Species composition, community and population dynamics of two gallery forests from the Brazilian Cerrado domain

Markus Gastauer‡, Roosevelt P Almado§, Angela S Miazaki¶, Écio S Diniz‡, Luís C B Moreira‡, João A.A. Meira-Neto‡

‡ Laboratory of Plant Ecology and Evolution, Department of Plant Biology, Federal University of Viçosa, Viçosa, Brazil
§ ArcelorMittal Bioflorestas, Belo Horizonte, Brazil
¶ State University of Minas Gerais, Campus Frutal, Frutal, Brazil

Corresponding author: Markus Gastauer (markus.gastauer@ufv.br)
Academic editor: Quentin Groom
Received: 15 Mar 2016 | Accepted: 15 Jul 2016 | Published: 18 Jul 2016
Citation: Gastauer M, Almado R, Miazaki A, Diniz É, Moreira L, Meira-Neto J (2016) Species composition, community and population dynamics of two gallery forests from the Brazilian Cerrado domain. Biodiversity Data Journal 4: e8503. doi: 10.3897/BDJ.4.e8503

Abstract

Background

To understand the impacts of global changes on future community compositions, knowledge of community dynamics is of crucial importance. To improve our knowledge of community composition, biomass stock and maintenance of gallery forests in the Brazilian Cerrado, we provide two datasets from the 0.5 ha Corrego Fazendinha Gallery Forest Dynamics Plot and the Corrego Fundo Gallery Forest Dynamics Plot situated in the Bom Despacho region, Minas Gerais, Southeastern Brazil.

New information

We report diameter at breast height, basal area and height measurements of 3417 trees and treelets identified during three censuses in both areas.

© Gastauer M et al. This is an open access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.
Keywords

Gallery Forest, Brazilian Cerrado, savanna vegetation, species richness, tropical forests, forest inventory

Introduction

Although the Brazilian Cerrado is a hotspot of biodiversity (Mendonça et al. 2008, Myers et al. 2000) and holds carbon stocks of nearly 300 Mg per hectare (Batlle-Bayer et al. 2010, Paiva et al. 2011), its species richness, diversity and biomass are still threatened by habitat loss, fragmentation, biological invasion and climate change (e.g., Lapola et al. 2013, Jantz et al. 2015, Rossi et al. 2014). Within the Cerrado domain, gallery forests accompany the borders of rivers, creeks and streams, forming important corridors for wildlife among patches of remaining vegetation (Silveira et al. 2014) that also protect aquatic ecosystems from substrate input, reducing water temperatures and erosion of river banks (Monteiro et al. 2016, Londe and Silva 2014). Furthermore, gallery forests have the highest above ground biomass per hectare in the Cerrado domain (Moreira-Burger and Delitti 1999). Worldwide, these forests are threatened by human activities, including domestic livestock, which prevent tree seedling establishment, and the construction of dams and weirs, which cause flooding or interference with natural stream flow (FAO 2010). Long-term monitoring studies, so-called community dynamics, are necessary to outline and understand the impacts of these disturbances on vegetation communities and on carbon stocks (Couvet et al. 2011, Fidelis et al. 2012, Pocock et al. 2015).

Therefore, the aim of this data paper is to make available data from forest dynamics from two gallery forest dynamics plots from the Bom Despacho region, Minas Gerais, Southeastern Brazil, to increase knowledge about community composition, biomass stock and maintenance of such forests in the Brazilian Cerrado.

Project description

Title: Population and community dynamics of two gallery forests from the Bom Despacho Region, Minas Gerais, Brazil

Study area description: The study was carried out in the counties of Quartel Geral and Dores do Indaiá, Bom Despacho region, Minas Gerais, Brazil. Cattle pasture, corn and eucalyptus plantations characterize the land-use of both counties. According to the Köppen system, the climate is humid subtropical (Cwa, Peel et al. 2007), with warm and moist conditions in the summer months, dry winters and an annual precipitation of approximately 1,170 mm. The predominant soils are deeply weathered latosols. According to Veloso et al. (1991), the vegetation is characterized as savanna vegetation.
Within the municipality, two study sites were selected within properties owned by the ArcelorMittal Bioflorestas company. The Corrego Fazendinho Gallery Forest, situated 5.5 km west of Quartel Geral center, covers approximately 50 ha on both sides of the upper 5 km of Fazendinho Creek (Fig. 1). It is surrounded on all sides by eucalypt plantations from ArcelorMittal Bioflorestas.

The second study site, the Corrego Fundo Gallery Forest, is situated approximately 10 km southeast of the Corrego Fazendinho Gallery Forest (Fig. 1). It is a forest remnant that flanks the complete upper Fundo Creek. The mean width of the gallery forest is approximately 80 m. On its northern side, the forest adjoins native Cerrado vegetation belonging to the ArcelorMittal Bioflorestas legal reserve, while cattle pastures are found beyond its southern limit.

**Funding:** JAAMN received a CNPq productivity fellowship. ArcelorMittal Bioflorestas, FAPEMIG and CNPq financed this study.

**Sampling methods**

**Sampling description:** Within each of the gallery forests, two plots of 50 x 50 m were delimited and divided into 25 subplots of 10 x 10 m (24 plots in the second plot from the Corrego Fundo Gallery Forest). All plots are situated at the northern part of the gallery forests (see Fig. 1).

Within these plots, three censuses in four-year intervals of all trees with a diameter at breast height (dbh) greater than 3.2 cm were carried out (Table 1). Trees fulfilling the inclusion criterion were tagged and identified. Tree diameter (dbh) was measured and
basal area was calculated; for multiple stem individuals, we calculated basal area at breast height for all shoots, summed these, and calculated from that the pooled dbh.

| Census | Dates     | BA [m²] | Number of trees | Number of species | BA ≥ 10 cm [m²] | Number of trees ≥ 10 cm | Number of species (≥ 10 cm dbh) |
|--------|-----------|---------|-----------------|-------------------|-----------------|-------------------------|----------------------------------|
| First  | June 2007 | 12.61   | 1597            | 110               | 9.35            | 405                     | 67                               |
| Second | August 2011 | 14.06  | 1711            | 113               | 10.70           | 428                     | 69                               |
| Third  | August 2015 | 14.85  | 1478            | 101               | 11.93           | 434                     | 66                               |
|        |           |         |                 |                   |                 |                         |                                  |
|        |           |         |                 |                   |                 |                         |                                  |

Specimens not recognized during fieldwork were collected, deposited in the Herbarium of the Federal University of Viçosa (VIC) and identified with the help of material from the VIC or by consultation of specialists and literature sources (Lorenzi 1992). Species names were verified using the Taxonomic Name Resolution Service (TNRS) proposed by Boyle et al. (2013); species classification follows the Angiosperm Phylogeny Group III guidelines (APG III 2009).

Diversity indices as well as Jaccard similarity between study sites were computed using EstimateS (Colwell and Coddington 1994). Mortality and recruitment rates, as well as gains and losses of the basal area, were calculated according to Sheil (1995).

**Geographic coverage**

**Description:** This study was carried out in the Counties Quartel Geral and Dores do Indaíá, Bom Despacho region, Minas Gerais, Brazil (Fig. 1).

**Coordinates:** -19.343498 and -19.2575 Latitude; -45.49603 and -45.451609 Longitude.
**Taxonomic coverage**

**Description:** Altogether, 3413 trees and treelets belonging to 158 species, 96 genera and 41 families were detected in both study sites during all censuses. Thirty species were identified to genus level only, two to family level, and three species remain unidentified.

With a total of 1862 trees and treelets from 114 species (70 genera, 35 families) from three censuses, species richness and stem density in the Corrego Fazendinha Gallery Forest was higher than in the Corrego Fundo Gallery Forest (1551 trees and treelets, 89 species, 67 genera, 35 families, Table 1). Forty-five species occur in both study sites, yielding a Jaccard similarity between the study sites of 0.28. More than 75% of species and around 80% of basal area belongs to common species.

Due to higher species richness, diversity is also higher in the Corrego Fazendinha Gallery Forest than in the Corrego Fundo Gallery Forest. While the basal area increased from the first to the third census in the Corrego Fazendinha Gallery Forest, it declined in the Corrego Fundo Gallery Forest (Tables 1, 2).

---

**Table 2.**

Gallery forest plots diversity and species richness summary Tally (third censuses). N is number of individual trees, S is number of species, G is number of genera, F is number of families, H' is Shannon-Wiener diversity index using log₁₀, and α is Fisher’s α. Basal area (BA) includes all multiple stems for each individual.

| Size Class [cm dbh] | BA [m²] | N       | S     | G     | F     | H'     | α ±DP |
|---------------------|---------|---------|-------|-------|-------|--------|-------|
| ≥ 3.2               | 14.85   | 1478    | 101   | 64    | 31    | 3.41   | 24.54 ±1.29 |
| ≥ 10                | 11.93   | 434     | 66    | 48    | 26    | 3.12   | 21.66 ±1.75 |
| ≥ 30                | 2.86    | 26      | 9     | 9     | 7     | 1.83   | 4.87 ±1.52  |
| Corrego Fundo Gallery Forest |
| ≥ 3.2               | 11.34   | 1268    | 88    | 64    | 35    | 3.43   | 21.49 ±1.21 |
| ≥ 10                | 8.61    | 292     | 51    | 40    | 23    | 3.02   | 17.87 ±1.72 |
| ≥ 30                | 3.46    | 25      | 5     | 5     | 5     | 1.10   | 1.87 ±0.61  |

With regards to basal area and abundance, Vochysiaceae, Fabaceae, Myrtaceae, Lauraceae and Anacaridaceae are among the five dominant families in the Corrego Fazendinha and Corrego Fundo gallery forests (Tables 3, 4). Furthermore, Fabaceae, Myrtaceae and Anacardiaceae are the most species-rich families in both study sites. *Callisthene*, *Myrcia* and *Copaifera* had the highest basal area among genera, while
Callisthene, Siparuna and Myrcia showed the highest abundance. Finally, Myrcia, Machaerium and Aspidosperma are the most species-rich genera in both study sites (Tables 5, 6). Callisthene major and Copaifera langsdorffii have the highest basal area in both study sites, followed by Piptadenia gonoacantha, Siparuna guianensis and Myrcia tomentosa in the Corrego Fazendinha Gallery Forest and Terminalia glabrescens, Tapirira guianensis and Pera glabrata in the Corrego Fundo Gallery Forest. The most abundant species in both study sites are C. major and S. guianensis, followed by Campomanesia xanthocarpa, Myrcia tomentosa and Dalbergia brasiliensis in the Corrego Fazendinha Gallery Forest and Licania kunthiana, Myrcia rostrata and Alibertia edulis in the Corrego Fundo Gallery Forest (Tables 7, 8).

**Table 3.**
Corrego Fazendinha Gallery Forest rankings by family according to basal area (BA, including all multiple stems for each individual), number of individuals (N) and number of species (S), data from the third census.

| Rank | Family         | BA  | % BA | % N  | Family       | N   | % N  | Family | S  |
|------|----------------|-----|------|------|--------------|-----|------|--------|----|
| 1    | Vochysiaceae   | 5.21| 35.08| 22.73| Vochysiaceae | 336 | 22.73| Fabaceae| 21 |
| 2    | Fabaceae       | 3.08| 20.76| 13.53| Siparunaceae | 274 | 18.54| Myrtaceae| 16 |
| 3    | Myrtaceae      | 1.59| 10.74| 16.24| Myrtaceae    | 240 | 16.24| Anacardiaceae| 6  |
| 4    | Lauraceae      | 0.91| 6.12 | 4.80 | Fabaceae     | 200 | 13.53| Rubiaceae| 6  |
| 5    | Anacardiaceae  | 0.79| 5.31 | 4.06 | Lauraceae    | 71  | 4.80 | Annonaceae| 5  |
| 6    | Siparunaceae   | 0.65| 4.40 | 18.54| Anacardiaceae| 60  | 4.06 | Vochysiaceae| 5  |
| 7    | Meliaceae      | 0.46| 3.12 | 0.61 | Aquifoliaceae| 48  | 3.25 | Apocynaceae| 4  |
| 8    | Annonaceae     | 0.42| 2.83 | 2.77 | Annonaceae   | 41  | 2.77 | Araliaceae| 3  |
| 9    | Aquifoliaceae  | 0.21| 1.44 | 3.25 | Myristicaceae| 36  | 2.44 | Meliaceae| 3  |
| 10   | Salicaceae     | 0.21| 1.43 | 1.15 | Araliaceae   | 27  | 1.83 | Aquifoliaceae| 2  |
| 11   | Combretaceae   | 0.17| 1.13 | 0.41 | Lacistemataceae| 19  | 1.29 | Chrysobalanaceae| 2  |
| 12   | Araliaceae     | 0.14| 0.96 | 1.83 | Rubiaceae    | 18  | 1.22 | Combretaceae| 2  |
| 13   | Myristicaceae  | 0.12| 0.80 | 2.44 | Salicaceae   | 17  | 1.15 | Erythroxylaceae| 2  |
| 14   | Arecaceae      | 0.09| 0.63 | 0.14 | Chrysobalanaceae| 10  | 0.68 | Euphorbiaceae| 2  |
| 15   | Chrysobalanaceae| 0.09| 0.60 | 0.68 | Meliaceae    | 9   | 0.61 | Lacistemataceae| 2  |
| 16   | Asteraceae     | 0.08| 0.55 | 0.41 | Malvaceae    | 7   | 0.47 | Lauraceae| 2  |
| Rank | Family       | BA  | %BA | %N | Family     | N   | %N  | Family     | S  |
|------|--------------|-----|-----|----|------------|-----|-----|------------|----|
| 1    | Vochysiaceae | 3.78| 33.30| 2.63| Vochysiaceae | 240 | 18.93| Myrtaceae  | 14 |
| 2    | Fabaceae     | 1.53| 13.49| 1.06| Myrtaceae  | 148 | 11.67| Fabaceae  | 12 |
| 3    | Combretaceae | 0.77| 6.82 | 0.54| Siparunaceae | 132 | 10.41| Malvaceae  | 6  |
| 4    | Anacardiaceae| 0.76| 6.67 | 0.53| Fabaceae   | 88  | 6.94 | Rubiaceae  | 6  |
| 5    | Myrtaceae    | 0.75| 6.57 | 0.52| Chrysobalanaceae | 84  | 6.62| Anacardiaceae | 4 |
| 6    | Malvaceae    | 0.48| 4.26 | 0.34| Rubiaceae  | 69  | 5.44| Apocynaceae | 4  |

