEAE		*Myrcia limae* G.Barroso & Peixoto
MYRTACEAE		*Myrcia lindeniana* (O.Berg) C.Wright
MYRTACEAE		*Myrcia lineata* (O.Berg) Nied.
MYRTACEAE		*Myrcia littoralis* DC.
MYRTACEAE		*Myrcia lundiana* Kiaersk.
MYRTACEAE		*Myrcia lutescens* Cambess.
MYRTACEAE		*Myrcia macrocarpa* DC.
MYRTACEAE		*Myrcia magnifolia* Cambess.
MYRTACEAE		*Myrcia micropetala* (Mart.) Nied.
MYRTACEAE		*Myrcia mischophylla* Kiaersk.
MYRTACEAE		*Myrcia montana* Cambess.
MYRTACEAE		*Myrcia morroqueimadensis* Kiaersk.
MYRTACEAE		*Myrcia multiflora* (Lam.) DC.
MYRTACEAE		*Myrcia mutabilis* (O.Berg) N.Silveira
MYRTACEAE		*Myrcia neorostrata* Sobral
MYRTACEAE		*Myrcia oblongata* DC.
MYRTACEAE		*Myrcia obovata* (O.Berg) Nied.
MYRTACEAE		*Myrcia oligantha* O.Berg
MYRTACEAE		*Myrcia ovata* Cambess.
MYRTACEAE		*Myrcia palustris* DC.

APPENDIX B - Continued.

Family	Species
MYRTACEAE	*Myrcia panicularis* (O.Berg) D.Silveira
MYRTACEAE	*Myrcia paracatuensis* Kiaersk.
MYRTACEAE	*Myrcia perforata* O.Berg
MYRTACEAE	*Myrcia plusiantha* Kiaersk.
MYRTACEAE	*Myrcia polyantha* (Kunth) DC.
MYRTACEAE	*Myrcia pubescens* DC.
MYRTACEAE	*Myrcia pubiflora* DC.
MYRTACEAE	*Myrcia pubipetala* Miq.
MYRTACEAE	*Myrcia pulchra* (O.Berg) Kiaersk.
MYRTACEAE	*Myrcia racemosa* (O.Berg) Kiaersk.
MYRTACEAE	*Myrcia recurvata* O.Berg
MYRTACEAE	*Myrcia reticulata* Cambess.
MYRTACEAE	*Myrcia reticulosa* Miq.
MYRTACEAE	*Myrcia retorta* Cambess.
MYRTACEAE	*Myrcia richardiana* (O.Berg) Kiaersk.
MYRTACEAE	*Myrcia riodocensis* G.Barroso & Peixoto
MYRTACEAE	*Myrcia robusta* Sobral
MYRTACEAE	*Myrcia rosangelae* (Nic Lughada) comb.ined.
MYRTACEAE	*Myrcia rotundifolia* (O.Berg) Kiaersk.
MYRTACEAE	*Myrcia rupicola* D.Legrand
MYRTACEAE	*Myrcia salzmannii* O.Berg
MYRTACEAE	*Myrcia selloi* (Spreng.) N.Silveira
MYRTACEAE	*Myrcia spectabilis* DC.
MYRTACEAE	*Myrcia splendens* (Sw.) DC.
MYRTACEAE	*Myrcia springiana* (O.Berg) Kiaersk.
MYRTACEAE	*Myrcia subavenia* (O.Berg) N.Silveira
MYRTACEAE	*Myrcia subcordata* DC.
MYRTACEAE	*Myrcia subsericea* A.Gray
MYRTACEAE	*Myrcia subverticillaris* (O.Berg) Kiaersk.
MYRTACEAE	*Myrcia sylvatica* (G.Mey.) DC.
MYRTACEAE	*Myrcia tenuifolia* (O.Berg) Sobral
MYRTACEAE	*Myrcia tenuivenosa* Kiaersk.
MYRTACEAE	*Myrcia thyrsoidea* O.Berg

APPENDIX B - Continued.

Family	Species
MYRTACEAE	*Myrcia tijucensis* Kiaersk.
MYRTACEAE	*Myrcia tomentosa* (Aubl.) DC.
MYRTACEAE	*Myrcia uberavensis* Berg
MYRTACEAE	*Myrcia undulata* O.Berg
MYRTACEAE	*Myrcia variabilis* DC.
MYRTACEAE	*Myrcia vauthieriana* O.Berg
MYRTACEAE	*Myrcia velutiflora* (Mattos & D.Legrand) comb.ined.
MYRTACEAE	*Myrcia venulosa* DC.
MYRTACEAE	*Myrcia verrucosa* Sobral
MYRTACEAE	*Myrcia vestita* DC.
MYRTACEAE	*Myrcia vittoriana* Kiaersk.
MYRTACEAE	*Myrcia warmingiana* Kiaersk.
MYRTACEAE	*Myrcianthes cionei* Mattos
MYRTACEAE	*Myrcianthes cisplatensis* (Cambess.) O.Berg
MYRTACEAE	*Myrcianthes gigantea* (D.Legrand) D.Legrand
MYRTACEAE	*Myrcianthes mato* (Griseb.) McVaugh
MYRTACEAE	*Myrcianthes pungens* (O.Berg) D.Legrand
MYRTACEAE	*Myrciaria cuspidata* O.Berg
MYRTACEAE	*Myrciaria delicatula* (DC.) O.Berg
MYRTACEAE	*Myrciaria disticha* O.Berg
MYRTACEAE	*Myrciaria floribunda* (H.West ex Willd.) O.Berg
MYRTACEAE	*Myrciaria glanduliflora* (Kiaersk.) Mattos & D.Legrand
MYRTACEAE	*Myrciaria glazioviana* (Kiaersk.) G.Barroso ex Sobral
MYRTACEAE	*Myrciaria guaquiea* (Kiaersk.) Mattos & D. Legrand
MYRTACEAE	*Myrciaria leucadendron* O.Berg
MYRTACEAE	*Myrciaria pilosa* Sobral & Couto
MYRTACEAE	*Myrciaria plinioides D.Legrand*
MYRTACEAE	*Myrciaria pumila* (Gardner) O.Berg
MYRTACEAE	*Myrciaria strigipes* O.Berg
MYRTACEAE	*Myrciaria tenella* (DC.) O.Berg
MYRTACEAE	*Myrrhinium atropurpureum* Schott

APPENDIX B - Continued.

Family		Species
MYRTACEAE		*Neomitranthes amblymitra* (Burret) Mattos
MYRTACEAE		*Neomitranthes cordifolia* (D.Legrand) D.Legrand
MYRTACEAE		*Neomitranthes gemballae* (D.Legrand) D.Legrand
MYRTACEAE		*Neomitranthes glomerata* (D.Legrand) D.Legrand
MYRTACEAE		*Neomitranthes langsdorffii* (O. Berg) Mattos
MYRTACEAE	*	*Neomitranthes nitida* Mattos
MYRTACEAE		*Neomitranthes obscura* (DC.) N.Silveira
MYRTACEAE		*Neomitranthes obtusa* Sobral & Zambom
MYRTACEAE		*Neomitranthes warmingiana* (Kiaersk.) Mattos
MYRTACEAE		*Pimenta pseudocaryophyllus* (Gomes) Landrum
MYRTACEAE		*Plinia anonyma* Sobral
MYRTACEAE		*Plinia brachybotrya* (D.Legrand) Sobral
MYRTACEAE	*	*Plinia callosa* Sobral
MYRTACEAE		*Plinia cauliflora* (Mart.) Kausel
MYRTACEAE		*Plinia complanata* M.L.Kawasaki & B.Holst
MYRTACEAE		*Plinia cordifolia* (D.Legrand) Sobral
MYRTACEAE		*Plinia coronata* (Mattos) Mattos
MYRTACEAE		*Plinia edulis* (Vell.) Sobral
MYRTACEAE		*Plinia grandifolia* (Mattos) Sobral
MYRTACEAE	*	*Plinia hatschbachii* (Mattos) Sobral
MYRTACEAE	*	*Plinia ilhensis* G.Barroso
MYRTACEAE		*Plinia longiacuminata* Sobral
MYRTACEAE		*Plinia marqueteana* G.Barroso
MYRTACEAE		*Plinia martinellii* G.M.Barroso & M.Peron
MYRTACEAE		*Plinia muricata* Sobral
MYRTACEAE		*Plinia pauciflora* M.L.Kawasaki & B.Holst
MYRTACEAE		*Plinia phitrantha* (Kiaersk.) Sobral
MYRTACEAE		*Plinia pseudodichasiantha* (Kiaersk.) G.Barroso ex Sobral
MYRTACEAE	*	*Plinia rara* Sobral
MYRTACEAE	*	*Plinia renatiana* G.Barroso & Peixoto
MYRTACEAE		*Plinia rivularis* (Cambess.) Rotman
MYRTACEAE		*Plinia spiciflora* (Nees & Mart.) Sobral

APPENDIX B - Continued.

Family	Species
MYRTACEAE	*Plinia spiritosantensis* (Mattos) Mattos
MYRTACEAE	*Plinia stictophylla* G.Barroso & Peixoto
MYRTACEAE	*Plinia subavenia* Sobral
MYRTACEAE	*Plinia trunciflora* (O.Berg) Kausel
MYRTACEAE	*Psidium acutangulum* DC.
MYRTACEAE	*Psidium appendiculatum* Kiaersk.
MYRTACEAE	*Psidium araucanum* Soares-Silva & Proença
MYRTACEAE	*Psidium brownianum* DC.
MYRTACEAE	*Psidium cattleianum* Sabine
MYRTACEAE	*Psidium cauliflorum* Landrum & Sobral
MYRTACEAE	*Psidium giganteum* Mattos
MYRTACEAE	*Psidium guajava* L.
MYRTACEAE	*Psidium guineense* Sw.
MYRTACEAE	*Psidium longipetiolatum* D.Legrand
MYRTACEAE	*Psidium myrsinites* DC.
MYRTACEAE	*Psidium myrtoides* O.Berg
MYRTACEAE	*Psidium oblongatum* O.Berg
MYRTACEAE	*Psidium oligospermum* Mart. ex DC.
MYRTACEAE	*Psidium ovale* (Spreng.) Burret
MYRTACEAE	*Psidium robustum* O.Berg
MYRTACEAE	*Psidium rufum* DC.
MYRTACEAE	*Psidium salutare* (Kunth) O.Berg
MYRTACEAE	*Psidium sartorianum* (O.Berg) Nied.
MYRTACEAE	*Psidium schenckianum* Kiaersk.
MYRTACEAE	*Siphoneugena delicata* Sobral & Proença
MYRTACEAE	*Siphoneugena densiflora* O.Berg
MYRTACEAE	*Siphoneugena dussii* (Krug & Urb.) C.Proença
MYRTACEAE	*Siphoneugena guilfoyleiana* C.Proença
MYRTACEAE	*Siphoneugena kiaerskoviana* (Burret) Kausel
MYRTACEAE	*Siphoneugena kuhlmannii* Mattos
MYRTACEAE	*Siphoneugena reitzii* D.Legrand
MYRTACEAE	*Siphoneugena widgreniana* O.Berg
MYRTACEAE	*Syzygium jambos* (L.) Alston

APPENDIX B - Continued.

