

ZOOTAXA

5001

Ants of the State of Pará, Brazil: a historical and comprehensive dataset of a key biodiversity hotspot in the Amazon Basin

EMÍLIA ZOPPAS DE ALBUQUERQUE^{1,*#}, LÍVIA PIRES DO PRADO^{2,9,#}, JOUDELLYS ANDRADE-SILVA^{2,10,#}, EMELY LAIARA SILVA DE SIQUEIRA^{2,11}, KELLY LIANE DA SILVA SAMPAIO^{2,12}, DIEGO LEMOS ALVES^{2,13}, CARLOS ROBERTO FERREIRA BRANDÃO³, PALOMA L. ANDRADE^{4,16}, RODRIGO MACHADO FEITOSA^{4,17}, ELMO BORGES DE AZEVEDO KOCH^{5,18}, JACQUES HUBERT CHARLES DELABIE^{5,19}, ITANNA FERNANDES⁶, FABRÍCIO BEGGIATO BACCARO⁷, JORGE LUIZ PEREIRA SOUZA⁸, RONY PETERSON SANTOS ALMEIDA^{2,14} & ROGÉRIO R. SILVA^{2,15,#}

¹National Museum of Natural History, Smithsonian Institution, 1000 Constitution Ave NW, Washington, DC 20560, USA; School of Life Sciences, Arizona State University, 427 E Tyler Mall, Tempe, AZ 85281, USA.

²Coordenação de Ciências da Terra e Ecologia, Museu Paraense Emílio Goeldi, Av. Perimetral 1901, Belém, PA 66077-830, Brazil.

³Museu de Zoologia da Universidade de São Paulo, Av. Nazaré 481, São Paulo, SP 04263-000, Brazil.

 crfbrand@usp.br;  https://orcid.org/0000-0002-4689-5845

⁴Universidade Federal do Paraná, Departamento de Zoologia, Av. Francisco Heráclito dos Santos s/n, Curitiba, PR 81531-980, Brazil.

⁵Laboratório de Mirmecologia, CEPEC-CEPLAC, Km 22 rodovia Ilhéus-Itabuna (BR-415). Ilhéus, BA, Brazil.

⁶Instituto Nacional de Pesquisas da Amazônia, Coordenação de Biodiversidade, Av. André Araújo 2936, Manaus, AM 69060-095, Brazil.

 itanna.fernandes@gmail.com;  https://orcid.org/0000-0003-1619-4201

⁷Universidade Federal do Amazonas, Departamento de Biologia, Av. General Rodrigo Octávio, 6200, Manaus, AM 69077-000, Brazil.

 fbaccaro.ecolab@gmail.com;  https://orcid.org/0000-0003-4747-1857

⁸Instituto da Mata Atlântica, Av. José Ruschi 4, Santa Teresa, ES 29650-000, Brazil.

 jlpsouza@protonmail.com;  https://orcid.org/0000-0003-4574-8111

⁹ livia.pires7@gmail.com;  https://orcid.org/0000-0003-1819-8767

¹⁰ joudellys@gmail.com;  https://orcid.org/0000-0002-5393-6502

¹¹ emelysiqueira@gmail.com;  https://orcid.org/0000-0002-8819-3868

¹² kelli.liane@yahoo.com.br;  https://orcid.org/0000-0002-1580-0436

¹³ diegoalves797@gmail.com;  https://orcid.org/0000-0002-1442-5531

¹⁴ ronyalmeida@museu-goeldi.br;  https://orcid.org/0000-0003-0681-0357

¹⁵ rogerioribeiro@gmail.com;  https://orcid.org/0000-0002-0599-2155

¹⁶ palomaandradebio@gmail.com;  https://orcid.org/0000-0002-4752-2071

¹⁷ rsmfeitosa@gmail.com;  https://orcid.org/0000-0001-9042-0129

¹⁸ elmoborges@gmail.com;  https://orcid.org/0000-0002-2022-4066;

¹⁹ jacques.delabie@gmail.com;  https://orcid.org/0000-0002-2695-1061

*corresponding author.  albuquerque@si.edu;  https://orcid.org/0000-0002-2888-2864

#these authors contributed equally to the work.



Magnolia Press
Auckland, New Zealand

EMÍLIA ZOPPAS DE ALBUQUERQUE, LÍVIA PIRES DO PRADO, JOUDELLYS ANDRADE-SILVA, EMELY LAIARA SILVA DE SIQUEIRA, KELLY LIANE DA SILVA SAMPAIO, DIEGO LEMOS ALVES, CARLOS ROBERTO FERREIRA BRANDÃO, PALOMA L. ANDRADE, RODRIGO MACHADO FEITOSA, ELMO BORGES DE AZEVEDO KOCH, JACQUES HUBERT CHARLES DELABIE, ITANNA FERNANDES, FABRÍCIO BEGGIATO BACCARO, JORGE LUIZ PEREIRA SOUZA, RONY PETERSON SANTOS ALMEIDA & ROGÉRIO R. SILVA

Ants of the State of Pará, Brazil: a historical and comprehensive dataset of a key biodiversity hotspot in the Amazon Basin

(*Zootaxa* 5001)

83 pp.; 30 cm.

16 Jul. 2021

ISBN 978-1-77688-300-4 (paperback)

ISBN 978-1-77688-301-1 (Online edition)

FIRST PUBLISHED IN 2021 BY

Magnolia Press

P.O. Box 41-383

Auckland 1041

New Zealand

e-mail: magnolia@mapress.com

<https://www.mapress.com/j/zt>

© 2021 Magnolia Press

All rights reserved.

No part of this publication may be reproduced, stored, transmitted or disseminated, in any form, or by any means, without prior written permission from the publisher, to whom all requests to reproduce copyright material should be directed in writing.

This authorization does not extend to any other kind of copying, by any means, in any form, and for any purpose other than private research use.

ISSN 1175-5326 (Print edition)

ISSN 1175-5334 (Online edition)

Table of Contents

Abstract	3
Introduction	3
Materials and methods	4
Results	6
Discussion	11
Concluding remarks	16
List of species	17
Agroecomyrmecinae Carpenter, 1930 [1 genus, 1 species]	17
Amblyoponinae Forel, 1893 [2 genera, 6 species]	17
Dolichoderinae Forel, 1878 [7 genera, 74 species, and 9 subspecies]	18
Dorylinae Leach, 1815 [8 genera, 43 species, and 5 subspecies]	23
Ectatomminae Emery, 1895 [3 genera, 45 species]	27
Formicinae Latreille, 1809 [7 genera, 78 species, and 6 subspecies]	30
Heteroponerinae Bolton, 2003 [2 genera, 3 species]	36
Myrmicinae Lepeletier de Saint-Fargeau, 1835 [41 genera, 330 species, and 2 subspecies]	36
Paraponerinae Emery, 1901 [1 genus, 1 species]	57
Ponerinae Lepeletier de Saint-Fargeau, 1835 [14 genera, 93 species]	58
Proceratiinae Emery, 1895 [2 genera, 4 species]	65
Pseudomyrmecinae Smith, 1952 [1 genus, 52 species]	66
Acknowledgments	70
References	70

Abstract

The state of Pará in northern Brazil is located entirely within the Amazon Basin and harbors a great diversity of landscape and vegetation types that support high levels of biodiversity. Here, we provide a comprehensive inventory of ant species and their distribution in Pará. This regional list is based on an extensive review of species records from published and unpublished sources covering a period of 134 years (1886–2020) and includes the five most representative ant collections in Brazil. In total, we documented 12 subfamilies, 90 genera and 753 ant species, including 97 species recorded for the first time in Pará and 12 species newly reported in Brazil. Sampling effort across the state is highly uneven, and most records may be associated with research areas near the state capital, mining areas, hydroelectric dams, and research field stations run by the state or universities. In addition, our results suggest a strong bias in ant collection in Pará in terms of proximity of sampled sites to access routes, such as roads and rivers. We also found that species records were highly unevenly distributed based on areas of endemism within the Amazon, vegetation type, and protected areas within the state. Ant surveys are still lacking from most protected areas of Pará, and further sampling is urgently needed in view of the current trend of expansion of major infrastructure projects and natural resource harvesting within protected areas of Pará. Our database represents an extremely valuable and rich source of information for further studies on ant biodiversity and conservation in the Amazon Basin.

Key words: Database, Entomological collection, Formicidae, richness, public politics, conservation

Introduction

Located entirely within the Amazon Basin, the state of Pará has been considered a relevant historical and geographical region in northern Brazil since its inception. Historically, it was one of the first Amazonian areas targeted by early Portuguese settlers in 1616 (Silva & Silva 2008) and the site of important scientific expeditions by great naturalists, such as Johann Baptist von Spix (1781–1826), Carl Friedrich Philip von Martius (1794–1868), Henry Walter Bates (1825–1892), Alfred Russell Wallace (1823–1913), and Emilia Snethlage (1868–1929) (Vanzolini 2004; Lovejoy 2019).

