



Vascular flora of Serra do Japi Biological Reserve, Jundiaí, southeastern Brazil

Flora vascular da Reserva Biológica Municipal da Serra do Japi, Jundiaí, SP

Julio Antonio Lombardi^{1,2,5}, Carolina da Silva Carvalho³, Leonardo Biral⁴, Mariana Naomi Saka⁴
& Sean Miki Hieda³

Abstract

Floristic sampling was carried out in Serra do Japi Biological Reserve, Jundiaí, state of São Paulo, Brazil, including physiognomies of semideciduous montane forest, a type of forest formation within the Atlantic Forest domain. Six hundred and sixty one species distributed in 129 families were recorded; the ten most diverse phanerogam families were: Asteraceae (56 species), Fabaceae (37), Rubiaceae (29), Poaceae (25), Solanaceae (24), Cyperaceae (19), Euphorbiaceae (19), Orchidaceae (19), Melastomataceae (17), and Piperaceae (17). The addition of 322 species from other floristic surveys increased the number of species of Serra do Japi to 976, distributed in 141 families. Compared to other floristic surveys carried out in the Atlantic Forest, our results highlight the floristic diversity of the study area and the importance of preserving the vegetation of this highly urbanized region.

Keywords: Brazil, semideciduous montane forest, floristic, Atlantic Forest, vascular plants.

Resumo

Amostragem florística foi feita em áreas da Reserva Biológica Municipal da Serra do Japi, Jundiaí, Estado de São Paulo, incluindo fisionomias de floresta semidecídua montana, classificada como parte das formações da Mata Atlântica. Foram encontradas 661 espécies em 129 famílias, as dez fanerogâmicas mais diversas foram: Asteraceae (56 espécies), Fabaceae (37), Rubiaceae (29), Poaceae (25), Solanaceae (24), Cyperaceae (19), Euphorbiaceae (19), Orchidaceae (19), Melastomataceae (17), e Piperaceae (17). O acréscimo de 322 espécies adicionais compiladas de listagens florísticas suplementares eleva, para a Serra do Japi em geral, o número registrado a 976 espécies em 141 famílias. Comparada a outros levantamentos florísticos na Mata Atlântica, esses resultados demonstram a diversidade florística da área estudada e ressaltam o valor da preservação da vegetação nessa região altamente urbanizada.

Palavras-chave: Brasil, floresta semidecídua montana, florística, Mata Atlântica, plantas vasculares.

Introduction

The Atlantic Forest is highly complex, both floristically and structurally. In the past, it covered an almost continuous range along the coast, from the state of Rio Grande do Norte to the state of Rio Grande do Sul, which represents ca. 12% of the Brazilian territory (Consórcio Mata

Atlântica 1992; Fundação SOS Mata Atlântica & INPE 2002; Galindo-Leal & Câmara 2003). It comprises different vegetation types, from forests to fields. Its current legal circumscription is given by Decree no. 750/93, which deals with the use of the Atlantic Forest, defining it as forest formations and associated ecosystems inserted

This paper has additional data published in its electronic version.

¹ Universidade Estadual Paulista – UNESP, Instituto de Biociências de Rio Claro, Depto. Botânica, Av. 24-A 1515, 13506-900, Rio Claro, SP, Brazil.

² Research Productivity Fellowship CNPq, process 300240/2009-0.

³ PIBIC Scholarship CNPq/UNESP, Undergraduate Program in Biological Sciences, Instituto de Biociências de Rio Claro, UNESP – Universidade Estadual Paulista, Av. 24-A 1515, 13506-900, Rio Claro, São Paulo, Brazil.

⁴ CNPq Scholarship. Graduate Program in Biological Sciences (Plant Biology), Instituto de Biociências de Rio Claro, UNESP – Universidade Estadual Paulista, Av. 24-A 1515, 13506-900, Rio Claro, São Paulo, Brazil.

⁵ Corresponding author: e-mail: cissus@rc.unesp.br

in the domain of the Atlantic Forest, with their respective official delimitations established (IBGE 1991).

The flora of the Atlantic Forest was estimated in 20 thousand species of vascular plants, of which approximately eight thousand would be endemic (Myers *et al.* 2000). Although this estimate allows us to place this formation within the so-called biodiversity hotspots (Mittermeier *et al.* 2004), we can still consider it relatively poorly known, in particular because from 1990 to 2006 more than 1,100 new species from this biome were described; over 40% of more than 1,100 new species described from Brazil were made from this biome (Sobral & Stehmann 2009). Floristic inventories including non-tree species are relatively rare in the Atlantic Forest, whereas tree species are better known, mainly due to several phytosociological studies carried out in the state of São Paulo (e.g. Leitão-Filho 1982).

The Serra do Japi range is considered a priority area for conservation, representing the largest inland continuous forest of the state of São Paulo, and, despite the impacts of mining, logging and human occupation that it has undergone, it still represents an important remnant of the flora and fauna of southeastern Brazil (Joly 1992; Leitão-Filho & Morellato 1997, Morellato 1992a).

The range is located in a highly populated region within the urban areas of São Paulo, Jundiaí, and Campinas, which potentializes the risks of disordered occupation that the area is subjected to. However, since 1983, Serra do Japi is under governmental trust (CONDEPHAAT - Conselho de Defesa do Patrimônio Histórico, Arqueológico, Artístico e Turístico do Estado/Council for the Defense of the Historical, Archaeological, Artistic and Touristic Heritage) and, from 1984 on, it was declared a reserve (APA - Área de Proteção Ambiental/Environmental Protection Area), partially located within the municipalities of Jundiaí and Cabreúva. The Serra do Japi Biological Reserve (RBMSJ - Reserva Biológica Municipal da Serra do Japi) was created in 1992 (Jundiaí 1991-1992), and in 1993 it was included in the Atlantic Forest Biosphere Reserve (Leitão-Filho & Morellato 1997).

The Serra do Japi Biological Reserve has been extensively studied in terms of arboreal flora (Cardoso-Leite *et al.* 2002; Leitão-Filho 1992; Rodrigues *et al.* 1989), physiognomy (Cardoso-

Leite *et al.* 2005; Rodrigues & Shepherd 1992), phenology (Morellato *et al.* 1989; Morellato *et al.* 1990; Morellato 1992b), and fauna (e.g. Brown Jr. 1992; Haddad & Sazima 1992; Marinho-Filho 1992; Sazima & Haddad 1992; Silva 1992).

The objective of the present study was to contribute to the knowledge of the flora of Serra do Japi Biological Reserve, creating a floristic list that includes all life forms, thus complementing the lists already published for the area and comparing it to other lists and taxonomic studies, aiming to check the presence of invasive, rare or endemic species, in order to give support to future conservation and management projects.

Material and Methods

Study area

The massif of Serra do Japi is located within the municipalities of Jundiaí, Itupeva, Cabreúva, Pirapora do Bom Jesus, and Cajamar, approximately between 23°11'S and 46°52'W, and covers 354 km² (Leitão-Filho & Morellato 1997). The altitude of this mountain varies from 700 to 1,300 m, and its average annual temperature varies from 15.7°C in the highest areas to 19.2°C in the lowest areas. July is the coldest month, with average temperatures between 11.8 °C and 15.3°C; the warmest month is January, with average temperatures between 18.4°C and 22.2°C. Hence, the local summer is warm and humid and the winter is cold and dry (Pinto 1992).

Serra do Japi Biological Reserve is located within the municipality of Jundiaí (between 23°12'-23°21'S and 46°30'-46°05'W), and comprises 2,071.20 ha (Fig. 1) covered mainly by seasonal semideciduous montane forest (Cardoso-Leite *et al.* 2005; IBGE 1991; Jundiaí 1991-1992).

Collections of botanical material were carried out monthly, from May 2007 to November 2008; only reproductive specimens were collected. Marked trails were covered, with eventual incursions into the surrounding vegetation. Considering that previous inventories focused on sampling the tree stratum, we focused on sampling specimens of other life forms, mainly herbs and lianas.

The samples were pressed and dried following Fidalgo & Bononi (1984) and notes on life form, height, color, and other characters were taken. Exsiccates were deposited in the collection of Herbarium Rioclarense (HRCB),

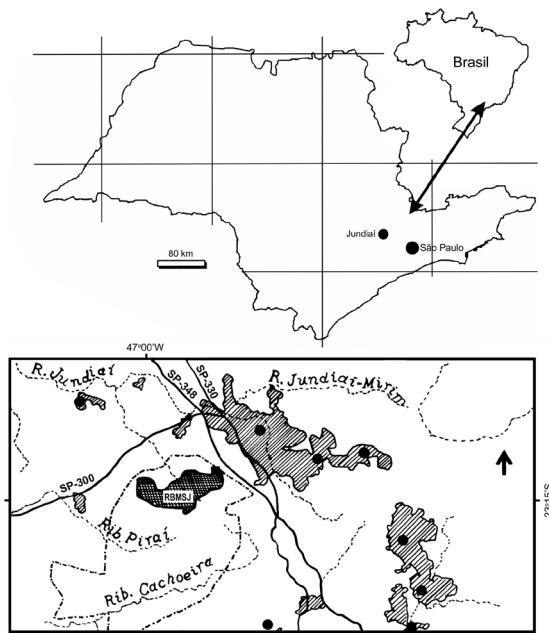


Figura 1 — Location of the municipality of Jundiaí in the state of São Paulo and of Serra do Japi Biological Reserve, showing the surrounding urban areas (adapted from Cardoso-Leite *et al.* 2005 and Neves & Cardoso 2006).

of the Institute of Bioscience of Rio Claro, Universidade Estadual Paulista (UNESP). Species were identified based on the literature, exchange of duplicates and consultation with specialists, as well as by comparison with identified specimens deposited in other herbaria in the state of São Paulo (Appendix 1). The abbreviations of herbaria followed Thiers (2009). The classification of angiosperms followed APG III (2009), whereas the classification of Lycophyta, Moniliophyta, and gymnosperms followed, respectively, Kramer & Tryon (1990), Smith *et al.* (2006), and Page (1990).

The floristic list presented encompasses species collected in this inventory, plus species reported as occurring in the area in previously published lists for Serra do Japi (Cardoso-Leite *et al.* 2002; Leitão-Filho 1992; Pansarin & Pansarin 2008; Rodrigues *et al.* 1989). Vouchers are mentioned only for collections carried out in the present study.

Names of native species included in the lists presented here were checked on the Lista de

Espécies da Flora do Brasil (Forzza *et al.* 2010). The botanical synonymy and authorship of species were checked in the literature (Forzza *et al.* 2010, "The Plant List"), and through consultation with specialists. Whenever necessary, updating and correction were made.

In the floristic comparison among Atlantic Forest areas (Braga 2005), only species collected in the present inventory were considered; the six other areas of Atlantic Forest *s.l.* used for comparison were selected from papers published in the past ten years, which were extensive and not restricted to a particular life form: Araldo Forest (Mata do Araldo), state of Paraná (Souza & Monteiro 2005); Santa Genebra Municipal Reserve (Reserva Municipal de Santa Genebra), Campinas, state of São Paulo (Guaratini *et al.* 2008); Caratinga Biological Station (Estação Biológica de Caratinga) and Rio Doce State Park (Parque Estadual do Rio Doce), state of Minas Gerais (Lombardi & Gonçalves 2000); João Vasconcelos-Sobrinho Ecological Park (Parque Ecológico João Vasconcelos-Sobrinho), state of Pernambuco (Rodal & Sales 2007); Intervales State Park (Parque Estadual Intervales), Saibadela Base, state of São Paulo (Zipparro *et al.* 2005); Toró Forest (Mata do Toró), state of Pernambuco (Rodal *et al.* 2005).

Results and Discussion

In the Serra do Japi Biological Reserve, 661 species from 129 families (Appendix 1) were collected. The ten best-represented phanerogam families were: Asteraceae (56 species), Fabaceae (37), Rubiaceae (29), Poaceae (25), Solanaceae (24), Cyperaceae (19), Euphorbiaceae (19), Orchidaceae (19), Melastomataceae (17), and Piperaceae (17). Among pteridophytes, the three most important families were: Polypodiaceae, Pteridaceae (11 species each), and Blechnaceae (6).

The addition of 322 species compiled from other floristic lists increased the number of species recorded for Serra do Japi to 976 species from 141 families. Compared to the other inventories selected (Tab. 1), the number of species sampled in the present study was only smaller than that reported in the inventory of the Atlantic Forest of Minas Gerais (Lombardi & Gonçalves 2000), which includes two areas: Caratinga Biological

Station (Estação Biológica de Caratinga) and Rio Doce State Park (Parque Estadual do Rio Doce). The ten most common families were also present in the other inventories used for comparison; Fabaceae was the most important family in terms of number of species in eight inventories, whereas in Serra do Japi Biological Reserve the predominance of Asteraceae over Fabaceae is explained by the inclusion of ruderal species in the present study.

Although all sampled areas exhibited different signs of anthropic alteration, the large number of species found in this study highlights the high floristic richness of the region. Additional collections could add more species to the list presented here.

The identification of the specimens sampled in Serra do Japi Biological Reserve recorded species previously considered extinct in the state: *Prestonia solanifolia* (Müll.Arg.) Woodson and *Peperomia nitida* Dahlst. (Mamede *et al.* 2007), as well as several species considered vulnerable: *Cissampelos pareira* L., *Dicksonia sellowiana* Hook., *Eugenia brasiliensis* Lam., *Euterpe edulis* Mart., and *Trichilia hirta* L. (Mamede *et al.* 2007).

Cissus striata subsp. *argentina* (Suess.) Lombardi was observed in the region, which had been previously recorded for the state of São Paulo only in collections from the municipalities of São Bernardo do Campo and Campos do Jordão, where it was found up to the Caparaó Mountain Range (Serra do Caparaó), state of Minas Gerais, always in high-altitude areas, but with its geographic distribution restricted mainly to southern Brazil and northern Argentina (Lombardi 2000, 2002). Moreover, a new species, *Sida* sp. nov., was discovered and is being described (A. Krapovickas, personal communication).

In Serra do Japi Biological Reserve, 112 of the collected species can be classified as cultivated, both non-invasive (29 species) or invasive (83 species) (Appendix 1).

The species considered as cultivated non-invasive were collected in the surroundings of the Ecological Base (head office) or in ruins of abandoned residences, and were apparently unable to self-propagate, since other individuals outside these sites have not been observed. These species, according to Colautti & MacIsaac

(2004), are non-invasive and classified in stages III and IVb, non-native species that, respectively, have restricted populations and are numerically rare, or are locally restricted but dominant in the area.