Family	Species
NYCTAGINACEAE	*Andradea floribunda* Allemão
NYCTAGINACEAE	*Bougainvillea glabra* Choisy
NYCTAGINACEAE	*Bougainvillea praecox* Griseb.
NYCTAGINACEAE	*Bougainvillea spectabilis* Willd.
NYCTAGINACEAE	*Guapira areolata* (Heimerl) Lundell
NYCTAGINACEAE	*Guapira campestris* (Netto) Lundell
NYCTAGINACEAE	*Guapira eggersiana* (Heimerl) Lundell
NYCTAGINACEAE	*Guapira graciliflora* (Schmidt) Lundell
NYCTAGINACEAE	*Guapira hirsuta* (Choisy) Lundell
NYCTAGINACEAE	*Guapira laxa* (Netto) Furlan
NYCTAGINACEAE	*Guapira obtusata* (Jacq.) Little
NYCTAGINACEAE	*Guapira opposita* (Vell.) Reitz
NYCTAGINACEAE	*Guapira parvifolia* (Standl.) Lundell
NYCTAGINACEAE	*Guapira pernambucensis* (Casar.) Lundell
NYCTAGINACEAE	*Guapira tomentosa* (Casar.) Lundell
NYCTAGINACEAE	*Guapira venosa* (Choisy) Lundell
NYCTAGINACEAE	*Neea duckei* Heimerl
NYCTAGINACEAE	*Neea floribunda* Poepp. & Endl.
NYCTAGINACEAE	*Neea hermaphrodita* S.Moore
NYCTAGINACEAE	*Neea macrophylla* Poepp. & Endl.
NYCTAGINACEAE	*Neea ovalifolia* Spruce ex J.A. Schmidt
NYCTAGINACEAE	*Neea pendulina* Heimerl
NYCTAGINACEAE	*Neea theifera* Oerst.
NYCTAGINACEAE	*Neea verticillata* Ruiz & Pav.
NYCTAGINACEAE	*Pisonia zapallo* Griseb.
NYCTAGINACEAE	*Ramisia brasiliensis* Oliver
OCHNACEAE	*Elvasia capixaba* Fraga & Saavedra
OCHNACEAE	*Elvasia gigantifolia* Fraga & Saavedra
OCHNACEAE	*Elvasia kollmannii* Fraga & Saavedra
OCHNACEAE	*Elvasia tricarpellata* Sastre
OCHNACEAE	*Lacunaria decastyla* (Radlk.) Ducke
OCHNACEAE	*Luxemburgia corymbosa* A.St.-Hil.
OCHNACEAE	*Luxemburgia mysteriosa* Fraga & Feres

APPENDIX B - Continued.

Family	Species
OCHNACEAE	*Ouratea castaneifolia* (DC.) Engl.
OCHNACEAE	*Ouratea fieldingiana* (Gardner) Engl.
OCHNACEAE	*Ouratea floribunda* Engl.
OCHNACEAE	*Ouratea gigantophylla* (Erhard) Engl.
OCHNACEAE	*Ouratea hexasperma* (A.St.-Hil.) Baill.
OCHNACEAE	*Ouratea multiflora* (DC.) Baill.
OCHNACEAE	*Ouratea oliviformis* (A.St.-Hil.) Engl.
OCHNACEAE	*Ouratea parviflora* (DC.) Baill.
OCHNACEAE	*Ouratea polygyna* Engl.
OCHNACEAE	*Ouratea salicifolia* Engl.
OCHNACEAE	*Ouratea semiserrata* (Mart. & Nees) Engl.
OCHNACEAE	*Ouratea spectabilis* (Mart. & Engl.) Engl.
OCHNACEAE	*Ouratea stipulata* (Vell.) Sastre
OCHNACEAE	*Ouratea tenuifolia* Engl.
OCHNACEAE	*Ouratea vaccinioides* (A.St.-Hil. & Tul.) Engl.
OCHNACEAE	*Quiina glaziovii* Engl.
OCHNACEAE	*Quiina magallanogomesii* Schwacke
OCHNACEAE	*Quiina rhytidopus* Tul.
OLACACEAE	*Aptandra tubicina* (Poepp.) Benth. ex Miers
OLACACEAE	*Cathedra bahiensis* Sleumer
OLACACEAE	*Cathedra grandiflora* Loes.
OLACACEAE	*Cathedra rubricaulis* Miers
OLACACEAE	*Dulacia gardneriana* (Benth.) O.Kuntze
OLACACEAE	*Dulacia papillosa* (Rangel) Sleumer
OLACACEAE	*Dulacia pauciflora* (Benth.) Kuntze
OLACACEAE	*Dulacia singularis* Vell.
OLACACEAE	*Heisteria brasiliensis* (Engl.) Sleumer
OLACACEAE	*Heisteria ovata* Benth.
OLACACEAE	*Heisteria perianthomega* (Vell.) Sleumer
OLACACEAE	*Heisteria silvianii* Schwacke
OLACACEAE	*Tetrastylidium grandifolium* (Baill.) Sleumer
OLACACEAE	*Ximenia americana* L.
OLACACEAE	*Ximenia coriacea* Engl.

APPENDIX B - Continued.

Family		Species
OLACACEAE		*Ximenia intermedia* (Chodat & Hassl.) DeFilipps
OLEACEAE		*Chionanthus crassifolius* (Mart.) P.S.Green
OLEACEAE		*Chionanthus ferrugineus* (Gilg) P.S.Green
OLEACEAE		*Chionanthus filiformis* (Vell.) P.S.Green
OLEACEAE		*Chionanthus fluminensis* (Miers) P.S.Green
OLEACEAE		*Chionanthus greenii* Lombardi
OLEACEAE		*Chionanthus micranthus* (Mart.) Lozzano & Fuertes
OLEACEAE	*	*Chionanthus subsessilis* (Eichler) P.S.Green
OLEACEAE		*Chionanthus tenuis* P.S.Green
OLEACEAE		*Chionanthus trichotomus* (Vell.) P.S.Green
OLEACEAE		*Priogymnanthus hasslerianus* (Chodat) P.S.Green
ONAGRACEAE		*Ludwigia elegans* (Cambess. ex A.St.-Hil.) H.Hara
OPILIACEAE		*Agonandra brasiliensis* Miers ex Benth. & Hook.
OPILIACEAE		*Agonandra excelsa* Griseb.
OPILIACEAE		*Agonandra fluminensis* Rizz. & Occhioni
PENTAPHYLACACEAE		*Ternstroemia alnifolia* Wawra
PENTAPHYLACACEAE		*Ternstroemia brasiliensis* Cambess.
PENTAPHYLACACEAE		*Ternstroemia carnosa* Cambess.
PENTAPHYLACACEAE		*Ternstroemia cuneifolia* Gardner
PERACEAE		*Chaetocarpus echinocarpus* (Baill.) Ducke
PERACEAE		*Pera barbinervis* (Mart. ex Klozsch) Pax & K.Hoffm.
PERACEAE		*Pera glabrata* (Schott) Poepp. ex Baill.
PERACEAE		*Pera heteranthera* (Schrank) I.M.Johnst.
PERACEAE		*Pera parvifolia* (Klotzsch) Müll.Arg.
PERACEAE		*Pogonophora schomburgkiana* Miers ex Benth.
PHYLLANTHACEAE		*Amanoa guianensis* Aubl.
PHYLLANTHACEAE		*Astrocasia jacobinensis* (Müll.Arg.) G.L.Webster
PHYLLANTHACEAE		*Discocarpus essequeboensis* Klotzsch
PHYLLANTHACEAE		*Discocarpus pedicellatus* Fiaschi & Cordeiro
PHYLLANTHACEAE		*Gonatogyne brasiliensis* (Baill.) Müll.Arg.
PHYLLANTHACEAE		*Hieronyma alchorneoides* Allemão

APPENDIX B - Continued.

Family		Species
PHYLLANTHACEAE		*Hieronyma oblonga* (Tul.) Müll.Arg.
PHYLLANTHACEAE		*Margaritaria nobilis* L.f.
PHYLLANTHACEAE		*Phyllanthus acuminatus* Vahl
PHYLLANTHACEAE		*Phyllanthus bahiensis* Müll.Arg.
PHYLLANTHACEAE		*Phyllanthus chacoensis* Morong
PHYLLANTHACEAE		*Phyllanthus gradyi* M.J.Silva & M.F.Sales
PHYLLANTHACEAE		*Phyllanthus juglandifolius* Willd.
PHYLLANTHACEAE		*Phyllanthus riedelianus* Müll.Arg.
PHYLLANTHACEAE		*Phyllanthus sellowianus* (Klotzsch) Müll.Arg.
PHYLLANTHACEAE		*Phyllanthus umbratus* Müll.Arg.
PHYLLANTHACEAE		*Richeria grandis* Vahl
PHYLLANTHACEAE		*Savia dictyocarpa* Müll.Arg.
PHYLLANTHACEAE		*Savia sessiliflora* (Sw.) Willd.
PHYTOLACCACEAE		*Gallesia integrifolia* (Spreng.) Harms
PHYTOLACCACEAE		*Phytolacca dioica* L.
PHYTOLACCACEAE		*Seguieria americana* L.
PHYTOLACCACEAE		*Seguieria langsdorffii* Moq.
PICRAMNIACEAE		*Picramnia bahiensis* Turcz.
PICRAMNIACEAE		*Picramnia ciliata* Mart.
PICRAMNIACEAE	*	*Picramnia coccinea* W.W.Thomas
PICRAMNIACEAE		*Picramnia excelsa* Kuhlm. ex Pirani
PICRAMNIACEAE		*Picramnia gardneri* Planch.
PICRAMNIACEAE		*Picramnia glazioviana* Engl.
PICRAMNIACEAE		*Picramnia grandifolia* Engl.
PICRAMNIACEAE		*Picramnia latifolia* Tul.
PICRAMNIACEAE		*Picramnia parvifolia* Engl.
PICRAMNIACEAE		*Picramnia ramiflora* Planch.
PICRAMNIACEAE		*Picramnia sellowii* Planch.
PICRODENDRACEAE		*Paradrypetes ilicifolia* Kuhlm.
PICRODENDRACEAE		*Piranhea securinega* Radcl.-Sm. & Ratter
PIPERACEAE		*Piper aduncum* L.
PIPERACEAE		*Piper amalago* L.
PIPERACEAE		*Piper arboreum* Aubl.

APPENDIX B - Continued.