From a geographical standpoint, it is the second largest Brazilian state, occupying 1,253,164.5 km², and the 13th largest first-order administrative division in the world (Silva & Silva 2008; Moure *et al.* 2013). The state is characterized by a great diversity of geological environments and vegetation cover types, such as dense ombrophilous forests, open ombrophilous forests (which include periodically flooded forests, *e.g.*, várzea and igapó), campinaranas (endemic vegetation of Amazonia), cangas (herbs and shrubs associated with iron-rich conglomerates), savannas,

and pioneer vegetation (including sand bars and mangroves) (IBGE 2012), which support a high level of biodiversity. Pará is also a gateway to and from the Amazon River through its connection to the Atlantic Ocean (Barros & Pimentel 2001).

The state plays an important role in the economic development of the Amazon region. Historical and current infrastructure projects have impacted local biodiversity. Examples include the construction of railroads from the capital of Pará, Belém, to the coast; the construction of the Estrada Real road from Belém to the state of Maranhão; a highway from Belém to the capital of Brazil, Brasília; the Trans-Amazonian Highway; and transmission power lines, power plants, and mines (Laurance 1998; Laurance *et al.* 2001; Silva & Silva 2008). These projects are the main contributors to habitat loss, affecting species richness and ecosystem resources through the removal of pristine forest areas and increasing deforestation rates in the state of Pará, which has one of the highest rates in the Amazon Basin (Vedovato *et al.* 2016). The latest report of National Institute for Space Research (INPE) on Amazon deforestation rates shows an increase of 9.5% between August 2019 and July 2020, with Pará ranking first and accounting for 46.8% of the accumulated deforestation recorded in the Legal Amazon (INPE 2020).

Over the last 50 years, a significant proportion of the ant samples collected in Pará came from Environmental Impact Assessment studies (Prado *et al.* 2020). As legal repositories of Brazilian biodiversity, these official biological collections include specimens from different regions, allowing not only an appreciation of the biodiversity from irreversibly modified regions but also an evaluation of the environmental impact of human actions (Taddei *et al.* 1999; Vivo *et al.* 2014).

Recently, efforts have been made to study the diversity and distribution of ant species in the Amazon Basin; in recent years, checklists have been published for French Guiana (Franco *et al.* 2019), for Amazonian Colombia (Castro *et al.* 2018; Guerrero *et al.* 2018; Fernández *et al.* 2019), and for several Brazilian Amazon states (Miranda *et al.* 2012; Fernandes & Souza 2018; Prado *et al.* 2019; Schmidt *et al.* 2020). However, no comprehensive checklist integrating taxonomic validation has been published so far for the state of Pará, one of the largest areas in the Amazon Basin.

In this paper, we gather information on ants recorded in Pará. To do this, we obtained data available from (i) published and unpublished sources, (ii) online biodiversity databases, and (iii) ant specimens from Pará deposited in the main ant collections in Brazil. We created the most detailed database of ant records and spatial data from eastern Amazon to generate a list of ant species from Pará and describe sample coverage throughout the state. We highlight priority areas for further studies to understand and advance the knowledge of the ant fauna in the Amazon Basin.

Materials and methods

Data Records. We compiled a dataset of ant species from Pará recorded in the literature from 1886 (the first record in the literature of ants collected in Pará) to 2020. Most published data records were provided by the Global Ant Biodiversity (GABI) project (Guénard *et al.* 2017), including data extracted from AntWeb (AntWeb 2020). Next, we extracted geographical information from labels of specimens collected in Pará and deposited in one of the five main Brazilian entomological collections, namely Museu Paraense Emílio Goeldi (MPEG); Coleção Entomológica Padre Jesus Santiago Moure at Universidade Federal do Paraná (DZUP); Centro de Pesquisas do Cacau at Comissão Executiva do Plano de Lavoura Cacaueira (CPDC); Museu de Zoologia at Universidade de São Paulo (MZSP); and Instituto Nacional de Pesquisas da Amazônia (INPA). Thirdly, for the MPEG dataset, we retrieved records from the Brazilian Biodiversity Information System (SiBBr), a national online biodiversity database (<https://www.sibbr.gov.br/>). The SiBBr repository hosts and mirrors the information available from GBIF (Global Biodiversity Information Facility; <https://www.gbif.org>). Lastly, material from recent surveys conducted by the authors in the state of Pará were also used to update the database.

The full database contains a unique species record per row and columns displaying metadata, with variables as defined on Dryad dataset (<https://doi.org/10.5061/dryad.6djh911h>).

Georeferencing. When available from the original source (specimen labels and/or published information), coordinates were transformed to decimal degrees before analyses. We used WGS84 as datum (if entry datum was not reported in specimen data). For records without coordinates, we georeferenced specimens using the GeoNames geographical database (<http://www.geonames.org/>), Fallingrain: Maps and Weather (<http://www.fallingrain.com/index.html>), and searches in Google Maps. Finally, we used personal databases of Pará localities from researchers at MPEG (William L. Overal) and Instituto Tecnológico Vale (ITV; Tereza C. Giannini and Rafael C. Borges) to

determine the coordinates of some sites. In all cases, we kept a detailed description of the source of coordinates and georeferenced data.

Taxonomic and Status Validation. Species identifications were validated by examining the specimen (directly or using high-resolution images, whenever possible) and reviewing the tools used for species identification (for literature data). In case of questionable records and new distribution records, experts were consulted to decide if the records should be included or excluded. Data that could not be validated using the available tools were discarded. Valid species names were assigned according to the Online Catalog of the Ants of the World (AntCat; Bolton 2021). We included a column in the database labeled “Technical.Validation” (a binary variable that specifies whether to keep or exclude records in the analyses) to represent identification errors. We only gathered information on formally named species (morphospecies data were excluded from our dataset). The dataset is available in Unicode (UTF-8) format on Dryad (<https://doi.org/10.5061/dryad.6djh911h>).

Exotic Species. The classification of species as exotic in our list is based on the historical records of species that had no previous occurrence in the state of Pará and that are reported as invasive in the myrmecological literature. The monitoring of species status over time was based on the comparison of occurrence lists and taxonomic catalogs with the recent literature obtained mainly through the Global Ant Biodiversity (GABI) project (Guénard *et al.* 2017). In addition, we reported new occurrences of exotic species based on the material deposited in the ant collections consulted for this study.

Analyses. The full database contains all specimen records, including multiple specimens of the same species and same collection data, or multiple records for a species at the same site that differ in date, collector, or other label data (for example, label code). We used ‘site-specific records’ to avoid duplicate records in analyses. We defined a ‘site’ as a unique coordinate (decimal degrees to 6 decimal places) in the dataset. A site-specific record was a unique combination of a species and a site (i.e., collapsing all records that differed only in date, collector, or other label details).

First, we characterized the distribution of ant records in the state of Pará by mapping records into four major geographical categories: (1) areas of endemism in the Brazilian Amazon, (2) vegetation types, (3) protected areas, and (4) access routes. Our goal was to describe (and not model) patterns of species richness and number of records based on classification systems frequently adopted in analyses of biodiversity data from the Amazon Basin. Exotic species were mapped, and total number of records and sites were determined; further, we analyzed their distribution regarding access routes to describe the influence of roads and rivers on exotic species records. We followed Silva *et al.* (2002) for areas of endemism in the Amazon Basin, a classification based on the confluence of the main Amazonian rivers (Wallace 1854) that outlines the main biogeographic divisions of understory birds and primate species diversity within the basin (Haffer 1969). To explore the entire database, we also added the Marajó region as an area of endemism. Brazilian vegetation types were based on the classification of the Brazilian Institute of Geography and Statistics (IBGE 2012), which extracts information from the most current data on native vegetation cover in Brazil.

For protected areas (indigenous lands and conservation units), we obtained the distribution of municipal, state, and national protected areas of Pará from the Brazilian Ministry for the Environment (MMA) (<http://mapas.mma.gov.br/i3geo/datadownload.htm>). We also investigated whether distribution records were biased towards proximity to access routes (roads and main rivers). Maps of access roads and rivers were obtained from MMA and Forest-Gis (<http://forest-gis.com/download-de-shapefiles/>), respectively. We extracted the number of records observed within 1, 5, and 10 km buffers around roads and rivers in the state of Pará. We used these distances because we expected the highest record density in the Amazon to be concentrated within this range of distances from access routes (Oliveira *et al.* 2016).

We extracted the municipality (second-level administrative level) of Pará that included collections using the package ‘brazilmaps’ (Siqueira 2017) in the R environment for statistical computing (R Core Team 2020 version 4.0.0). Maps depicting endemism areas, vegetation types, protected areas, and access routes were created using the QGIS software (QGIS Development Team 2020).

We further explored the relationship between the number of records and the number of species recorded over time. To do this, we used collection year as the collection unit of museum data or year of publication as the collection unit of published sources. However, since for most records there are no unique identifiers available to detect the overlap between specimen data from museums and from publications, these sources are not completely independent. Similarly, our database does not separate primary records in the taxonomic literature (records from

specimens examined in the study) from secondary records (records published formally and reported again in a following publication), which may inflate records over time in published literature.

Results

Our compilation of ant species from Pará generated an updated list of 21,646 ant records belonging to 12 subfamilies, 90 genera, and 771 species names, including 12 exotic species. We excluded, after taxonomic validation, 25 records and 18 species from the analyses (see Table 1), resulting in a total of 753 valid species in Pará (see list of species). All numbers provided hereafter in the text consider only the taxonomically validated records (N = 21,621).

TABLE 1. List of species and subspecies recorded in the literature and our online dataset (see dataset on Dryad) excluded after taxonomic validation.

