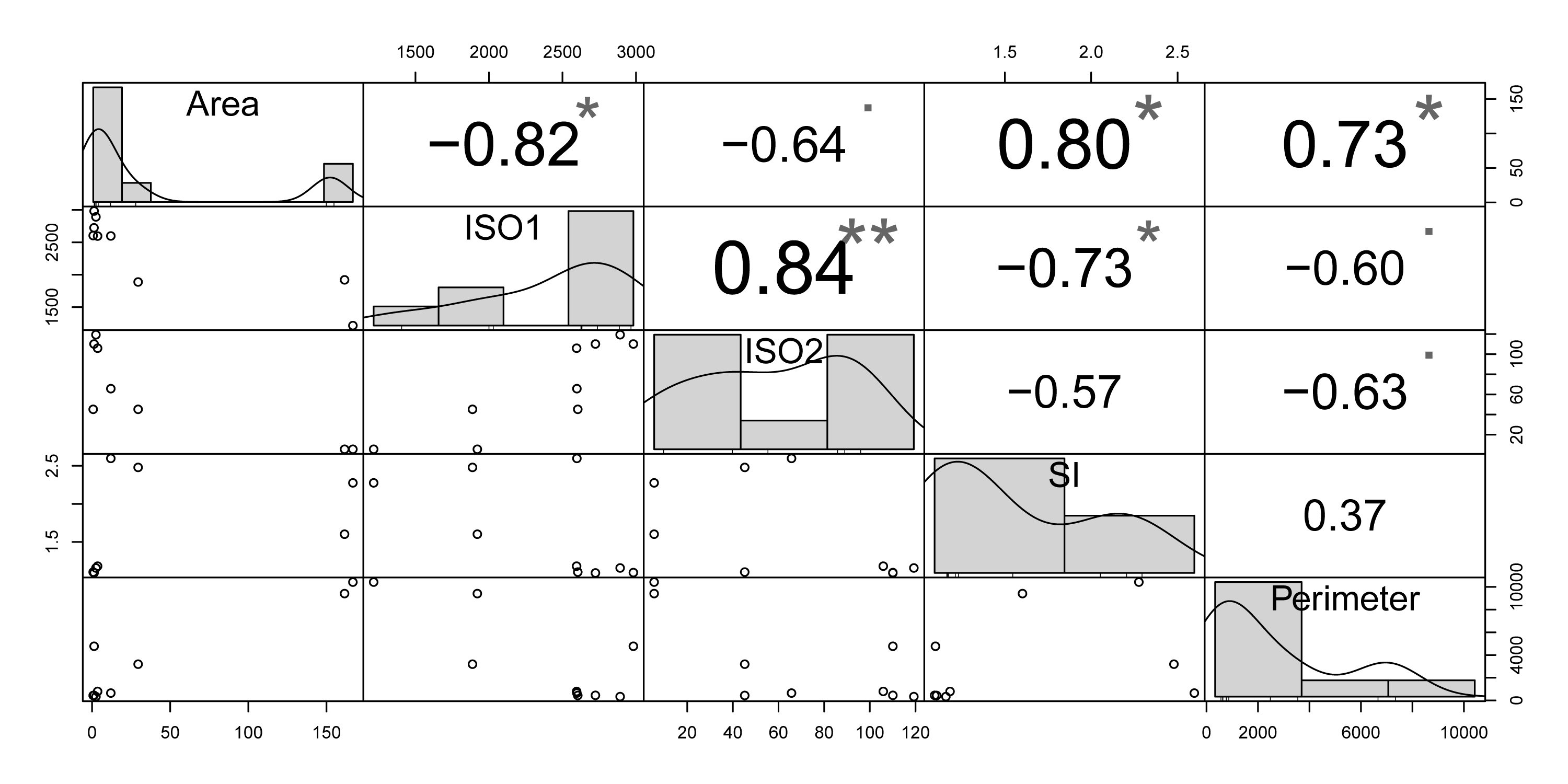
**Supplementary material**

**Table S1:** Spatial metrics recorded for the ten fragments from Atlantic forest remnants in the Fazenda Santana, in Sergipe, Brazil. Area: total size (ha); ISO 1: distance to the largest fragment (m); ISO 2: distance to nearest fragment (m); SI: shape index.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Area (ha)** | **ISO 1 (m)** | **ISO 2 (m)** | **SI** | **Perimeter (m)** |
| 241.18 | - | 1216.30 | 1.71 | 7219.86 |
| 166.89 | 1216.00 | 0 | 2.28 | 10422.82 |
| 161.57 | 1921.00 | 0 | 1.60 | 9411.02 |
| 29.49 | 1888.00 | 45.20 | 2.48 | 3192.79 |
| 12.03 | 2598.00 | 65.70 | 2.60 | 648.88 |
| 3.57 | 2596.00 | 105.90 | 1.18 | 792.46 |
| 2.49 | 2892.00 | 119.30 | 1.16 | 335.54 |
| 1.33 | 2982.00 | 110.10 | 1.10 | 4771.89 |
| 1.27 | 2724.00 | 110.10 | 1.09 | 448.79 |
| 0.73 | 2604.00 | 45.20 | 1.11 | 437.16 |

**Isolation and shape complexity**

The isolation and shape of a fragment may vary independently of its size, and it may thus be important to take these variables into account when analyzing local bird assemblage structure. We measured two metrics of isolation – the minimum distance (m) to the nearest fragment and the distance (m) to the largest fragment. The perimeter (m) and the degree of complexity of the outline of each fragment were also measured. The shape index was obtained from the equation: , where *p* = the perimeter of the area in meters, and *a* = the area of the fragment in hectares. We then applied Spearman’s correlation coefficient to evaluate the degree of collinearity between these metrics and the area of the fragments (Zuur et al., 2009). After confirming collinearity in all cases (Supplementary Material, Fig. S1), we retained only the area as a predictor variable for the analyses presented in the text.

****

**Figure S1:** Multi-panel graph of Spearman's correlation coefficients (*r*) between the candidate variables explaining bird diversity. The lower left panels show dispersion. The upper right panels contain Spearman correlation coefficients. The central diagonal panel shows the histograms of the variables with their frequency density (black line). ISO 1 = Distance to the largest fragment; ISO 2 = Distance to the nearest fragment; SI = shape index. Fragment one was taken from the correlation analysis because its value for ISO 1 does not exist and that of ISO 2 is an outlier. · = 0.05, \* = p < 0.05, \*\* = p < 0.01, \*\*\* = p < 0.001.

