

[10.1071/BT22022](https://doi.org/10.1071/BT22022)

Australian Journal of Botany

Supplementary Material

Relationships between soils and plant community composition and structure in a Neotropical savanna mosaic

Eddie Lenza^{A,}, Ana Clara Abadia^A, Arthur Veríssimo^A, Hellen Kezia Almada^A, Lorryne Aparecida Gonçalves^A, and Daielle Carrijo^A*

^APrograma de Pós-graduação em Ecologia e Conservação, Universidade do Estado de Mato Grosso (UNEMAT), PO Box 08, 78690-000 Nova Xavantina, MT, Brazil.

*Correspondence to: Eddie Lenza Programa de Pós-graduação em Ecologia e Conservação, Universidade do Estado de Mato Grosso (UNEMAT), PO Box 08, 78690-000 Nova Xavantina, MT, Brazil Email: eddielenza@yahoo.com.br

Supplementary Material

Table S1. Description of the six vegetation communities sampled in a vegetation mosaic in the Cerrado-Amazon transition zone, Brazil. Description based on Oliveira Filho and Ratter (2002); Ribeiro and Walter (2008) and the present study. In parentheses and italics are the vegetation communities names as described in Portuguese.

Vegetation communities	Description
Gallery Forest <i>(Mata de Galeria)</i>	Forest vegetation with predominantly evergreen tree species, which borders small rivers and streams, forming a closed canopy corridor over the water course. The average height of the tree stratum varies between 20 and 30 meters and the canopy coverage ranges from 70% to 95%. This physiognomy can be subdivided into two types of due topography variations, water table height and, consequently, flooding occurrence: Non-floodable Gallery Forest (sampled in the present study) and Floodable Gallery Forest. This physiognomy is favored by higher soil fertility and greater water availability and throughout the year. There is a certain dissimilarity in woody flora between the two types of Gallery Forest and between these forests and other forest (e.g., Cerrado Woodland) and savanna (e.g., Dense Cerrado and Typical Cerrado) formations in the Cerrado Biome.
Woodland Cerrado <i>(Cerradão)</i>	Semideciduous forest vegetation with sclerophyllous characteristics (hard, leathery leaves), and understory formed by shrubs, herbs, and a few grasses. It is home to both woody species of savanna and other forest formations, with a predominance of savanna species. The height of the tree stratum ranges from 8 to 15 meters, has continuous canopy with tree cover ranging from 50% to 90%, with incipient shrub and

	<p>herbaceous strata. Soils are deep and well-drained, with moderate fertility and slight acidity. According to soil fertility and woody species composition, Cerrado Woodland can be subdivided into: Dystrophic Cerrado Woodland (shown in the present study) found on soils with low fertility and vegetation associated with transition with savannas, and Mesotrophic Woodland Cerrado, which occurs in intermediate fertility soils associated with the transition to mesophytic forests. These two Cerrado Woodland types show dissimilarity in their woody flora and a small group of indicator and dominant species in each of them.</p>
<p>Dense Cerrado (<i>Cerrado Denso</i>)</p>	<p>Semideciduous savanna vegetation with predominance of trees and characterized by the presence of low, sloped and crooked trees with irregular and twisted branching. Average height between 5 and 8 meters and canopy coverage ranging from 50% to 70%; therefore, the herbaceous and shrub strata are less dense. Height and density of plants of the shrub and tree strata of the vegetation are intermediate between those of Cerrado Woodland and the Typical Cerrado. However, the composition of woody species is more similar to that of other savanna formations (e.g., Typical Cerrado, Murundu Field).</p>
<p>Typical Cerrado (<i>Cerrado Típico</i>)</p>	<p>Semideciduous savanna vegetation with characteristics very similar to the Dense Cerrado, but distinguished by the spacing between woody individuals, which follows a decreasing density gradient from Woodland Cerrado and Dense Cerrado. Predominantly shrub-tree, with average coverage ranging from 3 to 6 meters and canopy coverage ranging from 20% to 50%. This partial shading of the shrub-tree stratum favors the establishment of a continuous herbaceous-grassy stratum. The composition of woody species is similar to other savanna</p>