Species/subspecies	Reference	Justification
<i>Apterostigma carinatum</i> Lattke, 1997	Solar <i>et al.</i> , 2016b	Needs Verification
<i>Atta capiguara</i> Gonçalves, 1944	Chaves <i>et al.</i> , 2018	Needs Verification
<i>Atta robusta</i> Borgmeier, 1939	Chaves <i>et al.</i> , 2018	Needs Verification
<i>Cardiocondyla nuda</i> (Mayr, 1866)	Vasconcelos <i>et al.</i> , 2006	Dubious
<i>Crematogaster minutissima</i> Mayr, 1870	Vasconcelos <i>et al.</i> , 2006	Dubious
<i>Cyphomyrmex costatus</i> Mann, 1922	Vasconcelos <i>et al.</i> , 2006	Misidentification
<i>Cyphomyrmex salvini</i> Forel, 1899	Vasconcelos <i>et al.</i> , 2006	Misidentification
<i>Dorymyrmex flavus</i> McCook, 1880	McCook, 1880	Dubious
<i>Gnamptogenys menozzii</i> (Borgmeier, 1928)	Camacho <i>et al.</i> , 2020	Wrong location assignment
<i>Lachnomyrmex nordestinus</i> Feitosa & Brandão, 2008	Harada, 2016	Dubious
<i>Lachnomyrmex plaumanni</i> Borgmeier, 1957	Harada, 2016	Dubious
<i>Neivamyrmex opacithorax</i> (Emery, 1894)	Borgmeier, 1936	Dubious
<i>Pseudomyrmex mordax</i> (Warming, 1894)	Forel, 1904	Dubious
<i>Pseudomyrmex rubiginosus</i> (Stitz, 1913)	Baroni Urbani, 1977	Wrong location assignment
<i>Rogeria scandens</i> (Mann, 1922)	Vasconcelos <i>et al.</i> , 2006	Dubious
<i>Simopelta bicolor</i> Borgmeier, 1950	Harada, 2016	Dubious
<i>Strumigenys perdita</i> Bolton, 2000	Harada, 2016	Dubious
<i>Strumigenys splendens</i> (Borgmeier, 1954)	Harada, 2016	Dubious

For 1,336 records the only locality information was ‘state of Pará’ and thus they lacked within-state locality data. For the remaining 20,285 records, we recorded ants from 101 municipalities and 775 unique coordinates (based on 6 decimal places; Fig. 1A). In the database, 4,990 records did not originally include a second-order administrative level, which was assigned based on the coordinates available from the labels (see Materials and methods). In addition, there was a relatively high number of ant records without precise coordinates; 280 of the 775 unique coordinates (36%) were assigned by us.

In total, 97 species belonging to 8 subfamilies and 35 genera were recorded for the first time in Pará; of these, 12 species were also new records for Brazil. In addition to species reported for the first time in Pará, our database also includes species recorded for the first time in the Brazilian Amazon (e.g., *Strumigenys sublonga* Brown, 1958). Our dataset covers both arboreal and ground-nesting species, as well as native and introduced ants. Regarding conservation status, two species are classified as vulnerable (SISG, 1996) according to the IUCN Red List of Threatened Species (IUCN 2020): *Megalomyrmex symmetochus* Wheeler, 1925 and *Oxyepoecus inquilinus* (Kusnezov, 1952).

Among the 90 ant genera recorded, 19 genera had 10 or more species and subspecies found in the state of Pará: *Pheidole* (68 species and subspecies), *Camponotus* (60), *Pseudomyrmex* (52), *Strumigenys* (43), *Azteca* (37), *Gnamptogenys* (35), *Cephalotes* (29), *Dolichoderus* (29), *Crematogaster* (26), *Neoponera* (24), *Neivamyrmex* (23), *Acromyrmex* (15), *Odontomachus* (14), *Rogeria* (14), *Solenopsis* (13), *Eciton* (11), *Leptogenys* (11), and *Megalomyrmex* (11).

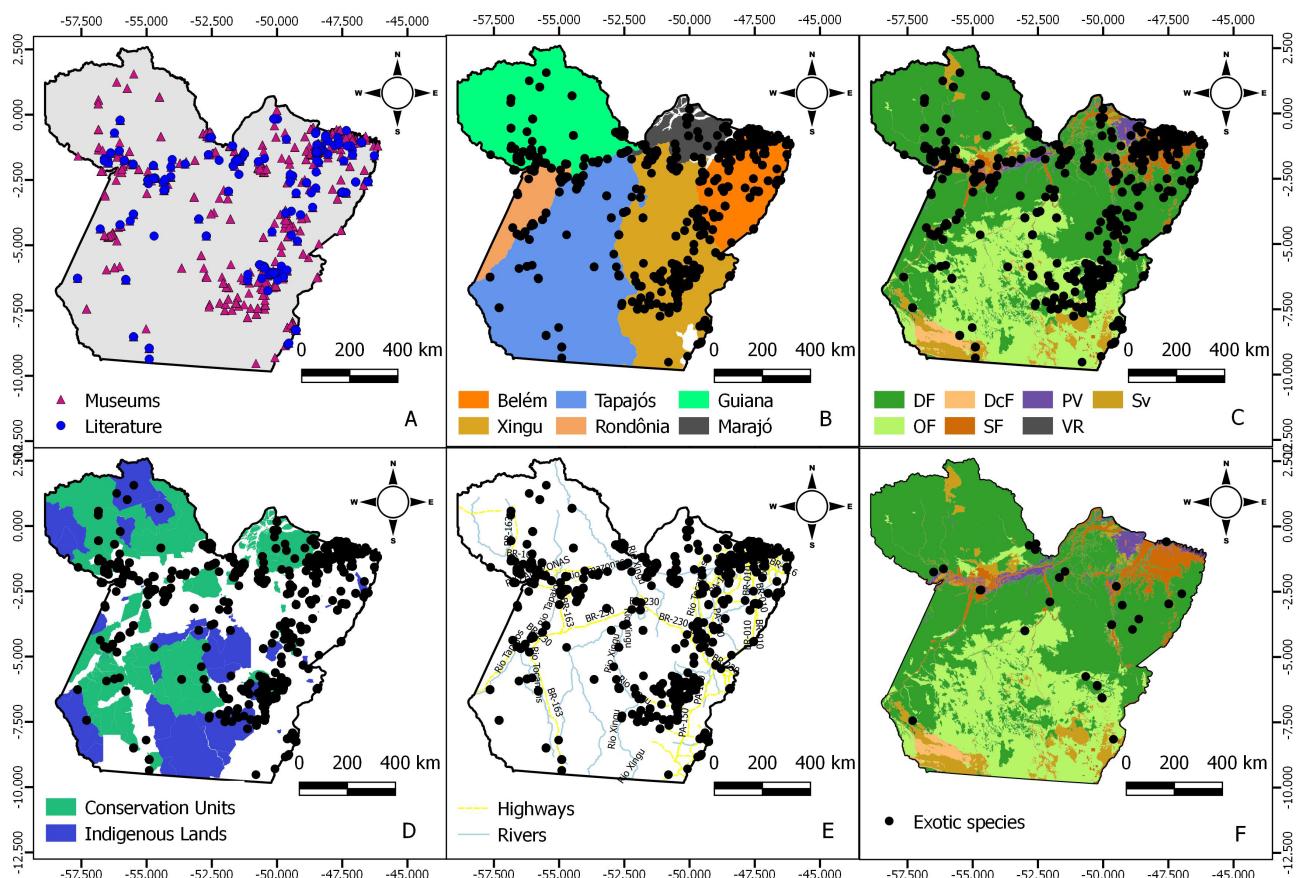


FIGURE 1. Ant sampling distribution (localities) in the state of Pará by data source (A), area of endemism (B), vegetation type (C), protected area (D), roads and rivers (E), and the distribution of exotic ants in 78 records (F). DF = Dense Ombrophilous Forest; OF = Open Ombrophilous Forest; DcF = Seasonal Deciduous Forest; SF = Secondary Forest; PV = Pioneer Vegetation; VR = Refúgio Vegetacional; Sv = Savanna.

The distribution of site-specific species records is highly skewed (Fig. 2; N = 6,056, excluding records without spatial resolution). There were 546 species known from ten or fewer sites, or 71% of all species recorded in the state of Pará. Species with 100 or more records add up to 58% of the database. The number of species known from a single locality is also high: 158 ant species (21% in 753 species). The most common ant species recorded in the state of Pará were *Ectatomma tuberculatum* (Olivier, 1792) (139 sites), *Cephalotes atratus* (Linnaeus, 1758) (127), *Paraponera clavata* (Fabricius, 1775) (119), *Ectatomma brunneum* Smith, 1858 (99), *Camponotus atriceps* (Smith, 1858) (98), *Pseudomyrmex gracilis* (Fabricius, 1804) (93), *Pseudomyrmex tenuis* (Fabricius, 1804) (89), and *Gigantiops destructor* (Fabricius, 1804) (87).