Family	Species
PIPERACEAE	*Piper cernuum* Vell.
PIPERACEAE	*Piper crassinervium* Kunth
PIPERACEAE	*Piper itatiaianum* C.DC.
PIPERACEAE	*Piper richardiifolium* Kunth
PIPERACEAE	*Piper rivinoides* Kunth
PIPERACEAE	*Piper tectoniifolium* (Kunth) Kunth ex C.DC.
POACEAE	*Guadua calderoniana* Londoño & Judz.
POACEAE	*Guadua chacoensis* (Rojas) Londoño & P.M.Peterson
POACEAE	*Guadua paniculata* Munro
POACEAE	*Guadua tagoara* (Nees) Kunth
POACEAE	*Guadua trinii* (Nees) Ness
PODOCARPACEAE	*Podocarpus lambertii* Klotzsch ex Endl.
PODOCARPACEAE	*Podocarpus sellowii* Klotzsch ex Endl.
POLYGALACEAE	*Bredemeyera floribunda* Willd.
POLYGALACEAE	*Polygala albicans* (A.W.Benn.) Grondona
POLYGALACEAE	*Polygala pulcherrima* Kuhlm.
POLYGONACEAE	*Coccoloba alnifolia* Casar.
POLYGONACEAE	*Coccoloba argentinensis* Speg.
POLYGONACEAE	*Coccoloba brasiliensis* Nees & Mart.
POLYGONACEAE	*Coccoloba cordata* Cham.
POLYGONACEAE	*Coccoloba cujabensis* Wedd.
POLYGONACEAE	*Coccoloba fastigiata* Meisn.
POLYGONACEAE	*Coccoloba glaziovii* Lindau
POLYGONACEAE	*Coccoloba marginata* Benth.
POLYGONACEAE	*Coccoloba mollis* Casar.
POLYGONACEAE	*Coccoloba oblonga* Lindau
POLYGONACEAE	*Coccoloba obtusifolia* Jacq.
POLYGONACEAE	*Coccoloba ovata* Benth.
POLYGONACEAE	*Coccoloba persicaria* Wedd.
POLYGONACEAE	*Coccoloba ramosissima* Wedd.
POLYGONACEAE	*Coccoloba rosea* Meisn.
POLYGONACEAE	*Coccoloba salicifolia* Wedd.
POLYGONACEAE	*Coccoloba schwackeana* Lindau

APPENDIX B - Continued.

Family		Species
POLYGONACEAE		*Coccoloba warmingii* Meisn.
POLYGONACEAE		*Ruprechtia crenata* (Casar.) R.A.Howard
POLYGONACEAE		*Ruprechtia fagifolia* Meisn.
POLYGONACEAE		*Ruprechtia latifunda* Pendry
POLYGONACEAE		*Ruprechtia laxiflora* Meisn.
POLYGONACEAE		*Ruprechtia lundii* Meisn.
POLYGONACEAE		*Ruprechtia paranensis* Pendry
POLYGONACEAE		*Ruprechtia salicifolia* (Cham. & Schltdl.) C.A.Meyer
POLYGONACEAE		*Ruprechtia* sp.nov.ined.
POLYGONACEAE		*Ruprechtia triflora* Griseb.
POLYGONACEAE		*Triplaris americana* L.
POLYGONACEAE		*Triplaris gardneriana* Weddell
PROTEACEAE		*Euplassa bahiensis* (Meisn.) I.M.Johnst.
PROTEACEAE		*Euplassa cantareirae* Sleumer
PROTEACEAE		*Euplassa hoehnei* Sleumer
PROTEACEAE		*Euplassa inaequalis* (Pohl) Engl.
PROTEACEAE		*Euplassa incana* (Klotzsch) I.M.Johnst.
PROTEACEAE		*Euplassa itatiaiae* Sleumer
PROTEACEAE		*Euplassa legalis* (Vell.) I.M.Johnst.
PROTEACEAE	*	*Euplassa nebularis* Rambo & Sleumer
PROTEACEAE		*Euplassa organensis* (Gardner) I.M.Johnst.
PROTEACEAE		*Euplassa rufa* (Loes.) Sleumer
PROTEACEAE		*Euplassa semicostata* Plana
PROTEACEAE		*Euplassa taubertiana* K.Schum.
PROTEACEAE		*Panopsis multiflora* (Schott) Ducke
PROTEACEAE		*Roupala asplenioides* Sleumer
PROTEACEAE		*Roupala consimilis* Mez ex Taub.
PROTEACEAE		*Roupala gracilis* Meisn.
PROTEACEAE		*Roupala longepetiolata* Pohl
PROTEACEAE		*Roupala meisneri* Sleumer
PROTEACEAE		*Roupala montana* Aubl.
PROTEACEAE		*Roupala pallida* K.Schum.
PROTEACEAE		*Roupala paulensis* Sleumer

APPENDIX B - Continued.

Family	Species
PROTEACEAE	*Roupala sculpta* Sleumer
PROTEACEAE	*Roupala thomesiana* Moric.
PUTRANJIVACEAE	*Drypetes sessiliflora* Allemão
QUILLAJACEAE	*Quillaja brasiliensis* (A.St.-Hil. & Tul.) Mart.
RHAMNACEAE	*Colletia paradoxa* (Spreng.) Escal.
RHAMNACEAE	*Colubrina glandulosa* Perkins
RHAMNACEAE	*Colubrina retusa* (Pittier) R.S.Cowan
RHAMNACEAE	*Condalia buxifolia* Reissek
RHAMNACEAE	*Rhamnidium elaeocarpum* Reissek
RHAMNACEAE	*Rhamnidium glabrum* Reissek
RHAMNACEAE	*Rhamnidium molle* Reissek
RHAMNACEAE	*Rhamnus sphaerosperma* Sw.
RHAMNACEAE	*Scutia arenicola* (Casar.) Reissek
RHAMNACEAE	*Scutia buxifolia* Reissek
RHAMNACEAE	*Ziziphus cotinifolia* Reissek
RHAMNACEAE	*Ziziphus joazeiro* Mart.
RHAMNACEAE	*Ziziphus mistol* Griseb.
RHAMNACEAE	*Ziziphus platyphylla* Reissek
RHAMNACEAE	*Ziziphus undulata* Reissek
RHIZOPHORACEAE	*Rhizophora mangle* L.
ROSACEAE	*Prunus myrtifolia* (L.) Urb.
RUBIACEAE	*Alibertia baiana* Delprete & C.Perss.
RUBIACEAE	*Alibertia edulis* (Rich.) A.Rich. ex DC.
RUBIACEAE	*Alseis floribunda* Schott
RUBIACEAE	*Alseis involuta* K.Schum.
RUBIACEAE	*Alseis pickelii* Pilger & Schmale
RUBIACEAE	*Amaioua guianensis* Aubl.
RUBIACEAE	*Amaioua intermedia* Mart. ex Schult. & Schult.f.
RUBIACEAE	*Amaioua pilosa* K.Schum.
RUBIACEAE	*Bathysa australis* (A.St.-Hil.) Benth. & Hook.f.
RUBIACEAE	*Bathysa cuspidata* (A.St.-Hil.) Hook.f.
RUBIACEAE	*Bathysa gymnocarpa* K.Schum.
RUBIACEAE	*Bathysa mendoncae* K.Schum.

APPENDIX B - Continued.

Family	Species
RUBIACEAE	*Bathysa nicholsonii* K.Schum.
RUBIACEAE	*Bathysa silvestrae* Germano Filho & M.Gomes
RUBIACEAE	*Bathysa stipulata* (Vell.) Presl.
RUBIACEAE	*Calycophyllum papillosum* J.H.Kirkbr.
RUBIACEAE	*Calycophyllum spruceanum* (Benth.) Hook.f. ex K.Schum.
RUBIACEAE	*Chomelia anisomeris* Müll.Arg.
RUBIACEAE	*Chomelia bella* (Standl.) Steyerm.
RUBIACEAE	*Chomelia brasiliana* A.Rich.
RUBIACEAE	*Chomelia estrellana* Müll.Arg.
RUBIACEAE	*Chomelia martiana* Müll.Arg. & Char.
RUBIACEAE	*Chomelia obtusa* Cham. & Schltdl.
RUBIACEAE	*Chomelia parvifolia* (Standl.) Govaerts
RUBIACEAE	*Chomelia pedunculosa* Benth.
RUBIACEAE	*Chomelia pohliana* Müll.Arg.
RUBIACEAE	*Chomelia pubescens* Cham. & Schltdl.
RUBIACEAE	*Cordiera concolor* (Cham.) Kuntze
RUBIACEAE	*Cordiera elliptica* (Cham.) Kuntze
RUBIACEAE	*Cordiera longiflora* Kuntze
RUBIACEAE	*Cordiera macrophylla* Kuntze
RUBIACEAE	*Cordiera myrciifolia* (K.Schum.) C.Perss. & Delprete
RUBIACEAE	*Cordiera oligantha* (K.Schum.) Kuntze
RUBIACEAE	*Cordiera rigida* (K.Schum.) Kuntze
RUBIACEAE	*Cordiera sessilis* (Vell.) Kuntze
RUBIACEAE	*Cordiera stipulacea* C.Perss. & Delprete
RUBIACEAE	*Cordiera vinosa* (Cham.) Kuntze
RUBIACEAE	*Coussarea accedens* Müll.Arg.
RUBIACEAE	*Coussarea albescens* (DC.) Müll.Arg.
RUBIACEAE	*Coussarea andrei* M.S.Pereira & M.R.Barbosa
RUBIACEAE	*Coussarea bahiensis* Müll.Arg.
RUBIACEAE	*Coussarea bocainae* M.Gomes
RUBIACEAE	*Coussarea capitata* (Benth.) Benth. & Hook.f.
RUBIACEAE	*Coussarea congestiflora* Müll.Arg.

APPENDIX B - Continued.

Family		Species
RUBIACEAE		*Coussarea contracta* (Walp.) Müll.Arg.
RUBIACEAE		*Coussarea friburgensis* M.Gomes
RUBIACEAE		*Coussarea graciliflora* (Mart.) Müll.Arg.
RUBIACEAE		*Coussarea hydrangeifolia* (Benth.) Müll.Arg.
RUBIACEAE		*Coussarea ilheotica* Müll.Arg.
RUBIACEAE		*Coussarea leptopus* Müll.Arg.
RUBIACEAE		*Coussarea megistophylla* Standl.
RUBIACEAE		*Coussarea meridionalis* (Vell.) Müll.Arg.
RUBIACEAE		*Coussarea nodosa* (Benth.) Müll.Arg.
RUBIACEAE		*Coussarea obscura* Müll.Arg.
RUBIACEAE		*Coussarea platyphylla* Müll.Arg.
RUBIACEAE		*Coussarea strigosipes* Müll.Arg.
RUBIACEAE		*Coussarea verticillata* Müll.Arg.
RUBIACEAE		*Coussarea viridis* Müll.Arg.
RUBIACEAE		*Coutarea hexandra* (Jacq.) K.Schum.
RUBIACEAE		*Duroia saccifera* (Mart. ex Schult. & Schult.f.) K.Schum.
RUBIACEAE		*Faramea atlantica* J.G.Jardim & Zappi
RUBIACEAE	*	*Faramea bahiensis* Müll.Arg.
RUBIACEAE		*Faramea brachyloba* Müll.Arg.
RUBIACEAE		*Faramea calyciflora* A.Rich. ex DC.
RUBIACEAE	*	*Faramea coerulea* (Nees & Mart.) DC.
RUBIACEAE		*Faramea glaziovii* Müll.Arg.
RUBIACEAE		*Faramea hyacinthina* Mart.
RUBIACEAE		*Faramea hymenocalyx* M.Gomes
RUBIACEAE		*Faramea intercedens* Müll.Arg.
RUBIACEAE		*Faramea latifolia* (Cham. & Schltdl.) DC.
RUBIACEAE		*Faramea martiana* Müll.Arg.
RUBIACEAE		*Faramea montevidensis* (Cham. & Schltdl.) DC.
RUBIACEAE		*Faramea nitida* Benth.
RUBIACEAE		*Faramea oligantha* Müll.Arg.
RUBIACEAE		*Faramea pachyantha* Müll.Arg.
RUBIACEAE		*Faramea paratiensis* M.Gomes
RUBIACEAE		*Faramea picinguabae* M.Gomes

APPENDIX B - Continued.