	Cerrado formations (e.g., Rocky Cerrado and Murundu Field).
Murundu Field (<i>Campo de Murundu</i>)	Semideciduous savanna vegetation subjected to occasional flooding or waterlogged in the rainy season. It is characterized by the presence of shrubs and trees grouped into non-waterlogged elevations (called <i>Monchões</i> or <i>Murundus</i>) and subshrubs and herbs in the waterlogged and less elevated locations. The average height of the trees ranges from 3 to 6 meters and canopy coverage ranges from 50% to 70%. Soils are usually Gleisoiil, but with increased drainage over the murundus. The woody flora is similar to other savanna Cerrado formations (e.g., Typical Cerrado and Dense Cerrado), but there are also species that are more adapted to soil water saturation.
Palm Swamps (<i>Vereda</i>)	Evergreen savanna vegetation with monodominance of <i>Mauritia flexuosa</i> (buriti) in the upper stratum. Tree species are rarer and there is a continuous layer of herbaceous-subshrub species. Generally, this physiognomy is surrounded by humid fields (a grassy vegetation of the Cerrado) or by savanna formations, such as Typical Cerrado and Dense Cerrado. Palm Swamp present three zones linked to topography and soil drainage: edge – driest place and grassy vegetation area, with the presence of tree species; medium – soil moisture is variable, and the vegetation is typically grassy; and bottom–soil saturated with water, swampy, where <i>buriti</i> palms and shrub-tree species are concentrated. The average height of <i>buritis</i> ranges from 12 to 15 m and canopy cover of woody species ranges from 5% to 10%. Soils are Gleisoiils, saturated with water for most of the year. They occupy small, steep valleys with poorly defined drainage lines. The composition of woody species is similar to Non-floodable Gallery Forest.

Fig. S1. Sampled vegetation communities (*sensu* Ribeiro and Walter, 2008) from a vegetation mosaic in the Cerrado-Amazon transition zone, GF = Gallery Forest; CW= Cerrado Woodland; DC = Dense Cerrado; TC = Typical Cerrado; MF = Murundu Field and PS= Palm Swamp.

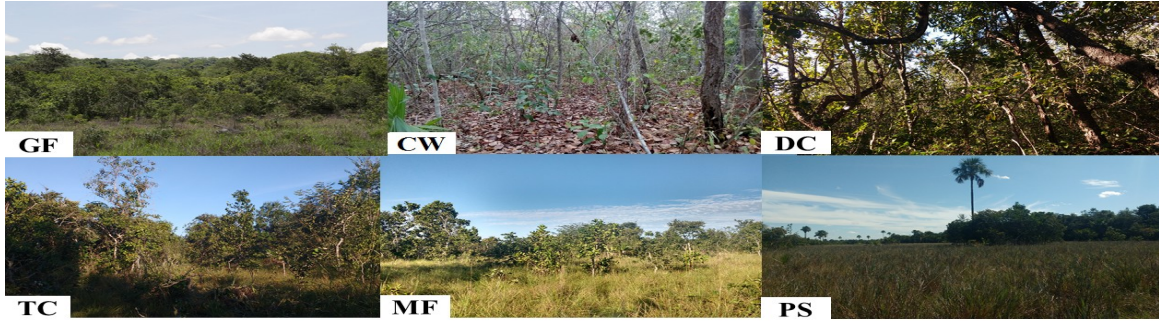


Table S2. Parameters, estimation, standard error, and t-values for the best models. CW= Cerrado Woodland; DC = Dense Cerrado; TC = Typical Cerrado; MF = Murundu Field and PS= Palm Swamps.

Parameter	Estimate	Std. Error	<i>t</i> -value
OM			
(Intercept)	23.97	11.84	2.03
WC	-8.06	14.71	-0.55
DC	4.77	14.49	0.33
TC	-2.71	12.89	-0.21
MF	-4.99	13.10	-0.38
PS	100.65	14.12	7.13
Base Saturation			
(Intercept)	46.91	4.15	11.31
WC	11.53	5.00	2.31
DC	32.98	4.80	6.87
TC	23.43	4.36	5.38
MF	28.33	4.50	6.29
PS	33.43	4.75	7.04
Sand			
(Intercept)	67.14	5.77	11.64
WC	19.69	7.18	2.74
DC	-12.04	6.94	-1.74
TC	-1.85	6.35	-0.29
MF	-4.32	6.34	-0.68
PS	-5.47	6.78	-0.81
Clay			
(Intercept)	236.00	22.00	10.73
WC	117.33	27.44	4.28
DC	-43.27	26.54	-1.63
TC	8.55	24.38	0.35
MF	1.50	24.19	0.06
PS	0.15	25.89	0.01
Silt			
(Intercept)	67.14	5.77	11.64