Table 4.
Corrego Fundo Gallery Forest rankings by family according to basal area (BA, including all multiple stems for each individual), number of individuals (N) and number of species (S), data from the third census.
| 7 | Euphorbiaceae | 0.47 | 4.12 | 0.32 | Anacardiaceae | 63 | 4.97 | Sapindaceae | 4 |
| 8 | Sapindaceae | 0.35 | 3.12 | 0.25 | Lacistemataceae | 49 | 3.86 | Chrysobalanaceae | 3 |
| 9 | Burseraceae | 0.32 | 2.85 | 0.22 | Sapindaceae | 49 | 3.86 | Salicaceae | 3 |
| 10 | Siparunaceae | 0.31 | 2.72 | 0.21 | Burseraceae | 39 | 3.08 | Anonaceae | 2 |
| 11 | Apocynaceae | 0.27 | 2.39 | 0.19 | Combretaceae | 34 | 2.68 | Araliaceae | 2 |
| 12 | Chrysobalanaceae | 0.27 | 2.39 | 0.19 | Euphorbiaceae | 33 | 2.60 | Bignoniaceae | 2 |
| 13 | Annonaceae | 0.26 | 2.32 | 0.18 | Myristicaceae | 30 | 2.37 | Lauraceae | 2 |
| 14 | Rubiaceae | 0.24 | 2.15 | 0.17 | Apocynaceae | 26 | 2.05 | Primulaceae | 2 |
| 15 | Myristicaceae | 0.13 | 1.18 | 0.09 | Ebenaceae | 25 | 1.97 | Sapotaceae | 2 |
| 16 | Ebenaceae | 0.12 | 1.02 | 0.08 | Malvaceae | 25 | 1.97 | Aquifoliaceae | 1 |
| 17 | Bignoniaceae | 0.10 | 0.92 | 0.07 | Annonaceae | 24 | 1.89 | Burseraceae | 1 |
| 18 | Araliaceae | 0.09 | 0.77 | 0.06 | Araliaceae | 19 | 1.50 | Calophyllaceae | 1 |
| 19 | Lacistemataceae | 0.07 | 0.61 | 0.05 | Bignoniaceae | 17 | 1.34 | Celastraceae | 1 |
| 20 | Lamiaceae | 0.05 | 0.43 | 0.03 | Sapotaceae | 12 | 0.95 | Combretaceae | 1 |
| 21 | Sapotaceae | 0.05 | 0.42 | 0.03 | Aquifoliaceae | 8 | 0.63 | Ebenaceae | 1 |
| 22 | Salicaceae | 0.03 | 0.26 | 0.02 | Lamiaceae | 8 | 0.63 | Erythroxylaceae | 1 |
| 23 | Solanaceae | 0.03 | 0.24 | 0.02 | Salicaceae | 8 | 0.63 | Euphorbiaceae | 1 |
| 24 | Ochnaceae | 0.02 | 0.22 | 0.02 | Ochnaceae | 7 | 0.55 | Lacistemataceae | 1 |
| 25 | Lauraceae | 0.01 | 0.13 | 0.01 | Primulaceae | 6 | 0.47 | Lamiaceae | 1 |
| 26 | Aquifoliaceae | 0.01 | 0.13 | 0.01 | Lauraceae | 5 | 0.39 | Malpighiaceae | 1 |
| 27 | Primulaceae | 0.01 | 0.11 | 0.01 | Celastraceae | 4 | 0.32 | Meliaceae | 1 |
| 28 | Nyctaginaceae | 0.01 | 0.10 | 0.01 | Nyctaginaceae | 4 | 0.32 | Myristicaceae | 1 |
| 29 | Urticaceae | 0.01 | 0.09 | 0.01 | Solanaceae | 4 | 0.32 | Nyctaginaceae | 1 |
| 30 | Celastraceae | 0.01 | 0.08 | 0.01 | Calophyllaceae | 2 | 0.16 | Ochnaceae | 1 |
| 31 | Malpighiaceae | 0.00 | 0.04 | 0.00 | Malpighiaceae | 2 | 0.16 | Simaroubaceae | 1 |
| 32 | Erythroxylaceae | 0.00 | 0.03 | 0.00 | Erythroxylaceae | 1 | 0.08 | Siparunaceae | 1 |
| 33 | Calophyllaceae | 0.00 | 0.02 | 0.00 | Meliaceae | 1 | 0.08 | Solanaceae | 1 |
Table 5.
Corrego Fazendinha Gallery Forest ranking by genus according to basal area (BA, including all multiple stems for each individual), number of individuals (N) and number of species (S), data from the third census.

| Rank | Genus               | BA     | % BA  | % N  | Genus               | N     | % N  | Genus   | S          |
|------|---------------------|--------|-------|------|---------------------|-------|------|---------|------------|
| 1    | *Callisthene*       | 5.066  | 34.12 | 21.11| *Callisthene*       | 312   | 21.11| *Myrcia*| 7          |
|      | (Vochysiaceae)      |        |       |      | (Vochysiaceae)      |       |      | (Myrtaeae) |            |
| 2    | *Myrcia*            | 1.003  | 6.75  | 7.24 | *Siparuna*          | 274   | 18.54| *Machaerium* | 5          |
|      | (Myrtaeae)          |        |       |      | (Siparunaceae)      |       |      | (Fabaceae) |            |
| 3    | *Copaihera*         | 0.955  | 6.43  | 2.98 | *Myrcia*            | 107   | 7.24 | *Aspidosperma* | 4          |
|      | (Fabaceae)          |        |       |      | (Myrtaeae)          |       |      | (Apocynaceae) |            |
| 4    | *Piptadenia*        | 0.686  | 4.62  | 1.08 | *Campomanesia*      | 96    | 6.50 | *Pterogyne* | 4          |
|      | (Fabaceae)          |        |       |      | (Myrtaeae)          |       |      | (Fabaceae) |            |
| 5    | *Siparuna*          | 0.654  | 4.40  | 18.54| *Dalberia*          | 49    | 3.32 | *Xylopia* | 4          |
|      | (Siparunaceae)      |        |       |      | (Fabaceae)          |       |      | (Annonaceae) |            |
| 6    | *Ocotea*            | 0.518  | 3.49  | 1.76 | *Ilex*              | 48    | 3.25 | *Eugenia* | 3          |
|      | (Lauraceae)         |        |       |      | (Aquifoliaceae)     |       |      | (Myrtaeae) |            |
| 7    | *Machaerium*        | 0.462  | 3.11  | 1.96 | *Nectandra*         | 45    | 3.04 | *Astronium* | 2          |
|      | (Fabaceae)          |        |       |      | (Lauraceae)         |       |      | (Anacardiaceae) |        |
| 8    | *Cedrela*           | 0.449  | 3.03  | 0.41 | *Copaihera*         | 44    | 2.98 | *Campomanesia* | 2          |
|      | (Meliaceae)         |        |       |      | (Fabaceae)          |       |      | (Myrtaeae) |            |
| 9    | *Campomanesia*      | 0.443  | 2.98  | 6.50 | *Virola*            | 36    | 2.44 | *Cassia* | 2          |
|      | (Myrtaeae)          |        |       |      | (Myristicaceae)     |       |      | (Fabaceae) |            |
| 10   | *Nectandra*         | 0.391  | 2.64  | 3.04 | *Xylopia*           | 35    | 2.37 | *Dendropanax* | 2          |
|      | (Lauraceae)         |        |       |      | (Annonaceae)        |       |      | (Araliaceae) |            |
| 11   | *Xylopia*           | 0.355  | 2.39  | 2.37 | *Svartzia*          | 32    | 2.17 | *Erythroxylum* | 2          |
|      | (Annonaceae)        |        |       |      | (Fabaceae)          |       |      | (Erythroxylaceae) |        |
| 12   | *Lithraea*          | 0.334  | 2.25  | 1.01 | *Machaerium*        | 29    | 1.96 | *Ilex* | 2          |
|      | (Anacardiaceae)     |        |       |      | (Fabaceae)          |       |      | (Aquifoliaceae) |            |
| 13   | *Svartzia*          | 0.273  | 1.84  | 3.32 | *Ocotea*            | 26    | 1.76 | *Lacistema* | 2          |
|      | (Fabaceae)          |        |       |      | (Lauraceae)         |       |      | (Lacistemataceae) |        |
| 14   | *Qualea*            | 0.266  | 1.79  | 2.17 | *Ochysia*           | 24    | 1.62 | *Licania* | 2          |
|      | (Vochysiaceae)      |        |       |      | (Chrysobalanaceae)  |       |      | (Chrysobalanaceae) |        |
|   | Genus/Species                  | TRC   | HEC  | SEP  | NCD   | Genus/Species                  | TRC   | HEC  | SEP  | NCD   |
|---|--------------------------------|-------|------|------|-------|--------------------------------|-------|------|------|-------|--------------------------------|-------|------|------|-------|
| 15| *Ilex* (Aquifoliaceae)         | 0.214 | 1.44 | 3.25 | 21    | *Protium* (Burseraceae)        | 1.42  |      |      |       |                                |       |      |      |       |
| 16| *Casearia* (Salicaceae)        | 0.212 | 1.43 | 1.15 | 19    | *Randia* (Rubiaceae)           | 1.29  |      |      |       |                                |       |      |      |       |
| 17| *Myracrodruon* (Anacardiaceae) | 0.174 | 1.17 | 0.68 | 19    | *Sclerolobium* (Fabaceae)      | 1.29  |      |      |       |                                |       |      |      |       |
| 18| *Terminalia* (Combretaceae)    | 0.168 | 1.13 | 0.41 | 18    | *Acrocomia* (Arecaceae)        | 1.22  |      |      |       |                                |       |      |      |       |
| 19| *Astronium* (Anacardiaceae)    | 0.156 | 1.05 | 1.08 | 17    | *Tabebuia* (Bignoniaceae)      | 1.15  |      |      |       |                                |       |      |      |       |
| 20| *Qualea* (Vochysiaceae)        | 0.143 | 0.96 | 1.62 | 17    | *Tapirira* (Anacardiaceae)     | 1.15  |      |      |       |                                |       |      |      |       |
| 21| *Tapirira* (Anacardiaceae)     | 0.124 | 0.84 | 1.29 | 16    | *Vitex* (Lamiaceae)            | 1.08  |      |      |       |                                |       |      |      |       |
| 22| *Virola* (Myristicaceae)       | 0.118 | 0.80 | 2.44 | 16    | *Acrocomia* (Arecaceae)        | 1.08  |      |      |       |                                |       |      |      |       |
| 23| *Andira* (Fabaceae)            | 0.117 | 0.78 | 0.81 | 15    | *Alchornea* (Euphorbiaceae)    | 1.01  |      |      |       |                                |       |      |      |       |
| 24| *Acrocomia* (Arecaceae)        | 0.093 | 0.63 | 0.14 | 12    | *Alibertia* (Rubiaceae)        | 0.81  |      |      |       |                                |       |      |      |       |
| 25| *Licania* (Chrysobalanaceae)   | 0.089 | 0.60 | 0.68 | 11    | *Andira* (Fabaceae)            | 0.74  |      |      |       |                                |       |      |      |       |
| 26| Not identified                 | 0.087 | 0.59 | 1.22 | 10    | *Licania* (Chrysobalanaceae)   | 0.68  |      |      |       |                                |       |      |      |       |
| 27| *Peltophorium* (Fabaceae)      | 0.087 | 0.58 | 0.20 | 10    | *Callisthene* (Vochysiaceae)   | 0.68  |      |      |       |                                |       |      |      |       |
| 28| *Schefflera* (Araliaceae)      | 0.082 | 0.56 | 0.41 | 6     | *Casearia* (Salicaceae)        | 0.41  |      |      |       |                                |       |      |      |       |
| 29| *Vernonia* (Asteraceae)        | 0.082 | 0.55 | 0.41 | 6     | *Cedrela* (Meliaceae)          | 0.41  |      |      |       |                                |       |      |      |       |
| 30| *Picramnia* (Picramniaceae)    | 0.082 | 0.55 | 0.14 | 6     | *Copalifera* (Fabaceae)        | 0.41  |      |      |       |                                |       |      |      |       |
| 31| *Vitex* (Lamiaceae)            | 0.079 | 0.53 | 0.20 | 6     | *Cupania* (Sapindaceae)        | 0.41  |      |      |       |                                |       |      |      |       |
| 32| *Pera* (Euphorbiaceae)         | 0.075 | 0.50 | 0.27 | 6     | *Dalbergia* (Fabaceae)         | 0.41  |      |      |       |                                |       |      |      |       |
|   | Species                  | Family           | Density | Height | Diameter | Species                  | Family           | Density | Height | Diameter |
|---|--------------------------|------------------|---------|--------|----------|--------------------------|------------------|---------|--------|----------|
| 33| *Tabebuia* (Bignoniaceae) |                  | 0.070   | 0.47   | 0.41     | *Tabebuia* (Bignoniaceae)|                  | 6       | 0.41   | 1        |
| 34| *Sclerolobium* (Fabaceae) |                  | 0.069   | 0.46   | 0.07     | *Terminalia* (Combretaceae)|                | 6       | 0.41   | 1        |
| 35| *Dialium* (Fabaceae)      |                  | 0.062   | 0.42   | 0.41     | *Vernonia* (Asteraceae)   |                  | 6       | 0.41   | 1        |
| 36| *Dendropanax* (Araliaceae)|                  | 0.061   | 0.41   | 1.42     | *Cupania* (Sapindaceae)   |                  | 5       | 0.34   | 1        |
| 37| *Eugenia* (Myrtaceae)     |                  | 0.053   | 0.35   | 1.15     | *Erythroxylum* (Erythroxylaceae) |              | 5       | 0.34   | 1        |
| 38| *Rollinia* (Anonaceae)    |                  | 0.043   | 0.29   | 0.14     | *Guazuma* (Malvaceae)     |                  | 5       | 0.34   | 1        |
| 39| *Guazuma* (Malvaceae)     |                  | 0.041   | 0.27   | 0.34     | *Protium* (Burseraceae)   |                  | 5       | 0.34   | 1        |
| 40| *Pterogyne* (Fabaceae)    |                  | 0.040   | 0.27   | 0.07     | *Guatteria* (Annonaceae)  |                  | 4       | 0.27   | 1        |
| 41| *Cupania* (Sapindaceae)   |                  | 0.036   | 0.24   | 0.34     | *Pera* (Euphorbiaceae)    |                  | 4       | 0.27   | 1        |
| 42| *Aspidosperma* (Apocynaceae)|              | 0.036   | 0.24   | 0.41     | *Psidium* (Myrtaeaceae)   |                  | 4       | 0.27   | 1        |
| 43| *Luehea* (Malvaceae)      |                  | 0.026   | 0.18   | 0.14     | *Cassia* (Fabaceae)       |                  | 3       | 0.20   | 1        |
| 44| *Alibertia* (Rubiaceae)   |                  | 0.026   | 0.18   | 0.74     | *Marlieria* (Myrtaeaceae)|                  | 3       | 0.20   | 1        |
| 45| *Lacistema* (Lacistemataceae)|            | 0.024   | 0.16   | 1.29     | *Peltophorun* (Fabaceae)  |                  | 3       | 0.20   | 1        |
| 46| *Cassia* (Fabaceae)       |                  | 0.023   | 0.16   | 0.20     | *Rudgea* (Rubiaceae)      |                  | 3       | 0.20   | 1        |
| 47| *Randia* (Rubiaceae)      |                  | 0.022   | 0.15   | 0.07     | *Vitex* (Lamiaceae)       |                  | 3       | 0.20   | 1        |
| 48| *Guatteria* (Annonaceae)  |                  | 0.022   | 0.15   | 0.27     | *Acrocomia* (Areaceae)    |                  | 2       | 0.14   | 1        |
| 49| *Senna* (Fabaceae)        |                  | 0.021   | 0.14   | 0.14     | *Heteropteris* (Malpighiaceae) |                | 2       | 0.14   | 1        |
| 50| *Protium* (Burseraceae)   |                  | 0.020   | 0.13   | 0.34     | *Luehea* (Malvaceae)      |                  | 2       | 0.14   | 1        |
| 51| *Plathymenia* (Fabaceae)  |                  | 0.018   | 0.12   | 0.07     | *Picramnia* (Picramniaceae)|                | 2       | 0.14   | 1        |
| Rank | Genus              | BA   | %BA  | %N  | Genus              | N   | %N   | Genus   | S   |
|------|-------------------|------|------|-----|-------------------|-----|------|---------|-----|
| 1    | *Callisthene*     | 3.78 | 33.30| 18.93| *Callisthene*    | 240 | 18.93| *Myrcia*| 5   |