Most records in our database (N = 21,621) were obtained from museum collections: 18,543 records, or 86% of species-level identifications; we found 3,079 records in the literature. The database includes ant records from specimens collected (or sources published) between 1886 and 2020. We found that 1,340 records (6.2%), representing 345 ant species, had no collection year information. The number of records extracted from collections and from the literature tended to increase over time but fluctuated markedly (Fig. 3; see Fig. 1A: spatial distribution of data sources). We found 5,495 site-specific museum records collected from 1903–2018, including 553 species. From published sources, we extracted 2,639 site-specific records, from 1886–2020, corresponding to 580 species (Fig. 4).

The distribution of sampling effort throughout the state is highly uneven. For example, taking into account site-specific records, the state capital, Belém, had 769 records, followed by Parauapebas (479), Santarém (447), Oriximiná (419), Melgaço (392), and Paragominas (365). Indeed, most records can be associated with research sites near the capital of Pará (Belém, Marituba), mining areas (Parauapebas, Paragominas, Óbidos, Oriximiná, and Bannach, near Parauapebas), a hydroelectric dam (Tucuruí), and field stations belonging to research institutes (MPEG in Melgaço, Portel, and Breves municipalities) or universities (Santarém and Altamira).

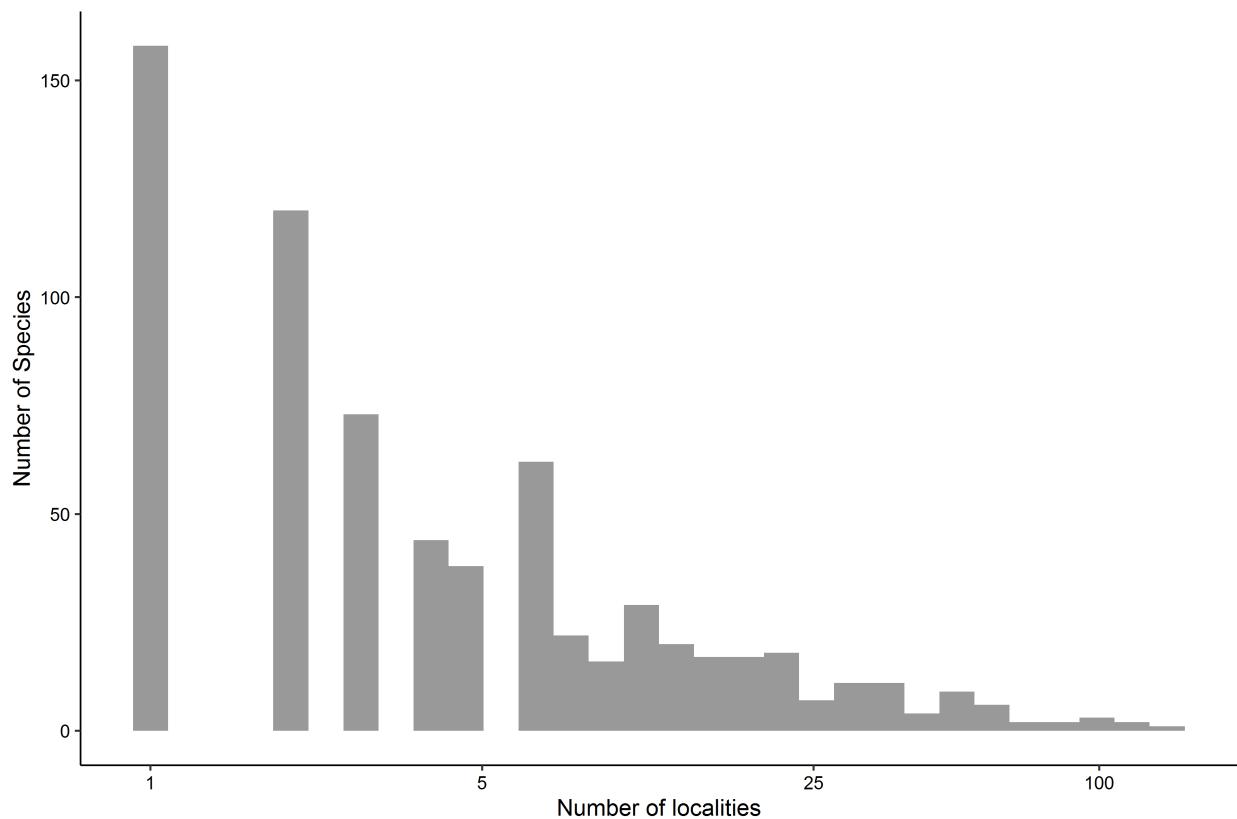


FIGURE 2. Abundance distribution of site-specific ant species records in the state of Pará. The x-axis is on a logarithmic scale.

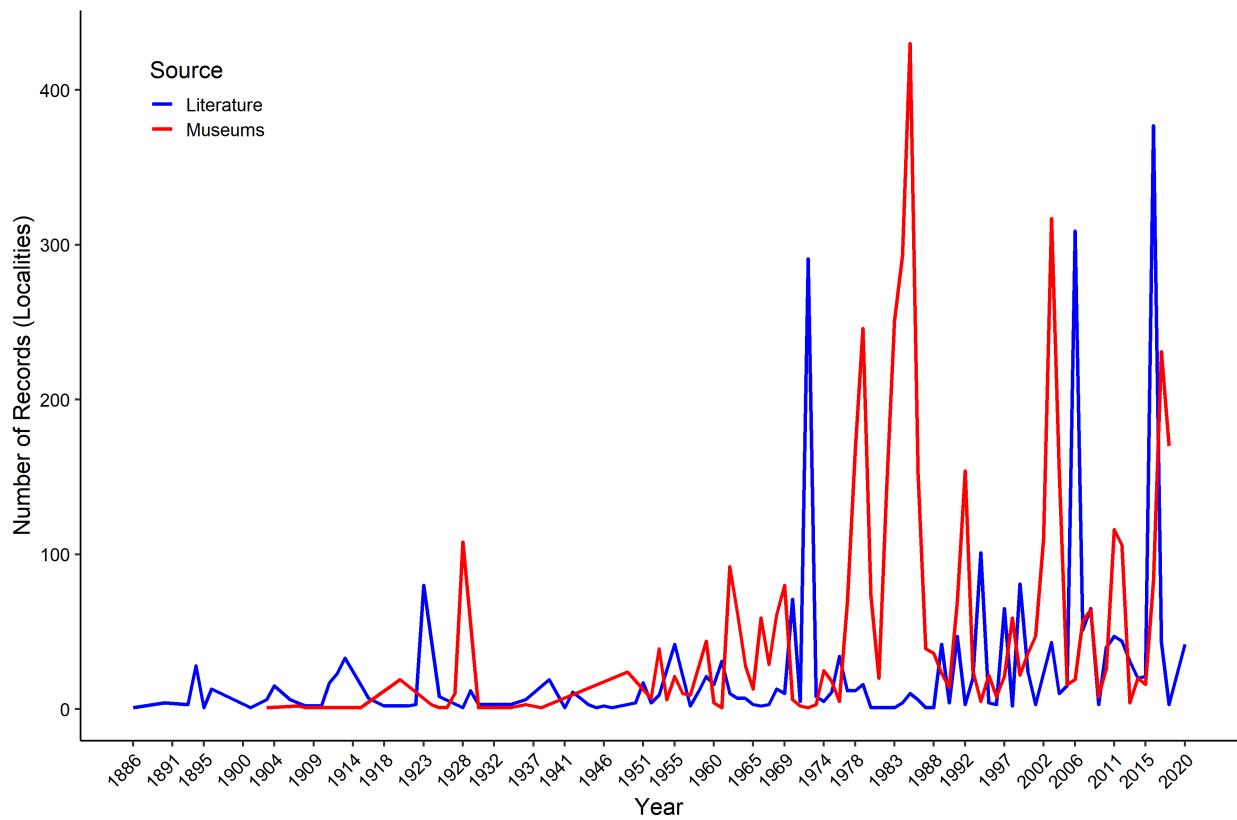


FIGURE 3. Number of ant records in the state of Pará based on museum specimens and published sources over time. Note: 695 of 3,502 site-specific records from published sources did not indicate the collection year; 64 of 4,531 site-specific records from museum specimens did not indicate the collection year.