Family	Species
RUBIACEAE	*Faramea porophylla* (Vell.) Müll.Arg.
RUBIACEAE	*Faramea stipulacea* (Cham. & Schltdl.) DC.
RUBIACEAE	*Faramea tetragona* Müll.Arg.
RUBIACEAE	*Faramea truncata* (Vell.) Müll.Arg.
RUBIACEAE	*Faramea urophylla* Müll.Arg.
RUBIACEAE	*Ferdinandusa edmundoi* Sucre
RUBIACEAE	*Ferdinandusa guainiae* Spruce ex K.Schum.
RUBIACEAE	*Ferdinandusa ovalis* Pohl
RUBIACEAE	*Ferdinandusa speciosa* Pohl
RUBIACEAE	*Genipa americana* L.
RUBIACEAE	*Genipa infundibuliformis* Zappi & Semir
RUBIACEAE	*Guettarda angelica* Mart. ex Müll.Arg.
RUBIACEAE	*Guettarda grazielae* M.R.Barroso
RUBIACEAE	*Guettarda platypoda* DC.
RUBIACEAE	*Guettarda pohliana* Müll.Arg.
RUBIACEAE	*Guettarda uruguensis* Cham. & Schltdl.
RUBIACEAE	*Guettarda viburnoides* Cham. & Schltdl.
RUBIACEAE	*Hamelia patens* Jacq.
RUBIACEAE	*Hillia parasitica* Jacq.
RUBIACEAE	*Ixora bahiensis* Benth.
RUBIACEAE	*Ixora bracteolaris* Benth.
RUBIACEAE	*Ixora brevifolia* Benth.
RUBIACEAE	*Ixora gardneriana* Benth.
RUBIACEAE	*Ixora heterodoxa* Müll.Arg.
RUBIACEAE	*Ixora muelleri* Bremek.
RUBIACEAE	*Ixora syringiflora* (Schltdl.) Müll.Arg.
RUBIACEAE	*Ixora venulosa* Benth.
RUBIACEAE	*Kerianthera longiflora* Zappi & C.T.Oliveira
RUBIACEAE	*Ladenbergia cujabensis* Klotzsch
RUBIACEAE	*Ladenbergia hexandra* (Pohl) Klotzsch
RUBIACEAE	*Machaonia acuminata* Humb. & Bonpl.
RUBIACEAE	*Machaonia brasiliensis* (Hoffmanss. ex Humb.) Cham. & Schltdl.
RUBIACEAE	*Margaritopsis astrellantha* (Wernham)

APPENDIX B - Continued.

Family		Species
		L.Andersson
RUBIACEAE	*	*Melanopsidium nigrum* Colla
RUBIACEAE		*Molopanthera paniculata* Turcz.
RUBIACEAE		*Palicourea blanchetiana* Schltdl.
RUBIACEAE		*Palicourea crocea* (Sw.) Roem. & Schult.
RUBIACEAE		*Palicourea guianensis* Aubl.
RUBIACEAE		*Palicourea macrobotrys* (Ruiz & Pav.) Schult.
RUBIACEAE		*Palicourea rigida* Kunth
RUBIACEAE		*Posoqueria acutifolia* Mart.
RUBIACEAE		*Posoqueria bahiensis* Macias & L.S.Kinosh.
RUBIACEAE		*Posoqueria latifolia* (Rudge) Roem. & Schult.
RUBIACEAE		*Posoqueria longiflora* (Lam.) Roxb.
RUBIACEAE		*Posoqueria palustris* Mart.
RUBIACEAE		*Psychotria anceps* Kunth
RUBIACEAE		*Psychotria ararum* C.M.Taylor
RUBIACEAE		*Psychotria beyrichiana* Müll.Arg.
RUBIACEAE		*Psychotria carthagenensis* Jacq.
RUBIACEAE		*Psychotria conjugens* Müll.Arg.
RUBIACEAE		*Psychotria cupularis* (Müll.Arg.) Standl.
RUBIACEAE		*Psychotria deflexa* DC.
RUBIACEAE		*Psychotria forsteronioides* Müll.Arg.
RUBIACEAE		*Psychotria glaziovii* Müll.Arg.
RUBIACEAE		*Psychotria hastisepala* Müll.Arg.
RUBIACEAE		*Psychotria jambosioides* Schltdl.
RUBIACEAE		*Psychotria laciniata* Vell.
RUBIACEAE		*Psychotria mapourioides* DC.
RUBIACEAE		*Psychotria mima* Standl.
RUBIACEAE		*Psychotria myriantha* Müll.Arg.
RUBIACEAE		*Psychotria nemorosa* Gardner
RUBIACEAE		*Psychotria nuda* (Cham. & Schltdl.) Wawra
RUBIACEAE		*Psychotria pallens* Gardn.
RUBIACEAE		*Psychotria patentinervia* Müll.Arg.
RUBIACEAE		*Psychotria schlechtendaliana* Müll. Arg.

APPENDIX B - Continued.

Family		Species
RUBIACEAE		*Psychotria suterella* Müll.Arg.
RUBIACEAE		*Psychotria ulei* Standl.
RUBIACEAE		*Psychotria vellosiana* Benth.
RUBIACEAE		*Randia armata* (Sw.) DC.
RUBIACEAE		*Randia calycina* Cham.
RUBIACEAE		*Randia ferox* DC.
RUBIACEAE		*Remijia ferruginea* DC.
RUBIACEAE		*Riodocea pulcherrima* Delprete
RUBIACEAE		*Rudgea coriacea* (Spreng.) K.Schum.
RUBIACEAE		*Rudgea gardenioides* (Cham.) Müll.Arg.
RUBIACEAE	*	*Rudgea interrupta* Benth.
RUBIACEAE		*Rudgea jacobinensis* Müll.Arg.
RUBIACEAE		*Rudgea jasminoides* (Cham.) Müll.Arg.
RUBIACEAE	*	*Rudgea macrophylla* Benth.
RUBIACEAE		*Rudgea minor* (Cham.) Standl.
RUBIACEAE		*Rudgea nobilis* Müll.Arg.
RUBIACEAE		*Rudgea recurva* Müll.Arg.
RUBIACEAE		*Rudgea reticulata* Benth.
RUBIACEAE		*Rudgea sessilis* (Vell.) Müll.Arg.
RUBIACEAE		*Rudgea triflora* Benth.
RUBIACEAE		*Rudgea umbrosa* Müll.Arg.
RUBIACEAE		*Rudgea vellerea* Müll.Arg.
RUBIACEAE		*Rudgea viburnoides* (Cham.) Benth.
RUBIACEAE		*Rustia angustifolia* K.Schum.
RUBIACEAE		*Rustia formosa* (Cham. & Schltdl. ex DC.) Klotzsch
RUBIACEAE		*Rustia gracilis* K.Schum.
RUBIACEAE		*Rustia simpsonii* Delprete
RUBIACEAE		*Salzmannia nitida* DC.
RUBIACEAE		*Simira corumbensis* (Standl.) Steyerm.
RUBIACEAE		*Simira eliezeriana* Peixoto
RUBIACEAE		*Simira gardneriana* M.R.Barbosa & Peixoto
RUBIACEAE		*Simira glaziovii* (K.Schum.) Steyerm.
RUBIACEAE		*Simira grazielae* Peixoto

APPENDIX B - Continued.

Family	Species
RUBIACEAE	*Simira hatschbachiorum* J.H.Kirkbr.
RUBIACEAE	*Simira hexandra* (S.Moore) Steyerm.
RUBIACEAE	*Simira pikia* (K.Schum.) Steyerm.
RUBIACEAE	*Simira pisoniiformis* (Baill.) Steyerm.
RUBIACEAE	*Simira rubescens* (Schum.) Bremeck. ex Steyerm.
RUBIACEAE	*Simira sampaioana* (Standl.) Steyerm.
RUBIACEAE	*Simira viridiflora* (Allemão & Saldanha) K.Schum.
RUBIACEAE	*Simira walteri* Silva Neto & Callado
RUBIACEAE	*Stachyarrhena harleyi* J.H.Kirkbr.
RUBIACEAE	*Tocoyena brasiliensis* Mart.
RUBIACEAE	*Tocoyena bullata* (Vell.) Mart.
RUBIACEAE	*Tocoyena formosa* (Cham. & Schltdl.) K.Schum.
RUTACEAE	*Almeidea caerulea* (Nees & Mart.) A.St.-Hil. ex DC.
RUTACEAE	*Almeidea lilacina* A.St.-Hil.
RUTACEAE	*Almeidea limae* I.M.Silva
RUTACEAE	*Almeidea longifolia* St.Hil.
RUTACEAE	*Almeidea rubra* A.St.-Hil.
RUTACEAE	*Andreadoxa flava* Kallunki
RUTACEAE	*Angostura bracteata* (Nees & Mart.) Kallunki
RUTACEAE	*Balfourodendron molle* (Miq.) Pirani
RUTACEAE	*Balfourodendron riedelianum* (Engl.) Engl.
RUTACEAE	*Conchocarpus adenantherus* (Rizzini) Kallunki & Pirani
RUTACEAE	*Conchocarpus cauliflorus* Pirani
RUTACEAE	*Conchocarpus cyrtanthus* Kallunki
RUTACEAE	*Conchocarpus diadematus* Pirani
RUTACEAE	*Conchocarpus fontanesianus* (A.St.-Hil.) Kallunki & Pirani
RUTACEAE	*Conchocarpus furcatus* Kallunki
RUTACEAE	*Conchocarpus longifolius* (A.St.-Hil.) Kallunki & Pirani
RUTACEAE	*Conchocarpus longipes* Kallunki
RUTACEAE	*Conchocarpus macrocarpus* (Engl.) Kallunki &

APPENDIX B - Continued.

Family		Species
		Pirani
RUTACEAE		*Conchocarpus marginatus* (Rizzini) Kallulnki & Pirani
RUTACEAE		*Conchocarpus mastigophorus* Kallunki
RUTACEAE		*Conchocarpus paniculatus* (Engl.) Kallunki & Pirani
RUTACEAE		*Conchocarpus pentandrus* (Engl.) Kallunki & Pirani
RUTACEAE		*Conchocarpus punctatus* Kallunki
RUTACEAE		*Conchocarpus santosii* Pirani & Kallunki
RUTACEAE		*Conchocarpus sordidus* Kallunki
RUTACEAE		*Dictyoloma vandellianum* A.Juss.
RUTACEAE		*Erythrochiton brasiliense* Nees & Mart.
RUTACEAE		*Esenbeckia almawillia* Kaastra
RUTACEAE		*Esenbeckia decidua* Pirani
RUTACEAE		*Esenbeckia densiflora* (Chodat & Hassl.) Hassl.
RUTACEAE		*Esenbeckia febrifuga* (A.St.-Hil.) A.Juss. ex Mart.
RUTACEAE		*Esenbeckia grandiflora* Mart.
RUTACEAE		*Esenbeckia hieronymi* Engl.
RUTACEAE		*Esenbeckia irwiniana* Kaastra
RUTACEAE		*Esenbeckia leiocarpa* Engl.
RUTACEAE		*Esenbeckia oligantha* Kaastra
RUTACEAE		*Esenbeckia pilocarpoides* Kunth
RUTACEAE		*Galipea ciliata* Taub.
RUTACEAE		*Galipea jasminiflora* (A.St.-Hil.) Engl.
RUTACEAE		*Galipea laxiflora* Engl.
RUTACEAE		*Galipea revoluta* Pirani
RUTACEAE		*Galipea simplicifolia* Schult.
RUTACEAE		*Helietta apiculata* Benth.
RUTACEAE		*Helietta glaziovii* (Engl.) Pirani
RUTACEAE		*Hortia brasiliana* Vand. ex DC.
RUTACEAE	*	*Metrodorea maracasana* Kaastra
RUTACEAE		*Metrodorea mollis* Taub.
RUTACEAE		*Metrodorea nigra* A.St.-Hil.