Table 6.
Corrego Fundo Gallery Forest ranking by genus according to basal area (BA, including all multiple stems for each individual), number of individuals (N) and number of species (S), data from the third census.
| Species | Count | Mean | S.D. |
|---------|-------|------|------|
| Copaifera (Fabaceae) | 132 | 10.41 | Not identified |
| Siparuna (Siparunaceae) | 104 | 8.20 | Aspidosperma (Apocynaceae) |
| Myrcia (Myrtaceae) | 74 | 5.84 | Eugenia (Myrtaceae) |
| Tapirira (Anacardiaceae) | 52 | 4.10 | Machaerium (Fabaceae) |
| Pera (Euphorbiaceae) | 50 | 3.94 | Casearia (Salicaceae) |
| Protium (Burseraceae) | 49 | 3.86 | Dalbergia (Fabaceae) |
| Siparuna (Siparunaceae) | 49 | 3.86 | Lacistema (Lacistemataceae) |
| Aspidosperma (Apocynaceae) | 39 | 3.08 | Licania (Chrysobalanaceae) |
| Dilodendron (Sapindaceae) | 34 | 2.68 | Matayba (Sapindaceae) |
| Pera (Euphorbiaceae) | 33 | 2.60 | Swartzia (Fabaceae) |
| dilodendron (Sapindaceae) | 30 | 2.37 | Tabebuia (Bignoniaceae) |
| Licania (Chrysobalanaceae) | 30 | 2.37 | Eugenia (Myrtaceae) |
| Alibertia (Rubiaceae) | 30 | 2.37 | Alibertia (Rubiaceae) |
| Virola (Myristicaceae) | 26 | 2.05 | Andira (Fabaceae) |
| Diospyros (Ebenaceae) | 25 | 1.97 | Apeiba (Malvaceae) |
| Xylopia (Annonaceae) | 23 | 1.81 | Ardisia (Primulaceae) |
| Eugenia (Myrtaceae) | 17 | 1.34 | Astronium (Anacardiaceae) |
| Cupania (Sapindaceae) | 15 | 1.18 | Aureliana (Solanaceae) |
| # | Species | Genus | Family | Height | DBH | Species | Genus | Family | Height | DBH | Species | Genus | Family |
|---|---------|-------|--------|--------|------|---------|-------|--------|--------|------|---------|-------|--------|
| 20 | Guazuma | Malvaceae | 0.09 | 0.80 | 0.87 | Ixora | Rubiaceae | 15 | 1.18 | Bowdichia | Fabaceae | 1 |
| 21 | Cupania | Sapindaceae | 0.07 | 0.63 | 1.18 | Swartzia | Fabaceae | 15 | 1.18 | Byrsonima | Malpighiaceae | 1 |
| 22 | Lacistema | Lacistemataceae | 0.07 | 0.61 | 3.86 | Dendropanax | Araliaceae | 11 | 0.87 | Calisthene | Vochysiaceae | 1 |
| 23 | Apeiba | Malvaceae | 0.07 | 0.59 | 0.24 | Guazuma | Malvaceae | 11 | 0.87 | Calophyllum | Calophyllaceae | 1 |
| 24 | Ixora | Rubiaceae | 0.07 | 0.58 | 1.18 | Hirtella | Chrysobalanaceae | 10 | 0.79 | Calyptranthes | Myrtaceae | 1 |
| 25 | Not identified | | 0.05 | 0.45 | 0.63 | Micropholis | Sapotaceae | 10 | 0.79 | Campomanesia | Myrtaceae | 1 |
| 26 | Andira | Fabaceae | 0.05 | 0.45 | 0.63 | Andira | Fabaceae | 8 | 0.63 | Cecropia | Urticaceae | 1 |
| 27 | Vitex | Lamiaceae | 0.05 | 0.43 | 0.63 | Ilex | Aquifoliaceae | 8 | 0.63 | Copaifera | Fabaceae | 1 |
| 28 | Campomanesia | Myrtaceae | 0.04 | 0.39 | 0.24 | Schefflera | Araliaceae | 8 | 0.63 | Cupania | Sapindaceae | 1 |
| 29 | Dendropanax | Araliaceae | 0.04 | 0.39 | 0.87 | Vitex | Lamiaceae | 8 | 0.63 | Dendropanax | Araliaceae | 1 |
| 30 | Micropholis | Sapotaceae | 0.04 | 0.39 | 0.79 | Not identified | | 8 | 0.63 | Dilodendron | Sapindaceae | 1 |
| 31 | Schefflera | Araliaceae | 0.04 | 0.38 | 0.63 | Casearia | Salicaceae | 7 | 0.55 | Diospyros | Ebenaceae | 1 |
| 32 | Lithraea | Anacardiaceae | 0.04 | 0.36 | 0.39 | Machaerium | Fabaceae | 7 | 0.55 | Duguetia | Annonaceae | 1 |
| 33 | Eriotheca | Malvaceae | 0.04 | 0.35 | 0.39 | Ouratea | Ochnaceae | 7 | 0.55 | Endlicheria | Lauraceae | 1 |
| 34 | Bowdichia | Fabaceae | 0.04 | 0.35 | 0.24 | Astronium | Anacardiaceae | 6 | 0.47 | Eriotheca | Malvaceae | 1 |
| 35 | Machaerium | Fabaceae | 0.03 | 0.30 | 0.55 | Eriotheca | Malvaceae | 5 | 0.39 | Erythroxylum | Erythroxylaceae | 1 |
| 36 | Hirtella | Chrysobalanaceae | 0.03 | 0.27 | 0.79 | Lithraea | Anacardiaceae | 5 | 0.39 | Guapira | Nyctaginaceae | 1 |
| 37 | Swartzia | Fabaceae | 0.03 | 0.26 | 1.18 | Aureliana | Solanaceae | 4 | 0.32 | Guazuma | Malvaceae | 1 |
| No. | Species                      | Family           | Density | Height | Canopy Cover | Other Species | Notes                      |
|-----|------------------------------|------------------|---------|--------|--------------|---------------|----------------------------|
| 38  | *Casearia*                   | (Salicaceae)     | 0.03    | 0.25   | 0.55         | *Calyptranthes* (Myrtaceae) | 4 0.32 *Guettarda* (Rubiaceae) 1 |
| 39  | *Aureliana*                  | (Solanaceae)     | 0.03    | 0.24   | 0.32         | *Guapira* (Nyctaginaceae)  | 4 0.32 *Hirtella* (Chrysobalanaceae) 1 |
| 40  | *Ouratea*                    | (Ochnaceae)      | 0.02    | 0.22   | 0.55         | *Matayba* (Sapindaceae)   | 4 0.32 *ilex* (Aquifoliaceae) 1 |
| 41  | *Luehea*                     | (Malvaceae)      | 0.02    | 0.19   | 0.24         | *Rapanoea* (Primulaceae)  | 4 0.32 *Lacistema* (Lacistemataceae) 1 |
| 42  | *ilex*                       | (Aquifoliaceae)  | 0.01    | 0.13   | 0.63         | *Salacia* (Celastraceae)  | 4 0.32 *Lithraea* (Anacardiaceae) 1 |
| 43  | *Matayba*                    | (Sapindaceae)    | 0.01    | 0.12   | 0.32         | *Apeiba* (Malvaceae)     | 3 0.24 *Luehea* (Malvaceae) 1 |
| 44  | *Sterculia*                  | (Malvaceae)      | 0.01    | 0.12   | 0.08         | *Bowdichia* (Fabaceae)   | 3 0.24 *Micropholis* (Sapotaceae) 1 |
| 45  | *Platypodium*                | (Fabaceae)       | 0.01    | 0.11   | 0.24         | *Campomanesia* (Myrtaceae) | 3 0.24 *Ocotea* (Lauraceae) 1 |
| 46  | *Ocotea*                     | (Lauraceae)      | 0.01    | 0.10   | 0.24         | *Luehea* (Malvaceae)     | 3 0.24 *Ouratea* (Ochnaceae) 1 |
| 47  | *Guapira*                    | (Nyctaginaceae)  | 0.01    | 0.10   | 0.32         | *Ocotea* (Lauraceae)     | 3 0.24 *Pera* (Euphorbiaceae) 1 |
| 48  | *Rapanoea*                   | (Primulaceae)    | 0.01    | 0.09   | 0.32         | *Platypodium* (Fabaceae) | 3 0.24 *Piptadenia* (Fabaceae) 1 |
| 49  | *Cecropia*                   | (Urticaceae)     | 0.01    | 0.09   | 0.08         | *Ardisia* (Primulaceae)  | 2 0.16 *Platypodium* (Fabaceae) 1 |
| 50  | *Salacia*                    | (Celastraceae)   | 0.01    | 0.08   | 0.32         | *Byrsonima* (Malpighiaceae) | 2 0.16 *Pouteria* (Sapotaceae) 1 |
| 51  | *Dalbergia*                  | (Fabaceae)       | 0.01    | 0.08   | 0.16         | *Calophyllum* (Calophyllaceae) | 2 0.16 *Protium* (Burseraceae) 1 |
| 52  | *Calyptranthes*              | (Myrtaceae)      | 0.01    | 0.06   | 0.32         | *Dalbergia* (Fabaceae)   | 2 0.16 *Pseudobombax* (Malvaceae) 1 |
| 53  | *Byrsonima*                  | (Malpighiaceae)  | 0.00    | 0.04   | 0.16         | *Endicheria* (Lauraceae) | 2 0.16 *Rapanoea* (Primulaceae) 1 |
| 54  | *Pouteria*                   | (Sapotaceae)     | 0.00    | 0.04   | 0.16         | *Guettarda* (Rubiaceae)  | 2 0.16 *Rudgea* (Rubiaceae) 1 |
| 55  | *Erythroxylum*               | (Erythroxylaceae)| 0.00    | 0.03   | 0.08         | *Pouteria* (Sapotaceae)  | 2 0.16 *Salacia* (Celastraceae) 1 |
| Rank | Species                      | BA  | %BA | %N  | Species                      | BA  | %BA | %N  |
|------|------------------------------|-----|-----|-----|------------------------------|-----|-----|-----|
| 1    | Callisthene major Mart.      | 5.07| 34.12| 21.11 | Callisthene major Mart.      | 312 | 21.11 |       |
|      | (Vochysiaceae)               |     |      |      | (Vochysiaceae)               |     |      |      |
| 2    | Copaifera langsdorffii Desf.| 0.95| 6.43 | 2.98 | Siparuna guianensis Aubl.    | 274 | 18.54 |       |
|      | (Fabaceae)                   |     |      |      | (Siparunaceae)               |     |      |      |
| 3    | Piptadenia gonoacantha (Mart.)| 0.69| 4.62 | 1.08 | Campomanesia xanthocarpa (Mart.) O.Berg (Myrtaceae) | 94 | 6.36 |       |
|      | J.F.Macbr. (Fabaceae)         |     |      |      |                             |     |      |      |
| 4    | Siparuna guianensis Aubl.    | 0.65| 4.40 | 18.54 | Myrcia tomentosa (Aubl.) DC. (Myrtaceae) | 61 | 4.13 |       |
|      | (Siparunaceae)               |     |      |      | (Myrtaceae)                  |     |      |      |
| 5    | Myrcia tomentosa (Aubl.) DC. (Myrtaceae) | 0.60| 4.05 | 4.13 | Dalbergia brasiliensis Vogel (Fabaceae) | 49 | 3.32 |       |
| 6    | Ocotea corymbosa (Meisn.) Mez (Lauraceae) | 0.52| 3.49 | 1.76 | Nectandra oppositifolia Nees & Mart. (Lauraceae) | 45 | 3.04 |       |

