

Variation in bird taxonomic distinctness, but not body mass or niche overlap, explains the robustness of Neotropical seed dispersal networks

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Supplementary material

Table S1.

List of publications from which the mutualistic bird-plant interaction matrices were obtained.

Community code ¹	Country	Site	Year	Authors	Publication link
Alagoas	Brazil	Ibateguara, State of Alagoas (Coimbra Forest)	2014	Sarmiento et al.	https://doi.org/10.1590/S1984-46702014000300006
Costa Rica	Costa Rica	Cordillera Central	1992	Blake, J. G e Loiselle, B. A.	https://doi.org/10.2307/2388674
Galapagos	Galapagos	Santa Cruz and San Cristóbal Islands	2013	Heleno et al.	https://doi.org/10.1098/rspb.2012.2112
Ibitipoca	Brazil	Ibitipoca State Park, State of Minas Gerais	2010	Manhães, M. A. et al.	https://doi.org/10.1080/00222930903380947
BGard	Brazil	Federal University of Juiz de Fora Botanical Garden	2021	Lima, W. O.	This study
JF/Coronel*	Brazil	municipalities boundary (Continente farm)	2010	Manhães, M. A. et al.	https://doi.org/10.1080/00222930903380947
ReBioPD	Brazil	Poço D'Anta Municipal Biological Reserve-Juiz de Fora	2021	Lima, W. O.	This study
SerraSud1	Brazil	State of Rio Grande do Sul	2015	Casas, G.	https://www.lume.ufrgs.br/handle/10183/141942
SerraSud2	Brazil	State of Rio Grande do Sul, southeast ridge	2009	Azambuja, B. O.	https://www.lume.ufrgs.br/handle/10183/28435
Trinidad	Trinidad & Tobago	Main Ridge Forest Reserve and Crown Land	2008	Lefevre, K. L.	https://tspace.library.utoronto.ca/handle/1807/11223
Venezuela	Venezuela	Península Araya	1994	Poulin et al.	https://doi.org/10.2307/1369320

¹ Refers to the codes used in the analyses.

*Municipalities of Juiz de Fora and Coronel Pacheco, State of Minas Gerais. Data from one of the areas included in the paper (JF/Coronel = Continente farm in the paper under the link) were added to the data obtained from sampling carried out in 2005–2006 by Lima & Manhães (2017), resulting in the matrix in Table S3.

Table S2.

Quantitative seed dispersal matrix from Poço D'Anta Municipal Biological Reserve (ReBioPD); morpho: morphospecies.

Plant species	Bird species														
	Aru	Cca	Cli	Hru	Imi	Mma	Mru	Ssi	Tco	Tcy	Tme	Tal	Tfl	Tle	Tru
<i>Alchornea</i> sp.	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
<i>Amaioua</i> sp.	0	1	0	0	0	0	0	0	0	0	0	5	0	0	0
Araliaceae sp.	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
<i>Byrsonima</i> sp.	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
<i>Casearia sylvestris</i>	0	0	0	0	0	0	2	0	0	0	2	0	0	0	1
<i>Chiococca</i> sp.	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
<i>Cissampelos</i> sp.	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Erythroxylum pelleterianum</i>	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0
<i>Erythroxylum</i> sp.	1	0	0	0	0	2	0	0	0	0	0	0	0	0	1
Euphorbiaceae sp.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Euterpe edulis</i>	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
<i>Faramea</i> cf. <i>multiflora</i>	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
<i>Geonoma</i> sp.	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
<i>Guarea</i> sp.	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Hyeronima alchorneoides</i>	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
morpho01	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
morpho02	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
morpho03	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
morpho04	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
morpho05	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
morpho06	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
morpho07	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
morpho08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
morpho09	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
morpho10	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
morpho11	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
morpho12	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
morpho13	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
morpho14	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0