APPENDIX B - Continued.

Family		Species
RUTACEAE		*Metrodorea stipularis* Mart.
RUTACEAE		*Neoraputia alba* (Nees) Emmerich
RUTACEAE		*Neoraputia calliantha* Kallunki
RUTACEAE		*Neoraputia magnifica* (Engl.) Emmerich
RUTACEAE		*Neoraputia paraensis* (Ducke) Emmerich
RUTACEAE		*Neoraputia trifoliata* (Engl.) Emmerich
RUTACEAE		*Pilocarpus giganteus* Engl.
RUTACEAE		*Pilocarpus grandiflorus* Engl.
RUTACEAE	*	*Pilocarpus jaborandi* Holmes
RUTACEAE		*Pilocarpus pauciflorus* A.St.-Hil.
RUTACEAE		*Pilocarpus pennatifolius* Lem.
RUTACEAE		*Pilocarpus riedelianus* Engl.
RUTACEAE		*Pilocarpus spicatus* A.St.-Hil.
RUTACEAE	*	*Pilocarpus trachylophus* Holmes
RUTACEAE		*Rauia nodosa* (Engl.) Kallunki
RUTACEAE		*Rauia resinosa* Nees & Mart.
RUTACEAE	*	*Raulinoa echinata* Cowan
RUTACEAE		*Ravenia infelix* Vell.
RUTACEAE		*Spiranthera atlantica* Pirani
RUTACEAE		*Zanthoxylum acuminatum* (Sw.) Sw.
RUTACEAE		*Zanthoxylum caribaeum* Lam.
RUTACEAE		*Zanthoxylum fagara* (L.) Sarg.
RUTACEAE		*Zanthoxylum gardneri* Engl.
RUTACEAE		*Zanthoxylum hamadriadicum* Pirani
RUTACEAE		*Zanthoxylum kleinii* (R.S.Cowan) P.G.Waterman
RUTACEAE		*Zanthoxylum monogynum* A.St.-Hil.
RUTACEAE		*Zanthoxylum nemorale* Mart.
RUTACEAE		*Zanthoxylum petiolare* A.St.-Hil. & Tul.
RUTACEAE		*Zanthoxylum retusum* (Albuq.) P.G.Waterman
RUTACEAE		*Zanthoxylum rhoifolium* Lam.
RUTACEAE		*Zanthoxylum riedelianum* Engl.
RUTACEAE		*Zanthoxylum rigidum* Humb. & Bonpl. ex Willd.
RUTACEAE		*Zanthoxylum stelligerum* Turcz.

APPENDIX B - Continued.

Family	Species
RUTACEAE	*Zanthoxylum syncarpum* Tul.
RUTACEAE	*Zanthoxylum tingoassuiba* A.St.-Hil.
SABIACEAE	*Meliosma chartacea* Lombardi
SABIACEAE	*Meliosma itatiaiae* Urb.
SABIACEAE	*Meliosma sellowii* Urb.
SABIACEAE	*Meliosma sinuata* Urb.
SALICACEAE	*Abatia americana* (Gardner) Eichler
SALICACEAE	*Azara uruguayensis* (Speg.) Sleumer
SALICACEAE	*Banara brasiliensis* (Schott) Benth.
SALICACEAE	*Banara parviflora* (A.Gray) Benth.
SALICACEAE	*Banara serrata* (Vell.) Warb.
SALICACEAE	*Banara tomentosa* Clos
SALICACEAE	*Casearia aculeata* Jacq.
SALICACEAE	*Casearia arborea* (Rich.) Urb.
SALICACEAE	*Casearia bahiensis* Sleumer
SALICACEAE	*Casearia catharinensis* Sleumer
SALICACEAE	*Casearia commersoniana* Cambess.
SALICACEAE	*Casearia decandra* Jacq.
SALICACEAE	*Casearia eichleriana* Sleumer
SALICACEAE	*Casearia gossypiosperma* Briq.
SALICACEAE	*Casearia grandiflora* Cambess.
SALICACEAE	*Casearia guianensis* (Aubl.) Urb.
SALICACEAE	*Casearia hirsuta* Sw.
SALICACEAE	*Casearia javitensis* Kunth
SALICACEAE	*Casearia lasiophylla* Eichler
SALICACEAE	*Casearia luetzelburgii* Sleumer
SALICACEAE	*Casearia mariquitensis* Kunth
SALICACEAE	*Casearia melliodora* Eichler
SALICACEAE	*Casearia mestrensis* Sleumer
SALICACEAE	*Casearia obliqua* Spreng.
SALICACEAE	*Casearia oblongifolia* Cambess.
SALICACEAE	*Casearia paranaensis* Sleumer
SALICACEAE	*Casearia pauciflora* Cambess.

APPENDIX B - Continued.

Family	Species
SALICACEAE	*Casearia rufescens* Cambess.
SALICACEAE	*Casearia rupestris* Eichler
SALICACEAE	*Casearia selloana* Eichl.
SALICACEAE	*Casearia sylvestris* Sw.
SALICACEAE	*Casearia ulmifolia* Vahl
SALICACEAE	*Laetia americana* L.
SALICACEAE	*Macrothumia kuhlmannii* (Sleumer) M.H.Alford
SALICACEAE	*Prockia crucis* P.Browne ex L.
SALICACEAE	*Salix humboldtiana* Willd.
SALICACEAE	*Xylosma benthamii* (Tul.) Triana & Planch.
SALICACEAE	*Xylosma ciliatifolia* (Clos) Eichler
SALICACEAE	*Xylosma glaberrima* Sleumer
SALICACEAE	*Xylosma prockia* (Turcz.) Turcz.
SALICACEAE	*Xylosma tweediana* (Clos) Eichler
SALICACEAE	*Xylosma venosa* N.E.Brown
SANTALACEAE	*Acanthosyris pauloalvinii* Barroso
SANTALACEAE	*Acanthosyris spinescens* (Mart. & Eich.) Griseb.
SANTALACEAE	*Jodina rhombifolia* (Hook. & Arn.) Reissek
SAPINDACEAE	*Allophylus dioicus* (Nees & Mart.) Radlk.
SAPINDACEAE	*Allophylus edulis* (A.St.-Hil. et al.) Radlk.
SAPINDACEAE	*Allophylus guaraniticus* (A.St.-Hil.) Radlk.
SAPINDACEAE	*Allophylus heterophyllus* (Cambess.) Radlk.
SAPINDACEAE	*Allophylus laevigatus* (Turcz.) Radlk.
SAPINDACEAE	*Allophylus leucocladus* Radlk.
SAPINDACEAE	*Allophylus leucophloeus* Radlk.
SAPINDACEAE	*Allophylus melanophloeus* Radlk.
SAPINDACEAE	*Allophylus petiolulatus* Radlk.
SAPINDACEAE	*Allophylus quercifolius* Radlk
SAPINDACEAE	*Allophylus racemosus* Sw.
SAPINDACEAE	*Allophylus semidentatus* (Miq.) Radlk.
SAPINDACEAE	*Allophylus sericeus* (Cambess.) Radlk.
SAPINDACEAE	*Averrhoidium gardnerianum* Baill.
SAPINDACEAE	*Averrhoidium paraguaiense* Radlk.

APPENDIX B - Continued.

Family	Species
SAPINDACEAE	*Cupania bracteosa* Radlk
SAPINDACEAE	*Cupania castaneifolia* Mart.
SAPINDACEAE	*Cupania concolor* Radlk.
SAPINDACEAE	*Cupania crassifolia* Radlk.
SAPINDACEAE	*Cupania emarginata* Cambess.
SAPINDACEAE	*Cupania fluminensis* Acev.-Rodr.
SAPINDACEAE	*Cupania furfuracea* Radlk.
SAPINDACEAE	*Cupania impressinervia* Acev.-Rodr.
SAPINDACEAE	*Cupania ludowigii* Somner & Ferruci
SAPINDACEAE	*Cupania oblongifolia* Mart.
SAPINDACEAE	*Cupania paniculata* Cambess.
SAPINDACEAE	*Cupania platycarpa* Radlk.
SAPINDACEAE	*Cupania racemosa* (Vell.) Radlk.
SAPINDACEAE	*Cupania radlkoferi* Acev.-Rodr.
SAPINDACEAE	*Cupania rigida* Radlk.
SAPINDACEAE	*Cupania rugosa* Radlk.
SAPINDACEAE	*Cupania schizoneura* Radlk.
SAPINDACEAE	*Cupania tenuivalvis* Radlk.
SAPINDACEAE	*Cupania vernalis* Cambess.
SAPINDACEAE	*Cupania zanthoxyloides* Cambess.
SAPINDACEAE	*Diatenopteryx grazielae* Vaz & Andreata
SAPINDACEAE	*Diatenopteryx sorbifolia* Radlk.
SAPINDACEAE	*Dilodendron bipinnatum* Radlk.
SAPINDACEAE	*Diplokeleba floribunda* N.E. Brown
SAPINDACEAE	*Dodonaea viscosa* Jacq.
SAPINDACEAE	*Magonia pubescens* A.St.-Hil.
SAPINDACEAE	*Matayba cristae* Reitz
SAPINDACEAE	*Matayba discolor* (Spreng.) Radlk.
SAPINDACEAE	*Matayba elaeagnoides* Radlk.
SAPINDACEAE	*Matayba grandis* Radlk.
SAPINDACEAE	*Matayba guianensis* Aubl.
SAPINDACEAE	*Matayba heterophylla* (Mart.) Radlk.
SAPINDACEAE	*Matayba intermedia* Radlk.

APPENDIX B - Continued.