**Table S2:** Matrix of the traits of the bird species observed in the 10 fragments of the Atlantic Forest mosaic of the Fazenda Santana in Sergipe, Brazil, surveyed during the present study. Fru: Frugivorous; Nec: Nectarivorous; Omn: Omnivorous; Car: Carnivorous; Ins: Insectivorous; Gra: Granivorous. Ground, Understory, Mid-High, Canopy and Aerial correspond to foraging strata, and are shown as percentages.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Species** | **Guild** | **Ground** | **Understory** | **Mid-High** | **Canopy** | **Aerial** | **Mass (g)** |
| *Amazilia fimbriata* | Fru | 0 | 80 | 20 | 0 | 0 | 4.9 |
| *Amazona aestiva* | Fru | 0 | 30 | 40 | 30 | 0 | 451 |
| *Aphantochroa cirrochloris* | Nec | 0 | 80 | 20 | 0 | 0 | 7.7 |
| *Arremon taciturnus* | Omn | 50 | 50 | 0 | 0 | 0 | 24.8 |
| *Camptostoma obsoletum* | Ins | 0 | 0 | 80 | 20 | 0 | 8.1 |
| *Caracara plancus* | Car | 100 | 0 | 0 | 0 | 0 | 1078.62 |
| *Chiroxiphia pareola* | Fru | 0 | 50 | 50 | 0 | 0 | 16.84 |
| *Chlorostilbon lucidus* | Nec | 0 | 0 | 90 | 10 | 0 | 3.5 |
| *Chlorostilbon notatus* | Nec | 0 | 70 | 30 | 0 | 0 | 4.2 |
| *Chrysolampis mosquitus* | Nec | 0 | 50 | 30 | 20 | 0 | 3.9 |
| *Coereba flaveola* | Nec | 0 | 80 | 20 | 0 | 0 | 10.01 |
| *Columbina squammata* | Gra | 100 | 0 | 0 | 0 | 0 | 52.9 |
| *Columbina talpacoti* | Gra | 100 | 0 | 0 | 0 | 0 | 46.04 |
| *Conirostrum speciosum* | Omn | 60 | 20 | 20 | 0 | 0 | 8.8 |
| *Coryphospingus pileatus* | Gra | 0 | 60 | 40 | 0 | 0 | 15.3 |
| *Crotophaga ani* | Omn | 40 | 30 | 30 | 0 | 0 | 110.09 |
| *Crypturellus parvirostris* | Omn | 100 | 0 | 0 | 0 | 0 | 198.99 |
| *Cyanerpes cyaneus* | Fru | 0 | 20 | 40 | 40 | 0 | 14 |
| *Cyclarhis gujanensis* | Ins | 0 | 40 | 40 | 20 | 0 | 28.8 |
| *Dacnis cayana* | Omn | 0 | 0 | 30 | 60 | 10 | 13 |
| *Dryocopus lineatus* | Ins | 20 | 20 | 60 | 0 | 0 | 183.19 |
| *Elaenia cristata* | Omn | 0 | 30 | 40 | 30 | 0 | 18.2 |
| *Elaenia flavogaster* | Omn | 0 | 20 | 40 | 30 | 10 | 24.8 |
| *Empidonomus varius* | Ins | 0 | 30 | 70 | 0 | 0 | 27.1 |
| *Eupetomena macroura* | Nec | 0 | 0 | 60 | 30 | 10 | 9 |
| *Euphonia chlorotica* | Fru | 0 | 0 | 10 | 90 | 0 | 11 |
| *Euphonia violacea* | Fru | 0 | 30 | 40 | 30 | 0 | 15 |
| *Eupsittula aurea* | Fru | 70 | 30 | 0 | 0 | 0 | 84.62 |
| *Falco femoralis* | Car | 30 | 30 | 20 | 10 | 10 | 335.76 |
| *Formicivora grisea* | Ins | 20 | 40 | 40 | 0 | 0 | 10.36 |
| *Forpus xanthopterygius* | Fru | 100 | 0 | 0 | 0 | 0 | 31 |
| *Galbula ruficauda* | Ins | 0 | 50 | 50 | 0 | 0 | 26.5 |
| *Hemithraupis guira* | Omn | 0 | 0 | 10 | 90 | 0 | 12 |
| *Hemitriccus margaritaceiventer* | Ins | 0 | 40 | 60 | 0 | 0 | 8.4 |