WC	19.69	7.18	2.74
DC	-12.04	6.94	-1.74
TC	-1.85	6.35	-0.29
MF	-4.32	6.34	-0.68
PS	-5.47	6.78	-0.81

Table S3. Mean and standard deviation of chemical and physical soil properties from a vegetation mosaic in the Cerrado and Amazon transition zone, Brazil. GF = Gallery Forest; CW= Cerrado Woodland; DC = Dense Cerrado; TC = Typical Cerrado; MF = Murundu Field and PS= Palm Swamps; n = number of plots with soil collection.

Variable	GF (n=5)	WC (n=9)	DC (n=11)	TC (n=22)	MF (n=24)	PS (n=13)
Base Saturation	22.67±17.95 ^a	10.28±2.42 ^a	79.905±4.41 ^b	70.45±4.98 ^c	74.43±6.98 ^{bc}	78.43±9.72 ^b
OM (g/dm ³)	24.80±4.50 ^a	24.11±2.98 ^a	29.09±4.78 ^a	20.23±2.39 ^a	20.04±3.28 ^a	124.08±67.63 ^b
Sand (g/Kg)	698.0±46.58 ^a	560.0±68.37 ^b	752.72±27.23 ^a	690.45±79.67 ^a	699.58±28.66 ^a	692.0±91.01 ^a
Silte (g/Kg)	66.00±11.40 ^{ab}	86.00±12.25 ^a	54.55±8.20 ^b	65.00±15.35 ^b	62.92±8.59 ^b	62.31±18.33 ^b
Clay (g/Kg)	236.0±35.77 ^a	353.33±56.56 ^b	192.72±21.90 ^a	244.54±65.37 ^a	237.50±21.11 ^a	24.0±71.21 ^a

Table S4. Woody species and their respective abundances, sampled from a vegetation mosaic in the Cerrado-Amazon transition zone, Brazil. Species are presented in decreasing order of the number of vegetation communities (VC) in which they occurred. Where: GF = Gallery Forest; CW= Cerrado Woodland; DC = Dense Cerrado; TC = Typical Cerrado; MF = Murundu Field; PS= Palm swamps and N = Number of individuals.

Species	Family	VC	GF	CW	DC	TC	MF	PS	N
<i>Kielmeyera coriacea</i> Mart. & Zucc.	Calophyllaceae	6	1	5	25	21	7	1	60
<i>Myrcia</i> sp. 3	Myrtaceae	6	3	3	4	12	15	1	38
<i>Vatairea macrocarpa</i> (Benth.) Ducke	Fabaceae	6	2	2	52	30	30	1	117
<i>Emmotum nitens</i> (Benth.) Miers	Metteniusaceae	6	1	2	38	21	5	6	73
<i>Euplassa inaequalis</i> (Pohl) Engl.	Proteaceae	5	1		11	10	20	2	44
<i>Maprounea guianensis</i> Aubl.	Euphorbiaceae	5	2	6	7	4	4		23
<i>Matayba guianensis</i> Aubl.	Sapindaceae	5	5	14	21	6	15		61
<i>Qualea multiflora</i> Mart.	Vochysiaceae	5		4	7	8	11	1	31
<i>Roupala montana</i> Aubl.	Proteaceae	5	1	19	75	172	20		287
<i>Syagrus flexuosa</i> (Mart.) Becc.	Arecaceae	5	3	24	69	267	8		371
<i>Xylopia aromatica</i> (Lam.) Mart.	Annonaceae	5		9	51	31	55	11	157
<i>Alibertia edulis</i> (Rich.) A. Rich.	Rubiaceae	5	3	4	11		2	6	26
<i>Andira cujabensis</i> Benth.	Fabaceae	5		2	7	8	5	4	26
<i>Brosimum gaudichaudii</i> Trécul	Moraceae	5	1	1	2	21	1		26
<i>Byrsonima coccolobifolia</i> Kunth	Malpighiaceae	4		2	8	53	7		70
<i>Byrsonima</i> cf. <i>sericea</i>	Malpighiaceae	4		7		8	2	2	19