Table 7. Corrego Fazendinha Gallery Forest ranking by species according to basal area (BA) and number of individuals (N), data from the third census.
|   | Species name                                                                 | Diameter (cm) | Height (m) | DBH (m) | Index  |
|---|-------------------------------------------------------------------------------|---------------|------------|---------|--------|
| 7 | Cedrela fissilis Vell. (Meliaceae)                                             | 0.45          | 3.03       | 0.41    | 4.97   |
| 8 | Campomanesia xanthocarpa (Mart.) O.Berg. (Myrtaceae)                          | 0.43          | 2.88       | 6.36    | 2.77   |
| 9 | Nectandra oppositifolia Nees & Mart. (Lauraceae)                              | 0.39          | 2.64       | 3.04    | 2.57   |
| 10| Myrica splendens (Sw.) DC. (Myrtaceae)                                        | 0.37          | 2.46       | 2.57    | 2.44   |
| 11| Lithraea molleoides (Vell.) Engl. (Anacardiaceae)                             | 0.33          | 2.25       | 1.01    | 2.10   |
| 12| Machaerium villosum Vogel (Fabaceae)                                          | 0.31          | 2.06       | 1.35    | 1.76   |
| 13| Dalbergia brasiliensis Vogel (Fabaceae)                                       | 0.27          | 1.84       | 3.32    | 1.69   |
| 14| Swartzia sp (Fabaceae)                                                        | 0.26          | 1.78       | 2.10    | 1.35   |
| 15| Xylopia aromatica (Lam.) Mart. (Annonaceae)                                  | 0.24          | 1.63       | 1.69    | 1.35   |
| 16| Casearia sylvestris Sw. (Salicaceae)                                          | 0.21          | 1.43       | 1.15    | 1.22   |
| 17| Ilex cerasifolia Reissek (Aquifoliaceae)                                      | 0.19          | 1.31       | 2.77    | 1.15   |
| 18| Myracrodruon urundeuva Allemão (Anacardiaceae)                               | 0.17          | 1.17       | 0.68    | 1.08   |
| 19| Tapirira guianensis Aubl. (Anacardiaceae)                                    | 0.12          | 0.80       | 1.22    | 1.08   |
| 20| Virola sebifera Aubl. (Myristicaceae)                                         | 0.12          | 0.80       | 2.44    | 1.01   |
| 21| Andira fraxinifolia Benth. (Fabaceae)                                         | 0.12          | 0.78       | 0.81    | 1.01   |
| 22| Xylopia sericea A.St.-Hil. (Annonaceae)                                      | 0.11          | 0.77       | 0.68    | 0.95   |
| 23| Astronium fraxinifolium Schott (Anacardiaceae)                                | 0.10          | 0.65       | 1.01    | 0.88   |
| 24| Acrocomia aculeata (Jacq.) Lodd. ex Mart. (Areceaceae)                       | 0.09          | 0.63       | 0.14    | 0.81   |
|   | Species                                                                 | Relative weight | Weight | Frequency |  |   |
|---|------------------------------------------------------------------------|-----------------|--------|-----------|---|---|
| 25| Machaerium isadelphum (E.Mey.)Standl. (Fabaceae)                       | 0.09            | 0.63   | 0.27      |   | 12| 0.81|
| 26| Andira fraxinifolia Benth. (Fabaceae)                                  | 0.09            | 0.58   | 0.20      |   | 11| 0.74|
| 27| Xylopia sericea A.St.-Hil. (Annonaceae)                                | 0.09            | 0.57   | 0.07      |   | 10| 0.68|
| 28| Myracrodruon urundeuva Allemão (Anacardiaceae)                         | 0.08            | 0.56   | 0.41      |   | 10| 0.68|
| 29| Ilex sp (Aquifoliaceae)                                                | 0.08            | 0.55   | 0.34      |   | 7 | 0.47|
| 30| Veronia sp (Asteraceae)                                                | 0.08            | 0.55   | 0.41      |   | 6 | 0.41|
| 31| Schefflera morototoni (Aubl.) Maguire, Steyerm. & Frodin (Araliaceae) | 0.08            | 0.55   | 0.14      |   | 6 | 0.41|
| 32| Piper arboeum Aubl. (Piperaceae)                                       | 0.08            | 0.54   | 0.95      |   |   |   |
| 33| Licania kunthiana Hook.f. (Chrysobalanaceae)                           | 0.08            | 0.53   | 0.20      |   | 6 | 0.41|
| 34| Handroanthus ochraceus (Cham.) Mattos (Bignoniaceae)                   | 0.07            | 0.50   | 0.27      |   | 6 | 0.41|
| 35| Dialium sp (Fabaceae)                                                  | 0.07            | 0.47   | 0.41      |   | 6 | 0.41|
| 36| Cedrela fissilis Vell. (Meliaceae)                                     | 0.07            | 0.46   | 0.07      |   | 6 | 0.41|
| 37| Terminalia glabrescens Mart. (Combretaceae)                            | 0.07            | 0.45   | 0.88      |   | 5 | 0.34|
| 38| Qualea multilora Mart. (Vochysiaceae)                                  | 0.06            | 0.42   | 0.41      |   | 5 | 0.34|
| 39| Protium heptaphyllum (Aubl.) Marchand (Burseraceae)                    | 0.06            | 0.40   | 1.35      |   | 5 | 0.34|
| 40| Guazuma ulmifolia Lam. (Malvaceae)                                     | 0.06            | 0.40   | 0.07      |   | 5 | 0.34|
| 41| Cupania vernalis Cambess. (Sapindaceae)                                | 0.06            | 0.39   | 0.41      |   | 5 | 0.34|
| 42| Qualea sp (Vochysiaceae)                                               | 0.04            | 0.29   | 0.81      |   | 4 | 0.27|
| No. | Species Name                  | Family       | 0.02 | 0.03 | 0.04 | Species Name                  | Family       | 0.02 | 0.03 | 0.04 |
|-----|-------------------------------|--------------|------|------|------|-------------------------------|--------------|------|------|------|
| 43  | Machaerium nyctitans          | Fabaceae     | 0.04 | 0.28 | 0.14 | Pera glabrata (Schott) Poepp. ex Baill. (Euphorbiaceae) | 4            | 0.27 |
| 44  | Guazuma ulmifolia Lam.        | Malvaceae    | 0.04 | 0.27 | 0.34 | Machaerium isadelphum (E.Mey.)Standl. (Fabaceae)     | 4            | 0.27 |
| 45  | Pterogyne sp (Fabaceae)       | Fabaceae     | 0.04 | 0.27 | 0.07 | Licania sp (Chrysobalanaceae) | 4            | 0.27 |
| 46  | Cupania vernalis Cambess.     | Sapindaceae  | 0.04 | 0.24 | 0.34 | Guatteria sellowiana Schltld. (Annonaceae) | 4            | 0.27 |
| 47  | Qualea sp (Vochysiaceae)      | Vochysiaceae | 0.03 | 0.22 | 0.27 | Erythroxylum pelleterianum A.St.-Hil. (Erythroxylaceae) | 4            | 0.27 |
| 48  | Licania sp (Chrysobalanaceae) | Chrysobalanaceae | 0.03 | 0.21 | 0.27 | Vitex sellowiana Cham. (Lamiaceae) | 3            | 0.20 |
| 49  | Rollinia laurifolia Schltld.  | Annonaceae   | 0.03 | 0.21 | 0.07 | Rudgea viburnoides (Cham.) Benth. (Rubiacae) | 3            | 0.20 |
| 50  | Luehea grandiiflora Mart.     | Malvaceae    | 0.03 | 0.18 | 0.14 | Psidium guajava L. (Myrtaceae) | 3            | 0.20 |
| 51  | Alibertia edulis (Rich.) A.Rich. ex DC. (Rubiaeae) | 0.03 | 0.18 | 0.74 | Peltophorum dubium (Spreng.) Taub. (Fabaceae) | 3            | 0.20 |
| 52  | Randia armata (Sw.) DC.       | Rubiaceae    | 0.02 | 0.15 | 0.07 | Not identified 1 | 3            | 0.20 |
| 53  | Guatteria sellowiana Schltld. | Annonaceae   | 0.02 | 0.15 | 0.27 | Marlieria sp (Myrtaceae) | 3            | 0.20 |
| 54  | Machaerium opacum Vogel       | Fabaceae     | 0.02 | 0.14 | 0.14 | Lacistema sp (Lacistemataceae) | 3            | 0.20 |
| 55  | Aspidosperma olivaceum Müll. Arg. (Apocynaceae) | 0.02 | 0.14 | 0.20 | Eugenia dysenterica DC. (Myrtaceae) | 3            | 0.20 |
| 56  | Ilex sp (Aquifoliaceae)       | Apocynaceae  | 0.02 | 0.13 | 0.47 | Aspidosperma olivaceum Müll.Arg. (Apocynaceae) | 3            | 0.20 |
| 57  | Protium heptaphyllum (Aubl.) Marchand (Burseraceae) | 0.02 | 0.13 | 0.34 | Trichilia palida Sw. (Meliaceae) | 2            | 0.14 |
| 58  | Lacistema hasslerianum Chodat (Lacistemataceae) | 0.02 | 0.13 | 1.08 | Picramnia parvifolia Engl. (Picramniaceae) | 2            | 0.14 |
| 59  | Plathymenia reticulata Benth. (Fabaceae) | 0.02 | 0.12 | 0.07 | Myrcia sp1 (Myrtaceae) | 2            | 0.14 |
| 60  | Cassia ferruginea (Schrad.)DC. (Fabaceae) | 0.02 | 0.12 | 0.14 | Myrcia multiflora (Lam.) DC. (Myrtaceae) | 2            | 0.14 |
|   | Species and Family                        | W | H | L |ﺜ  |   |     |
|---|-----------------------------------------|---|---|---|---|---|------|
| 61 | Qualea multiflora Mart. (Vochysiaceae)   | 0.02 | 0.12 | 0.34 | Myrcia guianensis (Aubl.) DC. (Myrtaceae) | 2 | 0.14 |