| *Hemitriccus nidipendulus* | Ins | 0 | 80 | 20 | 0 | 0 | 7.5 |
| *Herpsilochmus pectoralis* | Ins | 0 | 0 | 100 | 0 | 0 | 10.86 |
| *Hydropsalis albicollis* | Ins | 40 | 30 | 20 | 0 | 10 | 57.84 |
| *Icterus pyrrhopterus tibialis* | Omn | 0 | 20 | 40 | 40 | 0 | 35.44 |
| *Lanio cristatus* | Omn | 0 | 10 | 20 | 70 | 0 | 18.8 |
| *Leptopogon amaurocephalus* | Ins | 0 | 50 | 50 | 0 | 0 | 11.7 |
| *Leptotila verreauxi* | Gra | 100 | 0 | 0 | 0 | 0 | 146.88 |
| *Manacus manacus* | Fru | 0 | 80 | 20 | 0 | 0 | 16.7 |
| *Megarynchus pitangua* | Omn | 0 | 10 | 50 | 40 | 0 | 69.91 |
| *Milvago chimachima* | Car | 100 | 0 | 0 | 0 | 0 | 315.21 |
| *Myiarchus swainsoni* | Ins | 0 | 100 | 0 | 0 | 0 | 25.1 |
| *Myiodynastes maculatus* | Omn | 0 | 0 | 100 | 0 | 0 | 43.2 |
| *Myiophobus fasciatus* | Ins | 0 | 100 | 0 | 0 | 0 | 9.9 |
| *Myiothlypis flaveola* | Ins | 60 | 40 | 0 | 0 | 0 | 13.19 |
| *Myiozetetes similis* | Omn | 20 | 20 | 40 | 20 | 0 | 28 |
| *Nemosia pileata* | Omn | 0 | 30 | 70 | 0 | 0 | 16 |
| *Neopelma pallescens* | Omn | 0 | 50 | 50 | 0 | 0 | 18.2 |
| *Ortalis araucuan* | Fru | 0 | 0 | 50 | 50 | 0 | 547.72 |
| *Pachyramphus polychopterus* | Ins | 0 | 0 | 100 | 0 | 0 | 20.8 |
| *Parabuteo unicinctus* | Car | 100 | 0 | 0 | 0 | 0 | 850.28 |
| *Phaethornis pretrei* | Nec | 0 | 100 | 0 | 0 | 0 | 5.6 |
| *Phaethornis ruber* | Nec | 0 | 100 | 0 | 0 | 0 | 2.4 |
| *Pheugopedius genibarbis* | Omn | 0 | 100 | 0 | 0 | 0 | 19.2 |
| *Phyllomyias fasciatus* | Ins | 0 | 0 | 0 | 100 | 0 | 10.3 |
| *Piaya cayana* | Omn | 0 | 0 | 20 | 80 | 0 | 101.98 |
| *Picumnus exilis* | Ins | 0 | 80 | 20 | 0 | 0 | 9.3 |
| *Pitangus sulphuratus* | Omn | 50 | 40 | 10 | 0 | 0 | 62.85 |
| *Platyrinchus mystaceus* | Ins | 0 | 80 | 20 | 0 | 0 | 9.7 |
| *Polioptila plumbea* | Ins | 0 | 33 | 33 | 33 | 0 | 6 |
| *Ramphocaenus melanurus* | Ins | 0 | 0 | 100 | 0 | 0 | 9.7 |
| *Ramphocelus bresilius* | Omn | 0 | 70 | 30 | 0 | 0 | 32.9 |
| *Rupornis magnirostris* | Car | 33 | 33 | 33 | 0 | 0 | 269 |
| *Saltator maximus* | Omn | 20 | 40 | 20 | 20 | 0 | 46.2 |
| *Schistochlamys ruficapillus* | Omn | 0 | 70 | 30 | 0 | 0 | 31.2 |
| *Serpophaga subcristata* | Ins | 0 | 33 | 33 | 33 | 0 | 6.6 |
| *Sporophila albogularis* | Gra | 50 | 50 | 0 | 0 | 0 | 9.7 |
| *Sporophila leucoptera* | Gra | 70 | 30 | 0 | 0 | 0 | 15.5 |
| *Sporophila nigricollis* | Gra | 30 | 70 | 0 | 0 | 0 | 9.6 |
| *Synallaxis frontalis* | Ins | 20 | 80 | 0 | 0 | 0 | 14 |
| *Tachyphonus rufus* | Omn | 20 | 50 | 10 | 10 | 10 | 34.4 |
| *Tangara cayana* | Omn | 0 | 30 | 40 | 30 | 0 | 18 |
| *Tangara palmarum* | Omn | 0 | 0 | 20 | 70 | 10 | 39 |