morpho15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
morpho16	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
morpho17	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
morpho18	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
morpho19	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
morpho20	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
morpho21	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
morpho22	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
morpho23	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
<i>Leandra</i> sp.	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0
Loranthaceae sp.	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
<i>Maprounea guianensis</i>	0	2	0	0	0	0	0	0	0	0	0	1	0	0	1
<i>Matayba</i> sp.	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
<i>Miconia budlejoides</i>	0	1	0	0	0	2	0	0	0	0	1	2	0	0	0
<i>Miconia cinnamomifolia</i>	0	4	0	0	0	0	0	0	3	1	0	5	0	0	3
<i>Miconia latecrenata</i>	0	1	0	0	0	2	0	2	1	0	1	0	1	0	0
<i>Miconia racemifera</i>	0	0	1	0	0	0	0	0	0	1	2	0	0	0	0
<i>Miconia sellowiana</i>	0	1	0	0	0	0	1	0	2	0	3	0	0	0	0
<i>Miconia</i> sp1	0	2	0	0	0	1	0	0	1	0	4	0	0	0	0
<i>Miconia</i> sp2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
<i>Miconia</i> sp3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
<i>Mollinedia</i> sp.	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Mucuna</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
<i>Myrcia</i> sp.	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Myrsine</i> sp.	0	1	0	0	0	0	3	0	0	0	0	1	0	0	0
Myrtaceae sp.	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
<i>Nectandra</i> sp.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Olyra</i> sp.	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
<i>Palicourea</i> sp.	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Paullinia</i> cf. <i>trigonia</i>	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1
<i>Psychotria sessilis</i>	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
<i>Psychotria</i> sp01	1	1	0	0	0	1	0	0	1	1	2	0	0	0	0
<i>Psychotria</i> sp02	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0
<i>Psychotria</i> sp03	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0

<i>Psychotria vellosiana</i>	0	5	0	0	0	0	0	0	0	0	2	1	0	0	0
Rubiaceae sp01	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0
Rubiaceae sp02	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Rubiaceae sp03	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Rubiaceae sp04	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0
Rubiaceae sp05	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0
Rubiaceae sp06	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Rubiaceae sp07	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0
Rubiaceae sp08	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Rubiaceae sp09	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0
Rubiaceae sp10	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0
Rubiaceae sp11	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0
Rubiaceae sp12	0	0	0	0	0	0	0	0	0	0	2	1	2	0	0
Rubiaceae sp13	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0
Sapindaceae sp.	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Schefflera morototoni</i>	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Siparuna guianensis</i>	0	4	0	0	0	0	3	0	0	0	0	0	0	0	0
<i>Xylopia</i> sp.	0	0	0	0	0	0	6	0	0	1	0	0	0	0	0
<i>Zanthoxylum</i> cf. <i>rhoifolium</i>	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
<i>Zanthoxylum</i> sp.	0	0	0	0	0	2	1	0	0	0	1	0	0	0	0
Total	7	45	1	4	1	18	26	3	16	5	34	31	4	2	9

Aru: *Attila rufus*; Cca: *Chiroxiphia caudata*; Cli: *Conopophaga lineata*; Hru: *Habia rubica*; Imi: *Ilicura militaris*; Mma: *Manacus manacus*; Mru: *Mionectes rufiventris*; Ssi: *Saltator similis*; Tco: *Tachyphonus coronatus*; Tcy: *Tangara cyanoventris*; Tme: *Trichothraupis melanops*; Tal: *Turdus albicollis*; Tfl: *Turdus flavipes*; Tle: *Turdus leucomelas*; Tru: *Turdus rufiventris*

Table S3.

Quantitative seed dispersal matrix from University of Juiz de Fora Botanical Garden (BGard).