The species considered as invasive here are non-native with a capacity for self-propagation, represented by widely distributed individuals and apparently maintaining a population in the study areas, which, according to Colautti & MacIsaac (2004), are invasive species classified in stages IVa and V, non-native species that are well distributed in the study area and, respectively, rare or dominant. The vast majority of these species are herbs, few are ornamental woody or fruit-bearing. Especially common along the trails and most illuminated areas are the herbs *Impatiens walleriana* Hook.f., very common along trails and borders, particularly in humid areas, and *Crocosmia crocosmiiflora* (Lemoine ex Morren) N.E.Br. that occurs in more restricted areas, mainly along the trail Ecological Base-Belvedere (Base Ecológica-Mirante), which has more intense visitation. Some tree or shrub species, such as *Eriobotrya japonica* (Thunb.) Lindl. and *Citrus limon* (L.) Burm.f., are sometimes found growing in the forest; the dispersal of these species is probably carried out by the autochthonous fauna, such as birds, taking into account that they are dispersed in the region.

We considered these invasive species to be integrated in the ecosystem, in a 'natural' evolution under human interference; according to some authors, efforts to amend situations such as these are useless and considered a waste of resources (Hobbs *et al.* 2006). Eradicating these species in order to restore the ecosystem to a previous condition is probably very difficult, or even impossible, since these species are well distributed in the study areas, though they occupy areas of relatively narrow ecological range, on borders and humid areas, where they can be rare (stage IVa: *Eriobotrya japonica* and *Citrus limon*) or dominant (stage V: *Impatiens walleriana* and *Crocosmia crocosmiiflora*).

The species richness observed in the Serra do Japi Biological Reserve shows the great importance of this area for biodiversity conservation in a region of the state of São Paulo where few areas with extensive native vegetation are found. The conservation of this important

Table 1 — Comparison between that floristic survey on the "Reserva Biológica Municipal da Serra do Japi" (RBMSJ) and six others on Atlantic Forest *s.l.* areas, showing the top ten families in number of species. ARAL = Mata do Araldo, Porto Rico, PR (Souza & Monteiro 2005); CAMP = Reserva Municipal de Santa Genebra, Campinas, SP (Guaratini *et al.* 2008); EBC+PERD = Estação Biológica de Caratinga (EBC) and Parque Estadual do Rio Doce (PERD), Caratinga (EBC) and Mariéria, Timóteo and Dionísio (PERD), MG (Lombardi & Gonçalves 2000); PEJVS = Parque Ecológico João Vasconcelos-Sobrinho, Caruaru, PE (Rodal & Sales 2007); SAIBA = Parque Estadual Intervales, Base Saibadela (Zipparro *et al.* 2005); and TORÓ = Mata do Toró, Estação Ecológica do Tapacurá, São Lourenço da Mata, PE (Rodal *et al.* 2005). Total = total number of species, in each area.

RBMSJ	ARAL	CAMP	EBC+PERD	PEJVS	SAIBA	TORÓ
Asteraceae (56)	Fabaceae (20)	Fabaceae (18)	Fabaceae (125)	Fabaceae (51)	Myrtaceae (55)	Fabaceae (29)
Fabaceae (37)	Myrtaceae (9)	Rubiaceae (18)	Rubiaceae (69)	Asteraceae (20)	Rubiaceae (32)	Rubiaceae (12)
Rubiaceae (29)	Poaceae (9)	Myrtaceae (14)	Asteraceae (51)	Rubiaceae (19)	Fabaceae (25)	Euphorbiaceae (10)
Poaceae (25)	Rubiaceae (9)	Rutaceae (11)	Bignoniacae (49)	Solanaceae (14)	Melastomataceae (23)	Myrtaceae (9)
Solanaceae (24)	Bignoniacae (8)	Solanaceae (9)	Myrtaceae (39)	Myrtaceae (13)	Araceae (20)	Sapindaceae (8)
Cyperaceae (19)	Solanaceae (6)	Sapindaceae (9)	Solanaceae (33)	Melastomataceae (12)	Lauraceae (14)	Apocynaceae (7)
Euphorbiaceae (19)	Meliaceae (5)	Bignoniacae (8)	Euphorbiaceae (32)	Acanthaceae (8)	Orchidaceae (14)	Erythroxylaceae (6)
Orchidaceae (19)	Rutaceae (5)	Meliaceae (8)	Melastomataceae (31)	Cyperaceae (8)	Solanaceae (14)	Melastomataceae (6)
Melastomataceae (17)	Asteraceae (4)	Euphorbiaceae (8)	Malpighiaceae (21)	Euphorbiaceae (8)	Celastraceae (12)	Verbenaceae (6)
Piperaceae (16)	Lauraceae (4)	Malvaceae (7)	Moraceae (19)	Araceae (7)	Piperaceae (11)	Cyperaceae (5)
Total	647	165	201	1048	332	436
					202	

reserve with 2,071.20 ha of vegetation, despite the alterations that it has undergone so far, is even more urgent in a region where urbanization and industrialization are very intensive (Florgård 2004). Furthermore, it is very important to preserve headwaters and to promote well-being in the region (Gowdy 1997; Kellert 1993; Pretty 2004; Ulrich 1993).

Acknowledgments

FAPESP – São Paulo Research Foundation (process no. 2006/07225-4) funded this research. CNPq - National Council for Scientific and Technological Development granted JAL (process number 306395/2006-1) a research productivity fellowship and CSC, MNS, and SMH undergraduate research scholarships. Jundiaí City Administration (Prefeitura Municipal de Jundiaí) and the Municipal Department of Planning and Environment (Secretaria Municipal de Planejamento e Meio Ambiente) granted us a permit for carrying out the present study. We also thank one anonymous reviewer, whose criticisms improved substantially the writing style of the manuscript. João Vasconcellos Neto helped us elaborate the original project. Natália Macedo Ivanauskas gave us invaluable suggestions for an early version of the manuscript. The specialists reported in the species list helped identifying species.

References

- APG – Angiosperm Phylogeny Group. 2009. An update of the Angiosperm Phylogeny Group classification for the orders and families of flowering plants: APG III. *Botanical Journal of the Linnean Society of London* 161: 105-121.
- Braga, J.M.A. 2005. Marantaceae – novidades taxonômicas e nomenclaturais III: tipificações, sinônimias e uma nova combinação em *Calathea*. *Acta Botanica Brasilica* 19: 763-768.
- Brown Jr., K.S. 1992. Borboletas da Serra do Japi: diversidade, hábitos, recursos alimentares e variação temporal. In: Morellato, L.P.C. (ed.) *História natural da Serra do Japi*. Editora da UNICAMP, FAPESP, Campinas. Pp. 142-186.
- Cardoso-Leite, E.; Pagani, M.I.; Hamburger, D.S. & Monteiro, R.R. 2002. Fitofisionomia, fitossociologia e conservação da vegetação na Reserva Biológica Municipal da Serra do Japi, Jundiaí, SP. *Naturalia (Rio Claro)* 27: 165-200.
- Cardoso-Leite, E.; Pagani, M.I.; Monteiro, R.R. & Hamburger, D.S. 2005. Ecologia da paisagem: mapeamento da vegetação da Reserva Biológica da Serra do Japi, Jundiaí, SP, Brasil. *Acta Botanica Brasiliaca* 19: 233-243.
- Consórcio Mata Atlântica. 1992. Reserva da Biosfera da Floresta Atlântica. Plano de ação. Referências básicas. Vol. 1. Editora da Universidade Estadual de Campinas, Campinas. 147p.
- Colautti, R.I. & MacIsaac, H.J. 2004. A neutral terminology to define "invasive" species. *Diversity and Distributions* 10: 135-141.
- Forzza, R. C. et al. 2010. Lista de Espécies da Flora do Brasil. 2010 [continuamente atualizado]. Available in <<http://floradobrasil.jbrj.gov.br/2010/>>. Access on 16 May 2011.
- Fidalgo, O. & Bononi, V.L.R. 1984. Técnicas de coleta, preservação e herborização de material botânico. Instituto de Botânica, São Paulo. 62p.
- Florgård, C. 2004. Remaining original natural vegetation in towns and cities – Introduction. *Urban Forestry & Urban Greening* 3: 1-2.
- Fundaçao SOS Mata Atlântica & INPE. 2002. Atlas dos remanescentes florestais da Mata Atlântica; período 1995–2000. Available in <<http://mtc-m12.sid.inpe.br/col/sid.inpe.br/jeferson/2003/06.02.07.45/doc/RelatorioAtlas.pdf>>. Access on 20 Jun 2012.
- Galindo-Leal, C. & Câmara, I.G. 2003. Atlantic Forest hotspots status: an overview. In: Galindo-Leal, C. & Câmara, I.G. (eds.). *The Atlantic Forest of South America: biodiversity status, threats, and outlook*. Center for Applied Biodiversity Science e Island Press, Washington. Pp. 3-11.
- Gowdy, J. M. 1997. The value of biodiversity: markets, society, and ecosystems. *Land Economics* 73: 25-41.
- Guaratini, M.T.G.; Gomes, E.P.C.; Tamashiro, J.Y. & Rodrigues, R.R. 2008. Composição florística da Reserva Municipal de Santa Genebra, Campinas, SP. *Revista Brasileira de Botânica* 31: 323-337.
- Haddad, C.F.B. & Sazima, I. 1992. Anfíbios anuros da Serra do Japi. In: Morellato, L.P.C. (ed.) *História Natural da Serra do Japi*. Editora da UNICAMP, FAPESP, Campinas. Pp. 188-211.
- Hobbs, R.J.; Arico, S.; Aronson, J.; Baron, J.S.; Bridgewater, P.; Cramer, V.A.; Epstein, P.R.; Ewel, J.J.; Klink, C.A.; Lugo, A.E.; Norton, D.; Ojima, D.; Richardson, D.M.; Sanderson, E.W.; Valladares, F.; Vilà, M.; Zamora, R. & Zobel, M. 2006. Novel ecosystems: theoretical and management aspects of the new ecological world order. *Global Ecology & Biogeography* 15: 1-7.
- IBGE – Fundação Instituto Brasileiro de Geografia e Estatística. 1991. Manual técnico da vegetação brasileira. Série Manuais Técnicos em Geociências. Secretaria do Orçamento e Coordenação da Presidência da República, Rio de Janeiro. 92p.

- Joly, C.A. 1992. A preservação da Serra do Japi. In: Morellato, L.P.C. (ed.). História natural da Serra do Japi. Editora da UNICAMP, FAPESP, Campinas. Pp. 310-321.
- Jundiaí (Município). Lei nº 3.672, de 10 de janeiro de 1991. Cria a Reserva Biológica Municipal da Serra do Japi. Decreto nº 13.196, de 30 de dezembro de 1992. Available in <[http://www.jundiai.sp.gov.br/PMJSITE/biblio.nsf/V03.01/lei_3672-91/\\$file/lei_3672-91.pdf](http://www.jundiai.sp.gov.br/PMJSITE/biblio.nsf/V03.01/lei_3672-91/$file/lei_3672-91.pdf)>. Access on 28 Jul 2009.
- Kellert, S.R. 1993. The biological basis for human values of nature. In: Kellert, S.R. & Wilson, E.O. (eds.). The biophilia hypothesis. Island Press, Washington. Pp. 42-69.
- Kramer, K.U. & Tryon, R.M. 1990. Introduction to the treatment of pteridophytes. In: Kramer, K.U. & Green, P.S. (eds.). The families and genera of vascular plants. I. Pteridophytes and Gymnosperms. Springer-Verlag, Berlin. Pp. 12-13.
- Leitão-Filho, H.F. 1982. Aspectos taxonômicos das florestas do estado de São Paulo. Silvicultura em São Paulo 16: 197-206.
- Leitão-Filho, H.F. 1992. A flora arbórea da Serra do Japi. In: Morellato, L.P.C. (ed.). História natural da Serra do Japi. Editora da UNICAMP, FAPESP, Campinas. Pp. 40-62.
- Leitão-Filho, H.F. & Morellato, L.P.C. 1997. Semideciduous forests of Southeastern Brasil – Serra do Japi. In: Davis, S.D.; Heywood, V.H.; Herrera-MacBryde, O.; Villa-Lobos, J. & Hamilton, A.C. (eds.). Centres for plant diversity: a guide and strategy for their conservation. IUCN, WWF, Washington. Pp. 381-384.
- Lombardi, J.A. 2000. Vitaceae – gêneros *Ampelocissus*, *Ampelopsis* e *Cissus*. Flora Neotropica Monograph 80: 1-250.
- Lombardi, J.A. 2002. Vitaceae. In: Wanderley, M.G.L.; Shepherd, G.J.; Giulietti, A.M.; Melhem, T.S.; Bittrich, V. & Kameyama, C. Flora fanerogâmica do estado de São Paulo. HUCITEC, FAPESP, São Paulo. Vol. 2. Pp. 365-374.
- Lombardi, J.A & Gonçalves, M. 2000. Composição florística de dois remanescentes de Mata Atlântica do sudeste de Minas Gerais, Brasil. Revista Brasileira de Botânica 23: 255-282.
- Mamede, M.C.H.; Souza, V.C.; Prado, J.; Barros, F.; Wanderley, M.G.L. & Rando, J.G. 2007. Livro vermelho das espécies vegetais ameaçadas do Estado de São Paulo. Instituto de Botânica; Imprensa Oficial, São Paulo. 165p.
- Marinho-Filho, J. 1992. Mamíferos da Serra do Japi. In: Morellato, L.P.C. (ed.). História natural da Serra do Japi. Editora da UNICAMP, FAPESP, Campinas. Pp. 264-286.
- Mittermeier, R.A.; Gil, P.R.; Hoffmann, M.; Pilgrim, J.; Brooks, J.; Mittermeier, C.G.; Lamouroux, J. & Fonsêca, G.A.B. 2004. Hotspots revisited: Earth's biologically richest and most endangered terrestrial ecoregions. CEMEX, Washington, D.C.
- Morellato, L.P.C. 1992a. Introdução. In: Morellato, L.P.C. (ed.). História natural da Serra do Japi. Editora da UNICAMP, FAPESP, Campinas. Pp. 8-11.
- Morellato, L.P.C. 1992b. Sazonalidade e dinâmica de ecossistemas florestais na Serra do Japi. In: Morellato, L.P.C. (ed.). História natural da Serra do Japi. Editora da UNICAMP, FAPESP, Campinas. Pp. 98-110.
- Morellato, L.P.C.; Rodrigues, R.R.; Leitão-Filho, H.F.; Joly, C.A. 1989. Estudo comparativo da fenologia de espécies arbóreas de floresta de altitude e Floresta Mesófila Semidecidua na Serra do Japi, SP. Revista Brasileira de Botânica 12: 85-98.
- Morellato, L.P.C.; Rodrigues, R.R.; Leitão-Filho, H.F. & Joly, C.A. 1990. Estratégias fenológicas de espécies arbóreas em floresta de altitude na Serra do Japi, Jundiaí, SP. Revista Brasileira de Biologia 50: 149-162.
- Myers, N.; Mittermeier, R.A.; Mittermeier, C.G.; Fonsêca, G.A.B. & Kent, J. 2000. Biodiversity hotspots for conservation priorities. Nature 403: 853-858.
- Neves, M. A. & Cardoso, M. S. N. 2006. Qualidade das águas do Rio Jundiaí (SP): a necessidade de uma gestão integrada. Holos Environment [Online] 6:2. Available in <<http://cecemca.rc.unesp.br/ojs/index.php/holos/article/view/556/467>>. Access on 5 Oct 2009.
- Page, C.N. 1990. Taxonomic concepts in Conifers and Ginkgooids. In: Kramer, K.U. & Green, P.S. (ed.). The families and genera of vascular plants. I. Pteridophytes and Gymnosperms. Springer-Verlag, Berlin. Pp. 282.
- Pansarin, E.R. & Pansarin, L.M. 2008. A família Orchidaceae na Serra do Japi, São Paulo, Brasil. Rodriguésia 59: 99-111.
- Pinto, H.S. 1992. Clima da Serra do Japi. In: Morellato, L.P.C. (ed.). História natural da Serra do Japi. Editora da UNICAMP, FAPESP, Campinas. Pp. 30-38.
- Pretty, J. 2004. How nature contributes to mental and physical health. Spirituality and Health International 5: 68-78.
- Rodal, M.J.N.; Lucena, M.F.A.; Andrade, K.V.S.A. & Melo, A.L. 2005. Mata do Toró: uma floresta estacional semidecidual de terras baixas no nordeste do Brasil. Hoehnea 32: 283-294.
- Rodal, M.J.N. & Sales, M.F. 2007. Composição da flora vascular em um remanescente de floresta montana no semi-árido do nordeste do Brasil. Hoehnea 34: 433-446.
- Rodrigues, R.R. & Shepherd, G.J. 1992. Análise da variação estrutural e fisionômica da vegetação e