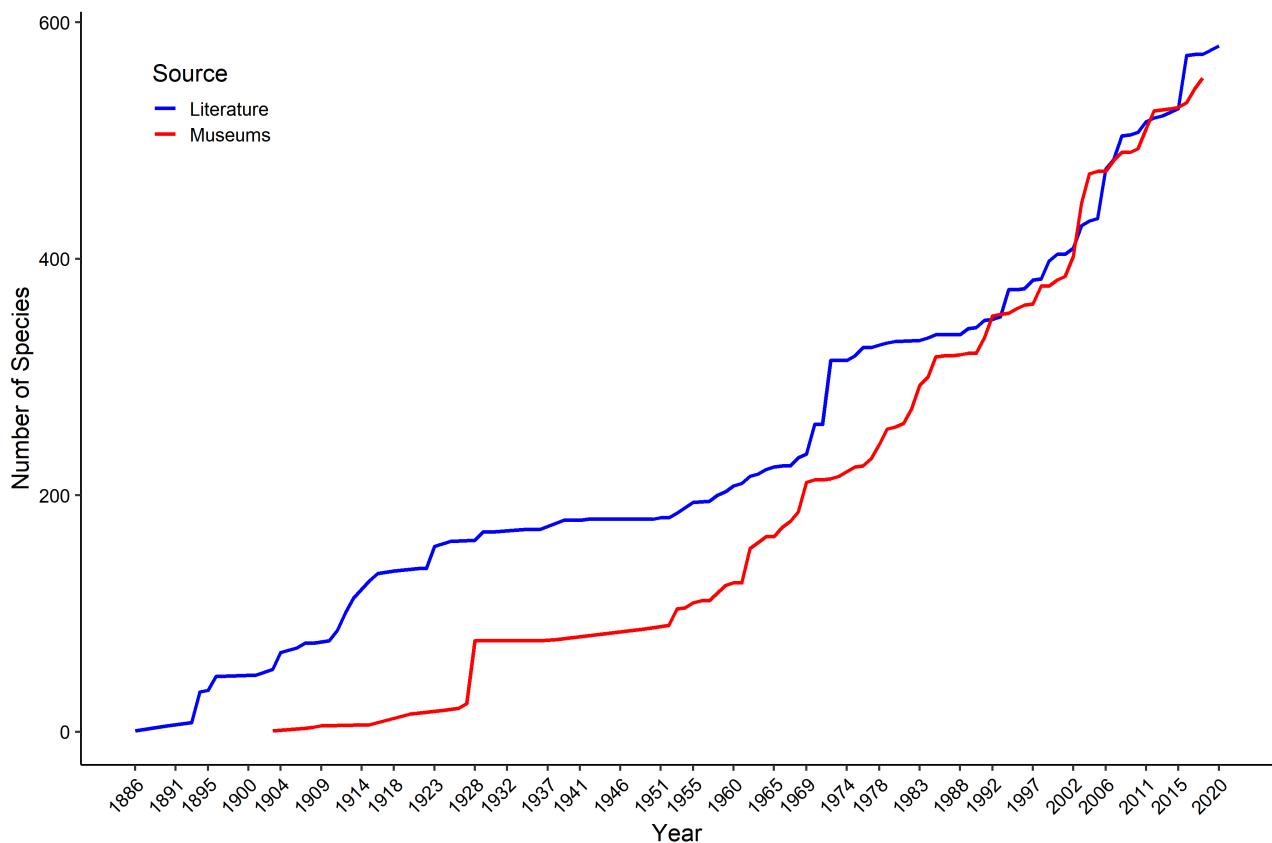


FIGURE 4. Collector's curve based on museum specimens (546 species) and published sources (561 species) for ant species recorded in the state of Pará, Brazil, between 1886 and 2018.

Records mapped based on areas of endemism in the Amazon, vegetation types, or protected areas within the state of Pará also reveal a highly uneven distribution (Fig. 1B–D) ($N = 7,226$ site-specific records aggregated by species and year, excluding 1,336 records without spatial resolution). For example, more than 2,000 records were found in areas of endemism in Xingu or Belém (24% and 10% of the territory, respectively), while the other areas had less than 1,000 records (Tab. 2). Comparisons based on record density/km² suggest a more homogeneous sampling effort among areas (Tab. 2). In the Belém area of endemism, records were concentrated along approximately 250 km of roads from Belém towards coastal areas (Fig. 1B). In Xingu, most records were associated with Serra dos Carajás and Tucuruí (Tocantins River). Sampling in both regions was primarily driven by research on biodiversity to comply with the legal requirements for development projects in Brazil (for mining and the construction of hydroelectric dams). Similarly, record density in the Guiana area of endemism was the result of sampling performed at a mining site (Porto Trombetas region). Moreover, most records along the east-west borders of the areas of endemism of Belém, Marajó, Guiana-Tapajós, and Rondônia were associated with the Amazon and Tapajós Rivers (Fig. 1E).

In terms of bias in vegetation types, most records were associated with dense ombrophilous forest (3,185, or 44%); secondary forests included 2,495 records, or 34% of all records (Tab. 2; Fig. 1C). Dense ombrophilous forests occupy around 57% of the area of Pará, while secondary forests correspond to 7%; record density/km² suggests greater effort in secondary forests than in dense ombrophilous forests. We did not find records in seasonal deciduous forests, which occupy 1.11% of the land area. The most uneven distribution of records was observed in conservation units: only 2,213 records (30%) were collected in these areas (Fig. 1D). However, these collections were highly aggregated: out of 34 conservation units in the state of Pará, 57% of the records came from the three conservation units in the most sampled areas in the state (Parque Estadual do Utinga, Belém; Floresta Nacional de Carajás; and Floresta Nacional de Caxiuanã) (Tab. 2).

There was also a strong bias in ant collection in Pará caused by infrastructure (*i.e.*, proximity to access routes such as roads and rivers; Fig. 1D). We found that 4,675 (64%) and 2,383 (33%) records were concentrated within 10 km of the main roads and rivers of Pará, respectively, while a 5 km buffer explained 29% (roads) and 16% (rivers),

and a 1 km buffer corresponded to 4% and 7% of the total records in roads and rivers, respectively (Tab. 3). In terms of species richness recorded, the bias was concentrated within a 10 km buffer, with roads and rivers explaining 68% of the total ant species known in Pará (Tab. 3).

TABLE 2. Distribution of ant species richness and number of records across the state of Pará based on three geographical categories (areas of endemism, vegetation types, and protected areas). APA = environmental protection area; FLOES = state forest; FLONA = national forest; PARES = state park; PARNA = national park; REBIO = biological reserve; REDES = sustainable reserve; RESEX = harvest reserve; REVIS = wildlife refuge. The area of the state is 1,261,077 km². The total number of site-specific records, aggregated by species and year, is 7,226 (excluding 1,355 records without spatial resolution).

Geographic Categories				
Areas of Endemism in the State of Pará				
Region	Area Occupied in the State	Species Richness	Number of Records	Density (No. Records/km ²)
Xingu	24.24 %	444	2,852	0.009
Belém	10.38 %	442	2,297	0.017
Guiana	21.28 %	290	828	0.003
Tapajós	32.79 %	286	974	0.002
Rondônia	5.06 %	77	161	0.002
Marajó	4.62 %	64	114	0.002
Vegetation Types in the State of Pará				
Dense Ombrophilous Forest	56.80 %	531	3,185	0.004
Secondary Forest	7.16 %	484	2,495	0.027
Open Ombrophilous Forest	26.15 %	268	1,081	0.003
Pioneer Vegetation	2.35 %	117	222	0.007
Savanna	6.30 %	90	196	0.002
Vegetation Refuges	0.03 %	19	47	0.127
Seasonal Deciduous Forest	1.11%	0	0	0.000
Protected Areas in the State of Pará				
Classification	Name	Species Richness	Number of Records	Administrative Level
Indigenous Land	-	150	405	-
APA	Algodoal-Maiandeua	5	10	State
	Alter do Chão	150	161	Municipal
	Combú	7	7	State
	Igarapé Gelado	1	1	National
	Lago de Tucuruí	19	42	State
	Marajó	54	88	State
	Região Metropolitana de Belém	61	83	State
	São Geraldo do Araguaia	9	12	State
	Tapajós	10	15	National
	Triunfo do Xingu	8	10	State

.....continued on the next page

TABLE 2. (Continued)

Classification	Name	Species Richness	Number of Records	Administrative Level
FLOES	Faro	1	1	State
	Parú	11	12	State
	Trombetas	34	38	State
FLONA	Carajás	160	475	National
	Caxiuanã	264	582	National
	Itacaiunas	1	1	National
	Jamanxim	7	7	National
	Saracá-Taquera	125	176	National
	Tapajós	4	4	National
PARES	Tapirapé-Aquiri	95	160	National
	Serra dos Martírios/Andorinhas	1	1	State
	Utinga	120	222	State
PARNA	Amazônia	35	60	National
	Campos Ferruginosos	2	2	National
	Jamanxim	1	1	National
	Serra do Pardo	1	1	National
REBIO	Rio Trombetas	7	7	National
REDES	Pucuruí-Ararão	3	4	State
RESEX	Gurupá-Melgaço	1	1	National
	Maracanã	6	6	National
	Mestre Lucindo	8	8	National
	Rio Xingu	4	5	National
	Tracuateua	4	4	National
REVIS	Metrópole da Amazônia	6	6	State

Regarding exotic species, we recorded 12 species from 78 records and 29 study sites in Pará (Fig. 1F), accounting for 0.3% of all records. Most of the records (61) were within 10 km of a road; five records were within 10 km of a river (Tab. 4-A and 4-B).

Discussion

The ant fauna of the state of Pará

Our regional list of ant species for the state of Pará represents the most accurate information ever compiled for any region in the Brazilian Amazon. We combined species records from published and unpublished sources, records from museum specimens deposited in the main entomological collections of Brazil, and spatial data to characterize the distribution of ant records in eastern Amazonia.

The species richness recorded in Pará is among the highest for any political unit in Brazil or South America (Guénard *et al.* 2017; Janicki *et al.* 2016; Guerrero *et al.* 2018; Franco *et al.* 2019). However, this is expected given (i) the wide geographic area of its territory, in turn inserted into the largest tropical forest on earth, and (ii) a thorough examination of literature records and museum specimens to mapping species occurrences.