Plant species	Bird species																		
	Ase	Aru	Bcu	Cca	Cgu	Eme	Hru	Lam	Mma	Mru	Ple	Tco	Tcy	Tsu	Tme	Tal	Tfl	Tle	Tru
<i>Alchornea</i> sp01	0	1	0	0	0	0	0	0	1	9	0	2	0	1	0	0	0	0	1
<i>Alchornea</i> sp02	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
<i>Amaioua</i> sp.	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	5	1	3	2
Asteraceae sp01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Asteraceae sp02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<i>Casearia sylvestris</i>	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
<i>Cecropia pachystachya</i>	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
<i>Cestrum</i> sp.	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Chloranthaceae sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<i>Clidemia</i> sp.	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
Dilleniaceae	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
<i>Erythroxylum</i> sp.	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<i>Euterpe edulis</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	3
<i>Faramea</i> cf. <i>multiflora</i>	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
<i>Ficus citrifolia</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<i>Ficus</i> sp.	0	0	2	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	1
Flacourtiaceae sp.	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0

<i>Guatteria</i> sp.	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Hedychium</i> sp.	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
morpho01	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
morpho02	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
morpho03	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
morpho04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
morpho05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
morpho06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
morpho07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
morpho08	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
morpho09	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
morpho10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
morpho11	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
morpho12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
morpho13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
morpho14	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
morpho15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
morpho16	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
morpho17	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
morpho18	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
morpho19	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
<i>Leandra</i> sp.	0	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0

<i>Magnolia ovata</i>	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
<i>Miconia budlejoides</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
<i>Miconia cinnamomifolia</i>	0	0	0	0	0	1	0	0	1	0	0	2	0	0	0	0	0	0	1
<i>Miconia latecrenata</i>	0	0	0	1	0	0	0	0	2	0	1	7	0	0	6	0	0	0	0
<i>Miconia sellowiana</i>	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Miconia sp01</i>	0	0	0	0	0	0	0	0	2	0	0	1	6	0	4	0	0	0	0
<i>Miconia sp02</i>	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
<i>Myrcia splendens</i>	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
<i>Nectandra oppositifolia</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0
<i>Paspalum sp.</i>	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Loranthaceae sp.	0	0	0	0	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0
<i>Piper aduncum</i>	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
Poaceae sp01	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Poaceae sp02	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Portea petropolitana</i>	0	0	0	0	0	0	0	0	0	0	0	5	0	0	3	0	0	0	0
<i>Psychotria sp01</i>	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
<i>Psychotria sp02</i>	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
<i>Psychotria sp03</i>	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0
<i>Psychotria sp04</i>	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0
<i>Psychotria sp05</i>	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
<i>Psychotria suterella</i>	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
<i>Psychotria vellosiana</i>	0	0	0	1	0	1	0	0	1	0	0	3	6	0	0	0	1	0	1

Rosaceae sp.	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Rubiaceae sp01	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Rubiaceae sp02	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Rubiaceae sp03	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Rubiaceae sp04	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Rubiaceae sp05	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Rubiaceae sp06	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Rubiaceae sp07	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Rubiaceae sp08	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Rubiaceae sp09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Rubiaceae sp10	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rubiaceae sp11	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Rubiaceae sp12	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Rubiaceae sp13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Rubiaceae sp14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Rubiaceae sp15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
Rubiaceae sp16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Rubiaceae sp17	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0
<i>Siparuna guianensis</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Solanaceae sp.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Solanum</i> sp01	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
<i>Solanum</i> sp02	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0

<i>Solanum</i> sp03	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
<i>Urera baccifera</i>	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
Vitaceae sp.	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
<i>Xylopia aromatica</i>	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
<i>Xylopia brasiliensis</i>	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
<i>Xylopia</i> sp01	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Xylopia</i> sp02	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	7	2	2	7	1	4	1	1	32	27	1	49	13	1	20	13	4	7	20

Ase: *Arremon semitorquatus*; Aru: *Attila rufus*; Bcu: *Basileuterus culicivorus*; Cca: *Chiroxiphia caudata*; Cgu: *Cyclarhis gujanensis*; Eme: *Elaenia mesoleuca*; Hru: *Habia rubica*; Lam: *Leptopogon amaurocephalus*; Mma: *Manacus manacus*; Mru: *Mionectes rufiventris*; Ple: *Pyriglena leucoptera*; Tco: *Tachyphonus coronatus*; Tcy: *Tangara cyanoventris*; Tsu: *Tolmomyias sulphurescens*; Tme: *Trichothraupis melanops*; Tal: *Turdus albicollis*; Tfl: *Turdus flavipes*; Tle: *Turdus leucomelas*; Tru: *Turdus rufiventris*.