| *Tangara sayaca* | Omn | 10 | 0 | 20 | 70 | 0 | 32.49 |
| *Taraba major* | Ins | 40 | 40 | 20 | 0 | 0 | 59.2 |
| *Tersina viridis* | Fru | 0 | 10 | 60 | 30 | 0 | 29 |
| *Thalurania glaucopis* | Nec | 0 | 60 | 40 | 0 | 0 | 4.8 |
| *Thamnophilus pelzelni* | Ins | 0 | 20 | 80 | 0 | 0 | 20.9 |
| *Todirostrum cinereum* | Ins | 0 | 33 | 33 | 33 | 0 | 6.29 |
| *Tolmomyias flaviventris* | Ins | 0 | 0 | 20 | 80 | 0 | 12.2 |
| *Troglodytes musculus* | Ins | 0 | 100 | 0 | 0 | 0 | 10.85 |
| *Trogon curucui* | Omn | 10 | 30 | 30 | 30 | 0 | 54 |
| *Turdus leucomelas* | Omn | 60 | 20 | 20 | 0 | 0 | 69.1 |
| *Tyrannus melancholicus* | Ins | 0 | 0 | 50 | 50 | 0 | 37.4 |
| *Veniliornis passerinus* | Ins | 0 | 33 | 33 | 33 | 0 | 32.1 |
| *Vireo chivi* | Ins | 0 | 0 | 20 | 80 | 0 | 16.06 |
| *Volatinia jacarina* | Gra | 100 | 0 | 0 | 0 | 0 | 9.7 |
| *Xiphorhynchus fuscus* | Ins | 0 | 50 | 50 | 0 | 0 | 21.8 |
| *Xiphorhynchus guttatus* | Ins | 0 | 10 | 90 | 0 | 0 | 59.69 |

**Table S3:** Matrix of the abundance of bird species recorded in the 10 fragments of the Atlantic Forest mosaic of the Fazenda Santana in Sergipe, Brazil, surveyed in the present study. F1-F10 correspond to the fragments, numbered by decreasing size.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Species** | **F1** | **F2** | **F3** | **F4** | **F5** | **F6** | **F7** | **F8** | **F9** | **F10** |
| *Amazilia fimbriata* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 |
| *Amazona aestiva* | 0.45 | 0.19 | 0.10 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Aphantochroa cirrochloris* | 0.03 | 0.00 | 0.00 | 0.00 | 0.13 | 0.00 | 0.14 | 0.06 | 0.00 | 0.00 |
| *Arremon taciturnus* | 0.55 | 0.50 | 0.31 | 0.26 | 0.25 | 0.13 | 0.00 | 0.12 | 0.45 | 0.00 |
| *Camptostoma obsoletum* | 0.76 | 0.15 | 0.12 | 0.15 | 0.88 | 0.50 | 0.14 | 0.12 | 0.09 | 0.43 |
| *Caracara plancus* | 0.07 | 0.15 | 0.00 | 0.04 | 0.00 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 |
| *Chiroxiphia pareola* | 0.03 | 0.27 | 0.22 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Chlorostilbon lucidus* | 0.07 | 0.08 | 0.04 | 0.19 | 0.38 | 0.25 | 0.43 | 0.24 | 0.00 | 0.43 |
| *Chlorostilbon notatus* | 0.07 | 0.04 | 0.10 | 0.15 | 0.13 | 0.00 | 0.00 | 0.12 | 0.09 | 0.14 |
| *Chrysolampis mosquitus* | 0.03 | 0.04 | 0.00 | 0.04 | 0.13 | 0.13 | 0.00 | 0.06 | 0.00 | 0.00 |
| *Coereba flaveola* | 0.48 | 0.23 | 0.16 | 0.19 | 1.38 | 0.75 | 0.57 | 0.29 | 0.36 | 0.71 |
| *Columbina squammata* | 0.00 | 0.04 | 0.00 | 0.07 | 0.13 | 0.00 | 0.43 | 0.12 | 0.00 | 0.57 |