| 62 | Campomanesia velutina (Cambess.) O.Berg (Myrtaceae) | 0.02 | 0.11 | 0.14 | Machaerium opacum Vogel (Fabaceae) | 2 | 0.14 |
| 63 | Myrcia multiflora (Lam.) DC. (Myrtaceae) | 0.02 | 0.11 | 0.14 | Machaerium nyctitans (Fabaceae) | 2 | 0.14 |
| 64 | Psidium guajava L. (Myrtaceae)           | 0.01 | 0.09 | 0.20 | Luehea grandiflora Mart. (Malvaceae) | 2 | 0.14 |
| 65 | Qualea multiflora subsp. pubescens (Mart.) Staffeu (Vochysiaceae) | 0.01 | 0.08 | 0.07 | Heteropterys byronimifolia A.Juss. (Malpighiaceae) | 2 | 0.14 |
| 66 | Rollinia sp (Annonaceae)                 | 0.01 | 0.08 | 0.07 | Eugenia sp (Myrtaceae) | 2 | 0.14 |
| 67 | Marlieria sp (Myrtaceae)                 | 0.01 | 0.08 | 0.20 | Cassia ferruginea (Schrad.)DC. (Fabaceae) | 2 | 0.14 |
| 68 | Not identified 2                        | 0.01 | 0.08 | 0.07 | Campomanesia velutina (Cambess.) O.Berg (Myrtaceae) | 2 | 0.14 |
| 69 | Senna sp2 (Fabaceae)                    | 0.01 | 0.07 | 0.07 | Acrocomia aculeata (Jacq.) Lodd. ex Mart. (Areaceae) | 2 | 0.14 |
| 70 | Senna sp1 (Fabaceae)                    | 0.01 | 0.07 | 0.07 | Terminalia argentea Mart. (Combretaceae) | 1 | 0.07 |
| 71 | Aspidosperma sp1 (Apocynaceae)           | 0.01 | 0.06 | 0.07 | Tapirira obtusa (Benth.) J.D.Mitch. (Anacardiaceae) | 1 | 0.07 |
| 72 | Diospyros sp (Ebenaceae)                 | 0.01 | 0.06 | 0.07 | Swartzia myrtifolia Sm. (Fabaceae) | 1 | 0.07 |
| 73 | Myrcia ruflipes DC. (Myrtaceae)          | 0.01 | 0.05 | 0.07 | Senna sp2 (Fabaceae) | 1 | 0.07 |
| 74 | Piper arboreum Aubl. (Piperaceae)        | 0.01 | 0.05 | 0.41 | Senna sp1 (Fabaceae) | 1 | 0.07 |
| 75 | Erythroxylum pelleterianum A.St.-Hill. (Erythroxylaceae) | 0.01 | 0.05 | 0.27 | Sclerolobium paniculatum Vogel (Fabaceae) | 1 | 0.07 |
| 76 | Guarea sp (Meliaceae)                    | 0.01 | 0.05 | 0.07 | Rubiaceae sp (Rubiaceae) | 1 | 0.07 |
| 77 | Ouratea sp (Ochnaceae)                   | 0.01 | 0.05 | 0.07 | Rollinia sp (Annonaceae) | 1 | 0.07 |
| 78 | Trichilia pallida Sw. (Meliaceae)        | 0.01 | 0.04 | 0.14 | Rollinia laurifolia Schltdl. (Annonaceae) | 1 | 0.07 |
| 79 | Eugenia dysenterica DC. (Myrtaceae)      | 0.01 | 0.04 | 0.20 | Randia armata (Sw.) DC. (Rubiaceae) | 1 | 0.07 |
|    | Species                                      | Density | Dominance | Importance Value | Relative Abundance |
|----|---------------------------------------------|---------|-----------|------------------|--------------------|
| 80 | Myrcia sp1 (Myrtaceae)                      | 0.01    | 0.04      | 0.14             | 1                  |
|    | *Qualea multiflora* subsp. *pubescens* (Mart.) Stafileu (Vochysiaceae) |         |           |                  |                    |
| 81 | Heteropterys byronimifolia A.Juss. (Malpighiaceae) | 0.01    | 0.04      | 0.14             | 1                  |
|    | *Pterogyne* sp (Fabaceae)                   |         |           |                  |                    |
| 82 | *Erythroxylum citrifolium* A.St.-Hil. (Erythroxylaceae) | 0.01    | 0.04      | 0.07             | 1                  |
|    | *Psidium rufum* Mart. ex DC. (Myrtaceae)    |         |           |                  |                    |
| 83 | *Cassia* sp (Fabaceae)                      | 0.00    | 0.03      | 0.07             | 1                  |
|    | *Plathymenia reticulata* Benth. (Fabaceae)  |         |           |                  |                    |
| 84 | Tapirira obtusa (Benth.) J.D.Mitch. (Anacardiaceae) | 0.00    | 0.03      | 0.07             | 1                  |
|    | *Ouratea* sp (Ochnaceae)                    |         |           |                  |                    |
| 85 | Not identified 1                            | 0.00    | 0.03      | 0.20             | 1                  |
|    | Not identified 2                            |         |           |                  |                    |
| 86 | *Lacistema* sp (Lacistemataceae)            | 0.00    | 0.03      | 0.20             | 1                  |
|    | *Myrcia* sp2 (Myrtaceae)                    |         |           |                  |                    |
| 87 | *Myrcia guianensis* (Aubl.) DC. (Myrtaceae) | 0.00    | 0.03      | 0.14             | 1                  |
|    | *Myrcia rupestris* DC. (Myrtaceae)          |         |           |                  |                    |
| 88 | *Eugenia* sp (Myrtaceae)                    | 0.00    | 0.03      | 0.14             | 1                  |
|    | *Machaerium* sp (Fabaceae)                  |         |           |                  |                    |
| 89 | *Psidium rufum* Mart. ex DC. (Myrtaceae)    | 0.00    | 0.03      | 0.07             | 1                  |
|    | *Ixora gardneriana* Benth. (Rubiaceae)      |         |           |                  |                    |
| 90 | *Aspidosperma subincanum* Mart. ex A.DC. (Apocynaceae) | 0.00    | 0.03      | 0.07             | 1                  |
|    | *Guettarda viburnoides* Cham. & Schltdl. (Rubiaceae) |         |           |                  |                    |
| 91 | *Ixora gardneriana* Benth. (Rubiaceae)      | 0.00    | 0.03      | 0.07             | 1                  |
|    | *Guarea* sp (Meliaceae)                     |         |           |                  |                    |
| 92 | *Rubiaceae* sp (Rubiaceae)                  | 0.00    | 0.03      | 0.07             | 1                  |
|    | *Erythroxylum citrifolium* A.St.-Hil. (Erythroxylaceae) |         |           |                  |                    |
| 93 | *Apuleia leiocarpa* (Vogel) J.F.Macbr. (Fabaceae) | 0.00    | 0.02      | 0.07             | 1                  |
|    | *Diospyros* sp (Ebenaceae)                  |         |           |                  |                    |
| 94 | *Rudgea viburnoides* (Cham.) Benth. (Rubiaceae) | 0.00    | 0.02      | 0.20             | 1                  |
|    | *Dendropanax* sp (Araliaceae)               |         |           |                  |                    |
| 95 | *Myrcia* sp2 (Myrtaceae)                    | 0.00    | 0.02      | 0.07             | 1                  |
|    | *Cassia* sp (Fabaceae)                      |         |           |                  |                    |
| 96 | *Aspidosperma* sp2 (Apocynaceae)            | 0.00    | 0.02      | 0.07             | 1                  |
|    | *Astronium* sp (Anacardiaceae)              |         |           |                  |                    |
| 97 | *Machaerium* sp (Fabaceae)                  | 0.00    | 0.01      | 0.07             | 1                  |
|    | *Aspidosperma subincanum* Mart. ex A.DC. (Apocynaceae) |         |           |                  |                    |
| 98 | *Guettarda viburnoides* Cham. & Schltdl. (Rubiaceae) | 0.00    | 0.01      | 0.07             | 1                  |
|    | *Aspidosperma* sp2 (Apocynaceae)            |         |           |                  |                    |
| Rank | Species | BA  | %BA | %N  | Species | N   | %N  |
|------|---------|-----|-----|-----|---------|-----|-----|
| 1    | Callisthene major Mart. (Vochysiaceae) | 3.78 | 33.30 | 18.93 | Callisthene major Mart. (Vochysiaceae) | 240 | 18.93 |
| 2    | Copaifera langsdorffii Desf. (Fabaceae) | 1.35 | 11.94 | 3.86 | Siparuna guianensis Aubl. (Siparunaceae) | 132 | 10.41 |
| 3    | Terminalia glabrescens Mart. (Combretaceae) | 0.77 | 6.82 | 2.68 | Licania kunthiana Hook.f. (Chrysobalanaceae) | 73 | 5.76 |
| 4    | Tapirira guianensis Aubl. (Anacardiaceae) | 0.57 | 5.04 | 3.86 | Myrcia rostrata DC. (Myrtaceae) | 51 | 4.02 |
| 5    | Pera glabrata (Schott) Poepp. ex Baill. (Euphorbiaceae) | 0.47 | 4.12 | 2.60 | Albertia edulis (Rich.) A.Rich. ex DC. (Rubiaceae) | 50 | 3.94 |
| 6    | Protium heptaphyllum (Aubl.) Marchand (Burseraceae) | 0.32 | 2.85 | 3.08 | Copaifera langsdorffii Desf. (Fabaceae) | 49 | 3.86 |
| 7    | Siparuna guianensis Aubl. (Siparunaceae) | 0.31 | 2.72 | 10.41 | Lacistema hassleriunum Chodat (Lacistemataceae) | 49 | 3.86 |
| 8    | Myrcia rostrata DC. (Myrtaceae) | 0.28 | 2.50 | 4.02 | Tapirira guianensis Aubl. (Anacardiaceae) | 49 | 3.86 |
| 9    | Dilodendron bipinnatum Radlk. (Sapindaceae) | 0.27 | 2.36 | 2.37 | Protium heptaphyllum (Aubl.) Marchand (Burseraceae) | 39 | 3.08 |
| 10   | Xylopia aromatica (Lam.) Mart. (Annonaceae) | 0.26 | 2.29 | 1.81 | Terminalia glabrescens Mart. (Combretaceae) | 34 | 2.68 |
| 11   | Pseudobombax tomentosum (Mart. & Zucc.) A.Robyns (Malvaceae) | 0.25 | 2.21 | 0.16 | Pera glabrata (Schott) Poepp. ex Baill. (Euphorbiaceae) | 33 | 2.60 |