Table S4.

List of all orders, families, and species by site considered for variation in taxonomic distinctness (varTD). Orders and families in taxonomic order, species in alphabetical order. 1: Alagoas; 2: Costa Rica; 3: Galapagos; 4: Ibitipoca; 5: Jd. Bot.; 6: JF/Coronel; 7: ReBioPD; 8: SerraSud1; 9: SerraSud2; 10: Trinidad; 11: Venezuela.

Species	Sites										
	1	2	3	4	5	6	7	8	9	10	11
Cuculiformes											
Cuculidae											
<i>Crotophaga ani</i>			1								
Apodiformes											
Trochilidae											
<i>Leucippus fallax</i>											
<i>Phaethornis eurynome</i>											
Coraciiformes											
Momotidae											
<i>Momotus momota</i>											
Galbuliformes											
Bucconidae											
<i>Hypnelus ruficollis</i>											
Piciformes											
Picidae											
<i>Colaptes rubiginosus</i>											
Piciformes											
Picidae											
<i>Melanerpes rubicapillus</i>											
Passeriformes											
Thamnophilidae											
<i>Dysithamnus mentalis</i>											
<i>Pyriglena leucoptera</i>											
<i>Thamnophilus doliatus</i>											
Passeriformes											
Conopophagidae											

<i>Conopophaga lineata</i>		■		■	
Furnariidae					
<i>Lepidocolaptes souleyetii</i>					■
<i>Lochmias nematura</i>				■	
<i>Sittasomus griseicapillus</i>		■			
Pipridae					
<i>Ceratopipra rubrocapilla</i>	■				
<i>Chiroxiphia lanceolata</i>					■
<i>Chiroxiphia caudata</i>			■		
<i>Chiroxiphia pareola</i>	■				■
<i>Ilicura militaris</i>				■	
<i>Manacus manacus</i>	■		■	■	
<i>Neopelma chrysolophum</i>		■			
Tityridae					
<i>Pachyramphus viridis</i>					■
<i>Schiffornis virescens</i>		■			
Tyrannidae					
<i>Atalotriccus pilaris</i>					■
<i>Attila rufus</i>			■	■	
<i>Camptostoma obsoletum</i>					■
<i>Cnemotriccus fuscatus</i>					■
<i>Contopus cinereus</i>					■
<i>Corythopsis delalandi</i>				■	
<i>Elaenia flavogaster</i>					■
<i>Elaenia mesoleuca</i>			■		
<i>Elaenia parvirostris</i>				■	■
<i>Elaenia</i> sp.				■	■
<i>Empidonax</i> sp.		■			
<i>Empidonax virescens</i>					
<i>Euscarthmus meloryphus</i>					■
<i>Hemitriccus diops</i>		■			
<i>Hemitriccus margaritaceiventer</i>					■
<i>Knipolegus cyanirostris</i>				■	
<i>Leptopogon amaurocephalus</i>			■		