- características edáficas, num gradiente altitudinal na Serra do Japi. In: Morellato, L.P.C. (ed.). História Natural da Serra do Japi. Editora da UNICAMP & FAPESP, Campinas. Pp. 64-96.
- Rodrigues, R.R.; Morellato, L.P.C.; Joly, C.A. & Leitão-Filho, H.F. 1989. Estudo florístico e fitossociológico envolvendo um gradiente altitudinal em uma mata mesófila estacional semidecídua na Serra do Japi, Jundiaí, SP. Revista Brasileira de Botânica 12: 71-84.
- Sazima, I. & Haddad, C.F.B. 1992. Répteis da Serra do Japi: notas sobre história natural. In: Morellato, L.P.C. (ed.). História natural da Serra do Japi. Editora da UNICAMP, FAPESP, Campinas. Pp. 212-236.
- Silva, W.R. 1992. As aves da Serra do Japi. In: Morellato, L.P.C. (ed.). História natural da Serra do Japi. Editora da UNICAMP, FAPESP, Campinas. Pp. 238-263.
- Smith, A.R.; Pryer, K.M.; Schuettpelz, E.; Korall, P.; Schneider, H. & Wolf, P.G. 2006. A classification for extant ferns. Taxon 55: 705-731.
- Sobral, M. & Stehmann, J.R. 2009. An analysis of new angiosperm species discoveries in Brazil (1990–2006). Taxon 58: 227-232.
- Souza, M.C. & Monteiro, R. 2005. Levantamento florístico em remanescente de floresta ripária no alto rio Paraná: Mata do Araldo, Porto Rico, Paraná, Brasil. Acta Scientiarum Biological Sciences 27: 405-414.
- The Plant List. 2010. Version 1. Available in <<http://www.theplantlist.org/>>. Access on 27 May 2011.
- Thiers, B. 2009 "continuously updated". *Index Herbariorum*: A global directory of public herbaria and associated staff. New York Botanical Garden's Virtual Herbarium. Available in <<http://sweetgum.nybg.org/ih/>>. Access on 22 Jul 2009.
- Ulrich, R. 1993. Biophilia, biophobia, and natural landscapes. In: Kellert, S.R. & Wilson, E.O. (ed.). The biophilia hypothesis. Island Press, Washington. Pp. 73-137.
- Zipparro, V.B.; Guilherme, F.A.G.; Almeida-Scabbia, R.J. & Morellato, L.P.C. 2005. Levantamento florístico de Floresta Atlântica no sul do estado de São Paulo, Parque Estadual Intervales, Base Saibadela. Biota Neotropica 5: 147-170. Available in <<http://www.biotaneotropica.org.br/v5n1/pt/abstract?inventory+BN02605012005>>. Access on 24 Aug 2010.



Vascular flora of Serra do Japi Biological Reserve, Jundiaí, southeastern Brazil

Flora vascular da Reserva Biológica Municipal da Serra do Japi, Jundiaí, SP

Julio Antonio Lombardi^{1,2,5}, Carolina da Silva Carvalho³, Leonardo Biral⁴, Mariana Naomi Saka⁴
& Sean Miki Hieda³

Appendix 1 — Floristic list from the "Reserva Biológica Municipal da Serra do Japi". JAL = collections of J.A. Lombardi *et al.*; LBS = collections of L.B. Santos.^{1,2,3,4}= species reported by Cardoso-Leite *et al.* (2002)¹, Leitão-Filho (1992)², Rodrigues *et al.* (1989)³ or Pansarin & Pansarin (2008)⁴, but not sampled in the present study. # = species only found in cultivation; § = invasive species.

Família	Espécie	Voucher
Acanthaceae	<i>Aphelandra longiflora</i> (Lindl.) Profice	JAL 7369
	<i>A. schottiana</i> (Nees) Profice	JAL 6757
	<i>Eranthemum pulchellum</i> Andrews#	JAL 7437
	<i>Hygrophila costata</i> Nees	JAL 7309
	<i>Justicia carnea</i> Lindl.	JAL 6628
	<i>J. lythroides</i> (Nees) V.A.W.Graham	JAL 7304
	<i>Justicia</i> sp. 1	JAL 6637
	<i>Mendoncia velloziana</i> Mart.	JAL 7006
	<i>Pseuderanthemum</i> sp. 1	JAL 6751
	<i>Ruellia</i> sp. 1	JAL 7418
	Indet. 1	JAL 7333
	<i>Sambucus nigra</i> L. #	JAL 6845
Alliaceae	<i>Nothoscordum gracile</i> (Aiton) Stearn var. <i>gracile</i> §	JAL 7519
Astromeriaceae	<i>Alstroemeria cunha</i> Vell.	JAL 7312
	<i>Bomarea edulis</i> (Tussac.) Herb.	JAL 7059
Amaranthaceae	<i>Alternanthera tenella</i> Colla	JAL 6737
	<i>Chamissoa altissima</i> (Jacq.) Kunth. var. <i>altissima</i>	JAL 6759
	<i>Chenopodium ambrosioides</i> L. §	JAL 7299
	<i>Hebanthe eriantha</i> (Poir.) Pedersen	JAL 6856
	<i>Iresine diffusa</i> Humb. & Bonpl. ex Willd.	JAL 7361
	<i>Psaffia gnaphaloides</i> (L.f.) Mart.	JAL 6598
	Indet. 1	JAL 6919
	<i>Hippeastrum puniceum</i> (Lam.) Kuntze	JAL 6914
	<i>Hippeastrum</i> sp. [híbrido cultivado]#	JAL 7520
	<i>Astronium graveolens</i> Jacq. ^{2,3}	
Anacardiaceae	<i>Lithraea molleoides</i> (Vell.) Engl. ^{1,2}	
	<i>Schinus terebinthifolius</i> Raddi	JAL 6651
	<i>Tapirira guianensis</i> Aubl.	JAL 6898
	<i>T. obtusa</i> (Benth.) J.D. Mitch. ^{2,3}	

Família	Espécie	Voucher
Anemiacae (A. Salino – BHCB)	<i>Anemia phyllitidis</i> (L.) Sw.	JAL 6647
	<i>A. raddiana</i> Link	JAL 7290
Annonaceae	<i>Annona cacans</i> Warm. ^{2,3}	
	<i>A. sylvatica</i> A.St.-Hil.	JAL 6974
	<i>Guatteria australis</i> A.St.-Hil.	JAL 7028
	<i>Xylopia brasiliensis</i> Spreng. ²	
Apiaceae	<i>Centella asiatica</i> (L.) Urb. [§]	JAL 6953
	<i>Cyclospermum leptophyllum</i> (Pers.) Sprague [§]	JAL 6792
	<i>Eryngium horridum</i> Malme	JAL 6886
Apocynaceae (R. Morokawa, W. Marcondes-Ferreira – UEC)	<i>Asclepias curassavica</i> L. [§]	JAL 6795
	<i>Aspidosperma olivaceum</i> Müll.Arg.	JAL 7476
	<i>A. parvifolium</i> A.DC. ¹	
	<i>A. pyricollum</i> Müll.Arg. ³	
	<i>Condylarcarpon isthmicum</i> (Vell.) A.DC.	JAL 6458
	<i>Ditassa burchellii</i> Hook. & Arn.	JAL 7314
	<i>D. hispida</i> (Vell.) Fontella	JAL 7313
	<i>Ditassa</i> sp. 1	JAL 7425
	<i>Odontadenia</i> sp. 1	JAL 7317
	<i>Orthosia urceolata</i> E.Fourn.	JAL 6823
	<i>Oxypetalum insigne</i> (Decne.) Malme var. <i>insigne</i>	JAL 6719
	<i>O. pachyglossum</i> Decne.	JAL 7074
	<i>Peltastes peltatus</i> (Vell.) Woodson	JAL 7024
	<i>Prestonia coalita</i> (Vell.) Woodson	JAL 7048
	<i>P. solanifolia</i> (Müll.Arg.) Woodson	JAL 6989
	<i>Rauvolfia sellowii</i> Müll.Arg. ²	
Aquifoliaceae	<i>Ilex cerasifolia</i> Reissek	JAL 7291
	<i>I. dumosa</i> Reissek ¹	
Araceae (L.G. Temponi – UNIOESTE, M. Nadruz – RB)	<i>Anthurium gaudichaudianum</i> Kunth	JAL 6691
	<i>A. scandens</i> (Aubl.) Engl.	JAL 6612
	<i>A. sellowianum</i> Kunth	JAL 8646
	<i>Asterostigma</i> sp. 1	JAL 7249
	<i>Dieffenbachia amoena</i> hort. ex Gentil [#]	JAL 7349
	<i>Monstera adansonii</i> var. <i>klotzschiana</i> (Schott) Madison	JAL 6964
	<i>Philodendron appendiculatum</i> Nadruz & Mayo	JAL 7487
	<i>P. bipinnatifidum</i> Schott	JAL 7451
	<i>P. martianum</i> Engl. [#]	JAL 6965
	<i>Xanthosoma</i> sp. 1	JAL 7414
	<i>Zantedeschia aethiopica</i> (L.) Spreng. [#]	JAL 7470
Araliaceae	<i>Dendropanax cuneatus</i> (DC.) Decne. & Planch.	JAL 6758
	<i>Hydrocotyle quinqueloba</i> Ruiz & Pav.	JAL 6980
	<i>Schefflera calva</i> (Cham.) Frodin & Fiaschi ^{1,2}	

Família	Espécie	Voucher
Araucariaceae	<i>Araucaria angustifolia</i> (Bertol.) Kuntze	JAL 7379
Arecaceae	<i>Acrocomia aculeata</i> (Jacq.) Lodd. ex Mart. ²	
	<i>Bactris setosa</i> Mart.	JAL 6999
	<i>Euterpe edulis</i> Mart. ²	
	<i>Syagrus romanzoffiana</i> (Cham.) Glassman ²	
Aristolochiaceae	<i>Aristolochia triangularis</i> Cham. & Schltdl.	JAL 6613
Asparagaceae	<i>Yucca filamentosa</i> L. [#]	JAL 7505
Aspleniaceae (T.E. Almeida, A. Salino – BHCB)	<i>Asplenium clausenii</i> Hieron.	JAL 6660
	<i>A. mucronatum</i> C.Presl	JAL 8649
	<i>A. triquetrum</i> N.Murak. & R.C.Moran	JAL 6822
Asteraceae (M.E. Monge – UEC)	<i>Acanthospermum australe</i> (Loefl.) Kuntze [§]	JAL 7337
	<i>Achyrocline satureioides</i> (Lam.) DC.	JAL 6806
	<i>Ambrosia polystachya</i> DC. [§]	JAL 6945
	<i>Baccharis articulata</i> (Lam.) Pers.	JAL 6877
	<i>B. crispa</i> Spreng.	JAL 6817
	<i>B. dentata</i> (Vell.) G.M. Barroso	JAL 7063
	<i>B. dracunculifolia</i> DC.	JAL 7274
	<i>B. mesoneura</i> DC.	JAL 6807
	<i>B. aff. reticularia</i> DC.	JAL 7447
	<i>B. semiserrata</i> DC.	JAL 6821
	<i>B. tarchonanthoides</i> DC.	JAL 6895
	<i>B. trinervis</i> (Lam.) Pers.	JAL 6881
	<i>Barrosoa</i> aff. <i>betonicaeformis</i> (DC.) R.M.King & H.Rob.	JAL 7464
	<i>Calea pinnatifida</i> (R.Br.) Less.	JAL 6470
	<i>Campovassouria cruciata</i> (Vell.) R.M.King & H.Rob.	JAL 6859
	<i>Chaptalia nutans</i> (L.) Pol. [§]	JAL 6797
	<i>Coreopsis lanceolata</i> L.	JAL 6977
	<i>Cosmos sulphureus</i> Cav. [§]	JAL 6755
	<i>Cyrtocymura scorpioides</i> (Lam.) H. Rob.	JAL 6805
	<i>Dasyphyllum brasiliense</i> (Spreng.) Cabrera ²	
	<i>D. flagellare</i> (Casar.) Cabrera	JAL 7443
	<i>Dendrophorbium pellucidinerve</i> (Sch.Bip. ex Baker) C.Jeffrey	JAL 6809
	<i>Elephantopus mollis</i> Kunth [§]	JAL 6703
	<i>Erechtites valerianifolius</i> (Wolf) DC. [§]	JAL 7347
	<i>Eremanthus erythropappus</i> (DC.) MacLeish	JAL 6814
	<i>Erigeron maximus</i> (D.Don) Otto ex DC. [§]	JAL 6674
	<i>Galinsoga parviflora</i> Cav. [§]	JAL 7402
	<i>Gamochaeta americana</i> (Mill.) Wedd. [§]	JAL 7086
	<i>Gochnatia polymorpha</i> (Less.) Cabrera ^{1,2,3}	
	<i>Grazielia intermedia</i> (DC.) R.M.King & H.Rob.	JAL 7277
	<i>Heterocondylus alatus</i> (Vell.) R.M.King & H.Rob.	JAL 6768