Family	Species
SAPINDACEAE	*Matayba juglandifolia* Radlk.
SAPINDACEAE	*Matayba leucodictya* Radlk.
SAPINDACEAE	*Matayba marginata* Radlk.
SAPINDACEAE	*Matayba mollis* Radlk.
SAPINDACEAE	*Matayba punctata* Radlk.
SAPINDACEAE	*Matayba* sp.1 (Coelho et al. 2009 ined.)
SAPINDACEAE	*Matayba* sp.2 (Coelho et al. 2009 ined.)
SAPINDACEAE	*Matayba sylvatica* (Casar.) Radlk.
SAPINDACEAE	*Melicoccus espiritosantensis* Acev.-Rodr.
SAPINDACEAE	*Melicoccus oliviformis* Kunth
SAPINDACEAE	*Pseudima frutescens* (Aubl.) Radlk.
SAPINDACEAE	*Sapindus saponaria* L.
SAPINDACEAE	*Scyphonychium multiflorum* (Mart.) Radlk.
SAPINDACEAE	*Talisia cerasina* Radlk.
SAPINDACEAE	*Talisia coriacea* Radlk.
SAPINDACEAE	*Talisia cupularis* (A.St.-Hil.) Radlk.
SAPINDACEAE	*Talisia esculenta* (A.St.-Hil.) Radlk.
SAPINDACEAE	*Talisia espiritosantensis* Acev.-Rodr.
SAPINDACEAE	*Talisia macrophylla* (Mart.) Radlk.
SAPINDACEAE	*Talisia retusa* R.S.Cowan
SAPINDACEAE	*Toulicia laevigata* Radlk.
SAPINDACEAE	*Toulicia stans* (Schott.) Radlk.
SAPINDACEAE	*Toulicia subsquamulata* Radlk.
SAPINDACEAE	*Tripterodendron filicifolium* (Linden) Radlk.
SAPOTACEAE	*Chrysophyllum flexuosum* Mart.
SAPOTACEAE	*Chrysophyllum gonocarpum* (Mart. & Eichler) Engl.
SAPOTACEAE	*Chrysophyllum imperiale* (Linden ex Koch & Fintelmann) Benth. & Hook.f.
SAPOTACEAE	*Chrysophyllum inornatum* Mart.
SAPOTACEAE	*Chrysophyllum januariense* Eichler
SAPOTACEAE	*Chrysophyllum lucentifolium* Cronq.
SAPOTACEAE	*Chrysophyllum marginatum* (Hook. & Arn.) Radlk.
SAPOTACEAE	*Chrysophyllum paranaense* T.D.Penn.

APPENDIX B - Continued.

Family	Species
SAPOTACEAE	*Chrysophyllum rufum* Mart.
SAPOTACEAE	*Chrysophyllum splendens* Spreng.
SAPOTACEAE	*Chrysophyllum subspinosum* Monach.
SAPOTACEAE	*Chrysophyllum viride* Mart. & Eichler
SAPOTACEAE	*Diploön cuspidatum* (Hoehne) Cronq.
SAPOTACEAE	*Ecclinusa ramiflora* Mart.
SAPOTACEAE	*Manilkara decrescens* T.D.Penn.
SAPOTACEAE	*Manilkara elata* (Allemão ex Miq.) Monach.
SAPOTACEAE	*Manilkara longifolia* (A.DC.) Dubard
SAPOTACEAE	*Manilkara maxima* T.D.Penn.
SAPOTACEAE	*Manilkara multifida* T.D.Penn.
SAPOTACEAE	*Manilkara rufula* (Miq.) Lam.
SAPOTACEAE	*Manilkara salzmannii* (A.DC.) H.J.Lam.
SAPOTACEAE	*Manilkara subsericea* (Mart.) Dubard
SAPOTACEAE	*Manilkara triflora* (Allemão) Monach.
SAPOTACEAE	*Micropholis compta* Pierre
SAPOTACEAE	*Micropholis crassipedicellata* (Mart. & Eichler) Pierre
SAPOTACEAE	*Micropholis emarginata* T.D.Penn.
SAPOTACEAE	*Micropholis gardneriana* (A.DC.) Pierre
SAPOTACEAE	*Micropholis gnaphaloclados* (Mart.) Pierre
SAPOTACEAE	*Micropholis guyanensis* (A.DC.) Pierre
SAPOTACEAE	*Micropholis venulosa* (Mart. & Eichler) Pierre
SAPOTACEAE	*Pouteria andarahiensis* T.D.Penn.
SAPOTACEAE	*Pouteria bangii* (Rusby) T.D.Penn.
SAPOTACEAE	*Pouteria bapeba* T.D.Penn.
SAPOTACEAE	*Pouteria beaurepairei* (Glaz. & Raunk.) Baehni
SAPOTACEAE	*Pouteria bullata* (S.Moore) Baehni
SAPOTACEAE	*Pouteria butyrocarpa* (Kuhlm.) T.D.Penn.
SAPOTACEAE	*Pouteria caimito* (Ruiz & Pav.) Radlk.
SAPOTACEAE	*Pouteria coelomatica* Rizz.
SAPOTACEAE	*Pouteria cuspidata* (A.DC.) Baehni
SAPOTACEAE	*Pouteria filipes* Eyma
SAPOTACEAE	*Pouteria fragrans* (Pierre) Dubard

APPENDIX B - Continued.

Family		Species
SAPOTACEAE		*Pouteria furcata* T.D.Penn.
SAPOTACEAE		*Pouteria gardneri* (Mart. & Miq.) Baehni
SAPOTACEAE		*Pouteria gardneriana* (A.DC.) Radlk.
SAPOTACEAE		*Pouteria glomerata* (Miq.) Radlk.
SAPOTACEAE		*Pouteria grandiflora* (A.DC.) Baehni
SAPOTACEAE		*Pouteria guianensis* Aubl.
SAPOTACEAE		*Pouteria macahensis* (Glaz.) T.D.Penn.
SAPOTACEAE		*Pouteria macrophylla* (Lam.) Eyma
SAPOTACEAE		*Pouteria microstrigosa* T.D.Penn.
SAPOTACEAE		*Pouteria oxypetala* Pennington
SAPOTACEAE		*Pouteria pachycalyx* T.D.Penn.
SAPOTACEAE		*Pouteria peduncularis* (Mart. & Eichler ex Miq.) Baehni
SAPOTACEAE		*Pouteria procera* (Mart.) T.D.Penn.
SAPOTACEAE	*	*Pouteria psammophila* (A.DC.) Radlk.
SAPOTACEAE		*Pouteria ramiflora* (Mart.) Radlk.
SAPOTACEAE		*Pouteria reticulata* (Engl.) Eyma
SAPOTACEAE		*Pouteria salicifolia* (Spreng.) Radlk.
SAPOTACEAE		*Pouteria stenophylla* Baehni
SAPOTACEAE		*Pouteria subsessilifolia* Cronq.
SAPOTACEAE		*Pouteria torta* (Mart.) Radlk.
SAPOTACEAE		*Pouteria venosa* (Mart.) Baehni
SAPOTACEAE		*Pradosia bahiensis* Teixeira
SAPOTACEAE		*Pradosia glaziovii* (Pierre) T.D.Penn.
SAPOTACEAE		*Pradosia kuhlmannii* Toledo
SAPOTACEAE		*Pradosia lactescens* (Vell.) Radlk.
SAPOTACEAE		*Sarcaulus brasiliensis* (A.DC.) Eyma
SAPOTACEAE		*Sideroxylon obtusifolium* (Roem. & Schult.) T.D.Penn.
SCHOEPFIACEAE		*Schoepfia brasiliensis* A.DC.
SCROPHULARIACEAE		*Buddleja stachyoides* Cham. & Schltdl.
SIMAROUBACEAE		*Castela tweediei* Planch.
SIMAROUBACEAE		*Picrasma crenata* (Vell.) Eichler
SIMAROUBACEAE		*Simaba cedron* Planch.

APPENDIX B - Continued.

Family	Species
SIMAROUBACEAE	*Simaba cuneata* A.St.-Hil. & Tul.
SIMAROUBACEAE	*Simaba docensis* Franceschin. & K.Yamam.
SIMAROUBACEAE	*Simaba insignis* A.St.-Hil. & Tul.
SIMAROUBACEAE	*Simaba maiana* Casar.
SIMAROUBACEAE	*Simaba subcymosa* A.St.-Hil. & Tul.
SIMAROUBACEAE	*Simarouba amara* Aubl.
SIMAROUBACEAE	*Simarouba versicolor* A.St.-Hil.
SIPARUNACEAE	*Siparuna bifida* (Poepp. & Endl.) A.DC.
SIPARUNACEAE	*Siparuna brasiliensis* (Spreng.) A.DC.
SIPARUNACEAE	*Siparuna cymosa* Tolm.
SIPARUNACEAE	*Siparuna glycycarpa* (Ducke) S.S.Renner & Hausner
SIPARUNACEAE	*Siparuna guianensis* Aubl.
SIPARUNACEAE	*Siparuna poeppigii* (Tul.) A.DC.
SIPARUNACEAE	*Siparuna reginae* (Tul.) A.DC.
SOLANACEAE	*Acnistus arborescens* (L.) Schltdl.
SOLANACEAE	*Athenaea anonacea* Sendtn.
SOLANACEAE	*Athenaea micrantha* Sendtn.
SOLANACEAE	*Athenaea pereirae* Barboza & Hunz.
SOLANACEAE	*Athenaea pogogena* (Moric.) Sendtn.
SOLANACEAE	*Aureliana angustifolia* R.C.Almeida-Lafetá
SOLANACEAE	*Aureliana brasiliana* (A.T.Hunz.) Barbosa & A.T.Hunz.
SOLANACEAE	*Aureliana darcyi* Carvalho & Bovini
SOLANACEAE	*Aureliana fasciculata* (Vell.) Sendtn.
SOLANACEAE	*Aureliana glomuliflora* Sendtn.
SOLANACEAE	*Aureliana selloviana* (Sendt.) Barboza & Stehmann
SOLANACEAE	*Aureliana tomentosa* Sendtn.
SOLANACEAE	*Aureliana velutina* Sendtn.
SOLANACEAE	*Brugmansia suaveolens* (Humb. & Bonpl. ex Willd.) Bercht. & J.Presl.
SOLANACEAE	*Brunfelsia clandestina* Plowman
SOLANACEAE	*Brunfelsia pauciflora* (Cham. & Schltdl.) Benth.
SOLANACEAE	*Capsicum parviflorum* Sendtn.

APPENDIX B - Continued.

Family	Species
SOLANACEAE	*Cestrum axillare* Vell.
SOLANACEAE	*Cestrum bracteatum* Link & Otto
SOLANACEAE	*Cestrum corcovadense* Miers
SOLANACEAE	*Cestrum intermedium* Sendtn.
SOLANACEAE	*Cestrum mariquitense* Kunth
SOLANACEAE	*Cestrum martii* Sendt.
SOLANACEAE	*Cestrum obovatum* Sendtn.
SOLANACEAE	*Cestrum pedicellatum* Sendtn.
SOLANACEAE	*Cestrum reflexum* Sendtn.
SOLANACEAE	*Cestrum retrofractum* Dunal
SOLANACEAE	*Cestrum salzmannii* Dunal
SOLANACEAE	*Cestrum schlechtendalii* G.Don
SOLANACEAE	*Cestrum strictum* Schott ex Sendtn.
SOLANACEAE	*Cestrum strigilatum* Ruiz & Pav.
SOLANACEAE	*Cestrum subumbellatum* Vignoli-Silva & M.Nee
SOLANACEAE	*Cestrum velutinum* Hiern
SOLANACEAE	*Cestrum viminale* Sendtn.
SOLANACEAE	*Lycianthes rantonnei* (Carrière) Bitter
SOLANACEAE	*Lycium cestroides* Schltdl.
SOLANACEAE	*Metternichia princeps* Mik.
SOLANACEAE	*Sessea brasiliensis* Toledo
SOLANACEAE	*Sessea regnellii* Taub.
SOLANACEAE	*Solanum argenteum* Dunal
SOLANACEAE	*Solanum asperum* Rich.
SOLANACEAE	*Solanum bullatum* Vell.
SOLANACEAE	*Solanum caavurana* Vell.
SOLANACEAE	*Solanum campaniforme* Roem. & Schult.
SOLANACEAE	*Solanum castaneum* Carvalho
SOLANACEAE	*Solanum cernuum* Vell.
SOLANACEAE	*Solanum cinnamomeum* Sendtn.
SOLANACEAE	*Solanum cladotrichum* Vand.
SOLANACEAE	*Solanum compressum* L.B.Sm. & Downs
SOLANACEAE	*Solanum cordioides* S.Knapp

APPENDIX B - Continued.