Among the 90 genera of ants known to occur in Pará, 20 genera were particularly rich in species and included 523 ant species, or 72% of the regional list. The eight most frequently recorded genera (*Pseudomyrmex*, *Camponotus*, *Ectatomma*, *Cephalotes*, *Dolichoderus*, *Neoponera*, *Paraponera*, and *Eciton*) were common in our database, probably because they usually include medium to large ants, easily collected through traps and by direct sampling. The other 70 genera are represented by only 208 species, which are probably undersampled.

TABLE 3. Distribution of species richness and ant records along (A) the main rivers and (B) along roads of the state of Pará based on empirical data (1, 5, and 10 km buffers).

TABLE 3-A

Buffer	Number of Records			Species Richness		
	1 km	5 km	10 km	1 km	5 km	10 km
River Name						
Rio Acara	14	21	28	10	15	21
Rio Amazonas	-	16	189	-	14	82
Rio Anapu	-	59	64	-	46	49
Rio Araguaia	56	104	106	49	50	51
Rio Arraia do Araguaia	-	-	43	-	-	33
Rio Aruandeuá	-	51	51	-	51	51
Rio Capim	393	502	900	189	214	268
Rio Guama	-	11	18	-	8	13
Rio Gurupi	-	18	68	-	18	34
Rio Itacaiunas	20	45	55	17	23	30
Rio Jari	-	25	27	-	23	24
Rio Moju	-	-	1	-	-	1
Rio Nhamunda	-	19	20	-	9	10
Rio Paru	20	22	22	15	17	17
Rio Paru de Este	14	14	14	13	13	13
Rio Piria	-	1	1	-	1	1
Rio Tapajos	-	12	401	-	8	190
Rio Tocantins	3	31	37	3	14	19
Rio Trombetas	-	218	284	-	134	136
Rio Xingu	10	34	54	9	22	39
Total	530	1203	2383	219	366	473
% of Total for the State	7%	16%	33%	31%	52%	68%

TABLE 3-B

Road Name	Number of Records			Species Richness		
	1 km	5 km	10 km	1 km	5 km	10 km
AM-363	-	-	19	-	-	9
BR-010	134	772	2021	107	214	322
BR-153	1	2	4	1	1	1
BR-158	1	1	65	1	1	43
BR-163	-	170	410	-	42	132
BR-222	1	2	2	1	1	1
BR-230	37	59	115	17	24	42
BR-235	-	-	2	-	-	1
BR-308	2	72	91	2	23	25
BR-316	-	3	3	-	3	3
BR-417	-	-	10	-	-	8
BR-422	1	189	283	1	59	59
PA-108	-	-	1	-	-	1

.....continued on the next page

TABLE 3-B. (Continued)

Road Name	Number of Records			Species Richness		
	1 km	5 km	10 km	1 km	5 km	10 km
PA-112	-	24	26	-	16	17
PA-124	7	11	17	4	6	6
PA-127	13	27	28	11	12	13
PA-136	-	1	3	-	1	2
PA-140	28	45	55	19	23	23
PA-150	4	9	134	2	7	109
PA-151	-	-	1	-	-	1
PA-154	-	-	4	-	-	4
PA-159	-	-	2	-	-	2
PA-167	-	-	4	-	-	4
PA-192	-	1	13	-	1	9
PA-220	-	1	1	-	1	1
PA-235	1	2	5	1	2	5
PA-242	4	30	63	4	22	33
PA-251	-	-	13	-	-	8
PA-252	-	1	10	-	1	10
PA-253	-	4	4	-	3	3
PA-254	-	-	96	-	-	78
PA-256	-	153	374	-	132	153
PA-257	8	8	8	8	8	8
PA-265	-	-	12	-	-	8
PA-275	13	171	221	9	122	128
PA-279	-	8	71	-	8	42
PA-318	-	-	2	-	-	2
PA-320	-	36	56	-	23	23
PA-322	-	3	3	-	3	3
PA-324	15	15	15	15	15	15
PA-364	-	-	1	-	-	1
PA-370	-	-	1	-	-	1
PA-391	9	45	100	8	26	53
PA-395	-	12	14	-	6	7
PA-396	-	-	2	-	-	1
PA-405	-	1	1	-	1	1
PA-409	-	9	9	-	9	9
PA-412	-	-	1	-	-	1
PA-414	-	-	5	-	-	3
PA-415	-	1	2	-	1	2
PA-419	-	1	1	-	1	1
PA-420	-	1	1	-	1	1
PA-421	-	1	2	-	1	1
PA-423	-	-	27	-	-	24
PA-425	-	-	2	-	-	1

.....continued on the next page

TABLE 3-B. (Continued)

Road Name	Number of Records			Species Richness		
	1 km	5 km	10 km	1 km	5 km	10 km
PA-427	-	1	1	-	1	1
PA-430	-	5	6	-	5	6
PA-431	35	104	118	29	48	60
PA-440	-	-	16	-	-	16
PA-446	9	29	33	9	24	26
PA-448	-	-	2	-	-	2
PA-449	-	17	17	-	17	17
PA-450	4	4	4	2	2	2
PA-454	-	-	1	-	-	1
PA-456	-	8	8	-	7	7
PA-458	26	27	28	17	18	18
PA-481	-	4	4	-	4	4
PA-483	-	-	1	-	-	1
Total	353	2,090	4,675	176	381	474
% of Total for the State	4%	29%	64%	25%	54%	68%

TABLE 4. Distribution of the 78 records of exotic ants along the main rivers (A) and roads (B) of the state of Pará based on empirical data (1, 5, and 10 km buffers). The unique record of *Cardiocondyla nuda* in Pará was excluded from analyses.**TABLE 4-A**

Buffer	Number of Records			Species Richness		
	1 km	5 km	10 km	1 km	5 km	10 km
River Name						
Rio Amazonas	-	2	2	-	2	2
Rio Arraia do Araguaia	-	-	1	-	-	1
Rio Aruandeuá	-	1	1	-	1	1
Rio Tapajós	-	-	1	-	-	1
Total	-	3	5	-	3	4
% of Total for the State	-	4%	6%	-	25%	33%

TABLE 4-B

Road Name	Number of Records			Species Richness		
	1 km	5 km	10 km	1 km	5 km	10 km
BR-010	-	-	10	-	-	5
BR-163	-	2	3	-	1	1
BR-422	-	16	24	-	1	1
PA-254	-	-	5	-	-	4
PA-256	-	5	10	-	5	5
PA-275	-	2	4	-	2	3
PA-415	-	2	2	-	1	1
PA-431	-	1	3	-	1	3
Total	-	28	61	-	6	8
% of Total for the State	-	36%	78%	-	50%	66%

The ant fauna of Pará and the Amazon Basin requires additional taxonomic studies and higher sampling effort for an accurate description of its diversity and distribution. Almost half of the new records belong to diverse and taxonomically challenging genera, such as *Pheidole* (20 new records), *Pseudomyrmex* (15), and *Camponotus* (13). The new records reported for *Pheidole* and *Pseudomyrmex* were noticed by experts who studied the collections recently, while for *Acromyrmex*, *Azteca*, *Camponotus*, and *Neivamyrmex* the new species and subspecies records mostly come from samples identified in the past by experts whose data was not made available at the time. Therefore, increasing taxonomic knowledge of historically neglected genera (e.g., *Hypoponera*) and from regional reviews that do not include species from the Amazon region, such as *Eurhopalothrix* (Longino 2013), *Nesomyrmex* (Hita Garcia *et al.* 2017), *Nylanderia* (La Polla *et al.* 2011; Kallal & La Polla 2012), and *Solenopsis* (Pitts *et al.* 2018), may reveal new records and lead to the discovery of new species for Pará.

To a lesser extent, we also present records exclusively from museums and not cited in the literature before for common species—widely distributed in the Neotropics [e.g., *Linepithema angulatum* (Emery 1894)]; rare species—known only from the type locality or with a limited known distribution (e.g., *Dolichoderus haradae* MacKay 1993); and recently described species—less than 10 years ago (e.g., *Octostruma pheidolorum* Longino 2013).

The species list includes 12 non-native species commonly recorded in Brazil. Our descriptive analysis suggests that records were more associated with roads than rivers. However, sample coverage is extremely low, constraining further analyses about drivers of exotic species distribution or exotic species as drivers of biodiversity losses. Record distribution among species is highly skewed, and many species are known from a single locality. If ten or fewer records is defined as an arbitrary threshold in order to describe narrow-sampled species in our database, 546 species meet this criterion or 71% of the regional list is characterized by small samples. Although numerous processes may lead to this asymmetry in species distribution (e.g., biases in surveys and museum data, rare species in assemblages, distinct relative species abundances; Longino *et al.* 2002; Jones *et al.* 2019), the main insight is that there is incomplete knowledge about species-level distributions (Wallacean shortfall; Whittaker *et al.* 2005) for a large percentage of the ant fauna. Further, the robustness of species distribution models relies on a minimum number of specimen records to develop accurate models (Van Proosdij *et al.* 2018).