<i>Connarus suberosus</i> Planch.	Connaraceae	5		5	17	20	1	1	44
<i>Curatella americana</i> L.	Dilleniaceae	4	1	17		72	138		228
<i>Diplopterys pubipetala</i> (A.Juss.) W.R.Anderson & C.C.Davis	Malpighiaceae	4	5	5		8	8		26
<i>Eriotheca gracilipes</i> (K.Schum.) A.Robyns	Malvaceae	4		1	6	10	2		19
<i>Erythroxylum suberosum</i> A.St.-Hil.	Erythroxylaceae	4		2	4	18	7		31
<i>Eugenia aurata</i> O.Berg	Myrtaceae	4		1	1	19	27		48
<i>Handroanthus ochraceus</i> (Cham.) Mattos	Bignoniaceae	4		5	2	35	7		49
<i>Mezilaurus crassiramea</i> (Meisn.) Taub. ex Mez	Lauraceae	5		1	56	110	2	1	170
<i>Protium heptaphyllum</i> (Aubl.) Marchand	Burseraceae	5	21	19		11	2	2	55
<i>Qualea grandiflora</i> Mart.	Vochysiaceae	4	1		2	49	3		55
<i>Qualea parviflora</i> Mart.	Vochysiaceae	4		1	39	123	121		284
<i>Syagrus comosa</i> (Mart.) Mart.	Arecaceae	4		25	5	157	37		224
<i>Terminalia argentea</i> Mart. & Zucc.	Combretaceae	4	1	46		146	13		206
<i>Aspidosperma tomentosum</i> Mart. & Zucc.	Apocynaceae	3			8	12	5		25
<i>Bowdichia virgilioides</i> Kunth	Fabaceae	4		3	3	28	1		35
<i>Davilla elliptica</i> A.St.-Hil.	Dilleniaceae	3			47	157	34		238
<i>Eriotheca</i> sp. 1	Malvaceae	3		1		9	5		15
<i>Erythroxylum engleri</i> O.E.Schulz	Erythroxylaceae	3			14	44	8		66
<i>Eugenia dysenterica</i> (Mart.) DC.	Myrtaceae	4		4	3	39	1		47
<i>Heteropterys byrsonimifolia</i> A.Juss.	Malpighiaceae	3		3		34	34		71

<i>Hirtella glandulosa</i> Spreng.	Chrysobalanaceae	4	5	6	9	4	24
<i>Hymenaea stigonocarpa</i> Mart. ex Hayne	Fabaceae	4		2	33	46	82
<i>Lafoensia pacari</i> A.St.-Hil.	Lythraceae	3			13	10	28
<i>Magonia pubescens</i> A.St.-Hil.	Sapindaceae	4	1	1	1	2	5
<i>Myrcia multiflora</i> (Lam.) DC.	Myrtaceae	4		1	11	96	117
<i>Myrcia tomentosa</i> (Aubl.) DC.	Myrtaceae	4	4	9	14	1	28
<i>Ouratea spectabilis</i> (Mart.) Engl.	Ochnaceae	4			28	26	58
<i>Pseudobombax longiflorum</i> (Mart.) A.Robyns	Malvaceae	3		3	26	44	73
<i>Simarouba amara</i> Aubl.	Simaroubaceae	4	2	11	4	2	19
<i>Vochysia rufa</i> Mart.	Vochysiaceae	3			15	13	43
<i>Xylopia sericea</i> A.St.-Hil.	Annonaceae	4	5	1	1	1	8
<i>Alchornea discolor</i> Poepp.	Euphorbiaceae	3	1	3	10		14
<i>Andira vermifuga</i> (Mart.) Benth.	Fabaceae	3	1		1	3	5
<i>Aspidosperma macrocarpon</i> Mart. & Zucc.	Apocynaceae	2			8	7	15
<i>Aspidosperma multiflorum</i> A.DC.	Apocynaceae	3		2	6	5	13
<i>Astronium fraxinifolium</i> Schott	Anacardiaceae	3	1	6	9		16
<i>Terminalia corrugata</i> (Ducke) Gere & Boatwr.	Combretaceae	3			15	15	34
<i>Byrsonima basiloba</i> * A.Juss.	Malpighiaceae	3			1	1	3
<i>Byrsonima pachyphylla</i> A.Juss.	Malpighiaceae	3			14	13	50
<i>Byrsonima verbascifolia</i> (L.) DC.	Malpighiaceae	3		1	1	10	12
<i>Callisthene fasciculata</i> Mart.	Vochysiaceae	3	6	3		3	12