Family	Species
SOLANACEAE	*Solanum crinitum* Lam.
SOLANACEAE	*Solanum decorum* Sendtn.
SOLANACEAE	*Solanum didymum* Dunal
SOLANACEAE	*Solanum diploconos* (Mart.) Bohs
SOLANACEAE	*Solanum gardneri* Sendtn.
SOLANACEAE	*Solanum gomphodes* Dunal
SOLANACEAE	*Solanum grandiflorum* Desf.
SOLANACEAE	*Solanum granulosoleprosum* Dunal
SOLANACEAE	*Solanum itatiaiae* Glaz.
SOLANACEAE	*Solanum lacerdae* Dusén
SOLANACEAE	*Solanum latiflorum* Bohs
SOLANACEAE	*Solanum leptostachys* Dunal
SOLANACEAE	*Solanum leucodendron* Sendtn.
SOLANACEAE	*Solanum lycocarpum* A.St.-Hil.
SOLANACEAE	*Solanum martii* Dunal
SOLANACEAE	*Solanum mauritianum* Scop.
SOLANACEAE	*Solanum megalochiton* Sendtn.
SOLANACEAE	*Solanum melissarum* Bohs
SOLANACEAE	*Solanum pabstii* L.B.Sm. & Downs
SOLANACEAE	*Solanum pachimatium* Dunal
SOLANACEAE	*Solanum paranense* Dusén
SOLANACEAE	*Solanum proteanthum* Bohs
SOLANACEAE	*Solanum pseudoquina* A.St.-Hil.
SOLANACEAE	*Solanum ramulosum* Sendtn.
SOLANACEAE	*Solanum reitzii* L.B.Sm. & Downs
SOLANACEAE	*Solanum rufescens* Sendtn.
SOLANACEAE	*Solanum rugosum* Dunal
SOLANACEAE	*Solanum sanctaecatharinae* Dunal
SOLANACEAE	*Solanum santosii* S.Knapp
SOLANACEAE	*Solanum sellowianum* Dunal
SOLANACEAE	*Solanum sellowii* Dunal
SOLANACEAE	*Solanum sooretamum* Carvalho
SOLANACEAE	*Solanum* sp.nov.ined.

APPENDIX B - Continued.

Family		Species
SOLANACEAE		*Solanum stipulaceum* Willd. ex Roem. & Schult.
SOLANACEAE		*Solanum swartzianum* Roem. & Schult.
SOLANACEAE		*Solanum sycocarpum* Mart. & Sendtn.
SOLANACEAE		*Solanum symmetricum* Rusby
SOLANACEAE		*Solanum tegore* Walp.
SOLANACEAE		*Solanum variabile* Mart.
SOLANACEAE		*Solanum velleum* Thunb.
SOLANACEAE		*Solanum vellozianum* Sendtn.
SOLANACEAE		*Solanum warmingii* Hieron.
SOLANACEAE		*Vassobia breviflora* (Sendtn.) Hunz.
STEMONURACEAE		*Discophora guianensis* Miers
STYRACACEAE		*Styrax acuminatus* Pohl
STYRACACEAE		*Styrax aureus* Mart.
STYRACACEAE		*Styrax camporum* Pohl
STYRACACEAE		*Styrax chrysocalyx* P.W.Fritsch
STYRACACEAE		*Styrax ferrugineus* Nees & Mart.
STYRACACEAE		*Styrax glabratus* Schott
STYRACACEAE		*Styrax griseus* P.W.Fritsch
STYRACACEAE		*Styrax lancifolius* Klotzsch ex Seub.
STYRACACEAE		*Styrax latifolius* Pohl
STYRACACEAE		*Styrax leprosus* Hook. & Arn.
STYRACACEAE		*Styrax maninul* B.Walln.
STYRACACEAE		*Styrax martii* Seub.
STYRACACEAE		*Styrax pedicellatus* (Perkins) B.Walln.
STYRACACEAE		*Styrax pohlii* A.DC.
STYRACACEAE		*Styrax rotundatus* (Perkins) P.W.Fritsch
STYRACACEAE		*Styrax sieberi* Perkins
SYMPLOCACEAE		*Symplocos adrianoi* Aranha
SYMPLOCACEAE	*	*Symplocos altissima* Brand
SYMPLOCACEAE		*Symplocos bidana* Aranha
SYMPLOCACEAE		*Symplocos celastrinea* Mart. ex Miq.
SYMPLOCACEAE		*Symplocos corymboclada* Brand
SYMPLOCACEAE		*Symplocos falcata* Brand

APPENDIX B - Continued.

Family	Species
SYMPLOCACEAE	*Symplocos glandulosomarginata* Hoehne
SYMPLOCACEAE	*Symplocos glaziovii* Brand
SYMPLOCACEAE	*Symplocos incrassata* Aranha
SYMPLOCACEAE	*Symplocos insignis* Brand
SYMPLOCACEAE	*Symplocos itatiaiae* Wawra
SYMPLOCACEAE	*Symplocos lanceolata* (Mart.) A.DC.
SYMPLOCACEAE	*Symplocos laxiflora* Benth.
SYMPLOCACEAE	*Symplocos microstyla* Aranha
SYMPLOCACEAE	*Symplocos mosenii* Brand
SYMPLOCACEAE	*Symplocos nitens* Benth.
SYMPLOCACEAE	*Symplocos nitidiflora* Brand
SYMPLOCACEAE	*Symplocos organensis* Brand
SYMPLOCACEAE	*Symplocos phaeoclada* (Mart.) A.DC.
SYMPLOCACEAE	*Symplocos platyphylla* (Pohl) Benth.
SYMPLOCACEAE	*Symplocos pubescens* Klotzsch ex Benth.
SYMPLOCACEAE	*Symplocos pycnobotrya* Mart ex Miq.
SYMPLOCACEAE	*Symplocos rizzinii* Occhioni
SYMPLOCACEAE	*Symplocos tenuifolia* Brand
SYMPLOCACEAE	*Symplocos tetrandra* Mart. ex Miq.
SYMPLOCACEAE	*Symplocos trachycarpa* Brand
SYMPLOCACEAE	*Symplocos uniflora* (Pohl) Benth.
SYMPLOCACEAE	*Symplocos variabilis* Mart. ex Miq.
THEACEAE	*Laplacea fruticosa* (Schrad.) Kobuski
THEACEAE	*Laplacea tomentosa* (Mart. & Zucc.) G.Don
THEOPHRASTACEAE	*Clavija caloneura* Mart. & Miq.
THEOPHRASTACEAE	*Clavija nutans* (Vell.) B.Stål
THEOPHRASTACEAE	*Clavija spinosa* (Vell.) Mez
THEOPHRASTACEAE	*Jacquinia armillaris* Jacq.
THYMELAEACEAE	*Daphnopsis brasiliensis* Mart. & Zucc.
THYMELAEACEAE	*Daphnopsis coriacea* Taub.
THYMELAEACEAE	*Daphnopsis fasciculata* (Meisn.) Nevling
THYMELAEACEAE	*Daphnopsis gemmiflora* (Miers) Domke
THYMELAEACEAE	*Daphnopsis martii* Meisn.

APPENDIX B - Continued.

Family		Species
THYMELAEACEAE		*Daphnopsis pseudosalix* Domke
THYMELAEACEAE		*Daphnopsis racemosa* Griseb.
THYMELAEACEAE		*Daphnopsis schwackeana* Taub.
THYMELAEACEAE		*Daphnopsis sellowiana* Taub.
THYMELAEACEAE		*Daphnopsis utilis* Warm.
TRIGONIACEAE	*	*Trigoniodendron spiritusanctense* E.F.Guim. & J.Miguel
ULMACEAE		*Ampelocera edentula* Kuhlm.
ULMACEAE		*Ampelocera glabra* Kuhlm.
ULMACEAE		*Phyllostylon rhamnoides* (J.Poiss.) Taub.
URTICACEAE		*Boehmeria caudata* Sw.
URTICACEAE		*Cecropia glaziovii* Snethl.
URTICACEAE		*Cecropia hololeuca* Miq.
URTICACEAE		*Cecropia pachystachya* Trécul
URTICACEAE		*Cecropia palmata* Willd.
URTICACEAE		*Cecropia saxatilis* Snethl.
URTICACEAE		*Coussapoa curranii* S.F.Blake
URTICACEAE		*Coussapoa floccosa* Akkermans & C.C.Berg
URTICACEAE		*Coussapoa microcarpa* (Schott) Rizzini
URTICACEAE		*Coussapoa pachyphylla* Akkermans & C.C.Berg
URTICACEAE		*Myriocarpa cordifolia* Liebm.
URTICACEAE		*Myriocarpa stipitata* Benth.
URTICACEAE		*Pourouma guianensis* Aubl.
URTICACEAE		*Pourouma mollis* Trécul
URTICACEAE		*Pourouma velutina* Mart.
URTICACEAE		*Urera aurantiaca* Wedd.
URTICACEAE		*Urera baccifera* (L.) Gaudich. ex Wedd.
URTICACEAE		*Urera caracasana* (Jacq.) Gaudich. ex Griseb.
VELLOZIACEAE		*Vellozia gigantea* N.L.Menezes & Mello-Silva
VERBENACEAE		*Aloysia virgata* (Ruiz & Pav.) A.Juss.
VERBENACEAE		*Citharexylum montevidense* (Spreng.) Moldenke
VERBENACEAE		*Citharexylum myrianthum* Cham.
VERBENACEAE		*Citharexylum obtusifolium* Kuhlm
VERBENACEAE		*Citharexylum solanaceum* Cham.

APPENDIX B - Continued.