Table 8.
Corrego Fundo Gallery Forest ranking by species according to basal area (BA) and number of individuals (N), data from the third census.
|   | Species                                                                 | Density | Diameter | Height | Family                      | Value1 | Value2 |
|---|-------------------------------------------------------------------------|---------|----------|--------|-----------------------------|--------|--------|
| 12| *Licania kunthiana* Hook.f. (Chrysobalanaceae)                          | 0.24    | 2.10     | 5.76   | *Dilodendron bipinnatum* Radik. (Sapindaceae) | 30     | 2.37   |
| 13| *Alibertia edulis* (Rich.) A.Rich. ex DC. (Rubiaceae)                  | 0.17    | 1.48     | 3.94   | *Virola sebifera* Aubl. (Myristicaceae)          | 30     | 2.37   |
| 14| *Virola sebifera* Aubl. (Myristicaceae)                                 | 0.13    | 1.18     | 2.37   | *Diospyros brasiliensis* Mart. ex Miq. (Ebenaceae) | 25     | 1.97   |
| 15| *Astronium fraxinifolium* Schott (Anacardiaceae)                        | 0.13    | 1.13     | 0.47   | *Myrcia guianensis* (Aubl.) DC. (Myrtaceae)      | 24     | 1.89   |
| 16| *Diospyros brasiliensis* Mart. ex Miq. (Ebenaceae)                      | 0.12    | 1.02     | 1.97   | *Xylopia aromatica* (Lam.) Mart. (Annonaceae)    | 23     | 1.81   |
| 17| *Aspidosperma darianense* Woodson ex Dwyer (Apocynaceae)               | 0.10    | 0.90     | 1.10   | *Myrcia* sp. (Myrtaceae)                         | 17     | 1.34   |
| 18| *Aspidosperma subincanum* Mart. ex A.DC. (Apocynaceae)                 | 0.10    | 0.86     | 0.24   | *Eugenia* sp. (Myrtaceae)                        | 16     | 1.26   |
| 19| *Tabebuia serratifolia* (Vahl) G. Nicholson (Bignoniaceae)             | 0.10    | 0.84     | 1.26   | *Tabebuia serratifolia* (Vahl) G. Nicholson (Bignoniaceae) | 16     | 1.26   |
| 20| *Guazuma ulmifolia* Lam. (Malvaceae)                                   | 0.09    | 0.80     | 0.87   | *Cupania vernalis* Cambess. (Sapindaceae)         | 15     | 1.18   |
| 21| *Myrcia* sp. (Myrtaceae)                                                | 0.09    | 0.78     | 1.34   | *Aspidosperma darianense* Woodson ex Dwyer (Apocynaceae) | 14     | 1.10   |
| 22| *Myrcia tomentosa* (Aubl.) DC. (Myrtaceae)                              | 0.09    | 0.77     | 0.87   | *Ixora gardneriana* Benth. (Rubiaceae)            | 14     | 1.10   |
| 23| *Myrcia guianensis* (Aubl.) DC. (Myrtaceae)                             | 0.08    | 0.71     | 1.89   | *Swartzia* sp. (Fabaceae)                        | 14     | 1.10   |
| 24| *Cupania vernalis* Cambess. (Sapindaceae)                               | 0.07    | 0.63     | 1.18   | *Eugenia florida* DC. (Myrtaceae)                 | 13     | 1.03   |
| 25| *Lacistema hasslerianum* Chodat (Lacistemataceae)                       | 0.07    | 0.61     | 3.86   | *Dendropanax cuneatus* (DC.) Decne. & Planch. (Araliaceae) | 11     | 0.87   |
| 26| *Apeiba tibourbou* Aubl. (Malvaceae)                                    | 0.07    | 0.59     | 0.24   | *Guazuma ulmifolia* Lam. (Malvaceae)              | 11     | 0.87   |
| 27| *Ixora gardneriana* Benth. (Rubiaceae)                                 | 0.06    | 0.56     | 1.10   | *Myrcia tomentosa* (Aubl.) DC. (Myrtaceae)        | 11     | 0.87   |
| 28| *Eugenia florida* DC. (Myrtaceae)                                       | 0.06    | 0.51     | 1.03   | *Hirtella hebeclada* Moric. ex DC. (Chrysobalanaceae) | 10     | 0.79   |
|   | Species                                    | Fabaceae | Myrtaceae | Vitex polygama Cham. | Schefllera morototoni (Aubl.) Maguire, Steyerm. & Frodin (Araliaceae) | Ouratea castaneifolia (DC.) Engl. (Ochnaceae) |
|---|--------------------------------------------|----------|-----------|---------------------|------------------------------------------------------------------|---------------------------------------------|
| 29| Andira fraxinifolia Benth. (Fabaceae)     | 0.05     | 0.45      | 0.63                | Micropholis gardneriana (A.DC.) Pierre (Sapotaceae)                | Andira fraxinifolia Benth. (Fabaceae)       |
| 30| Vitex polygama Cham. (Lamiaceae)           | 0.05     | 0.43      | 0.63                | Andira fraxinifolia Benth. (Fabaceae)                              |                                             |
| 31| Eugenia sp. (Myrtaceae)                    | 0.05     | 0.41      | 1.26                | Ilex cerasifolia Reissek (Aquifoliaceae)                           |                                             |
| 32| Campomanesia sp. (Myrtaceae)               | 0.04     | 0.39      | 0.24                | Schefllera morototoni (Aubl.) Maguire, Steyerm. & Frodin (Araliaceae) |                                             |
| 33| Aspidosperma cylindrocarpon Müll.Arg. (Apocynaceae) | 0.04     | 0.39      | 0.47                | Vitex polygama Cham. (Lamiaceae)                                   |                                             |
| 34| Dendropanax cuneatus (DC.) Decne. & Planch. (Araliaceae) | 0.04     | 0.39      | 0.87                | Ouratea castaneifolia (DC.) Engl. (Ochnaceae)                      |                                             |
| 35| Micropholis gardneriana (A.DC.) Pierre (Sapotaceae) | 0.04     | 0.39      | 0.79                | Aspidosperma cylindrocarpon Müll.Arg. (Apocynaceae)                |                                             |
| 36| Schefllera morototoni (Aubl.) Maguire, Steyerm. & Frodin (Araliaceae) | 0.04     | 0.38      | 0.63                | Astronium fraxinifolium Schott (Anacardiaceae)                     |                                             |
| 37| Lithraea molleoides (Vell.) Engl. (Anacardiaceae) | 0.04     | 0.36      | 0.39                | Casearia sylvestris Sw. (Salicaceae)                               |                                             |
| 38| Eriotheca candolleana (K.Schum.) A.Robyns (Malvaceae) | 0.04     | 0.35      | 0.39                | Eriotheca candolleana (K.Schum.) A.Robyns (Malvaceae)              |                                             |
| 39| Banisteriopsis anisandra (A.Juss.) B.Gates (Malpighiaceae) | 0.04     | 0.35      | 0.24                | Lithraea molleoides (Vell.) Engl. (Anacardiaceae)                  |                                             |
| 40| Hirtella hebeclada Moric. ex DC. (Chrysobalanaceae) | 0.03     | 0.27      | 0.79                | Aureliana velutina Sendtn. (Solanaceae)                            |                                             |
| 41| Myrtaceae 3                                | 0.03     | 0.27      | 0.16                | Calyptranthes sp. (Myrtaceae)                                      |                                             |
| 42| Swartzia sp. (Fabaceae)                    | 0.03     | 0.25      | 1.10                | Guapira opposita (Vell.) Reitz (Nyctaginaceae)                     |                                             |
| 43| Aureliana velutina Sendtn. (Solanaceae)    | 0.03     | 0.24      | 0.32                | Machaerium villosum Vogel (Fabaceae)                               |                                             |
| 44| Aspidosperma olivaceum Müll.Arg. (Apocynaceae) | 0.03     | 0.23      | 0.24                | Rapanea umbellata (Mart.) Mez (Primulaceae)                        |                                             |
| 45| Ouratea castaneifolia (DC.) Engl. (Ochnaceae) | 0.02     | 0.22      | 0.55                | Salacia elliptica (Mart.) G.Don (Celastraceae)                     |                                             |
| Species Name                                      | Genus & Family           | Populations | Abundance  | Diameter | Angledness | Relative Abundance |
|--------------------------------------------------|--------------------------|-------------|------------|----------|------------|--------------------|
| Luehea grandiflora Mart.                        | Malvaceae                | 0.02        | 0.19       | 0.24     | Apeiba tibourbou Aubl. | 3                  |
| Machaerium villosum Vogel                       | Fabaceae                 | 0.02        | 0.17       | 0.32     | Aspidosperma olivaceum Müll.Arg. (Apocynaceae) | 3                  |
| Casearia sylvestris Sw.                         | Salicaceae               | 0.02        | 0.16       | 0.39     | Aspidosperma subincanum Mart. ex A.DC. (Apocynaceae) | 3                  |
| Tapirira obtusa (Benth.) J.D.Mitch.             | Anacardiaceae            | 0.01        | 0.13       | 0.24     | Banisteriopsis anisandra (A.Juss.) B.Gates (Malpighiaceae) | 3                  |
| Luehea grandiflora Mart.                        | Malvaceae                | 0.01        | 0.13       | 0.63     | Campomanesia sp. (Myrtaceae) | 3                  |
| Sterculia striata A. St.-Hil. & Naudin          | Malvaceae                | 0.01        | 0.12       | 0.08     | Luehea grandiflora Mart. (Malvaceae) | 3                  |
| Machaerium nyctitans (Vell.) Benth.              | Fabaceae                 | 0.01        | 0.12       | 0.16     | Myrtaceae 1 | 3                  |
| Platypodium elegans Vogel                       | Fabaceae                 | 0.01        | 0.11       | 0.24     | Ocotea corymbosa (Meisn.) Mez (Lauraceae) | 3                  |
| Ocotea corymbosa (Meisn.) Mez                   | Lauraceae                | 0.01        | 0.10       | 0.24     | Platypodium elegans Vogel (Fabaceae) | 3                  |
| Guapira opposita (Vell.) Reitz                  | Nyctaginaceae            | 0.01        | 0.10       | 0.32     | Tapirira obtusa (Benth.) J.D.Mitch. (Anacardiaceae) | 3                  |
| Casearia gossypiosperma Briq.                   | Salicaceae               | 0.01        | 0.10       | 0.16     | Ardisia glauciflora Urb. (Primulaceae) | 2                  |
| Rapanea umbellata (Mart.) Mez                   | Primulaceae              | 0.01        | 0.09       | 0.32     | Byrsonima sericea DC. (Malpighiaceae) | 2                  |
| Myrtaceae 1                                     |                         | 0.01        | 0.09       | 0.24     | Calophyllum brasiliense Cambess. (Calophylliaceae) | 2                  |
| Cecropia pachystachya Trécul                     | Urticaceae               | 0.01        | 0.09       | 0.08     | Casearia gossypiosperma Briq. (Salicaceae) | 2                  |
| Salacia elliptica (Mart.) G.Don                 | Celastraceae             | 0.01        | 0.08       | 0.32     | Endlicheria paniculata (Spreng.) J.F.Macbr. (Lauraceae) | 2                  |
| Tabebuia impetiginosa (Mart. ex DC.) Standl.     | Bignoniaceae             | 0.01        | 0.08       | 0.08     | Guettarda viburnoides Cham. & Schltdl. (Rubiaceae) | 2                  |
| Matayba floribunda Radlk.                       | Sapindaceae              | 0.01        | 0.07       | 0.16     | Machaerium nyctitans (Vell.) Benth. (Fabaceae) | 2                  |
| Dalbergia brasiliensis Vogel                     | Fabaceae                 | 0.01        | 0.07       | 0.08     | Matayba floribunda Radlk. (Sapindaceae) | 2                  |
|   | Scientific Name | Family | Percentage 1 | Percentage 2 | Percentage 3 | Family | Percentage 1 | Percentage 2 | Percentage 3 |
|---|-----------------|--------|---------------|---------------|--------------|--------|---------------|---------------|--------------|
| 64 | Calyptranthes sp. (Myrtaceae) | 0.01   | 0.06          | 0.32          | Matayba guianensis Aubl. (Sapindaceae) | 2      | 0.16          |
| 65 | Matayba guianensis Aubl. (Sapindaceae) | 0.01   | 0.05          | 0.16          | Myrtaceae 3 | 2      | 0.16          |
| 66 | Rubiaceae 1     | 0.00   | 0.04          | 0.08          | Pouteria glomerata (Miq.) Radlk. (Sapotaceae) | 2      | 0.16          |
| 67 | Byrsonima sericea DC. (Malpighiaceae) | 0.00   | 0.04          | 0.16          | Pseudobombax tomentosum (Mart. & Zucc.) A.Robyns (Malvaceae) | 2      | 0.16          |
| 68 | Pouteria glomerata (Miq.) Radlk. (Sapotaceae) | 0.00   | 0.04          | 0.16          | Cecropia pachystachya Trécul (Urticaceae) | 1      | 0.08          |
| 69 | Erythroxylum daphnites Mart. (Erythroxylaceae) | 0.00   | 0.03          | 0.08          | Dalbergia brasiliensis Vogel (Fabaceae) | 1      | 0.08          |
| 70 | Myrtaceae 4     | 0.00   | 0.03          | 0.08          | Dalbergia trutescens (Vell.)Britton (Fabaceae) | 1      | 0.08          |
| 71 | Duguetia lanceolata A.St.-Hil. (Annonaceae) | 0.00   | 0.03          | 0.08          | Duguetia lanceolata A.St.-Hil. (Annonaceae) | 1      | 0.08          |
| 72 | Guettarda viburnoides Cham. & Schitldl. (Rubiaceae) | 0.00   | 0.03          | 0.16          | Erythroxylum daphnites Mart. (Erythroxylaceae) | 1      | 0.08          |
| 73 | Calophyllum brasiliense Cambess. (Calophyllaceae) | 0.00   | 0.02          | 0.16          | Eugenia dodonaeifolia Cambess. (Myrtaceae) | 1      | 0.08          |
| 74 | Trichilia pallida Sw. (Meliaceae) | 0.00   | 0.02          | 0.08          | Ixora cf. bahiensis (Rubiaceae) | 1      | 0.08          |
| 75 | Endlicheria paniculata (Spreng.) J.F.Macbr. (Lauraceae) | 0.00   | 0.02          | 0.16          | Licania sp. (Chrysobalanaceae) | 1      | 0.08          |
| 76 | Myrtaceae 2     | 0.00   | 0.02          | 0.08          | Machaerium brasiliense Vogel (Fabaceae) | 1      | 0.08          |
| 77 | Rudgea viburnoides (Cham.) Benth. (Rubiaceae) | 0.00   | 0.02          | 0.08          | Myrcia splendens (Sw.) DC. (Myrtaceae) | 1      | 0.08          |
| 78 | Ardisia glauciflora Urb. (Primulaceae) | 0.00   | 0.02          | 0.16          | Myrtaceae 2 | 1      | 0.08          |
| 79 | Myrcia splendens (Sw.) DC. (Myrtaceae) | 0.00   | 0.02          | 0.08          | Myrtaceae 4 | 1      | 0.08          |
| 80 | Ixora cf. bahiensis (Rubiaceae) | 0.00   | 0.01          | 0.08          | Piptadenia gonoacantha (Mart.)J.F.Macbr. (Fabaceae) | 1      | 0.08          |
| 81 | Licania sp. (Chrysobalanaceae) | 0.00   | 0.01          | 0.08          | Rubiaceae 1 | 1      | 0.08          |
Species composition, community and population dynamics of two gallery forests ...