Historical considerations

In the 19th century, ant collections in Pará were conducted by naturalists, including Emílio Goeldi (1859–1917), Jacques Huber (1867–1914), and Adolpho Ducke (1876–1959). At the time, these specimens were sent to Auguste Forel at the Musée d’Histoire Naturelle Genève, who published one of the first checklists of ants for Brazil (Forel, 1895). Then, in the early 20th century, the myrmecologist William M. Mann (1886–1960), the entomologist for the 1911 Stanford Expedition to Brazil, collected ants from the North and Northeast regions of Brazil, which led to new distribution records and the discovery of several new species (Mann 1916). After the passage of these naturalists, for many years, entomological research in the North region was neglected. Between 1950 and 1960 there was a great investment by the National Council of Science and Technology (CNPq) to conserve and reactivate the entomological collections in the Amazon region, including financial incentives for field expeditions (Overal & Gorayeb 1981). Between 1966 and 1967, the myrmecologist Walter W. Kempf (1920–1976) initiated a collaboration with researchers in the Amazon and conducted the first ant survey in the region of Belém (Kempf 1970). These surveys associated with the financial investment by government agencies that revitalized biological collections were crucial to increase both the voucher specimens deposited in Brazilian collections and knowledge of ants in Pará. In the 1970’s, William L. Overal, other researchers, and technicians from MPEG began to regularly collect ants from different sites in Pará, primarily as part of environmental impact assessments and scientific expeditions. Since then, studies on insect pest control (Wetterer & Porter 2003), cytogenetics (Santos *et al.* 2012), ecology (Solar *et al.* 2016; Lima *et al.* 2020), and taxonomy (Fernandes *et al.* 2014), among others, have used or surveyed ants collected in the state.

This development was followed by an increase in the number of specimens and species records over time in local museums (also depicted by Fig. 3, 1950-60’s and 1970-80’s), resulting in a massive effort to digitize the main Brazilian collections in late 2010’s, bringing us a new perspective and a challenge about how to store, manage, integrate and share this data.

Distribution of ant sampling in the state of Pará

In this study, we report a high heterogeneity in ant sampling across a Brazilian state in the eastern Amazon region. There is a strong bias in ant collection in Pará caused by proximity to access routes such as roads and

rivers. This is a common pattern for Amazon localities, since access to the interior of dense forests is not easy or even possible in most places. Sampling coverage was driven by environmental impact assessments of mining areas and hydroelectric dams required by the Brazilian legislation (that is, studies required during the planning and environmental licensing phases of major infrastructure projects); research units near urban centers (for example, sampling concentrated near Belém and Santarém) and/or field stations (e.g., Floresta Nacional de Caxiuanã); and main roads and rivers. Spatially, sampling diversity is essentially described by (i) an east-southeast axis accessible through roads, and (ii) collections along main rivers and cities (Tocantins, Amazon, and Tapajós Rivers).

The Belém area of endemism, a biogeographic region east of the Tocantins River, is located in the easternmost part of Amazon. It is the most deforested area in the Amazon (only 29–32% of the original forest cover is preserved; Prudente *et al.* 2018; INCT 2012), but it is also the second area with the largest number of ant records. However, most sampling occurred near urban centers (mainly Belém) and along highways connecting Belém to the coast. Therefore, our understanding of ant distribution in the most accessible but largely destroyed area of endemism of the Amazon is essentially incomplete. Studies of ant fauna in the remaining old-growth and secondary-growth forests are crucial to understand and record the biodiversity of this area of endemism (Almeida & Vieira 2010).

Since sampling efforts in the state of Pará have been concentrated on environmental assessments for large infrastructure projects in eastern Amazonia and around urban centers, we found low sampling density in protected areas, despite 55% of the territory of the state of Pará is currently protected by law (Veríssimo *et al.* 2011). Indeed, the best sampled protected areas were near mining areas, cities, or field stations run by research centers (Floresta Nacional de Carajás, Floresta Nacional de Saracá-Taquera, Parque Estadual do Utinga, Belém, and Floresta Nacional de Caxiuanã). Given current concerns about the impact of plans by the Brazilian government for major infrastructure development and natural resource harvesting in protected areas, the need for intense invertebrate surveys in protected areas of the state of Pará has also become more pressing. In addition, ants have high local dominance (Fittkau & Klinge 1973, Elwood & Foster 2004) and play a key ecological role (Griffiths *et al.* 2018), therefore information about ant diversity is crucial to develop management plans for protected areas.

Priority areas for ant surveys in the state of Pará

There were numerous and significant gaps in sampling coverage of the territory of Pará. Two large geographical areas, the Guiana and Tapajós areas of endemism, provided scattered ant records and may be considered particularly poorly sampled areas. For example, the Calha Norte region of the state (Guiana area of endemism) and the protected areas in the states of Amapá and Amazonas, which are part of the largest block of protected areas in the world, remain largely unsampled. This continuously forested area is considered of high biological importance but is relatively poorly known (Strand *et al.* 2018). Similarly, across the Tapajós area of endemism, large blocks of forest in the central-west or central-south regions of Pará (including indigenous lands) have not been surveyed. Furthermore, large blocks of forest within harvest reserves (*reservas extrativistas*, a type of conservation unit that allows for sustainable uses) that are nevertheless severely threatened by deforestation, such as those bounded by the Amazonas River to the north of Amazonas and Xingu River to the East, are poorly sampled systematically.

From 2005 to 2012, governmental interventions based on a set of strategies aimed at controlling deforestation across the region had reduced annual deforestation rates by 80% in 2009 (Nepstad *et al.* 2009; Da Silva *et al.* 2017). However, this progress was fragile and ephemeral. The Amazon Basin continues to suffer rapid clearing and degradation (Azevedo-Santos *et al.* 2017; Magnusson *et al.* 2018; Ferrante & Fearnside 2019), and deforestation has been increasing in the last few years (Carvalho *et al.* 2019; Vilela *et al.* 2020; INPE 2020).

At present, the rate of deforestation and fires in the Amazon has been increasing substantially, and total deforestation rate is almost 20% of the forested area (Nobre *et al.* 2016), making Pará one of the leaders in Amazon Forest loss (Vedovato *et al.* 2016; INPE 2020). Forest loss is still pervasive across the region and does not respond to a systematic plan and investments of funding agencies to increase sampling coverage of invertebrates; our knowledge of the little things that run the world (Wilson 1987) is largely underestimated and threatened by land-use and climate changes in the largest tropical forest of the world.

Concluding remarks

Scientific expeditions conducted by legendary naturalists and recent ones, mainly associated with large development projects implemented in the state of Pará have great historical and scientific importance in documenting the

biodiversity of the region (Vanzolini 2004; Lovejoy 2019), and through natural history collections, we are able to redeem its extremely valuable source of information for biodiversity studies (Meineke *et al.* 2018; Jones *et al.* 2019).

In addition, we found a strong bias in ant collection in Pará in terms of proximity of sampled sites to access routes, such as roads and rivers. We also found that species records were highly unevenly distributed based on areas of endemism within the Amazon, vegetation type, and protected areas within the state. Ant surveys are still lacking from most protected areas of Pará, and further sampling is urgently needed in view of the current trend of expansion of major infrastructure projects and natural resource harvesting within protected areas of Pará.

Lastly, we developed the largest database of ant species distribution in Pará, which is instrumental to inform further sampling to increase knowledge and develop conservation strategies for the Amazon region.

List of species

Ant species recorded for the state of Pará according to data from the literature, online databases (GBIF, GABI database, and SiBBr) and museum collections of ants. Species followed by an asterisk indicate new records for the state of Pará and species with two asterisks indicate new records for Brazil.

Agroecomyrmecinae Carpenter, 1930 [1 genus, 1 species]

Tatuidris Brown & Kempf, 1968

Tatuidris tatusia Brown & Kempf, 1968. Jacareacanga [ANTWEB; MZSP].

Amblyoponinae Forel, 1893 [2 genera, 6 species]

Fulakora Mann, 1919

Fulakora elongata (Santschi, 1912)*. Bagre [MPEG], Curionópolis [MPEG], Oriximiná [MPEG], Portel [MPEG].

Fulakora lurilabes (Lattke, 1991). Primavera [MPEG]; Santarém [INPA; Vasconcelos *et al.*, 2006], Terra Santa [MPEG].

Fulakora mystriops (Brown, 1960)*. Curionópolis [MPEG].

Prionopelta Mayr, 1866

Prionopelta amabilis Borgmeier, 1949. Municipality unavailable [Ladino & Feitosa, 2020]; Belém [Ladino & Feitosa, 2020], Benevides [Ladino & Feitosa, 2020]; Marabá [Ladino & Feitosa, 2020]; Parauapebas [Ladino & Feitosa, 2020].

Prionopelta antillana Forel, 1909. Municipality unavailable [Kempf, 1972c]; Belém [MZSP]; Benevides [MZSP]; Curionópolis [MPEG]; Marituba [CPDC]; Paragominas [Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP].

Prionopelta dubia Ladino & Feitosa, 2020. Municipality unavailable [Ladino & Feitosa, 2020]; Belém [Ladino & Feitosa, 2020]; Curionópolis [Ladino & Feitosa, 2020]; Paragominas [Ladino & Feitosa, 2020].

Dolichoderinae Forel, 1878 [7 genera, 74 species, and 9 subspecies]

Azteca Forel, 1878

Azteca alfari Emery, 1893. Municipality unavailable [ANTWEB; Longino, 1989]; Almeirim [DZUP]; Belém [ANTWEB; INPA]; Óbidos [Santschi, 1939]; Oriximiná [CPDC; Majer & Delabie, 1994]; Paragominas [Solar *et al.*, 2016b]; Parauapebas [MZSP]; Portel [Harada, 2016]; Tucuruí [ANTWEB].