Família	Espécie	Voucher
	<i>Jaegeria hirta</i> (Lag.) Less. [§]	JAL 6991
	<i>Lepidaploa eriolepis</i> (Gardner) H. Rob.	JAL 6803
	<i>Mikania aff. cordifolia</i> (L.f.) Willd.	JAL 6593
	<i>M. erioclada</i> DC.	JAL 6800
	<i>M. glomerata</i> Spreng.	JAL 6788
	<i>M. lasiandrae</i> DC.	JAL 6770
	<i>M. micrantha</i> Kunth	JAL 6771
	<i>Mutisia coccinea</i> A.St.-Hil.	JAL 6725
	<i>Piptocarpha angustifolia</i> Dusén ex Malme ^{1,2}	
	<i>P. axillaris</i> (Less.) Baker	JAL 6836
	<i>P. macropoda</i> (DC.) Baker	JAL 6815
	<i>P. sellowii</i> (Sch.Bip.) Baker ²	
	<i>Podocoma notobellidiastrum</i> (Griseb.) G.L.Nesom	JAL 6893
	<i>Pterocaulon alopecuroides</i> (Lam.) DC. [§]	JAL 7242
	<i>Senecio brasiliensis</i> (Spreng.) Less.	JAL 6853
	<i>S. icoglossus</i> DC.	JAL 6767
	<i>S. oxyphyllus</i> A. Cunn. ex DC.	JAL 6920
	<i>Solidago chilensis</i> Meyer [§]	JAL 7350
	<i>Stevia collina</i> Gardner	JAL 7346
	<i>Symphyopappus reticulatus</i> Baker	JAL 7266
	<i>Tagetes minuta</i> L. [§]	JAL 6644
	<i>Tilesia baccata</i> (L.f.) Pruski	JAL 7283
	<i>Tithonia diversifolia</i> (Hemsl.) A.Gray [#]	JAL 6739
	<i>Trichogoniopsis adenantha</i> (DC.) R.M.King & H.Rob.	JAL 6646
	<i>Trixis antimenorrhoea</i> (Schrank) Kuntze	JAL 6776
	<i>T. praestans</i> (Vell.) Cabrera	JAL 6844
	<i>Vernonanthura discolor</i> (Spreng.) H.Rob. ²	
	<i>V. divaricata</i> (Spreng.) H.Rob.	JAL 6774
	<i>V. petiolaris</i> (DC.) H. Rob.	JAL 6595
	<i>V. phosphorica</i> (Vell.) H. Rob.	JAL 6838
	<i>Viguiera arenaria</i> Baker	JAL 7341
Balanophoraceae	<i>Scybalium fungiforme</i> Schott & Endl.	JAL 7435
Balsaminaceae	<i>Impatiens walleriana</i> Hook.f. [§]	JAL 6673
Begoniaceae	<i>Begonia angulata</i> Vell.	JAL 7360
	<i>B. cucullata</i> Willd.	JAL 7055
	<i>B. fischeri</i> Schrank	JAL 6675
	<i>B. parilis</i> Irmsch.	JAL 6676
Bignoniacae (R.G. Udlutsch – HRCB)	<i>Adenocalymma bracteatum</i> (Cham.) DC.	JAL 6750
	<i>A. marginatum</i> (Cham.) DC.	JAL 7069
	<i>Amphilophium dolichoides</i> (Cham.) L.G.Lohmann	JAL 6951
	<i>Dolichandra unguis-cati</i> (L.) L.G.Lohmann	JAL 6648
	<i>Fridericia formosa</i> (Bureau) L.G.Lohmann	JAL 7014

Família	Espécie	Voucher
	<i>F. speciosa</i> Mart.	JAL 7019
	<i>Handroanthus albus</i> (Cham.) Mattos ^{1,2}	
	<i>H. chrysotrichus</i> (Mart. ex DC.) Mattos ^{1,2,3}	
	<i>H. impetiginosus</i> Mattos ²	
	<i>H. vellosoi</i> (Toledo) Mattos ²	
	<i>Jacaranda micrantha</i> Cham. ^{2,3}	
	<i>Jacaranda macrantha</i> Cham.	JAL 7477
	<i>Lundia corymbifera</i> (Vahl) Sandwith	JAL 7353
	<i>Mansoa diffcilis</i> (Cham.) Bureau & K.Schum.	JAL 6718
	<i>Mansoa</i> sp. 1	JAL 7012
	<i>Pyrostegia venusta</i> (Ker Gawl.) Miers	JAL 6787
	<i>Stizophyllum perforatum</i> (Cham.) Miers	JAL 6713
	<i>Tanaecium selloi</i> (Spreng.) L.G.Lohmann	JAL 6630
	<i>Tynanthus micranthus</i> Corr.Mello ex K.Schum.	JAL 6990
	<i>Zeyheria tuberculosa</i> (Vell.) Bureau ex Verl. ²	
Blechnaceae (A. Salino – BHCB)	<i>Blechnum binervatum</i> subsp. <i>acutum</i> (Desv.) R.M.Tryon & Stolze	JAL 6828
	<i>B. brasiliense</i> Desv.	JAL 6747
	<i>B. cordatum</i> (Desv.) Hieron.	JAL 6748
	<i>B. divergens</i> Mett.	JAL 6721
	<i>B. polypodioides</i> Raddi	JAL 6655
	<i>B. cf. usherianum</i> (Christ.) C.Chr.	JAL 6772
Boraginaceae	<i>Cordia ecalyculata</i> Vell. ²	
	<i>C. polyccephala</i> (Lam.) I.M.Johnst.	JAL 7374
	<i>C. sellowiana</i> Cham.	JAL 6811
	<i>C. trichotoma</i> (Vell.) Arráb. ex Steud. ^{1,2}	
	<i>Heliotropium transalpinum</i> Vell.	JAL 7071
	<i>Tournefortia paniculata</i> Cham.	JAL 6835
Brassicaceae	<i>Lepidium virginicum</i> L. [§]	JAL 7068
Bromeliaceae	<i>Aechmea bromeliifolia</i> (Rudge) Baker	JAL 7469
	<i>A. distichantha</i> Lem.	JAL 6669
	<i>Ananas bracteatus</i> (Lindl.) Schult. & Schult.f.	JAL 6966
	<i>Billbergia distachia</i> (Vell.) Mez	JAL 6682
	<i>Tillandsia gardneri</i> Lindl.	JAL 6946
	<i>T. recurvata</i> (L.) L.	JAL 7343
	<i>Vriesea carinata</i> Wawra	JAL 7415
Burseraceae	<i>Protium heptaphyllum</i> (Aubl.) Marchand ^{2,3}	
Cactaceae	<i>Cereus hildmannianus</i> K.Schum.	JAL 6997
	<i>Lepismium houllietianum</i> (Lem.) Barthlott	JAL 6928
	<i>Pereskia grandifolia</i> Haw.	JAL 7511
	<i>Rhipsalis floccosa</i> Salm-Dyck ex Pfeiff.	JAL 7474
	<i>R. paradoxa</i> (Salm-Dyck ex Pfeiff.) Salm-Dyck	JAL 6904
	<i>R. puniceodiscus</i> G.Lindb.	JAL 6681

Família	Espécie	Voucher
	<i>R. teres</i> (Vell.) Steud.	JAL 7416
Campanulaceae	<i>Lobelia exaltata</i> Pohl	JAL 6653
	<i>Siphocampylus sulfureus</i> E.Wimm.	JAL 6663
Cannabaceae	<i>Celtis iguanaea</i> (Jacq.) Sarg.	JAL 7009
	<i>Trema micrantha</i> (L.) Blume	JAL 6986
Cannaceae	<i>Canna paniculata</i> Ruiz & Pav.	JAL 6773
Cardiopteridaceae	<i>Citronella paniculata</i> (Mart.) R.A.Howard ^{1,2}	
Caricaceae	<i>Jacarata spinosa</i> (Aubl.) A.DC. ²	
Caryophyllaceae	<i>Drymaria cordata</i> (L.) Willd. ex Roem. & Schult. [§]	JAL 6978
Celastraceae	<i>Hippocratea volubilis</i> L.	JAL 6923
	<i>Maytenus aquifolia</i> Mart.	JAL 6831
	<i>M. evonymoides</i> Reissek	JAL 6874
	<i>M. gonoclada</i> Mart. ^{1,2}	
	<i>M. robusta</i> Reissek	JAL 6902
	<i>M. salicifolia</i> Reissek	JAL 6666
	<i>Peritassa hatschbachii</i> Lombardi	JAL 7015
	<i>Pristimera celastroides</i> (Kunth) A.C.Sm.	JAL 6950
Chrysobalanaceae	<i>Hirtella hebeclada</i> Moric. ex DC.	JAL 6940
Clethraceae	<i>Clethra scabra</i> Pers.	JAL 6699
Clusiaceae	<i>Calophyllum brasiliense</i> Cambess. ²	
	<i>Clusia criuva</i> Cambess. ²	
	<i>Garcinia gardneriana</i> (Planch. & Triana) Zappi ²	
	<i>Tovomitopsis paniculata</i> (Spreng.) Planch. & Triana	JAL 6656
Combretaceae	<i>Terminalia glabrescens</i> Mart. ^{2,3}	
Commelinaceae	<i>Commelina</i> sp. 1	JAL 6760
	<i>Tradescantia fluminensis</i> Vell.	JAL 6981
	<i>T. pallida</i> (Rose) D.R.Hunt	JAL 7413
	<i>T. zanonia</i> (L.) Sw.	JAL 6829
	<i>Tripogandra diuretica</i> (Mart.) Handlos	JAL 7257
Connaraceae	<i>Bernardinia fluminensis</i> (Gardner) Planch.	JAL 6857
	<i>Connarus regnellii</i> G.Schellenb.	JAL 6654
Convolvulaceae	<i>Dichondra microcalyx</i> (Hallier f.) Fabris [§]	JAL 7263
	<i>Ipomoea alba</i> L.	JAL 7093
	<i>I. indica</i> (Burm.) Merr.	JAL 6686
	<i>Jacquemontia ciliata</i> Sandwith	JAL 6623
	<i>Merremia macrocalyx</i> (Ruiz & Pav.) O'Donell	JAL 7371
	<i>M. umbellata</i> (L.) Hallier f.	JAL 7338
Costaceae	<i>Costus spiralis</i> (Jacq.) Roscoe	JAL 7351
Crassulaceae	<i>Bryophyllum delagoense</i> (Eckl. & Zeyh.) Druce [§]	JAL 6638
	<i>Sedum multiceps</i> Coss. & Durieu [§]	JAL 7501
Cucurbitaceae	<i>Cayaponia diversifolia</i> (Cogn.) Cogn.	JAL 6793
	<i>Cayaponia</i> sp. 1	JAL 7389

Família	Espécie	Voucher
	<i>Melothria cucumis</i> Vell.	JAL 7342
	<i>Wilbrandia hibiscoides</i> Silva Manso	JAL 6862
	<i>W. longibracteata</i> Cogn.	JAL 6939
	Indet. 1	JAL 7294
	Indet. 2	JAL 7386
Cunoniaceae	<i>Lamanonia ternata</i> Vell. (= <i>Lamanonia speciosa</i> (Cambess.) L.B.Sm.)	JAL 6473
Cupressaceae	<i>Cupressus lusitanica</i> Mill. [#]	JAL 6889
Cyatheaceae (T.E. Almeida, A. Salino – BHCB)	<i>Alsophila setosa</i> Kaulf.	JAL 6639
	<i>Cyathea atrovirens</i> (Langsd. & Fisch.) Domin	JAL 6668
	<i>C. delgadii</i> Sternb.	
Cyperaceae (S. Martins – HRCB, M.V. Alves – UFP)	<i>Bolboschoenus robustus</i> (Pursh) Soják	JAL 6778
	<i>Bulbostylis capillaris</i> (L.) C.B.Clarke	JAL 6947
	<i>Carex pseudocyperus</i> L. ^{\$}	JAL 6933
	<i>Cyperus friburgensis</i> Boeckeler	JAL 7039
	<i>C. haspan</i> L.	JAL 6931
	<i>C. cf. luzulae</i> (L.) Retz.	JAL 6932
	<i>Cyperus</i> sp. 1	JAL 7037
	<i>Cyperus</i> sp. 2	JAL 7363
	<i>Cyperus</i> sp. 3	JAL 7376
	<i>Eleocharis</i> sp. 1	JAL 7026
	<i>Fimbristylis autumnalis</i> (L.) Roem. & Schult.	JAL 7084
	<i>Pleurostachys foliosa</i> Kunth	JAL 6885
	<i>P. stricta</i> Kunth	JAL 7268
	<i>Rhynchospora corymbosa</i> (L.) Britton	JAL 6649
	<i>R. cf. holoschoenoides</i> (Rich.) Herter	JAL 7075
	<i>R. splendens</i> Lindm.	JAL 6779
	<i>Scleria myriocarpa</i> Kunth	JAL 6810
	<i>S. panicoides</i> Kunth	JAL 6667
	<i>S. variegata</i> (Nees) Steud.	JAL 6808
Dicksoniaceae (T.E. Almeida – BHCB)	<i>Dicksonia sellowiana</i> Hook.	JAL 8651
Dioscoreaceae (D. Araújo – HRCB)	<i>Dioscorea fodinamarum</i> Kunth	JAL 6929
	<i>D. multiflora</i> Mart. ex Griseb.	JAL 7092
	<i>D. subhastata</i> Vell.	JAL 7356
Dryopteridaceae (A. Salino, L.C.N. Melo – BHCB)	<i>Ctenitis submarginalis</i> (Langsd. & Fisch.) Ching	JAL 6830
	<i>Didymochlaena truncatula</i> (Sw.) J.Sm.	JAL 6925
	<i>Elaphoglossum lingua</i> (C.Presl) Brack.	JAL 7315
	<i>Megalastrum</i> sp.	JAL 8657
	<i>Polybotrya cylindrica</i> Kaulf.	JAL 7043
	<i>Rumohra adiantiformis</i> (G.Forst.) Ching	JAL 6722
Ebenaceae	<i>Diospyros inconstans</i> Jacq.	JAL 7506