<i>Campomanesia eugenioides</i> (Cambess.) D.Legrand ex Landrum	Myrtaceae	3	1	33		38		72
<i>Copaifera langsdorffii</i> Desf.	Fabaceae	3	2	9			3	14
<i>Couepia grandiflora</i> (Mart. & Zucc.) Benth. ex Hook. f.	Chrysobalanaceae	3				6	9	3
<i>Dalbergia miscolobium</i> Benth.	Fabaceae	3		2	4	9		15
<i>Dimorphandra mollis</i> Benth.	Fabaceae	3		2	10	9		21
<i>Dipteryx alata</i> Vogel	Fabaceae	3		1		5	5	11
<i>Eugenia gemmiflora</i> O.Berg	Myrtaceae	3				6	21	2
<i>Ferdinandusa elliptica</i> (Pohl) Pohl	Rubiaceae	3				3	3	2
<i>Guapira graciliflora</i> (Mart. ex Schmidt) Lundell	Nyctaginaceae	3				2	3	4
<i>Himatanthus articulatus</i> (Vahl) Woodson	Apocynaceae	3	12	2		2		16
<i>Kielmeyera rubriflora</i> Cambess.	Calophyllaceae	3				4	7	3
<i>Leptolobium dasycarpum</i> Vogel	Fabaceae	3	2				4	5
<i>Machaerium acutifolium</i> Vogel	Fabaceae	3	1	10			1	12
<i>Ouratea hexasperma</i> (A.St.-Hil.) Baill.	Ochnaceae	3		3	35	26		64
<i>Plathymenia reticulata</i> Benth.	Fabaceae	3				6	5	1
<i>Pouteria ramiflora</i> (Mart.) Radlk.	Sapotaceae	3		2	6	30		38
<i>Pterodon pubescens</i> (Benth.) Benth.	Fabaceae	3		1	21	27		49
<i>Simarouba versicolor</i> A.St.-Hil.	Simaroubaceae	2		3			2	5
<i>Stryphnodendron rotundifolium</i> Mart.	Fabaceae	3		1	1	1		3

<i>Tabebuia aurea</i> (Silva Manso) Benth. & Hook.f. ex S.Moore	Bignoniaceae	3		1		15	7		23
<i>Tachigali aurea</i> Tul.	Fabaceae	2				19	8		27
<i>Tapirira guianensis</i> Aubl.	Anacardiaceae	3			4		1	13	18
<i>Trichilia pallida</i> Sw.	Meliaceae	3	1	2		1			4
<i>Virola sebifera</i> Aubl.	Myristicaceae	3		1	27			5	33
<i>Vismia japurensis</i> Reichardt	Hypericaceae	3			1		1	3	5
<i>Annona coriacea</i> Mart.	Annonaceae	2				4	4		8
<i>Annona crassiflora</i> Mart.	Annonaceae	2			2	5			7
<i>Apuleia leiocarpa</i> (Vogel) J.F.Macbr.	Fabaceae	2	6	1					7
<i>Aspidosperma nobile</i> Müll.Arg.	Apocynaceae	2			1	4			5
<i>Bocageopsis mattogrossensis</i> (R.E.Fr.) R.E.Fr.	Annonaceae	2			1			1	2
<i>Caryocar brasiliense</i> Cambess.	Caryocaraceae	2			5	5			10
<i>Cecropia pachystachya</i> Trécul	Urticaceae	2	3					1	4
<i>Chaetocarpus echinocarpus</i> (Baill.) Ducke	Peraceae	2	7			3			10
<i>Coccoloba mollis</i> Casar. (Mart.) B.Walln.	Polygonaceae	2	4	1					5
	Ebenaceae	2			6	35			41
<i>Enterolobium gummiferum</i> (Mart.) J.F.Macbr.	Fabaceae	2			1	2			3
<i>Erythroxylum tortuosum</i> Mart	Erythroxylaceae	2				4	1		5
<i>Eugenia punicifolia</i> (Kunth) DC.	Myrtaceae	2			5	5			10
<i>Himatanthus obovatus</i> (Müll. Arg.) Woodson	Apocynaceae	2			1	8			9