The recruitment rate in the Corrego Fazendinha Gallery Forest exceeded the mortality rate during 2007 and 2011; but mortality was higher than recruitment in the period from 2011 to 2015 (Table 9). In the Corrego Fundo Gallery Forest, mortality exceeded recruitment during both observed periods. Further, gains of basal area were higher than losses in the Corrego Fazendinha Gallery Forest, indicating an increase in carbon stock, while losses in the Corrego Fundo Gallery Forest outpaced its gains (Table 9).

Table 9.
Corrego Fazendinha and Corrego Fundo Gallery Forests tree Demographic Plot. BA is Basal Area.

| Period            | Mortality Rate [%/yr] | Recruitment Rate [%/yr] | BA Losses [m²/ha/yr] | BA Gains [m²/ha/yr] |
|-------------------|-----------------------|-------------------------|----------------------|---------------------|
| Corrego Fazendinha|                       |                         |                      |                     |
| 2007 - 2011       | 0.93                  | 2.62                    | 0.51                 | 1.96                |
| 2011 - 2015       | 5.19                  | 1.66                    | 1.6                  | 2.39                |
| Corrego Fundo     |                       |                         |                      |                     |
| 2006 - 2010       | 2.43                  | 1.5                     | 2.56                 | 1.52                |
| 2010 - 2014       | 2.82                  | 0.85                    | 2.28                 | 1.08                |

Although both gallery forests are situated in the same region, they show low similarity between them, indicating high beta-diversity of this ecosystem, which might be due to high environmental heterogeneity (Chave 2009), different disturbance regimes (Connell 1978, ...
Mendonça Machado and de Oliveira-Filho 2010), differences in successional stages (Magurran 2011) or neutral factors such as ecological drift and stochasticity (Hubbell 2001). Large numbers of individuals and basal area belonging to common species indicates that the high beta-diversity is due to large number of species represented by few individuals only, which is typical for tropical forests (Condit 2000). High beta-diversity increases the importance for the protection of biotic resources and highlights the demand for further research to understand underlying determinants.

Although study sites were sampled three times during similar periods, forest dynamics show large differences between study sites. Mortality and recruitment rates between 1.5 and 3 % are within the expectations for undisturbed alluvial or gallery forests (Higuchi et al. 2008, Fontes and Teles Walter 2011). Causes for the elevated mortality rate during the second observation period in Corrego Fazendinha Gallery Forest remain unknown, as external disturbances were not registered during the field campaigns, but may be related to extreme water deficits between 2012 and 2015 in Brazil (Getirana 2016). These findings indicate the importance to give once continuity and to amplify these kind of studies, to come to a better understanding of the drivers of forest dynamics that influence the maintenance of biodiversity as well as that ecosystem services such as carbon sequestration in biomass.

**Taxa included:**

| Rank       | Scientific Name                        |
|------------|----------------------------------------|
| species    | Acrocomia aculeata                     |
| subspecies | Alchornea glandulosa subsp. iricurana   |
| species    | Alibertia edulis                        |
| species    | Andira fraxinifolia                    |
| species    | Apeiba tibourbou                        |
| species    | Apuleia leiocarpa                       |
| species    | Ardisia glauciflora                    |
| species    | Aspidosperma cylindrocarpon             |
| species    | Aspidosperma darienense                 |
| species    | Aspidosperma olivaceum                 |
| genus      | Aspidosperma sp1                        |
| genus      | Aspidosperma sp2                        |
| species    | Aspidosperma subincanum                |
| species    | Astronium fraxinfolium                 |
| genus      | Astronium sp.                           |
| species                        | genus                        |
|-------------------------------|------------------------------|
| *Aureliana velutina*           | *Calyptanthes sp.*           |
| *Banisteriopsis anisandra*     | *Campomanesia sp.*           |
| *Bowdichia virgilioides*       | *Casearia sp.*               |
| *Brosimum gaudichaudii*        | *Cassia sp.*                 |
| *Byrsonima sericea*            | *Cecropia hololeuca*         |
| *Callisthene major*            | *Cecropia pachystachya*      |
| *Calophyllum brasiliense*      | *Cedrela fissa*              |
| *Calyptranthes sp.*            | *Copalera langsdorffii*      |
| *Campomanesia velutina*        | *Cupania vernalis*           |
| *Campomanesia xanthocarpa*     | *Dalbergia brasiliensis*     |
| *Campomanesia velutina*        | *Dalbergia frutescens*       |
| *Casearia gossypiosperma*      | *Dendropanax cuneatus*       |
| *Casearia sylvestris*          | *Dendropanax sp.*            |
| *Casearia sylvestris*          | *Dialium sp.*                |
| *Cassia ferruginea*            | *Dilodendron bipinnatum*     |
| *Cecropia hololeuca*           | *Diospyros brasiliensis*     |
| *Cecropia pachystachya*        | *Diospyros hispida*          |
| *Cedrela fissa*                | *Diospyros sp.*              |
| *Campomanesia velutina*        | *Duguetia lanceolata*        |
| species               | Endlicheria paniculata                    |
|-----------------------|-------------------------------------------|
| species               | Eriotheca candolleana                     |
| species               | Erythroxylum citrifolium                  |
| species               | Erythroxylum daphnites                    |
| species               | Erythroxylum pelleterianum                |
| species               | Eugenia dodonaeifolia                    |
| species               | Eugenia dysenterica                      |
| species               | Eugenia florida                           |
| genus                 | Eugenia sp.                               |
| species               | Guapira opposita                         |
| genus                 | Guarea sp.                                |
| species               | Guatteria sellowiana                     |
| species               | Guazuma ulmifolia                         |
| species               | Guettarda viburnoides                    |
| species               | Handroanthus ochraceus                   |
| species               | Heteropterys byrsonimifolia              |
| species               | Hirtella hebeclada                       |
| species               | Ilex cerasifolia                         |
| genus                 | Ilex sp.                                  |
| species               | Ixora gardneriana                        |
| species               | Lacistema hasslerianum                   |
| genus                 | Lacistema sp.                             |
| species               | Licania kunthiana                        |
| genus                 | Licania sp.                               |
| species               | Lithraea molleoides                      |
| species               | Luehea grandiflora                       |
| species               | Machaerium brasiliense                   |
| species               | Machaerium isadelphum                    |
| species               | Machaerium nyctitans                     |
| species               | Machaerium opacum                        |
| genus                 | Machaerium sp.                            |
| species                              | Machaerium villosum                      |
|--------------------------------------|------------------------------------------|
| species                              | Maclura tinctoria                        |
| genus                                | Marlieria sp.                            |
| species                              | Matayba floribunda                       |
| species                              | Matayba guianensis                       |
| genus                                | Maytenus sp.                             |
| species                              | Micropholis gardneriana                  |
| species                              | Myracrodruon urundeuva                   |
| species                              | Myrcia guianensis                        |
| species                              | Myrcia lingua                            |
| species                              | Myrcia multiflora                        |
| species                              | Myrcia rostrata                          |
| species                              | Myrcia rufipes                           |
| genus                                | Myrcia sp.                               |
| genus                                | Myrcia sp1                               |
| genus                                | Myrcia sp2                               |
| genus                                | Myrcia sp3                               |
| species                              | Myrcia splendens                         |
| species                              | Myrcia tomentosa                         |
| species                              | Myrsine coriacea                         |
| species                              | Myrsine umbellata                        |
| family                               | Myrtaceae sp.                            |
| species                              | Nectandra oppositifolia                  |
| species                              | Ocotea corymbosa                         |
| species                              | Ouratea castaneifolia                    |
| genus                                | Ouratea sp.                              |
| species                              | Peltophorrum dubium                      |
| species                              | Pera glabrata                            |
| species                              | Picramnia parvifolia                     |
| species                              | Piper arboreum                           |
| species                              | Piptadenia gonoacantha                   |
| species                          | Genus/Naming Details                  |
|---------------------------------|---------------------------------------|
| *Plathymenia reticulata*        |                                       |
| *Platypodium elegans*           |                                       |
| *Pouteria glomerata*            |                                       |
| *Protium heptaphyllum*          |                                       |
| *Pseudobombax tomentosum*       |                                       |
| *Psidium guajava*               |                                       |
| *Psidium rufum*                 |                                       |
| *Psidium sp.*                   |                                       |
| *Pterogynne sp.*                |                                       |
| *Qualea grandiflora*            |                                       |
| *Qualea multiflora*             |                                       |
| *Qualea multiflora subsp. pubescens* |                                |
| *Qualea sp.*                    |                                       |
| *Randia armata*                 |                                       |
| *Rollinia laurifolia*           |                                       |
| *Rollinia sp.*                  |                                       |
| *Rubiaceae sp.*                 |                                       |
| *Rudgea viburnoides*            |                                       |
| *Salacia elliptica*             |                                       |
| *Schefflera morotonti*          |                                       |
| *Sclerolobium paniculatum*      |                                       |
| *Senna macranthera*             |                                       |
| *Senna sp1*                     |                                       |
| *Senna sp2*                     |                                       |
| *Simarouba amara*               |                                       |
| *Siparuna guianensis*           |                                       |
| *Sterculia striata*             |                                       |
| *Swartzia myrtifolia*           |                                       |
| *Swartzia sp.*                  |                                       |
| *Tabebuia impetiginosa*         |                                       |
| *Tabebuia serratifolia*         |                                       |
| species         | Tapirira guianensis   |
|-----------------|-----------------------|
| species         | Tapirira obtusa       |
| species         | Terminalia argentea   |
| species         | Terminalia glabrescens|
| species         | Trichilia pallida     |
| genus           | Trichilia sp.         |
| genus           | Vernonia sp.          |
| species         | Virola sebifera       |
| species         | Vitex polygama        |
| species         | Vitex sellowiana      |
| species         | Xylopia aromatica     |
| species         | Xylopia sericea       |
| species         | Xylosma prockia       |
| species         | Zanthoxylum rhoifolium|
| species         | Zanthoxylum riedelianum|

**Usage rights**

**Use license:** Creative Commons Public Domain Waiver (CC-Zero)

**IP rights notes:** This dataset can be freely used, provided this Data Paper is cited.

**Data resources**

**Data package title:** Species composition, community and population dynamics of two gallery forests from the Brazilian Cerrado domain

**Resource link:** [http://187.32.44.123/ipt/resource.do?r=fazendinha](http://187.32.44.123/ipt/resource.do?r=fazendinha)