Família	Espécie	Voucher
Elaeocarpaceae	<i>Sloanea hirsuta</i> (Schott) Planch. ex Benth.	JAL 8640
Erythroxylaceae	<i>Erythroxylum daphnites</i> Mart.	JAL 6926
	<i>E. deciduum</i> A.St.-Hil.	JAL 6456
Euphorbiaceae	<i>Acalypha chamaedrifolia</i> (Lam.) Müll.Arg. [#]	JAL 6955
	<i>Actinostemon concolor</i> (Spreng.) Müll.Arg.	JAL 7463
	<i>A. klotzschii</i> (Didr.) Pax	JAL 6869
	<i>Alchornea glandulosa</i> subsp. <i>iricurana</i> (Casar.) Secco	JAL 6743
	<i>A. sidifolia</i> Müll.Arg. ²	
	<i>A. triplinervia</i> (Spreng.) Müll.Arg. ^{1, 2, 3}	
	<i>Aparisthium cordatum</i> (A.Juss.) Baill.	JAL 7382
	<i>Bia alienata</i> Didr.	JAL 7011
	<i>Croton floribundus</i> Spreng.	JAL 6976
	<i>C. lundianus</i> (Didr.) Müll.Arg.	JAL 6927
	<i>C. macrobothrys</i> Baill.	JAL 6971
	<i>C. salutaris</i> Casar. ²	
	<i>C. urucurana</i> Baill.	JAL 7089
	<i>Dalechampia triphylla</i> Lam.	JAL 6818
	<i>Euphorbia cotinifolia</i> L. [#]	JAL 7087
	<i>E. milii</i> Des Moul. [#]	JAL 7493
	<i>E. pulcherrima</i> Willd. ex Klotzsch [#]	JAL 6728
	<i>Ricinus communis</i> L. [§]	JAL 6961
	<i>Sapium glandulosum</i> (L.) Morong	JAL 6942
	<i>Sebastiania edwalliana</i> Pax & K.Hoffm.	LBS 83
	<i>S. serrata</i> Müll.Arg. ^{1, 3}	
	Indet. 1	JAL 7316
	Indet. 2	JAL 6890
Fabaceae (L.P. Queiroz – HUEFS)	<i>Aeschynomene</i> sp. 1	JAL 7018
	<i>Albizia pedicellaris</i> (DC.) L.Rico ²	
	<i>A. polyccephala</i> (Benth.) Killip ex Record ²	
	<i>Anadenanthera colubrina</i> (Vell.) Brenan	JAL 7003
	<i>A. peregrina</i> (L.) Speg. ²	
	<i>Andira fraxinifolia</i> Benth.	JAL 6891
	<i>A. inermis</i> (W.Wright) DC. ^{2, 3}	
	<i>Bauhinia forficata</i> Link ²	
	<i>B. longifolia</i> (Bong.) Steud.	JAL 7085
	<i>Calliandra brevipes</i> Benth. [#]	JAL 7468
	<i>C. tweedii</i> Benth. [#]	JAL 7475
	<i>Cassia ferruginea</i> (Schrad.) Schrad. ex DC.	JAL 7002
	<i>Centrolobium tomentosum</i> Benth. ²	
	<i>Chamaecrista flexuosa</i> (L.) Greene [§]	JAL 7344
	<i>Coparia langsdorffii</i> Desf. ^{1, 2, 3}	
	<i>Crotalaria breviflora</i> DC. [§]	JAL 7240

Família	Espécie	Voucher
	<i>C. incana</i> L. [§]	JAL 6726
	<i>C. lanceolata</i> E.Mey [§]	JAL 6738
	<i>C. micans</i> Link [§]	JAL 7017
	<i>Dalbergia brasiliensis</i> Vogel	JAL 7038
	<i>D. frutescens</i> (Vell.) Britton ¹	
	<i>D. villosa</i> (Benth.) Benth. ^{2, 3}	
	<i>Desmodium discolor</i> Vogel [§]	JAL 7326
	<i>D. incanum</i> DC. [§]	JAL 6858
	<i>Dioclea rufescens</i> Benth.	JAL 7510
	<i>Enterolobium contortisiliquum</i> (Vell.) Morong ²	
	<i>Erythrina falcata</i> Benth. ²	
	<i>E. speciosa</i> Andrews [#]	JAL 7452
	<i>Holocalyx balansae</i> Michelii ²	
	<i>Hymenaea courbaril</i> L. ²	
	<i>Inga laurina</i> (Sw.) Willd. ²	
	<i>I. marginata</i> Willd.	JAL 7081
	<i>I. sessilis</i> (Vell.) Mart.	JAL 6466
	<i>I. striata</i> Benth.	JAL 7483
	<i>I. subnuda</i> Salzm. ex Benth. ²	
	<i>I. vera</i> Willd. ²	
	<i>Leucochloron incuriale</i> (Vell.) Barneby & J.W.Grimes	JAL 6864
	<i>Lonchocarpus campestris</i> Mart. ex Benth. ^{2, 3}	
	<i>L. muehlbergianus</i> Hassl.	JAL 6724
	<i>L. subglaucescens</i> Mart. ex Benth. ^{2, 3}	
	<i>Luetzelburgia guaissara</i> Toledo ²	
	<i>Machaerium brasiliense</i> Vogel	JAL 6918
	<i>M. lanceolatum</i> (Vell.) J.F.Macbr. ¹	
	<i>M. nictitans</i> (Vell.) Benth.	JAL 7372
	<i>M. oblongifolium</i> Vogel	JAL 7524
	<i>M. scleroxylon</i> Tul. ²	
	<i>M. stipitatum</i> (DC.) Vogel ^{2, 3}	
	<i>M. villosum</i> Vogel	JAL 6765
	<i>Mucuna pruriens</i> (L.) DC.	JAL 7325
	<i>Myrcarpus frondosus</i> Allemao ¹	
	<i>Myroxylon peruiferum</i> L.f. ²	
	<i>Ormosia arborea</i> (Vell.) Harms	JAL 7318
	<i>O. minor</i> Vogel ^{1, 2}	
	<i>Parapiptadenia rigida</i> (Benth.) Brenan ²	
	<i>Peltophorum dubium</i> (Spreng.) Taub. ²	
	<i>Piptadenia gonoacantha</i> (Mart.) J.F.Macbr. ^{2, 3}	
	<i>Platymiscium floribundum</i> Vogel	JAL 7495
	<i>Platypodium elegans</i> Vogel ²	

Família	Espécie	Voucher
	<i>Pterocarpus rohrii</i> Vahl ²	
	<i>Pterogyne nitens</i> Tul. ²	
	<i>Schizolobium parahyba</i> (Vell.) Blake ²	
	<i>Senegalia polyphylla</i> (DC.) Britton & Rose ^{2,3}	
	<i>Senegalia</i> sp. 1	JAL 7302
	<i>Senna pendula</i> (Humb.&Bonpl. ex Willd.) H.S.Irwin & Barneby	JAL 6685
	<i>S. splendida</i> (Vogel) H.S.Irwin & Barneby	JAL 6611
	<i>Senna</i> sp. 1	JAL 7512
	<i>Stylosanthes guianensis</i> (Aubl.) Sw. [§]	JAL 6715
	<i>Sweetia fruticosa</i> Spreng. ²	
	<i>Vigna latidenticulata</i> (Harms) A.Delgado [§]	JAL 7297
	<i>Vigna</i> sp. 1 [§]	JAL 6601
	<i>Zollernia ilicifolia</i> (Brongn.) Vogel ²	
	<i>Zornia gemella</i> Vogel [§]	JAL 7053
Geraniaceae	<i>Pelargonium hortorum</i> L.H.Bailey [#]	JAL 6960
Gesneriaceae (A. Chautems – G)	<i>Nematanthus striatus</i> (Handro) Chautems	JAL 6684
	<i>Sinningia aggregata</i> (Ker Gawl.) Wiehler	JAL 6916
	<i>S. allagophylla</i> (Mart.) Wiehler	JAL 7509
	<i>S. douglasii</i> (Lindl.) Chautems	JAL 6915
Gleicheniaceae (A. Salino – BHCB)	<i>Sticherus lanuginosus</i> (Fée) Nakai	JAL 6693
	<i>Sticherus</i> sp. 1	JAL 7273
Heliconiaceae	<i>Heliconia rostrata</i> Ruiz & Pav.	JAL 7329
Hypericaceae	<i>Hypericum brasiliense</i> Choisy	JAL 7079
Hypoxidaceae	<i>Vismia micrantha</i> A.St.-Hil.	JAL 7256
Iridaceae	<i>Hypoxis decumbens</i> L. [§]	JAL 7021
	<i>Crocosmia crocosmiiflora</i> (Lemoine ex Morren) N.E.Br. [§]	JAL 6680
	<i>Neomarica candida</i> (Hassl.) Sprague	JAL 6873
	<i>Sisyrinchium micranthum</i> Cav.	JAL 6954
	<i>Trimezia martinicensis</i> (Jacq.) Herb.	JAL 6952
Juncaceae	<i>Juncus microcephalus</i> Kunth	JAL 6618
Lamiaceae	<i>Aegiphila integrifolia</i> (Jacq.) Moldenke	JAL 7285
	<i>Eriope macrostachya</i> Mart. ex Benth. [§]	JAL 6993
	<i>Hyptis mutabilis</i> (Rich.) Briq. [§]	JAL 6683
	<i>Leonurus sibiricus</i> L. [§]	JAL 7062
	<i>Ocimum carnosum</i> (Spreng.) Link & Otto ex Benth. [§]	JAL 7239
	<i>Peltodon radicans</i> Pohl	JAL 6631
	<i>Plectranthus barbatus</i> Andrews [#]	JAL 6842
	<i>P. neochilus</i> Schltr. [§]	JAL 6905
	<i>Salvia coccinea</i> Buc'hoz ex Etli. [§]	JAL 7064
	<i>Tetradenia riparia</i> (Hochst.) Codd [#]	JAL 7428
	<i>Vitex megapotamica</i> (Spreng.) Moldenke	JAL 7040

Família	Espécie	Voucher
	<i>V. polygama</i> Cham.	JAL 7035
	Indet. 1	JAL 7420
Lauraceae (P.L.R. Moraes – HUEFS)	<i>Aniba firmula</i> (Nees & Mart.) Mez	JAL 7445
	<i>Cinnamomum stenophyllum</i> (Meisn.) Vattimo-Gil ^{1,2,3}	
	<i>C. triplinerve</i> (Ruiz & Pav.) Kosterm. ¹	
	<i>Cryptocarya aschersoniana</i> Mez ^{1,2}	
	<i>C. moschata</i> Nees & Mart. ^{2,3}	
	<i>Endlicheria paniculata</i> (Spreng.) J.F.Macbr.	JAL 7307
	<i>Nectandra grandiflora</i> Nees ^{2,3}	
	<i>N. megapotamica</i> (Spreng.) Mez	JAL 6917
	<i>N. oppositifolia</i> Nees ^{1,2}	
	<i>Ocotea bicolor</i> Vattimo-Gil ¹	
	<i>O. corymbosa</i> (Meisn.) Mez ^{1,2,3}	
	<i>O. diospyrifolia</i> (Meisn.) Mez ²	
	<i>O. elegans</i> Mez ^{2,3}	
	<i>O. glaziovii</i> Mez ²	
	<i>O. lanata</i> (Nees & Mart.) Mez ²	
	<i>O. minarum</i> (Nees & Mart.) Mez	JAL 6973
	<i>O. nutans</i> (Nees) Mez	JAL 6457
	<i>O. odorifera</i> (Vell.) Rohwer ²	
	<i>O. puberula</i> (Rich.) Nees ^{1,2,3}	
	<i>O. pulchella</i> (Nees & Mart.) Mez ²	
	<i>O. silvestris</i> Vattimo-Gil ¹	
	<i>O. teleiandra</i> (Meisn.) Mez ³	
	<i>Persea americana</i> Mill. [§]	JAL 7449
	<i>P. venosa</i> Nees & Mart. ^{1,2,3}	
	<i>P. willdenovii</i> Kosterm.	JAL 7287
Laxmanniaceae	<i>Cordyline</i> sp. 1	JAL 6944
Lecythidaceae	<i>Cariniana estrellensis</i> (Raddi) Kuntze ^{1,2,3}	
	<i>C. legalis</i> (Mart.) Kuntze ²	
Loganiaceae	<i>Spigelia beyrichiana</i> Cham. & Schltld.	JAL 6912
	<i>Spigelia</i> sp. 1	JAL 6909
	<i>Strychnos brasiliensis</i> Mart.	JAL 6957
Lomariopsidaceae (A. Salino – BHCB)	<i>Nephrolepis cordifolia</i> (L.) C.Presl	JAL 7395
Loranthaceae	<i>Struthanthus flexicaulis</i> Mart.	JAL 6695
	<i>S. marginatus</i> (Destr.) Blume	JAL 6843
	<i>S. staphylinus</i> Mart.	JAL 7479
Lycopodiaceae (A. Salino – BHCB)	<i>Lycopodiella cernua</i> (L.) Pic.Serm.	JAL 6599
	<i>Lycopodium thyoides</i> Humb. & Bonpl. ex Willd.	JAL 7441
Lythraceae	<i>Cuphea calophylla</i> subsp. <i>mesostemon</i> (Koehne) Lourteig	JAL 6979