<i>Inga cf. sertulifera</i>	Fabaceae	2	2	1			3
<i>Leptobalanus humilis</i> Cham. & Schldl.	Chrysobalanaceae	2			11	18	29
<i>Mouriri elliptica</i> Mart.	Melastomataceae	2			17	30	47
<i>Myrcia camapuanensis</i> N.Silveira	Myrtaceae	2		1		5	6
<i>Myrcia lanuginosa</i> O. Berg	Myrtaceae	2			8	13	21
<i>Neea theifera</i> Oerst.	Nyctaginaceae	2				1	1
<i>Peltogyne confertiflora</i> (Mart. ex Hayne) Benth.	Fabaceae	2			7	13	20
<i>Persea</i> sp. 1	Lauraceae	2	1	2			3
<i>Physocalymma scaberrimum</i> Pohl	Lythraceae	2	3	6			9
<i>Piptocarpha rotundifolia</i> (Less.) Baker	Asteraceae	2			1	4	5
<i>Plenckia populnea</i> Reissek	Celastraceae	2			1	1	2
<i>Rourea induta</i> Planch.	Connaraceae	2			3	2	5
<i>Salacia crassifolia</i> (Mart. ex Schult.) G.Don	Celastraceae	2			4	10	14
<i>Salvertia convallariodora</i> A.St.-Hil.	Vochysiaceae	2			2	1	3
<i>Didymopanax macrocarpus</i> (Cham. & Schldl.) Frodin	Araliaceae	2	3	4			7
<i>Didymopanax morototoni</i> (Aubl.) Maguire et al.	Araliaceae	2	6		1		7
<i>Secondatia densiflora</i> A.DC.	Apocynaceae	2	1			1	2
<i>Siparuna guianensis</i> Aubl.	Siparunaceae	2	1			1	2
<i>Stryphnodendron fissuratum</i> E.M.O.Martins	Fabaceae	2			1	1	2
<i>Tachigali vulgaris</i> L.G.Silva & H.C.Lima	Fabaceae	2		17		9	26

<i>Vernonanthura ferruginea</i> * (Less.) H.Rob	Asteraceae	2		1	1	2
<i>Aegiphila verticillata</i> Vell.	Lamiaceae	1			2	2
<i>Agonandra brasiliensis</i> Miers ex Benth. & Hook.f.	Opiliaceae	1		4		4
<i>Anacardium occidentale</i> L.	Anacardiaceae	1		1		1
<i>Annona</i> sp. 1	Annonaceae	1			1	1
<i>Aspidosperma subincanum</i> Mart.	Apocynaceae	1			1	1
<i>Bauhinia brevipes</i> Vogel	Fabaceae	1	3			3
<i>Bauhinia</i> sp. 1	Fabaceae	1	3			3
<i>Byrsonima umbellata</i> Mart. ex A.Juss.	Malpighiaceae	1				63 63
<i>Calophyllum brasiliense</i> Cambess.	Calophyllaceae	1				6 6
<i>Casearia</i> sp. 1	Salicaceae	1	3			3
<i>Casearia sylvestris</i> Sw.	Salicaceae	1			7	7
<i>Cheiloclinium cognatum</i> (Miers) A.C.Sm.	Celastraceae	1	5			5
Chrysobalanaceae sp. 1	Chrysobalanaceae	1	1			1
Sapindaceae sp.1	Sapindaceae	1	1			1
<i>Clusia</i> sp. 1	Clusiaceae	1				2 2
Combretaceae sp. 1	Combretaceae	1	1			1
<i>Copaifera martii</i> Hayne.	Fabaceae	1		1		1
<i>Cordia sessilis</i> (Vell.) Kuntze	Rubiaceae	1		1		1
<i>Coussarea</i> sp. 1	Rubiaceae	1	2			2