| *Columbina talpacoti* | 0.55 | 0.12 | 0.10 | 0.30 | 1.88 | 0.38 | 0.29 | 0.47 | 0.18 | 0.71 |
| *Conirostrum speciosum* | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 |
| *Coryphospingus pileatus* | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Crotophaga ani* | 0.10 | 0.04 | 0.00 | 0.07 | 0.75 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Crypturellus parvirostris* | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Cyanerpes cyaneus* | 0.03 | 0.12 | 0.06 | 0.00 | 0.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *cyclarhis gujanensis* | 0.48 | 0.15 | 0.12 | 0.15 | 0.25 | 0.00 | 0.57 | 0.18 | 0.18 | 0.29 |
| *Dacnis cayana* | 0.38 | 0.15 | 0.12 | 0.30 | 0.63 | 0.25 | 0.43 | 0.18 | 0.18 | 0.29 |
| *Dryocopus lineatus* | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Elaenia cristata* | 0.14 | 0.04 | 0.10 | 0.04 | 0.25 | 0.25 | 0.29 | 0.06 | 0.00 | 0.14 |
| *Elaenia flavogaster* | 0.41 | 0.19 | 0.06 | 0.07 | 0.38 | 0.38 | 0.14 | 0.06 | 0.00 | 0.00 |
| *Empidonomus varius* | 0.28 | 0.19 | 0.12 | 0.07 | 0.75 | 0.13 | 0.29 | 0.00 | 0.18 | 0.29 |
| *Eupetomena macroura* | 0.03 | 0.00 | 0.00 | 0.00 | 0.50 | 0.13 | 0.00 | 0.06 | 0.00 | 0.00 |
| *Euphonia chlorotica* | 0.14 | 0.04 | 0.14 | 0.15 | 0.75 | 0.00 | 0.00 | 0.06 | 0.00 | 0.14 |
| *Euphonia violacea* | 0.03 | 0.12 | 0.00 | 0.00 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Eupsittula aurea* | 0.31 | 0.12 | 0.08 | 0.00 | 0.13 | 0.13 | 0.14 | 0.00 | 0.00 | 0.00 |
| *Falco femoralis* | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Formicivora grisea* | 0.52 | 0.19 | 0.04 | 0.15 | 0.13 | 0.13 | 0.14 | 0.12 | 0.36 | 0.29 |
| *Forpus xanthopterygius* | 0.17 | 0.00 | 0.06 | 0.00 | 0.38 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 |
| *Galbula ruficauda* | 0.00 | 0.04 | 0.02 | 0.04 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Hemithraupis guira* | 0.03 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Hemitriccus margaritaceiventer* | 0.14 | 0.00 | 0.04 | 0.07 | 0.00 | 0.50 | 0.57 | 0.06 | 0.27 | 0.43 |
| *Hemitriccus nidipendulus* | 0.24 | 0.23 | 0.16 | 0.11 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Herpsilochmus pectoralis* | 0.31 | 0.12 | 0.10 | 0.11 | 0.00 | 0.00 | 0.29 | 0.24 | 0.27 | 0.00 |
| *Hydropsalis albicollis* | 0.03 | 0.12 | 0.10 | 0.00 | 0.25 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 |
| *Icterus pyrrhopterus tibialis* | 0.10 | 0.00 | 0.00 | 0.04 | 0.75 | 0.00 | 0.43 | 0.00 | 0.09 | 0.14 |