Família	Espécie	Voucher
	<i>Lafoensia pacari</i> A.St.-Hil.	JAL 7023
Magnoliaceae	<i>Magnolia champaca</i> (L.) Baill. ex Pierre [#]	JAL 7050
	<i>M. ovata</i> (A.St.-Hil.) Spreng. ²	
Malpighiaceae (M.C.H. Mamede – SP)	<i>Alicia anisopetala</i> (A.Juss.) W.R.Anderson	JAL 6733
	<i>Heteropterys intermedia</i> (A.Juss.) Griseb.	JAL 6742
	<i>H. umbellata</i> A.Juss.	JAL 7088
	<i>Mascagnia cordifolia</i> (A.Juss.) Griseb.	JAL 7052
	<i>Mascagnia</i> sp. 1	JAL 6717
	<i>Niedenzuella acutifolia</i> (Cav.) W.R.Anderson	JAL 7251
	<i>Peixotoa parviflora</i> A.Juss.	JAL 6636
	<i>Tetrapterys phlomoides</i> (Spreng.) Nied.	JAL 6650
	Indet. 1	JAL 7387
	Indet. 2	JAL 7462
Malvaceae (A. Krapovickas – CTES)	<i>Abutilon bedfordianum</i> (Hook.) A.St.-Hil. & Naudin	JAL 6746
	<i>Bastardiodia densiflora</i> (Hook. & Arn.) Hassl. ²	
	<i>Ceiba speciosa</i> (A.St.-Hil.) Ravenna	JAL 7270
	<i>Eriotheca candolleana</i> (K.Schum.) A.Robyns ²	
	<i>Guazuma ulmifolia</i> Lam. ²	
	<i>Helicteres ovata</i> Lam. ²	
	<i>Heliocarpus popayanensis</i> Kunth ²	
	<i>Luehea divaricata</i> Mart. & Zucc. ²	
	<i>L. grandiflora</i> Mart. & Zucc.	JAL 6854
	<i>L. paniculata</i> Mart. & Zucc. ²	
	<i>Malvaviscus arboreus</i> Cav. [#]	JAL 7401
	<i>Pavonia communis</i> A.St.-Hil.	JAL 6938
	<i>P. nemoralis</i> A.St.-Hil. & Naudin	JAL 7253
	<i>P. sepium</i> A.St.-Hil.	JAL 7262
	<i>Pseudobombax grandiflorum</i> (Cav.) A.Robyns	JAL 6720
	<i>P. longiflorum</i> (Mart. & Zucc.) A.Robyns ²	
	<i>Sida</i> sp.nov.	JAL 6633
	<i>Triumfetta semitriloba</i> Jacq.	JAL 6634
	<i>Waltheria americana</i> L. [§]	JAL 6702
	<i>Wissadula hernandioides</i> (L.Hér.) Garcke	JAL 7330
	<i>W. parviflora</i> (A.St.-Hil.) R.E.Fr.	JAL 6621
Marantaceae	<i>Calathea cf. monophylla</i> (Vell.) Körn.	JAL 7236
	<i>Ctenanthe lanceolata</i> Petersen	JAL 7076
Melastomataceae (R. Goldenberg – UPCB, G.A.R. Silveira – UEC)	<i>Leandra aurea</i> (Cham.) Cogn.	JAL 6775
	<i>L. melastomoides</i> Raddi	JAL 6619
	<i>L. purpurascens</i> (DC.) Cogn.	JAL 6841
	<i>Miconia cinnamomifolia</i> (DC.) Naudin ^{1,2}	

Família	Espécie	Voucher
	<i>M. discolor</i> DC.	JAL 6769
	<i>M. ibaguensis</i> (Bonpl.) Triana	JAL 6476
	<i>M. latecrenata</i> (DC.) Naudin	JAL 6632
	<i>M. ligustroides</i> (DC.) Naudin	JAL 6641
	<i>M. pusilliflora</i> (DC.) Naudin	JAL 6609
	<i>M. selllowiana</i> Naudin	JAL 6804
	<i>Ossaea amygdaloidea</i> (DC.) Triana	JAL 6658
	<i>O. marginata</i> (Desr.) Triana	JAL 6878
	<i>Tibouchina granulosa</i> (Desr.) Cogn.	JAL 7247
	<i>T. pulchra</i> Cogn. ²	
	<i>T. sebastianopolitana</i> (Raddi) Cogn.	JAL 6614
	<i>T. sellowiana</i> Cogn.	JAL 7423
	<i>T. semidecandra</i> (Schrank & Mart. ex DC.) Cogn.	JAL 7439
	<i>Tibouchina</i> sp. 1	JAL 6624
	<i>Tibouchina</i> sp. 2	JAL 6762
Meliaceae	<i>Cabralea canjerana</i> (Vell.) Mart.	JAL 6736
	<i>Cedrela fissilis</i> Vell. ^{1, 2, 3}	
	<i>C. odorata</i> L.	JAL 7516
	<i>Guarea guidonia</i> (L.) Sleumer ^{1, 2}	
	<i>G. macrophylla</i> Vahl	JAL 6970
	<i>Trichilia casaretti</i> C.DC. ²	
	<i>T. catigua</i> A.Juss.	JAL 7004
	<i>T. clausenii</i> C*.DC. ²	
	<i>T. elegans</i> A.Juss.	JAL 6967
	<i>T. hirta</i> L. ²	
	<i>T. cf. pallens</i> C.DC. ¹	
	<i>T. pallida</i> Sw.	JAL 7403
Menispermaceae	<i>Abuta selloana</i> Eichler	JAL 6983
	<i>Cissampelos andromorpha</i> DC.	JAL 6465
	<i>C. pareira</i> L.	JAL 7010
	<i>Hyperbaena oblongifolia</i> (Mart.) Chodat & Hassl.	JAL 7421
Monimiaceae	<i>Mollinedia argyrogyna</i> Perkins	JAL 6907
	<i>M. clavigera</i> Tul.	JAL 6870
	<i>M. schottiana</i> (Spreng.) Perkins ²	
	<i>M. uleana</i> Perkins ²	
Moraceae	<i>Ficus citrifolia</i> Mill. ²	
	<i>F. enormis</i> Mart. ex Miq. ²	
	<i>F. eximia</i> Schott ²	
	<i>F. guaranitica</i> Chodat ²	
	<i>F. luschnathiana</i> (Miq.)Miq.	JAL 7471
	<i>F. pertusa</i> L.f. ²	
	<i>Morus nigra</i> L. [#]	JAL 6846

Família	Espécie	Voucher
	<i>Maclura tinctoria</i> (L.) D. Don ex Steud. ^{2,3}	
	<i>Sorocea bonplandii</i> (Baill.) W.C.Burger et al.	JAL 6812
Myrsinaceae (L.C. Bernacci – IAC)	<i>Cybianthus cuneifolius</i> Mart.	JAL 7286
	<i>Myrsine coriacea</i> (Sw.) R.Br. ex Roem. & Schult.	JAL 6706
	<i>M. gardneriana</i> A.DC.	JAL 6657
	<i>M. lancifolia</i> Mart. ²	
	<i>M. umbellata</i> Mart.	JAL 6472
Myrtaceae (M. Sobral – BHCB)	<i>Calyptranthes clusiifolia</i> O.Berg ²	
	<i>C. concinna</i> DC. ²	
	<i>Campomanesia guazumifolia</i> (Cambess.) O.Berg. ^{1,2,3}	
	<i>C. maschalantha</i> (O.Berg) Kiaersk. ²	
	<i>C. phaea</i> (O. Berg) Landrum ²	
	<i>Campomanesia</i> sp. 1	JAL 7507
	<i>Eucalyptus</i> sp. 1 [§]	JAL 7460
	<i>Eugenia acutata</i> Miq.	JAL 7072
	<i>E. biflora</i> (L.) DC. ²	
	<i>E. blastantha</i> (O.Berg) D.Legrand ^{2,3}	
	<i>E. brasiliensis</i> Lam.	JAL 7515
	<i>E. florida</i> DC ²	
	<i>E. geminiflora</i> O.Berg ²	
	<i>E. handroana</i> D.Legrand ²	
	<i>E. involucrata</i> DC. ²	
	<i>E. kleinii</i> D.Legrand	JAL 6477
	<i>E. leptoclada</i> O.Berg	JAL 7241
	<i>E. ligustrina</i> (Sw.) Willd. ²	
	<i>E. myrcianthes</i> Nied. ²	
	<i>E. cf. neosilvestris</i> Sobral	JAL 6837
	<i>E. neolaurifolia</i> Sobral ^{2,3}	
	<i>E. neomyrtifolia</i> Sobral ^{1,2}	
	<i>E. neoverrucosa</i> Sobral	LBS 87
	<i>E. prasina</i> O.Berg.	
	<i>E. pyriformis</i> Cambess.	JAL 6475
	<i>E. speciosa</i> Cambess. ^{1,2}	
	<i>E. sulcata</i> Spring ex Mart. ²	JAL 7339
	<i>E. tenuipedunculata</i> Kiaersk. ^{2,3}	
	<i>E. vattimoana</i> Mattos ^{2,3}	
	<i>E. verticillata</i> (Vell.) Angely ²	
	<i>Eugenia</i> sp. 1	JAL 6714
	<i>Marlierea silvatica</i> (O.Berg.) Kiaersk. ^{2,3}	
	<i>Myrceugenia campestris</i> (DC.) D.Legrand & Kausel ^{2,3}	
	<i>M. myrcioides</i> (Cambess.) O.Berg ²	

Família	Espécie	Voucher
	<i>Myrcia glazioviana</i> Kiaersk. ²	
	<i>M. guianensis</i> (Aubl.) DC. ²	
	<i>M. hebepetala</i> DC. ²	
	<i>M. multiflora</i> (Lam.) DC. ²	
	<i>M. aff. retorta</i> Cambess. ¹	
	<i>M. rufipes</i> DC. ²	
	<i>M. spectabilis</i> DC. ²	
	<i>M. splendens</i> (Sw.) DC.	JAL 6996
	<i>M. tomentosa</i> (Aubl.) DC. ²	
	<i>M. undulata</i> O.Berg ²	
	<i>M. venulosa</i> DC. ^{2,3}	
	<i>Myrciaria floribunda</i> (H.West ex Willd.) O.Berg	JAL 7288
	<i>Myrcianthes pungens</i> (O.Berg) D.Legrand ²	
	<i>Pimenta pseudocaryophyllus</i> (Gomes) Landrum ^{1, 2, 3}	
	<i>Psidium cattleianum</i> Sabine	JAL 7066
	<i>P. grandifolium</i> Mart. ex DC. ²	
	<i>Siphoneugena densiflora</i> O.Berg ^{1, 2, 3}	
Nyctaginaceae	<i>Bougainvillea spectabilis</i> Willd. [#]	JAL 7500
	<i>Guapira opposita</i> (Vell.) Reitz	JAL 6865
	<i>Mirabilis jalapa</i> L. [§]	JAL 7238
	<i>Pisonia ambigua</i> Heimerl	JAL 6866
Ochnaceae	<i>Ouratea castaneifolia</i> (DC.) Engl. ²	
	<i>O. parviflora</i> (A.DC.) Baill. ²	
	<i>O. semiserrata</i> (Mart. & Nees) Engl. ^{1, 2, 3}	
Onagraceae	<i>Fuchsia regia</i> (Vell.) Munz	JAL 6903
	<i>Ludwigia elegans</i> (Cambess.) H.Hara	JAL 7078
	<i>L. sericea</i> (Cambess.) H.Hara	JAL 7359
Opiliaceae	<i>Agonandra excelsa</i> Griseb.	
Orchidaceae	<i>Acianthera aphthosa</i> (Lindl.) Pridgeon & M.W.Chase ⁴	
	<i>A. auriculata</i> (Lindl.) Pridgeon & M.W.Chase ⁴	
	<i>A. leptotifolia</i> (Barb.Rodr.) Pridgeon & M.W.Chase ⁴	
	<i>A. luteola</i> (Lindl.) Pridgeon & M.W.Chase ⁴	
	<i>A. saundersiana</i> (Rchb.f.) Pridgeon & M.W.Chase ⁴	
	<i>A. saurocephala</i> (Lodd.) Pridgeon & M.W.Chase ⁴	
	<i>Alatiglossum longipes</i> (Lindl.) Baptista ⁴	
	<i>Aspidogyne hylibates</i> (Rchb.f.) Garay ⁴	
	<i>A. metallescens</i> (Barb.Rodr.) Garay ⁴	
	<i>Baptistonia fimbriata</i> (Lindl.) Chiron & V.P.Castro ⁴	
	<i>B. pubes</i> (Lindl.) Chiron & V.P.Castro ⁴	
	<i>B. sarcochesma</i> (Lindl.) Chiron & V.P.Castro ⁴	
	<i>Barbosella cogniauxiana</i> (Speg. & Kraenzl.) Schltr. ⁴	
	<i>Bifrenaria harrisoniae</i> (Hook.) Rchb.f. ⁴	

Família	Espécie	Voucher
	<i>Brasilidium crispum</i> (Lodd.) Campacci ⁴	
	<i>B. praetextum</i> (Rchb.f.) Campacci ⁴	
	<i>Brasiliorchis chrysantha</i> (Barb.Rodr.) R.B.Singer et al. ⁴	
	<i>B. consanguinea</i> (Klotzsch) R.B.Singer et al. ⁴	
	<i>B. gracilis</i> (Lodd.) R.B.Singer et al. ⁴	
	<i>B. picta</i> (Hook.) R.B.Singer et al. ⁴	
	<i>Bulbophyllum chloroglossum</i> Rchb.f. & Warm. ⁴	
	<i>B. exaltatum</i> Lindl. ⁴	
	<i>B. glutinosum</i> (Barb.Rodr.) Cogn. ⁴	
	<i>B. regnellii</i> Rchb.f. ⁴	
	<i>Campylocentrum micranthum</i> (Lindl.) Rolfe ⁴	
	<i>Capanemia superflua</i> (Rchb.f.) Garay ⁴	
	<i>C. thereziae</i> Barb.Rodr. ⁴	
	<i>Catasetum cernuum</i> (Lindl.) Rchb.f. ⁴	
	<i>Cattleya loddigesii</i> Lindl. ⁴	
	<i>Christensonella cepula</i> (Rchb.f.) S.Koehler ⁴	
	<i>C. ferdinandiana</i> (Barb.Rodr.) Szlach. et al. ⁴	
	<i>C. neuwiedii</i> (Rchb.f.) S.Koehler ⁴	
	<i>C. pumila</i> (Hook.) Szlach. et al. ⁴	
	<i>Cirrhaea dependens</i> (Lodd.) Loudon ⁴	
	<i>Coppensia flexuosa</i> (Sims) Campacci	JAL 7300
	<i>C. hookeri</i> (Rolfe) F.Barros & L.Guimarães ⁴	
	<i>C. montana</i> (Barb.Rodr.) Campacci ⁴	
	<i>C. varicosa</i> (Lindl.) Campacci ⁴	
	<i>Corymborchis flava</i> (Sw.) Kuntze	JAL 7260
	<i>Cyclopogon calophyllus</i> Barb.Rodr. ⁴	
	<i>C. congestus</i> (Vell.) Hoehne	JAL 6834
	<i>C. elatus</i> (Sw.) Schltr.	JAL 7481
	<i>C. variegatus</i> Barb.Rodr. ⁴	
	<i>Dryadella aviceps</i> (Rchb.f.) Luer ⁴	
	<i>Encyclia patens</i> Hook. ⁴	
	<i>Epidendrum armeniacum</i> Lindl. ⁴	
	<i>E. chlorinum</i> Barb.Rodr. ⁴	
	<i>E. difforme</i> Jacq. ⁴	
	<i>E. henschenii</i> Barb.Rodr. ⁴	
	<i>E. latilabre</i> Lindl. ⁴	
	<i>E. martianum</i> Lindl. ⁴	
	<i>E. ochrochlorum</i> Barb.Rodr. ⁴	
	<i>E. paniculatum</i> Ruiz & Pav. ⁴	
	<i>E. prolixum</i> Barb.Rodr. ⁴	
	<i>E. secundum</i> Jacq.	JAL 6463
	<i>Eulophia alta</i> (L.) Fawc. & Rendle ⁴	