Mimidae

Dumetella carolinensis

Mimus gilvus

Mimus melanotis

Mimus parvulus

Mimus saturninus

Fringillidae

Euphonia violacea

Passerellidae

Arremon semitorquatus

Zonotrichia capensis

Icteridae

Icterus galbula

Icterus nigrogularis

Parulidae

Basileuterus culicivorus

Geothlypis formosa

Helmitheros vermivorum

Myiothlypis leucoblephara

Seiurus aurocapilla

Setophaga castanea

Setophaga fusca

Setophaga pensylvanica

Setophaga petechia

Vermivora cyanoptera

Cardinalidae

Cardinalis phoeniceus

Habia rubica

Piranga olivacea

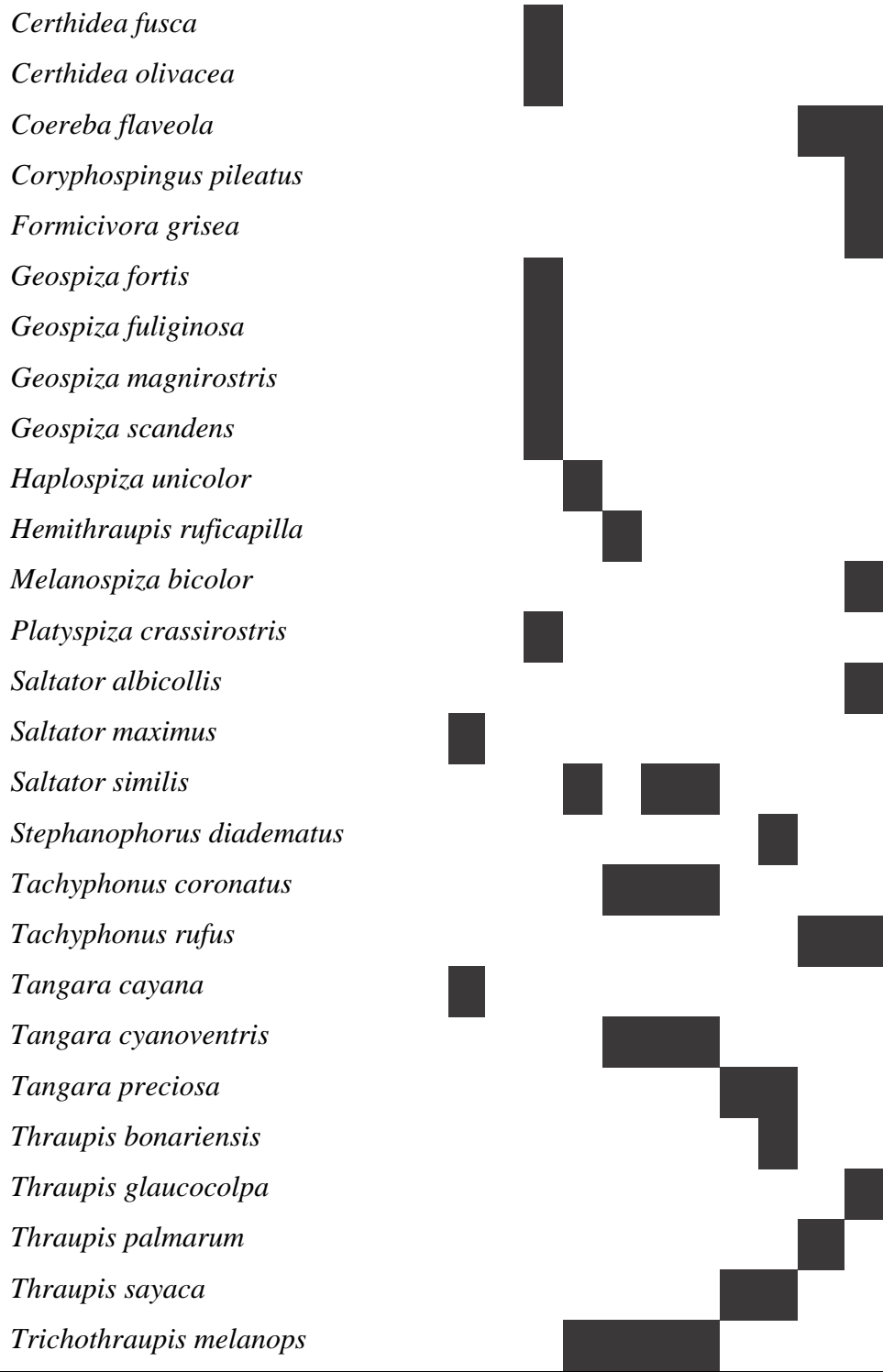
Piranga rubra

Thraupidae

Camarhynchus pallidus

Camarhynchus parvulus

Camarhynchus psittacula



Additional reference

Lima, A.L.C. & Manhães, M.A. (2017) Seasonal variation of understory insectivorous birds and arthropods in an area of secondary Atlantic Forest, southeast Brazil. *Rev. Bras. Ornitol.*, 25, 47–53. doi: 10.1007/BF03544376