| *Lanio cristatus* | 0.03 | 0.00 | 0.02 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Leptopogon amaurocephalus* | 0.03 | 0.08 | 0.06 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Leptotila verreauxi* | 0.31 | 0.35 | 0.12 | 0.15 | 0.88 | 0.38 | 0.14 | 0.12 | 0.27 | 0.14 |
| *Manacus manacus* | 0.24 | 0.15 | 0.06 | 0.19 | 0.63 | 0.00 | 0.57 | 0.00 | 0.00 | 0.00 |
| *Megarynchus pitangua* | 0.28 | 0.15 | 0.06 | 0.04 | 0.88 | 0.38 | 0.29 | 0.18 | 0.18 | 0.14 |
| *Milvago chimachima* | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 |
| *Myiarchus swainsoni* | 0.21 | 0.04 | 0.06 | 0.07 | 0.63 | 0.38 | 0.14 | 0.18 | 0.27 | 0.14 |
| *myiodynastes maculatus* | 0.03 | 0.12 | 0.10 | 0.00 | 0.00 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 |
| *Myiophobus fasciatus* | 0.24 | 0.04 | 0.00 | 0.00 | 0.38 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Myiothlypis flaveola* | 0.38 | 0.42 | 0.22 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Myiozetetes similis* | 0.07 | 0.04 | 0.04 | 0.07 | 0.75 | 0.00 | 0.14 | 0.18 | 0.00 | 0.00 |
| *Nemosia pileata* | 0.14 | 0.12 | 0.02 | 0.15 | 0.38 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Neopelma pallescens* | 0.00 | 0.12 | 0.14 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Ortalis araucuan* | 0.00 | 0.04 | 0.00 | 0.00 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Pachyramphus polychopterus* | 0.14 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Parabuteo unicinctus* | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Phaethornis pretrei* | 0.00 | 0.12 | 0.16 | 0.00 | 0.88 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 |
| *Phaethornis ruber* | 0.28 | 0.46 | 0.25 | 0.07 | 0.25 | 0.00 | 0.00 | 0.12 | 0.18 | 0.14 |
| *Pheugopedius genibarbis* | 1.00 | 0.15 | 0.02 | 0.30 | 0.75 | 0.38 | 0.00 | 0.41 | 0.27 | 0.00 |
| *Phyllomyias fasciatus* | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Piaya cayana* | 0.24 | 0.04 | 0.00 | 0.00 | 0.63 | 0.13 | 0.14 | 0.00 | 0.09 | 0.00 |
| *Picumnus exilis* | 0.24 | 0.08 | 0.02 | 0.04 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 |
| *Pitangus sulphuratus* | 0.10 | 0.04 | 0.00 | 0.07 | 0.75 | 0.13 | 0.43 | 0.12 | 0.00 | 0.57 |
| *Platyrinchus mystaceus* | 0.00 | 0.19 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Polioptila plumbea* | 0.45 | 0.12 | 0.14 | 0.04 | 0.00 | 0.38 | 0.14 | 0.12 | 0.55 | 0.00 |
| *Ramphocaenus melanurus* | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Ramphocelus bresilius* | 0.00 | 0.00 | 0.00 | 0.00 | 0.38 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Rupornis magnirostris* | 0.10 | 0.23 | 0.06 | 0.26 | 0.00 | 0.25 | 0.29 | 0.00 | 0.00 | 0.14 |