Família	Espécie	Voucher
	<i>Eurytyle actinosiphila</i> (Barb.Rodr.) Schltr.	JAL 7427
	<i>Galeandra beyrichii</i> Rchb.f.	JAL 7367
	<i>Gomesa crispa</i> (Lindl.) Klotzsch & Rchb.f. ⁴	
	<i>G. gomezoides</i> (Barb.Rodr.) Pabst ⁴	
	<i>G. handroi</i> (Hoehne) Pabst ⁴	
	<i>G. recurva</i> R.Br. ⁴	
	<i>Govenia utriculata</i> (Sw.) Lindl.	JAL 7306
	<i>Grandiphyllum auricula</i> (Vell.) Docha Neto ⁴	
	<i>G. hians</i> (Lindl.) Docha Neto ⁴	
	<i>Groblya amherstiae</i> Lindl. ⁴	
	<i>Habenaria araneiflora</i> Barb.Rodr. ⁴	
	<i>H. glaucophylla</i> Barb.Rodr. ⁴	
	<i>H. johannensis</i> Barb.Rodr. ⁴	
	<i>H. josephensis</i> Barb.Rodr.	JAL 6635
	<i>H. parviflora</i> Lindl.	JAL 7334
	<i>H. paulistana</i> J.A.N.Batista & Bianchetti ⁴	
	<i>H. pleiophylla</i> Hoehne & Schltr. ⁴	
	<i>H. warmingii</i> Rchb.f. & Warm. ⁴	
	<i>Habenaria</i> sp. 1	JAL 7301
	<i>Hapalorchis lineatus</i> (Lindl.) Schltr. ⁴	
	<i>H. micranthus</i> (Barb.Rodr.) Hoehne ⁴	
	<i>Heterotaxis brasiliensis</i> (Brieger & Illg) F.Barros ⁴	
	<i>Ionopsis utricularioides</i> (Sw.) Lindl. ⁴	
	<i>Isabelia violacea</i> (Lindl.) van den Berg & M.W.Chase ⁴	
	<i>I. virginialis</i> Barb.Rodr. ⁴	
	<i>Isochilus linearis</i> (Jacq.) R.Br. ⁴	
	<i>Liparis nervosa</i> (Thunb.) Lindl.	JAL 7345
	<i>Lockhartia lunifera</i> (Lindl.) Rchb.f. ⁴	
	<i>Lophiaris pumila</i> (Lindl.) Braem ⁴	
	<i>Malaxis excavata</i> (Lindl.) Kuntze ⁴	
	<i>M. leucaimata</i> Barb. Rodr. ⁴	
	<i>Mesadenella atroviridis</i> (Barb.Rodr.) Garay ⁴	
	<i>Maxillaria cuspidata</i> (Lindl.) Garay	JAL 7440
	<i>Miltonia regnellii</i> Rchb.f. ⁴	
	<i>Notylia nemorosa</i> Barb.Rodr. ⁴	
	<i>Octomeria crassifolia</i> Lindl. ⁴	
	<i>O. diaphana</i> Lindl. ⁴	
	<i>Oeceoclades maculata</i> (Lindl.) Lindl. ⁴	
	<i>Pelezia oestrifera</i> (Rchb.f. & Warm.) Schltr. ⁴	
	<i>Pleurothallis schenckii</i> Luer ⁴	
	<i>Polystachya caespitosa</i> Barb.Rodr. ⁴	
	<i>P. estrellensis</i> Rchb.f. ⁴	
	<i>P. montana</i> Barb.Rodr. ⁴	

Família	Espécie	Voucher
	<i>P. oligantha</i> (Sw.) Lindl. ⁴	
	<i>P. stachyodes</i> (Sw.) Lindl. ⁴	
	<i>Promenaea rollissonii</i> (Lindl.) Lindl. ⁴	
	<i>Prosthechea bulbosa</i> (Vell.) W.E.Higgins ⁴	
	<i>P. calamaria</i> (Lindl.) W.E.Higgins ⁴	
	<i>Prosthechea</i> sp. 1	JAL 6985
	<i>Psilochilus modestus</i> Barb. Rodr. ⁴	
	<i>Pteroglossa glazioviana</i> (Cogn.) Garay ⁴	
	<i>Rhetinantha notylioglossa</i> (Rchb.f.) M.A.Blanco ⁴	
	<i>Rodriguezia decora</i> (Lem.) Rchb.f.	JAL 7419
	<i>Sacoila lanceolata</i> (Aubl.) Garay	JAL 6910
	<i>Sarcoglottis fasciculata</i> (Vell.) Schltr. ⁴	
	<i>Sauvagesia nitidum</i> (Vell.) Schltr. ⁴	
	<i>Specklinia grobyi</i> (Batem. ex Lindl.) F.Barros ⁴	
	<i>S. uniflora</i> (Lindl.) Pridgeon & M.W.Chase ⁴	
	<i>Stanhopea lietzei</i> (Regel) Schltr. ⁴	
	<i>Stelis ephemera</i> (Lindl.) Pridgeon & M.W.Chase ⁴	
	<i>S. hypnicola</i> (Lindl.) Pridgeon & M.W.Chase ⁴	
	<i>Stigmatosema polyaden</i> (Vell.) Garay ⁴	
	<i>Vanilla bahiana</i> Hoehne ⁴	
	<i>V. edwallii</i> Hoehne ⁴	
	<i>Wullschlaegelia aphylla</i> (Sw.) Rchb.f.	JAL 7323
	<i>Zygopetalum maculatum</i> (Kunth) Garay ⁴	
	<i>Zygostates lunata</i> Lindl. ⁴	
	Indet. 1	JAL 6704
	Indet. 2	JAL 7261
Oxalidaceae	<i>Oxalis rhombeo-ovata</i> A.St.-Hil.	JAL 6832
	<i>O. triangularis</i> A.St.-Hil. [§]	JAL 6897
Passifloraceae	<i>Passiflora amethystina</i> J.C.Mikan	JAL 6763
	<i>P. capsularis</i> L.	JAL 7311
	<i>P. edulis</i> Sims [§]	JAL 7276
	<i>P. organensis</i> Gardner	JAL 7322
	<i>P. sidifolia</i> M.Roem.	JAL 6764
	<i>P. suberosa</i> L.	JAL 7013
Pentaphyllaceae	<i>Ternstroemia brasiliensis</i> Cambess. ¹	
Peraceae	<i>Pera obovata</i> Baill.	JAL 6604
Phyllanthaceae	<i>Phyllanthus tenellus</i> Roxb. [§]	JAL 7248
	<i>Savia dictyocarpa</i> Müll.Arg. ²	
Phytolaccaceae	<i>Gallesia integrifolia</i> (Spreng.) Harms ²	
	<i>Seguieria langsdownii</i> Moq. ²	
Picramniaceae (J.R. Pirani – SPF)	<i>Picramnia parvifolia</i> Engl.	JAL 7489
	<i>P. ramiflora</i> Planch. ³	
Pinaceae	<i>Pinus</i> sp. 1 [§]	JAL 6922

Família	Espécie	Voucher
Piperaceae (E.F. Guimarães & M. Carvalho-Silva – RB)	<i>Manekia obtusa</i> (Miq.) Arias et al.	JAL 7044
	<i>Peperomia alata</i> Ruiz & Pav.	JAL 7296
	<i>P. blanda</i> (Jacq.) Kunth	JAL 7384
	<i>P. nitida</i> Dahlst.	JAL 7041
	<i>P. rotundifolia</i> (L.) Kunth	JAL 8650
	<i>P. urocarpa</i> Fisch. & C.A.Mey.	JAL 7422
	<i>Piper aduncum</i> L.	JAL 6730
	<i>P. amalago</i> L. ³	
	<i>P. corcovadensis</i> (Miq.) C.DC.	JAL 7282
	<i>P. crassinervium</i> Kunth	JAL 6731
	<i>P. gaudichaudianum</i> Kunth	JAL 6600
	<i>P. glabratum</i> Kunth	JAL 6749
	<i>P. hayneanum</i> C.DC.	JAL 7431
	<i>P. richardiiifolium</i> Kunth	JAL 7034
	<i>Piper</i> sp. 1	JAL 6710
	<i>Piper</i> sp. 2	JAL 6911
	<i>Piper</i> sp. 3	JAL 7046
	<i>Piper</i> sp. 4	JAL 7065
Plantaginaceae	<i>Plantago major</i> L. [§]	JAL 6796
	<i>Scoparia dulcis</i> L. [§]	JAL 7082
Poaceae (P.L. Viana – BHCB)	<i>Andropogon bicornis</i> L.	JAL 7244
	<i>Bambusa tuldaoides</i> Munro [#]	JAL 6972
	<i>Chusquea</i> cf. <i>bambusoides</i> (Raddi) Hack.	JAL 7458
	<i>C. cf. leptophylla</i> Nees	JAL 6716
	<i>Dichanthelium hebotes</i> (Trin.) Zuloaga	JAL 6833
	<i>D. sabulorum</i> (Lam.) Gould & C.A.Clark	JAL 6616
	<i>Eragrostis rufescens</i> Schrad. ex Schult.	JAL 7388
	<i>Ichnanthus pallens</i> (Sw.) Munro ex Benth.	JAL 7366
	<i>Lasiacis</i> cf. <i>sorghoidea</i> (Desv. ex Ham.) Hitchc. & Chase	JAL 7467
	<i>Melinis minutiflora</i> P.Beauv. [§]	JAL 6665
	<i>M. repens</i> (Willd.) Zizka	JAL 7394
	<i>Merostachis</i> sp. 1	JAL 7459
	<i>Olyra humilis</i> Nees	JAL 7073
	<i>Panicum</i> sp. 1	JAL 7033
	<i>Parodiolyra micrantha</i> (Kunth) Davidse & Zuloaga	JAL 6777
	<i>Paspalum corcovadense</i> Raddi [§]	JAL 6617
	<i>P. urvillei</i> Steud. [§]	JAL 7001
	<i>Pennisetum purpureum</i> Schumach. [§]	JAL 6615
	<i>Pharus lappulaceus</i> Aubl.	JAL 7308
	<i>Phyllostachys aurea</i> Rivière & C.Rivière [#]	JAL 6826

Família	Espécie	Voucher
Polygalaceae	<i>Polypogon elongatus</i> Kunth	JAL 7020
	<i>Pseudechinolaena polystachya</i> (Kunth) Stapf	JAL 6672
	<i>Setaria sulcata</i> Raddi [§]	JAL 7280
	<i>Sporobolus indicus</i> (L.) R.Br.	JAL 7022
	<i>Urochloa brizantha</i> (Hochst. ex A.Rich.) R.D.Webster [§]	JAL 6935
	<i>Bredemeyera kunthiana</i> (A.St.-Hil) Klotzsch ex A.W.Benn.	JAL 7455
	<i>Diclidanthera laurifolia</i> Mart.	JAL 6995
	<i>Polygala monninooides</i> Kunth	JAL 6625
	<i>P. paniculata</i> L.	JAL 6791
	<i>Polygonum capitatum</i> Buch.-Ham. ex D.Don [§]	JAL 7473
Polygonaceae	<i>Campyloneurum nitidum</i> (Kaulf.) C.Presl	JAL 6662
	<i>C. rigidum</i> J.Sm.	JAL 8660
	<i>Microgramma squamulosa</i> (Kaulf.) de la Sota	JAL 6620
	<i>M. tecta</i> (Kaulf.) Alston	JAL 8645
	<i>Niphidium crassifolium</i> (L.) Lellinger	JAL 7454
	<i>Pecluma recurvata</i> (Kaulf.) M.G.Price	JAL 6670
	<i>Phlebodium pseudoaureum</i> (Cav.) Lellinger	JAL 7397
	<i>Pleopeltis pleopeltifolia</i> (Raddi) Alston	JAL 6723
	<i>Polypodium</i> sp. 1	JAL 6659
	<i>Serpocaulon catharinae</i> (Langsd. & Fisch.) A.R.Sm.	JAL 7373
Portulacaceae	<i>S. latipes</i> (Langsd. & Fisch.) A.R.Sm.	JAL 7396
	<i>Talinum paniculatum</i> (Jacq.) Gaertn.	JAL 6988
Proteaceae	<i>Roupara montana</i> var. <i>brasiliensis</i> (Sleumer) K.S. Edwards	JAL 6645
	<i>Adiantopsis radiata</i> (L.) Féé	JAL 6875
Pteridaceae (A. Salino – BHCB, J.Prado – SP)	<i>Adiantum lorentzii</i> Hieron.	JAL 7357
	<i>A. pentadactylon</i> Langsd. & Fisch.	JAL 7362
	<i>A. raddianum</i> C.Presl	JAL 6678
	<i>A. subcordatum</i> Sw.	JAL 6782
	<i>Doryopteris patula</i> Féé	JAL 6820
	<i>Pteris denticulata</i> Sw.	JAL 7049
	<i>P. lechleri</i> Mett.	JAL 7398
	<i>P. splendens</i> Kaulf.	JAL 7281
	<i>P. vittata</i> L. [§]	JAL 7409
	<i>Vittaria lineata</i> (L.) Sm.	JAL 7448
Ranunculaceae	<i>Clematis dioica</i> L.	JAL 7332
	<i>Colubrina glandulosa</i> Perkins ^{2,3}	
Rhamnaceae	<i>Gouania virgata</i> Reissek	JAL 7246
	<i>Rhamnidium elaeocarpum</i> Reissek ²	
Rosaceae	<i>Eriobotrya japonica</i> (Thunb.) Lindl. [§]	JAL 6643
	<i>Prunus myrtifolia</i> (L.) Urb.	JAL 6708