Family	Species
VERBENACEAE	*Duranta vestita* Cham.
VERBENACEAE	*Verbenoxylum reitzii* (Moldenke) Tronc.
VIOLACEAE	*Amphirrhox longifolia* (A.St.-Hil.) Spreng.
VIOLACEAE	*Paypayrola blanchetiana* Tul.
VIOLACEAE	*Paypayrola grandiflora* Tul.
VIOLACEAE	*Rinorea bahiensis* (Moric.) Kuntze
VIOLACEAE	*Rinorea guianensis* Aubl.
VIOLACEAE	*Rinorea laevigata* (Sol. ex Ging.) Hekking
VIOLACEAE	*Rinorea maximilliani* (Eichl.) Kuntze
VIOLACEAE	*Rinorea ramiziana* Glaz. ex Hekking
VOCHYSIACEAE	*Callisthene dryadum* Duarte
VOCHYSIACEAE	*Callisthene fasciculata* (Spreng.) Mart.
VOCHYSIACEAE	*Callisthene inundata* O.L.Bueno et al.
VOCHYSIACEAE	*Callisthene major* Mart.
VOCHYSIACEAE	*Callisthene microphylla* Warm.
VOCHYSIACEAE	*Callisthene minor* Mart.
VOCHYSIACEAE	*Callisthene mollissima* Warm.
VOCHYSIACEAE	*Erisma arietinum* M.L.Kawasaki
VOCHYSIACEAE	*Qualea cordata* (Mart.) Spreng.
VOCHYSIACEAE	*Qualea cryptantha* (Spreng.) Warm.
VOCHYSIACEAE	*Qualea densiflora* Warm.
VOCHYSIACEAE	*Qualea dichotoma* (Mart.) Warm.
VOCHYSIACEAE	*Qualea gestasiana* A.St.-Hil.
VOCHYSIACEAE	*Qualea glaziovii* Warm.
VOCHYSIACEAE	*Qualea grandiflora* Mart.
VOCHYSIACEAE	*Qualea hannekesaskiarum* Marc.-Berti
VOCHYSIACEAE	*Qualea jundiahy* Warm.
VOCHYSIACEAE	*Qualea magna* Kuhlm.
VOCHYSIACEAE	*Qualea megalocarpa* Stafleu
VOCHYSIACEAE	*Qualea multiflora* Mart.
VOCHYSIACEAE	*Qualea parviflora* Mart.
VOCHYSIACEAE	*Qualea selloi* Warm.

APPENDIX B – Concluded**.**

Family	Species
VOCHYSIACEAE	*Salvertia convallariodora* A.St.-Hil.
VOCHYSIACEAE	*Vochysia acuminata* Bong.
VOCHYSIACEAE	*Vochysia angelica* M.C.Vianna & Fontella
VOCHYSIACEAE	*Vochysia bifalcata* Warm.
VOCHYSIACEAE	*Vochysia cinnamomea* Pohl
VOCHYSIACEAE	*Vochysia dasyantha* Warm.
VOCHYSIACEAE	*Vochysia elliptica* (Spr.) Mart.
VOCHYSIACEAE	*Vochysia emarginata* Vahl
VOCHYSIACEAE	*Vochysia gardneri* Warm.
VOCHYSIACEAE	*Vochysia glaberrima* Warm.
VOCHYSIACEAE	*Vochysia glazioviana* Warm.
VOCHYSIACEAE	*Vochysia gummifera* Mart. ex Warm.
VOCHYSIACEAE	*Vochysia haenkeana* Mart.
VOCHYSIACEAE	*Vochysia magnifica* Warm.
VOCHYSIACEAE	*Vochysia oblongifolia* Warm.
VOCHYSIACEAE	*Vochysia oppugnata* Warm.
VOCHYSIACEAE	*Vochysia pruinosa* Pohl
VOCHYSIACEAE	*Vochysia pyramidalis* Mart.
VOCHYSIACEAE	*Vochysia rectiflora* Warm.
VOCHYSIACEAE	*Vochysia riedeliana* Stafleu
VOCHYSIACEAE	*Vochysia rufa* Mart.
VOCHYSIACEAE	*Vochysia saldanhana* Warm.
VOCHYSIACEAE	*Vochysia santaluciae* M.C.Vianna & Fontella
VOCHYSIACEAE	*Vochysia schwackeana* Warm.
VOCHYSIACEAE	*Vochysia selloi* Warm.
VOCHYSIACEAE	*Vochysia spathulata* Warm.
VOCHYSIACEAE	*Vochysia thyrsoidea* Pohl
VOCHYSIACEAE	*Vochysia tucanorum* Mart.
WINTERACEAE	*Drimys brasiliensis* Miers

APPENDIX C - Tropical and subtropical exclusive genera

Tropical exclusive genera: *Kielmeyera* (24 species), *Conchocarpus* (16), *Pilosocereus* (15), *Chamaecrista* (14), *Pavonia* (11), *Algernonia* (10), *Eriotheca* (10), *Hornschuchia* (9), *Eschweilera* (8), *Gymnanthes* (8), *Eremanthus* (7), *Moldenhawera* (7), *Peltogyne* (7), *Siparuna* (7), *Unonopsis* (7), *Mabea* (6), *Poincianella* (6), *Simaba* (6), *Stephanopodium* (6), *Stryphnodendron* (6), *Almeidea* (5), *Cnidoscolus* (5), *Dimorphandra* (5), *Galipea* (5), *Helicteres* (5), *Neoraputia* (5), *Rinorea* (5), *Ziziphus* (5), *Athenaea* (4), *Caryocar* (4), *Combretum* (4), *Deguelia* (4), *Dulacia* (4), *Elvasia* (4), *Ferdinandusa* (4), *Himatanthus* (4), *Lecythis* (4), *Macropeplus* (4), *Oxandra* (4), *Paralychnophora* (4), *Rustia* (4), *Spondias* (4), *Tetragastris* (4), *Vismia* (4), *Wunderlichia* (4), *Acosmium* (3), *Apeiba* (3), *Couratari* (3), *Ephedranthus* (3), *Hyptidendron* (3), *Neocalyptrocalyx* (3), *Pachira* (3), *Rourea* (3), *Sparattanthelium* (3), *Sterculia* (3), *Stylogyne* (3), *Toulicia* (3), *Urbanodendron* (3), *Alibertia* (2), *Ampelocera* (2), *Anaxagorea* (2), *Arapatiella* (2), *Austrocritonia* (2), *Bixa* (2), *Bocagea* (2), *Calycophyllum* (2), *Christiana* (2), *Clarisia* (2), *Colicodendron* (2), *Coursetia* (2), *Discocarpus* (2), *Emmotum* (2), *Facheiroa* (2), *Genipa* (2), *Graffenrieda* (2), *Helicostylis* (2), *Henriettea* (2), *Heteropterys* (2), *Lacmellea* (2), *Ladenbergia* (2), *Libidibia* (2), *Luxemburgia* (2), *Macrolobium* (2), *Martiodendron* (2), *Melicoccus* (2), *Merianthera* (2), *Micranthocereus* (2), *Myriocarpa* (2), *Paypayrola* (2), *Peritassa* (2), *Pityrocarpa* (2), *Plenckia* (2), *Polygala* (2), *Pseudoxandra* (2), *Pterodon* (2), *Ptilochaeta* (2), *Quararibea* (2), *Rauia* (2), *Riedeliella* (2), *Sacoglottis* (2), *Samanea* (2), *Savia* (2), *Simarouba* (2), *Sparattosperma* (2), *Tontelea* (2), *Trattinnickia* (2), *Trigynaea* (2), *Triplaris* (2), *Trischidium* (2), *Varronia* (2), *Zeyheria* (2), *Abatia* (1), *Adenophaedra* (1), *Amanoa* (1), *Amphirrhox* (1), *Anacardium* (1), *Andradea* (1), *Andreadoxa* (1), *Angostura* (1), *Anthodiscus* (1), *Antonia* (1), *Aptandra* (1), *Arrabidaea* (1), *Arrojadoa* (1), *Arthrocereus* (1), *Astrocasia* (1), *Banisteriopsis* (1), *Barnebydendron* (1), *Bernardinia* (1), *Blanchetiodendron* (1), *Bocageopsis* (1), *Bonnetia* (1), *Bowdichia* (1), *Brasiliocroton* (1), *Bredemeyera* (1), *Brodriguesia* (1), *Camptosema* (1), *Capparidastrum* (1), *Capsicum* (1), *Caraipa* (1), *Cardiopetalum* (1), *Carpotroche* (1), *Caryodendron* (1), *Cavanillesia* (1), *Cenostigma* (1), *Chaetocarpus* (1), *Cheiloclinium* (1), *Chrysobalanus* (1), *Chrysochlamys* (1), *Cocos* (1), *Commiphora* (1), *Conocarpus* (1), *Copernicia* (1), *Couma* (1), *Crepidospermum* (1), *Cymbopetalum* (1), *Cynophalla* (1), *Cyrtocarpa* (1), *Davilla* (1), *Dendrophorbium* (1), *Dialium* (1), *Dilodendron* (1), *Dipteryx* (1), *Diptychandra* (1), *Discophora* (1), *Drypetes* (1), *Duroia* (1), *Erisma* (1), *Erythrochiton* (1), *Euphorbia* (1), *Euterpe* (1), *Fraunhofera* (1), *Gaultheria* (1), *Geissospermum* (1), *Geoffroea* (1), *Glycydendron* (1), *Godmania* (1), *Gonatogyne* (1), *Goniorrhachis* (1), *Grazielodendron* (1), *Guibourtia* (1), *Guilandina* (1), *Hancornia* (1), *Harleyodendron* (1), *Henriettella* (1), *Humiria* (1), *Hydrogaster* (1), *Jacquinia* (1), *Joannesia* (1), *Kerianthera* (1), *Kuhlmanniodendron* (1), *Lacunaria* (1), *Laetia* (1), *Leocereus* (1), *Lindackeria* (1), *Macoubea* (1), *Macrothumia* (1), *Macrotorus* (1), *Magonia* (1), *Malmea* (1), *Mauritia* (1), *Mauritiella* (1), *Melanopsidium* (1), *Melanoxylon* (1), *Metternichia* (1), *Mezilaurus* (1), *Micrandra* (1), *Molopanthera* (1), *Monilicarpa* (1), *Morithamnus* (1), *Naucleopsis* (1), *Neocabreria* (1), *Norantea* (1), *Oedematopus* (1), *Oenocarpus* (1), *Panopsis* (1), *Paradrypetes* (1), *Paratecoma* (1), *Phyllostemonodaphne* (1), *Phyllostylon* (1), *Physocalymma* (1), *Piranhea* (1),

Pithecellobium (1), *Plathymenia* (1), *Platycyamus* (1), *Platypodium* (1), *Pleurothyrium* (1), *Poeppigia* (1), *Pogonophora* (1), *Polyandrococos* (1), *Priogymnanthus* (1), *Pseudima* (1), *Pterygota* (1), *Quiabentia* (1), *Ramisia* (1), Ravenia (1), *Remijia* (1), *Riodocea* (1), *Salvertia* (1), *Salzmannia* (1), *Sarcaulus* (1), *Schinopsis* (1), *Schistostemon* (1), *Scyphonychium* (1), *Senefeldera* (1), *Souroubea* (1), *Spiranthera* (1), *Stachyarrhena* (1), *Sweetia* (1), *Symphonia* (1), *Tabaroa* (1), *Tapura* (1), *Thyrsodium* (1), *Tococa* (1), *Trigoniodendron* (1), *Tripterodendron* (1), *Vataireopsis* (1), *Vellozia* (1), and *Williamodendron* (1). **Subtropical exclusive genera:** *Ateleia* (1), *Castela* (1), *Colletia* (1), *Crinodendron* (1), *Curitiba* (1), *Diplokeleba* (1), *Jodina* (1), *Lycium* (1), *Malmeanthus* (1), *Parkinsonia* (1), *Plumeria* (1), *Raulinoa* (1), *Schaefferia* (1), *Trithrinax* (1) and *Verbenoxylum* (1).