**Alternative identifiers:** [http://www.gbif.org/publisher/9e1ad169-1f58-48fb-ad7a-3b2b4544d875](http://www.gbif.org/publisher/9e1ad169-1f58-48fb-ad7a-3b2b4544d875)

**Number of data sets:** 2

**Data set name:** Community Dynamics of Corrego Fazendinha Gallery Forest

**Download URL:** [http://187.32.44.123/ipt/resource.do?r=fazendinha](http://187.32.44.123/ipt/resource.do?r=fazendinha), [http://www.gbif.org/dataset/5ddd59c2-c291-4a74-8a25-933bf873d4a4](http://www.gbif.org/dataset/5ddd59c2-c291-4a74-8a25-933bf873d4a4)
**Data format:** Darwin Core Archive DwC-A

**Description:** Occurrences, basal area and height of 1862 trees and treelets identified during three census distributed within all 50 subplots from the 0.5 ha Corrego Fazendinha Gallery Forest Dynamics Plot, Quartel Geral, Minas Gerais, Brazil. Dataset (Suppl. material 1) consists of occurrence.txt (DwC-Attributes id, modified, language, rights, rightsHolder, bibliographicCitation, references, datasetName, basisOfRecord, occurrenceID, occurrenceRemarks, eventDate, decimalLatitude, decimalLongitude, acceptedNameUsageID, parentNameUsageID, nameAccordingToID, scientificName, acceptedNameUsage, parentNameUsage, nameAccordingTo, higherClassification, kingdom, class, order, family, genus, subgenus, specificEpithet, infraSpecificEpithet, taxonRank, scientificNameAuthorship, nomenclaturalCode, taxonomicStatus), meta.xml, measurementOrFact.txt (containing the DwC-Attributes id, measurementType, measurementUnit, measurementDeterminedDate, measurementMethod, measurementValue, measurementRemarks, locationID), eml.xml, ressourcerelationship.txt (containing the DwC-Attributes id, locationID, resourceRelationshipIDresourceID, relatedResourceID, Role). Please see [http://rs.tdwg.org/dwc/](http://rs.tdwg.org/dwc/) for details.

| Column label | Column description |
|--------------|--------------------|
| id           | Occurrence identifier |

**Data set name:** Community Dynamics of Corrego Fundo Gallery Forest

**Download URL:** [http://www.gbif.org/dataset/a68403f2-b43f-4747-bd54-1e3eeb03dd46](http://www.gbif.org/dataset/a68403f2-b43f-4747-bd54-1e3eeb03dd46), [http://187.32.44.123/ipt/resource.do?r=fundo](http://187.32.44.123/ipt/resource.do?r=fundo)

**Data format:** Darwin Core Archive DwC-A

**Description:** Occurrences, basal area and height of 1551 trees and treelets identified during three census distributed within all 49 subplots from the 0.49 ha Corrego Fazendinha Gallery Forest Dynamics Plot, Quartel Geral, Minas Gerais, Brazil. Dataset (Suppl. material 2) consists of the occurrence.txt (DwC-Attributes id, modified, language, rights, rightsHolder, bibliographicCitation, references, datasetName, basisOfRecord, occurrenceID, occurrenceRemarks, eventDate, decimalLatitude, decimalLongitude, acceptedNameUsageID, parentNameUsageID, nameAccordingToID, scientificName, acceptedNameUsage, parentNameUsage, nameAccordingTo, higherClassification, kingdom, class, order, family, genus, subgenus, specificEpithet, infraSpecificEpithet, taxonRank, scientificNameAuthorship, nomenclaturalCode, taxonomicStatus), meta.xml, measurementOrFact.txt (containing the DwC-Attributes id, measurementType, measurementUnit, measurementDeterminedDate, measurementMethod, measurementValue, measurementRemarks, locationID), eml.xml, ressourcerelationship.txt (containing the DwC-Attributes id, locationID, resourceRelationshipIDresourceID, relatedResourceID, Role). Please see [http://rs.tdwg.org/dwc/](http://rs.tdwg.org/dwc/) for details.
Acknowledgements

MG is grateful for a SIF/ArcelorMittal Bioflorestas scholarship; JAAMN thanks CNPq for a productivity fellowship. ArcelorMittal Bioflorestas, FAPEMIG and CNPq financed this study.

Author contributions

JAAMN and RPA designed the study, MG, EDS, LCBM and ASM collected the data, ASM generated the maps, EDS computed the forest dynamics and MG formatted the data and wrote the paper with important contributions from all other authors.

References

- APG III (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 161 (2): 105-121. DOI: 10.1111/j.1095-8339.2009.00996.x
- Batlle-Bayer L, Batjes N, Bindraban P (2010) Changes in organic carbon stocks upon land use conversion in the Brazilian Cerrado: A review. Agriculture, Ecosystems & Environment 137: 47-58. DOI: 10.1016/j.agee.2010.02.003
- Boyle B, Hopkins N, Lu Z, Raygoza Garay J, Mozzerin D, Rees T, Matasci N, Narro ML, Piel WH, Mckay SJ, Lowry S, Freeland C, Peet RK, Erunst BJ (2013) The taxonomic name resolution service: an online tool for automated standardization of plant names. BMC Bioinformatics 14 (1): 16. DOI: 10.1186/1471-2105-14-16
- Chave J (2009) Competition, Neutrality, and Community Organization. The princeton Guide of Ecology. URL: http://dx.doi.org/10.1515/9781400833023.264 DOI: 10.1515/9781400833023.264
- Colwell RK, Coddington JA (1994) Estimating Terrestrial Biodiversity through Extrapolation. Philosophical Transactions of the Royal Society B: Biological Sciences 345 (1311): 101-118. DOI: 10.1098/rstb.1994.0091
- Condit R (2000) Spatial Patterns in the Distribution of Tropical Tree Species. Science 288 (5470): 1414-1418. DOI: 10.1126/science.288.5470.1414
- Connell JH (1978) Diversity in Tropical Rain Forests and Coral Reefs. Science 199 (4335): 1302-1310. DOI: 10.1126/science.199.4335.1302
- Couvet D, Devictor V, Jiguet F, Julliard R (2011) Scientific contributions of extensive biodiversity monitoring. Comptes Rendus Biologies 334: 370-377. DOI: 10.1016/j.crvi.2011.02.007
- FAO (2010) Global Forest Ressource Assessment. http://www.fao.org/docrep/013/i1757e/i1757e.pdf. Accession date: 2016 3 14.
• Fidelis A, Lyra MFdS, Pivello VR (2012) Above- and below-ground biomass and carbon dynamics in Brazilian Cerrado wet grasslands. Journal of Vegetation Science 24 (2): 356-364. DOI: 10.1111/j.1654-1103.2012.01465.x

• Fontes CG, Teles Walter BM (2011) Dinâmica do componente arbóreo de uma mata de galeria inundável (Brasília, Distrito Federal) em um período de oito anos. Brazilian Journal of Botany 34 (2): 145-158. DOI: 10.1590/s0100-84042011000200002

• Getirana A (2016) Extreme Water Deficit in Brazil Detected from Space. Journal of Hydrometeorology 17 (2): 591-599. DOI: 10.1175/jhm-d-15-0096.1

• Higuchi P, Oliveira-Filho A, Bebber D, Brown N, Silva AC, Machado EM (2008) Spatio-temporal patterns of tree community dynamics in a tropical forest fragment in Southeast Brazil. Plant Ecology 199 (1): 125-135. DOI: 10.1007/s11258-008-9418-x

• Hubbell SP (2001) The unified neutral theory of biodiversity and biogeography. Princeton University Press, Oxford, 392 pp.

• Jantz S, Barker B, Brooks T, Chini L, Huang Q, Moore R, Noel J, Hurtt G (2015) Future habitat loss and extinctions driven by land-use change in biodiversity hotspots under four scenarios of climate-change mitigation. Conservation Biology 29 (4): 1122-1131. DOI: 10.1111/cobi.12549

• Lapola D, Martinelli L, Peres C, Ometto JHB, Ferreira M, Nobre C, Aguiar A, Bustamante MC, Cardoso M, Costa M, Joly C, Leite C, Moutinho P, Sampaio G, Strassburg BN, Vieira IG (2013) Pervasive transition of the Brazilian land-use system. Nature Climate Change 4 (1): 27-35. DOI: 10.1038/nclimate2056

• Londe V, Silva JCy (2014) Characterization of Poaceae (grass) species as indicators of the level of degradation in a stretch of riparian forest in Matutina, Brazil. Acta Botanica Brasileira 28 (1): 102-108. DOI: 10.1590/s0102-33062014000100010

• Lorenzi H (Ed.) (1992) Árvores brasileiras: manual de identificação e cultivo de plantas arbóreas nativas do Brasil. [Brazilian Trees: Identification and cultivation guide for native tree from Brazil]. 1. Plantaram, Nova Odessa, 352 pp.

• Magurran AE (2011) Measuring biological diversity in time (and space).Pp. 85-94. In: Magurran AE, McGill BJ (Eds) Biological Diversity—frontiers in measurement and assessment. New York, 85-94 pp.

• Mendonça Machado EL, de Oliveira-Filho AT (2010) Spatial patterns of tree community dynamics are detectable in a small (4 ha) and disturbed fragment of the Brazilian Atlantic forest. Acta Botanica Brasileira 24 (1): 250-261. DOI: 10.1590/s0102-33062010000100027

• Moreira-Burger D, Delitti WC (1999) Fitomassa epigéa da mata ciliar do rio Mogi-Guaçu, Itapira - SP. Revista Brasileira de Botânica 22 (3): 429-435. DOI: 10.1590/s0100-84041999000300011

• Myers N, Mittermeier R, Mittermeier C, da Fonseca GB, Kent J (2000) Biodiversity hotspots for conservation priorities. Nature 403 (6772): 853-858. DOI: 10.1038/35002501
• Paiva AO, Rezende AV, Pereira RS (2011) Estoque de carbono em cerrado sensu stricto do Distrito Federal. Revista Árvore 35 (3): 527-538. DOI: 10.1590/s0100-67622011000300015
• Peel MC, Finlayson BL, McMahon TA (2007) Updated world map of the Köppen-Geiger climate classification. Hydrology and Earth System Sciences Discussions 4 (2): 439-473. DOI: 10.5194/hessd-4-439-2007
• Pocock MO, Newson S, Henderson I, Peyton J, Sutherland W, Noble D, Ball S, Beckmann B, Biggs J, Brereton T, Bullock D, Buckland S, Edwards M, Eaton M, Harvey M, Hill M, Horlock M, Hubble D, Julian A, Mackey E, Mann D, Marshall M, Medlock J, O’Mahony E, Pacheco M, Porter K, Prentice S, Procter D, Roy H, Southway S, Shortall C, Stewart AA, Wembridge D, Wright M, Roy D (2015) Developing and enhancing biodiversity monitoring programmes: a collaborative assessment of priorities. Journal of Applied Ecology 52 (3): 686-695. DOI: 10.1111/1365-2664.12423
• Rossi RD, Martins CR, Viana PL, Rodrigues EL, Côrtes Figueira JE (2014) Impact of invasion by molasses grass (Melinis minutiflora P. Beauv.) on native species and on fires in areas of campo-cerrado in Brazil. Acta Botanica Brasilica 28 (4): 631-637. DOI: 10.1590/0102-33062014abb3390
• Sheil D (1995) Evaluating Turnover in Tropical Forests. Science 268 (5212): 894-894. DOI: 10.1126/science.268.5212.894
• Silveira L, Sollmann R, Jâcomo AA, Diniz Filho JF, Tôrres N (2014) The potential for large-scale wildlife corridors between protected areas in Brazil using the jaguar as a model species. Landscape Ecology 29 (7): 1213-1223. DOI: 10.1007/s10980-014-0057-4
• Veloso HP, Rangel Filho ALR, Lima JC (1991) Classificação da Vegetação Brasileira, adaptada a um sistema universal. [Classification of the Brazilian Vegetation, adapted to an universal system]. Ministério de Economia, Fazenda e Planejamento, 124 pp.

Supplementary materials

Suppl. material 1: Community Dynamics of Corrego Fazendinha Gallery Forest

Authors: Markus Gastauer, Roosevelt de Paula Almado, Angela S. Miazaki, Écio D. Souza, Luiz C.B. Moreira & João A. A. Meira-Neto
Data type: Darwin Core Archive
Filename: dwca-fazendinha.zip - Download file (151.03 kb)

Suppl. material 2: Community Dynamics of Corrego Fundo Gallery Forest

Authors: Markus Gastauer, Roosevelt de Paula Almado, Angela S. Miazaki, Écio D. Souza, Luiz C.B. Moreira & João A. A. Meira-Neto
Data type: Darwin Core Archive
Filename: dwca-fundo.zip - Download file (129.87 kb)