Família	Espécie	Voucher
Rubiaceae	<i>Rubus brasiliensis</i> Mart.	JAL 7417
	<i>R. rosifolius</i> Sm.	JAL 6753
	<i>R. sellowii</i> Cham. & Schltdl.	JAL 6754
	<i>Alseis floribunda</i> Schott ²	
	<i>Amaioua guianensis</i> Aubl. ²	
	<i>Bathysa australis</i> (A.St.-Hil.) K.Schum.	JAL 6664
	<i>Borreria latifolia</i> (Aubl.) K.Schum. [§]	JAL 7305
	<i>B. verticillata</i> (L.) G.Mey. [§]	JAL 6594
	<i>Chiococca alba</i> (L.) Hitch.	JAL 7404
	<i>Coccocypselum geophilooides</i> Wawra	JAL 7032
	<i>C. lanceolatum</i> (Ruiz & Pav.) Pers.	JAL 6992
	<i>Coffea arabica</i> L. [§]	JAL 7433
	<i>Cordiera concolor</i> (Cham.) Kuntze	JAL 7245
	<i>Coussarea contracta</i> (Walp.) Müll.Arg. ^{2, 3}	
	<i>C. nodosa</i> (Benth.) Müll.Arg. ²	
	<i>Coutarea hexandra</i> (Jacq.) K.Schum.	JAL 7497
	<i>Diodella apiculata</i> (Willd. ex Roem. & Schult.) Delprete	JAL 6622
	<i>Emmeorhiza umbellata</i> (Spreng.) K.Schum.	JAL 6700
	<i>Galianthe laxa</i> (Cham. & Schltdl.) E.L.Cabral	JAL 7259
	<i>Galium hypocarpium</i> (L.) Endl. ex Griseb.	JAL 6819
	<i>Guettarda viburnoides</i> Cham. & Schltdl. ²	
	<i>Ixora brevifolia</i> Benth.	JAL 6937
	<i>I. gardneriana</i> Benth.	JAL 7406
	<i>I. venulosa</i> Benth. ²	
	<i>Manettia cordifolia</i> Mart.	JAL 6461
	<i>M. gracilis</i> Cham. & Schltdl.	JAL 6627
	<i>M. luteo-rubra</i> (Vell.) Benth.	JAL 6629
	<i>Palicourea marcgravii</i> A.St.-Hil.	JAL 6607
	<i>Posoqueria acutifolia</i> Mart.	JAL 7517
	<i>P. latifolia</i> (Rudge) Schult. ^{1, 2}	
	<i>Psychotria carthagenaensis</i> Jacq.	JAL 7057
	<i>P. forsteronioides</i> Müll.Arg.	JAL 6603
	<i>P. hastisepala</i> Müll.Arg.	JAL 7368
	<i>P. hoffmannseggiana</i> (Willd. ex Schult.) Müll.Arg.	JAL 6602
	<i>P. nuda</i> (Cham. & Schltdl.) Wawra ²	
	<i>P. ruelliifolia</i> (Cham. & Schltdl.) Müll.Arg.	JAL 6941
	<i>P. suterella</i> Müll.Arg.	JAL 6640
	<i>P. velloziana</i> Benth.	JAL 6474
	<i>Randia armata</i> (Sw.) DC. ²	
	<i>Richardia brasiliensis</i> Gomes [§]	JAL 7390
	<i>Rudgea gardenioides</i> (Cham.) Müll.Arg. ^{1, 2, 3}	

Família	Espécie	Voucher
	<i>R. jasminoides</i> (Cham.) Müll.Arg. ¹	
	<i>R. minor</i> (Cham.) Standl. subsp. <i>minor</i> ^{2,3}	
	Indet. 1	JAL 6679
Rutaceae	<i>Balfourodendron riedelianum</i> (Engl.) Engl. ²	
	<i>Citrus latifolia</i> (Tanaka ex Yu.Tanaka) Tanaka [#]	JAL 6847
	<i>C. limon</i> (L.) Burm.f. [§]	JAL 7472
	<i>Dictyoloma vandellianum</i> A.Juss. ²	
	<i>Esenbeckia febrifuga</i> (A.St.-hil.) A.Juss. ex Mart. ^{2,3}	
	<i>E. grandiflora</i> Mart.	JAL 8648
	<i>E. leiocarpa</i> Engl. ²	
	<i>Galipea jasminiflora</i> (A.St.-Hil.) Engl. ²	
	<i>Metrodorea nigra</i> A.St.-Hil. ²	
	<i>M. stipularis</i> Mart. ²	
	<i>Zanthoxylum caribaeum</i> Lam. ²	
	<i>Z. fagara</i> (L.) Sarg.	
	<i>Z. monogynum</i> A.St.-Hil. ²	
	<i>Z. rhoifolium</i> Lam. ²	
Sabiaceae	<i>Meliosma sellowii</i> Urb.	JAL 6468
Salicaceae	<i>Casearia decandra</i> Jacq. ^{1, 2, 3}	
	<i>C. gossypiosperma</i> Briq. ²	
	<i>C. obliqua</i> Spreng. ^{1, 3}	
	<i>C. sylvestris</i> Sw.	JAL 6921
	<i>Prockia crucis</i> P.Browne ex L.	JAL 7007
	Indet. 1	JAL 7492
	<i>Xylosma ciliatifolia</i> (Clos) Eichler	JAL 6701
Santalaceae	<i>Phoradendron crassifolium</i> (Pohl ex DC.) Eichler	JAL 6734
Sapindaceae (M.S. Ferrucci – CTES)	<i>Allophylus edulis</i> (A.St.-Hil. et al.) Hieron. ex Niedrl.	JAL 6855
	<i>A. petiolulatus</i> Radlk. ²	
	<i>Cupania vernalis</i> Cambess. ^{1, 2, 3}	
	<i>C. zanthoxyloides</i> Radlk.	JAL 6839
	<i>Dodonaea viscosa</i> Jacq.	JAL 6597
	<i>Matayba guianensis</i> Aubl. ²	
	<i>M. juglandifolia</i> (Cambess.) Radlk. ^{2, 3}	
	<i>Matayba</i> sp. 1	JAL 7491
	<i>Paullinia rhomboidea</i> Radlk.	JAL 6732
	<i>Serjania communis</i> Cambess.	JAL 6785
	<i>S. larouotteana</i> Cambess.	JAL 6596
	<i>S. multiflora</i> Cambess.	JAL 7466
	<i>S. paradoxa</i> Radlk.	JAL 7407
	<i>S. reticulata</i> Cambess.	JAL 7352
	<i>Urvillea ulmacea</i> Kunth	JAL 6712

Família	Espécie	Voucher
	Indet. 1	JAL 7514
Sapotaceae	<i>Chrysophyllum gonocarpum</i> (Mart. & Eichler ex Miq.) Engl. ^{2,3} <i>C. marginatum</i> (Hook. & Arn.) Radlk. ^{1,2} <i>Pouteria caitito</i> (Ruiz & Pav.) Radlk. ²	
Schoepfiaeae	<i>Schoepfia brasiliensis</i> A.DC. ²	
Scrophulariaceae	<i>Buddleja stachyoides</i> Cham. & Schltdl.	JAL 6661
Smilacaceae	<i>Smilax elastica</i> Griseb. <i>Smilax</i> sp. 1 <i>Smilax</i> sp. 2	JAL 6642 JAL 7383 JAL 7432
Solanaceae (L.L. Giacomin, J.R. Stehmann – BHCB)	<i>Athenaea picta</i> (Mart.) Sendtn. <i>Aureliana fasciculata</i> (Vell.) Sendtn. <i>Brugmansia suaveolens</i> (Willd.) Bercht. & J.Presl [§] <i>Brunfelsia brasiliensis</i> (Spreng.) L.B.Sm. & Downs <i>Capsicum baccatum</i> L. [§] <i>Capsicum</i> sp. 1 <i>Cestrum axillare</i> Vell. ¹ <i>C. schlechtendalii</i> G.Don <i>C. strigilatum</i> Ruiz & Pav. <i>Nicotiana tabacum</i> L. [§] <i>Sessea brasiliensis</i> Toledo <i>Solanum americanum</i> Mill. <i>S. argenteum</i> Dunal ^{2,3} <i>S. betaceum</i> Cav. ² <i>S. bullatum</i> Vell. ¹ <i>S. campaniforme</i> Roem. & Schult. <i>S. cernuum</i> Vell. ² <i>S. concinnum</i> Sendtn. <i>S. decompositiflorum</i> Schott ex Sendtn. <i>S. didymum</i> Dunal <i>S. granulosoleprosum</i> Dunal <i>S. inodorum</i> Vell. <i>S. palinacanthum</i> Dunal [§] <i>S. paniculatum</i> L. [§] <i>S. pseudoquina</i> A.St.-Hil. <i>S. rufescens</i> Sendtn. <i>S. sanctae-catharinae</i> Dunal <i>S. sciadostylis</i> (Sendtn.) Bohs <i>S. swartzianum</i> Roem. & Schult. ² <i>S. variabile</i> Mart.	JAL 7488 JAL 6460 JAL 6863 JAL 6852 JAL 7298 JAL 7000 JAL 6761 JAL 6729 JAL 6958 JAL 6696 JAL 6789 [§] JAL 6888 JAL 6752 JAL 7016 JAL 6626 JAL 6694 JAL 7426 JAL 7056 JAL 7438 JAL 7377 JAL 6786 JAL 7292 JAL 6982 LBS 73
Styracaceae	<i>Styrax latifolius</i> Pohl ^{2,3}	

Família	Espécie	Voucher
	<i>S. pohlii</i> A.DC.	JAL 6962
Symplocaceae (J.L.M. Aranha Filho – UEC)	<i>Symplocos celastrinea</i> Mart.	JAL 7490
	<i>S. glandulosomarginata</i> Hoehne ¹	
	<i>S. pubescens</i> Klotzsch ex Benth. ¹	
	<i>S. revoluta</i> Casar.	JAL 6697
	<i>S. tetrandra</i> Mart.	JAL 7391
Theaceae	<i>Laplacea fructicosa</i> (Schrad.) Kobuski ^{1,2,3}	
Thelypteridaceae (T.E. Almeida, A. Salino – BHCB)	<i>Macrothelypteris torresiana</i> (Gaudich.) Ching [§]	JAL 8641
	<i>Thelypteris amambayensis</i> Ponce	JAL 8658
	<i>T. dentata</i> (Forssk.) E.P.St.John [§]	JAL 7408
	<i>T. hispidula</i> (Decne.) C.F. Reed	JAL 7408
	<i>T. cf. lugubris</i> (Mett.) R.M.Tryon & A.F.Tryon	
Thymelaeaceae	<i>Daphnopsis fasciculata</i> (Meisn.) Nevling	JAL 6780
Tropaeolaceae	<i>Tropaeolum majus</i> L. [§]	JAL 6959
Turneraceae	<i>Turnera capitata</i> Cambess.	JAL 6906
Typhaceae	<i>Typha latifolia</i> L.	JAL 7518
Urticaceae	<i>Boehmeria caudata</i> Sw.	JAL 6987
	<i>Cecropia glaziovii</i> Snelth.	JAL 7453
	<i>C. hololeuca</i> Miq. ²	
	<i>C. pachystachya</i> Trécul	JAL 6868
	<i>Pilea pubescens</i> Liebm.	JAL 7319
	<i>Urera baccifera</i> (L.) Gaudich. ex Wedd.	JAL 7058
Valerianaceae	<i>Valeriana scandens</i> L.	JAL 6467
Verbenaceae	<i>Citharexylum myrianthum</i> Cham. ²	
	<i>Duranta erecta</i> L. [#]	JAL 7070
	<i>Lantana fucata</i> Lindl.	JAL 6471
	<i>Lippia brasiliensis</i> (Link) T.R.S.Silva	JAL 7303
	<i>L. lippoides</i> (Cham.) Rusby	JAL 7252
	<i>Stachytarpheta cayennensis</i> (Rich.) Vahl [§]	JAL 6963
	<i>Verbena litoralis</i> Kunth [§]	JAL 6956
	<i>V. rigida</i> Spreng. [§]	JAL 6871
Violaceae	<i>Anchietea pyrifolia</i> (Mart.) G.Don	JAL 6798
	<i>Hybanthus atropurpureus</i> (A.St.-Hil.) Taub.	JAL 6745
Vitaceae	<i>Cissus serroniana</i> (Glaz.) Lombardi	JAL 7295
	<i>C. striata</i> subsp. <i>argentina</i> (Suess.) Lombardi	JAL 6469
	<i>C. sulcicaulis</i> (Baker) Planch.	JAL 6756
	<i>C. verticillata</i> (L.) Nicolson & C.E.Jarvis subsp. <i>verticillata</i>	JAL 6727
Vochysiaceae	<i>Callisthene minor</i> Mart.	LBS 71
	<i>Qualea dichotoma</i> (Mart.) Warm. ^{2,3}	

Família	Espécie	Voucher
	<i>Q. multiflora</i> subsp. <i>pubescens</i> (Mart.) Stafleu	JAL 7434
	<i>Vochysia magnifica</i> Warm. ^{2,3}	
	<i>V. tucanorum</i> Mart.	JAL 6711
Woodsiaceae (A. Salino – BHCB)	<i>Diplazium plantaginifolium</i> (L.) Urb.	JAL 7271
Xanthorrhoeaceae	<i>Kniphofia uvaria</i> (L.) Oken [#]	JAL 7436
Xyridaceae	<i>Xyris laxifolia</i> Mart.	JAL 7336
Zingiberaceae	<i>Hedychium coronarium</i> J.Koenig [§]	JAL 7327