| *Saltator maximus* | 0.24 | 0.12 | 0.06 | 0.04 | 0.50 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 |
| *Schistochlamys ruficapillus* | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Serpophaga subcristata* | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Sporophila albogularis* | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Sporophila leucoptera* | 0.17 | 0.00 | 0.00 | 0.00 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Sporophila nigricollis* | 0.07 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Synallaxis frontalis* | 0.34 | 0.15 | 0.00 | 0.15 | 0.75 | 0.00 | 0.29 | 0.18 | 0.00 | 0.00 |
| *tachyphonus rufus* | 0.45 | 0.15 | 0.12 | 0.11 | 1.25 | 0.38 | 0.43 | 0.35 | 0.36 | 0.29 |
| *Tangara cayana* | 0.28 | 0.27 | 0.12 | 0.15 | 1.25 | 0.38 | 0.00 | 0.24 | 0.18 | 0.43 |
| *Tangara palmarum* | 0.24 | 0.15 | 0.04 | 0.07 | 1.50 | 0.13 | 0.29 | 0.24 | 0.18 | 0.29 |
| *Tangara sayaca* | 0.34 | 0.08 | 0.02 | 0.00 | 0.50 | 0.25 | 0.29 | 0.18 | 0.00 | 0.14 |
| *Taraba major* | 0.17 | 0.04 | 0.00 | 0.00 | 1.13 | 0.00 | 0.00 | 0.18 | 0.00 | 0.00 |
| *Tersina viridis* | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Thalurania glaucopis* | 0.14 | 0.04 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Thamnophilus pelzelni* | 0.48 | 0.35 | 0.25 | 0.11 | 0.13 | 0.00 | 0.14 | 0.00 | 0.09 | 0.29 |
| *Todirostrum cinereum* | 0.28 | 0.00 | 0.00 | 0.00 | 1.13 | 0.13 | 0.00 | 0.06 | 0.00 | 0.00 |
| *Tolmomyias flaviventris* | 0.31 | 0.08 | 0.04 | 0.00 | 0.13 | 0.38 | 0.43 | 0.00 | 0.09 | 0.00 |
| *Troglodytes musculus* | 0.41 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 |
| *Trogon curucui* | 0.07 | 0.15 | 0.08 | 0.11 | 0.00 | 0.00 | 0.14 | 0.00 | 0.09 | 0.00 |
| *Turdus leucomelas* | 0.10 | 0.23 | 0.16 | 0.22 | 1.00 | 0.13 | 0.14 | 0.24 | 0.09 | 0.14 |
| *Tyrannus melancholicus* | 0.52 | 0.50 | 0.14 | 0.30 | 1.38 | 0.63 | 0.86 | 0.24 | 0.45 | 0.57 |
| *Veniliornis passerinus* | 0.10 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 |
| *Vireo chivi* | 0.28 | 0.42 | 0.24 | 0.26 | 0.38 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 |
| *Volatinia jacarina* | 0.21 | 0.15 | 0.06 | 0.07 | 1.38 | 0.25 | 0.00 | 0.24 | 0.18 | 0.29 |
| *Xiphorhynchus fuscus* | 0.00 | 0.04 | 0.02 | 0.00 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Xiphorhynchus guttatus* | 0.17 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.14 | 0.12 | 0.00 | 0.00 |

**Reference**

Zuur, A.F., Ieno, E.N., Walker, N.J., Saveliev, A.A., Smith, G.M., 2009. Mixed effects models and extensions in ecology with R. Springer, New York.