<i>Cupania vernalis</i> Cambess.	Sapindaceae	1	1		1
<i>Davilla nitida</i> (Vahl) Kubitzki	Dilleniaceae	1			1 1
<i>Dilodendron bipinnatum</i> Radlk.	Sapindaceae	1	1		1
<i>Diospyros</i> sp. 1	Ebenaceae	1	1		1
<i>Doliocarpus</i> cf. <i>dentatus</i>	Dilleniaceae	1	3		3
<i>Erythroxylum daphnites</i> Mart.	Erythroxylaceae	1		2	2
<i>Ferdinandusa speciosa</i> (Pohl) Pohl	Rubiaceae	1			23 23
<i>Fridericia candicans</i> (Rich.) L.G.Lohmann	Bignoniaceae	1	5		5
<i>Fridericia</i> cf. <i>florida</i>	Bignoniaceae	1	1		1
<i>Guazuma ulmifolia</i> Lam.	Malvaceae	1	3		3
<i>Hancornia speciosa</i> Gomes	Apocynaceae	1		3	3
<i>Handroanthus impetiginosus</i> (Mart. ex DC.) Mattos	Bignoniaceae	1	1		1
<i>Heteropterys eglandulosa</i> A. Juss.	Malpighiaceae	1			1 1
<i>Hirtella gracilipes</i> (Hook.f.) Prance	Chrysobalanaceae	1	8		8
<i>Hymenaea courbaril</i> L.	Fabaceae	1	4		4
<i>Hymenaea martiana</i> Hayne	Fabaceae	1	1		1
<i>Ilex affinis</i> Gardner	Aquifoliaceae	1			1 1
<i>Lacistema aggregatum</i> (P.J.Bergius) Rusby	Lacistemataceae	1		3	3
<i>Leptobalanus gardneri</i> (Hook.f.) Fritsch	Chrysobalanaceae	1	1		1
<i>Leptobalanus sclerophyllus</i> (Hook.f.) Fritsch	Chrysobalanaceae	1	1		1

<i>Mabea pohliana</i> (Benth.) Müll.Arg.	Euphorbiaceae	1	5		5
<i>Mauritia flexuosa</i> L.f.	Arecaceae	1		2	2
<i>Miconia albicans</i> (Sw.) Triana	Melastomataceae	1		3	3
<i>Miconia chamissois</i> Naudin	Melastomataceae	1		1	1
<i>Micropholis venulosa</i> (Mart. & Eichler) Pierre	Sapotaceae	1	12		12
<i>Myrcia</i> sp. 1	Myrtaceae	1		1	1
<i>Myrcia</i> sp. 2	Myrtaceae	1		2	2
<i>Nectandra cuspidata</i> Nees	Lauraceae	1	2		2
<i>Nectandra</i> sp. 1	Lauraceae	1	6		6
NI sp. 1		1		1	1
NI sp. 2		1	1		1
<i>Odontadenia puncticulosa</i> (Rich.) Pulle	Apocynaceae	1	2		2
<i>Platypodium elegans</i> Vogel	Fabaceae	1	1		1
<i>Pouteria torta</i> (Mart.) Radlk.	Sapotaceae	1	1		1
<i>Pseudolmedia laevigata</i> Trécul	Moraceae	1	1		1
<i>Richeria grandis</i> Vahl	Phyllanthaceae	1		12	12
<i>Salacia elliptica</i> (Mart.) G. Don	Celastraceae	1	1		1
<i>Salacia impressifolia</i> (Miers) A.C. Sm.	Celastraceae	1	3		3
Santalaceae sp. 1	Santalaceae	1		1	1
<i>Didymopanax vinosus</i> (Cham. & Schltldl.) Frodin & Fiaschi	Araliaceae	1		1	1

<i>Schnella outimouta</i> (Aubl.) Wunderlin	Fabaceae	1	11						11	
<i>Serjania</i> cf. <i>caracasana</i>	Sapindaceae	1		1					1	
<i>Strychnos guianensis</i> (Aubl.) Mart.	Loganiaceae	1			29				29	
<i>Strychnos sandwithiana</i> Krukoff & Barneby	Loganiaceae	1	1						1	
<i>Styrax pohlii</i> A.DC.	Styracaceae	1					1		1	
<i>Tabebuia roseoalba</i> (Ridl.) Sandwith	Bignoniaceae	1	2						2	
<i>Protium altissimum</i> (Aubl.) Swart	Burseraceae	1	13						13	
<i>Tocoyena formosa</i> (Cham. & Schltdl.) K.Schum.	Rubiaceae	1			1				1	
<i>Trichilia claussenii</i> C.DC.	Meliaceae	1	1						1	
<i>Vochysia pyramidalis</i> Mart.	Vochysiaceae	1					2		2	
<i>Xylopia emarginata</i> Mart.	Annonaceae	1					1		1	
<i>Zeyheria montana</i> Mart.	Bignoniaceae	1		3					3	
				244	408	985	2516	856	187	5196
		188	77	73	80	102	109	37	188	