Azteca angusticeps Emery, 1893*. Jacareacanga [MZSP].

Azteca aurita Emery, 1893. Municipality unavailable [ANTWEB; Emery, 1913b; Borgmeier, 1923; Kempf, 1972c; Baroni Urbani, 1977; Shattuck, 1994]; Belém [ANTWEB; MZSP; Guerrero *et al.*, 2010]; Bragança [ANTWEB; Emery, 1893; Borgmeier, 1923; Shattuck, 1994; Longino, 2007]; Paragominas [Solar *et al.*, 2016b]; Santarém [Forel, 1912e; Borgmeier, 1923; Longino, 2007].

Azteca barbifex Forel, 1906. Municipality unavailable [Borgmeier, 1923].

Azteca bequaerti Wheeler & Bequaert, 1929. Municipality unavailable [Emery, 1913b; Wheeler & Bequaert, 1929; Kempf, 1972c; Shattuck, 1994].

Azteca brevicornis (Mayr, 1878)*. Chaves [MZSP]; Óbidos [MZSP].

Azteca chartifex Emery, 1896. Municipality unavailable [ANTWEB; Kempf, 1972c]; Almeirim [DZUP]; Belém [MZSP; Forel, 1906; Borgmeier, 1923]; Moju [CPDC]; Novo Repartimento [CPDC]; Paragominas [Solar *et al.*, 2016b]; Portel [Harada, 2016]; Terra Santa [Santos *et al.*, 2008].

Azteca chartifex decipiens Forel, 1906. Municipality unavailable [Forel, 1904b; Emery, 1913b; Borgmeier, 1923; Kempf, 1972c; Baroni Urbani, 1977; Shattuck, 1994].

Azteca chartifex lanians Emery, 1913. Municipality unavailable [Emery, 1913b; Shattuck, 1994]; Belém [Forel, 1906; Borgmeier, 1923; Kempf, 1972c].

Azteca chartifex multinida Forel, 1899. Municipality unavailable [Emery, 1913b; Borgmeier, 1923].

Azteca chartifex stalactitica Emery, 1896. Municipality unavailable [Emery, 1896a; Emery, 1913b; Borgmeier, 1923; Shattuck, 1994]; Belém [Kempf, 1972c].

Azteca crassicornis Emery, 1893. Municipality unavailable [ANTWEB; Emery, 1893; Emery, 1913b; Borgmeier, 1923; Shattuck, 1994]; Belém [Kempf, 1972c].

Azteca delpini Emery, 1893*. Parauapebas [MZSP].

Azteca depilis Emery, 1893. Municipality unavailable [Emery, 1896a; Emery, 1913b; Borgmeier, 1923; Kempf, 1972c]; Cametá [MZSP].

Azteca fasciata Emery, 1893. Municipality unavailable [Emery, 1913b; Kempf, 1972c]; Santarém [Emery, 1896a; Borgmeier, 1923].

Azteca fasciata similis Mann, 1916. Santarém [Mann, 1916].

Azteca goeldii Forel, 1906. Municipality unavailable [Emery, 1913b; Borgmeier, 1923].

Azteca huberi Forel, 1906. Municipality unavailable [Emery, 1913b; Borgmeier, 1923; Baroni Urbani, 1977].

Azteca instabilis (Smith, 1862). Almeirim [MZSP]; Cametá [INPA]; Óbidos [MZSP]; Oriximiná [MZSP; Majer & Delabie, 1994]; Terra Santa [Santos *et al.*, 2008].

Azteca isthmica Wheeler, 1942*. São Félix do Xingu [MPEG].

Azteca muelleri Emery, 1893*. Altamira [MZSP]; Medicilândia [CPDC]; Oriximiná [CPDC].

Azteca olitrix Forel, 1904. Municipality unavailable [Forel, 1921; Wheeler, 1942; Kempf, 1972c].

Azteca ovaticeps Forel, 1904. Municipality unavailable [ANTWEB; Forel, 1904b; Forel, 1908; Emery, 1913b; Borgmeier, 1923; Wheeler & Bequaert, 1929; Wheeler, 1942; Kempf, 1972c; Baroni Urbani, 1977; Longino, 1989; Brandão, 1991; Shattuck, 1994; Longino, 2007]; Belém [ANTWEB]; Benevides [ANTWEB]; Óbidos [Forel, 1906; Borgmeier, 1923; Wheeler, 1942; Longino, 1989; Longino, 1991]; Paragominas [Solar *et al.*, 2016b].

Azteca paraensis Forel, 1904. Municipality unavailable [ANTWEB; Emery, 1913b; Borgmeier, 1923; Kempf, 1972c]; Almeirim [MZSP]; Belém [MZSP]; Goianésia do Pará [CPDC]; Oriximiná [CPDC; Majer & Delabie, 1994].

Azteca polymorpha Forel, 1899. Municipality unavailable [ANTWEB].

Azteca schumannii Emery, 1893. Municipality unavailable [ANTWEB].

Azteca schumannii taediosa Forel, 1904. Municipality unavailable [Emery, 1913b; Borgmeier, 1923; Kempf, 1972c; Baroni Urbani, 1977; Shattuck, 1994].

Azteca stanleyuli Forel, 1921. Municipality unavailable [Forel, 1921; Wheeler, 1942; Shattuck, 1994]; Belém [Kempf, 1972c].

Azteca stigmatica Emery, 1896. Municipality unavailable [ANTWEB; Emery, 1896a; Forel, 1912e; Emery, 1913b; Borgmeier, 1923; Shattuck, 1994]; Belém [Kempf, 1972c]; Parauapebas [MZSP].

Azteca trailii Emery, 1893. Municipality unavailable [Emery, 1896a; Forel, 1906; Kempf, 1972c].

Azteca trailii tococae Forel, 1904. Municipality unavailable [Wheeler & Bequaert, 1929; Kempf, 1972c].

Azteca trigona Emery, 1893. Municipality unavailable [ANTWEB]; Altamira [MZSP]; Igarapé-Açu [MZSP]; Oriximiná [MZSP]; Santarém [ANTWEB; Emery, 1893; Emery, 1896b; Emery, 1913b; Borgmeier, 1923; Kempf, 1972c].

Azteca trigona mathildae Forel, 1906. Municipality unavailable [Emery, 1913b; Borgmeier, 1923].

Azteca trigona subdentata Forel, 1904. Municipality unavailable [Emery, 1913b; Borgmeier, 1923; Kempf, 1972c; Shattuck, 1994].

Azteca ulei Forel, 1904. Municipality unavailable [Wheeler & Bequaert, 1929; Kempf, 1972c].

Azteca velox Forel, 1899. Municipality unavailable [Emery, 1913b; Borgmeier, 1923]; Marabá [MZSP]; Oriximiná [MZSP]; Parauapebas [MZSP].

Azteca xanthochroa (Roger, 1863). Conceição do Araguaia [INPA]; Parauapebas [MZSP].

Dolichoderus Lund, 1831

Dolichoderus abruptus (Smith, 1858). Municipality unavailable [ANTWEB; Emery, 1894b; Emery, 1913b; Borgmeier, 1923; Kempf, 1972c; MacKay, 1993; Shattuck, 1994]; Altamira [MZSP]; Óbidos [MZSP]; Oriximiná [MZSP]; Paragominas [CPDC; INPA].

Dolichoderus attelaboides (Fabricius, 1775). Municipality unavailable [Kempf, 1972c]; Acará [MPEG; MZSP]; Água Azul do Norte [MPEG]; Almeirim [DZUP; MPEG]; Bannach [MPEG]; Barcarena [MPEG]; Belém [MPEG; MZSP; Kempf, 1970]; Boa Vista [MPEG]; Breves [MPEG]; Bujaru [MPEG]; Conceição do Araguaia [INPA; MPEG]; Dom Eliseu [MPEG]; Goianésia do Pará [CPDC]; Itaituba [MPEG]; Jacareacanga [MZSP]; Marituba [CPDC]; Medicilândia [CPDC]; Melgaço [MPEG; Andrade-Silva & Almeida, 2020]; Moju [CPDC]; Mojuí dos Campos [MZSP]; Novo Repartimento [CPDC]; Óbidos [MZSP]; Oriximiná [CPDC; INPA; MZSP; Majer & Delabie, 1994]; Ourilândia do Norte [MPEG]; Paragominas [MPEG; MZSP]; Parauapebas [MZSP]; Ponta de Pedras [MPEG]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santa Bárbara do Pará [MPEG]; Santarém [Vasconcelos *et al.*, 2006]; São Félix do Xingu [MPEG]; São Francisco do Pará [MPEG]; São Miguel do Guamá [MPEG]; São Sebastião da Tucuruí [MPEG]; Terra Santa [Santos *et al.*, 2008].

Dolichoderus bidens (Linnaeus, 1758). Municipality unavailable [ANTWEB; CSIRO; Emery, 1894b; Forel, 1903; Emery, 1913b; Borgmeier, 1923; Kempf, 1972c; Baroni Urbani, 1977; MacKay, 1993; Shattuck, 1994]; Almeirim [DZUP; MZSP]; Altamira [MZSP]; Bannach [MPEG]; Belém [INPA; MZSP; Kempf, 1970; Kempf, 1972c]; Capanema [MZSP]; Faro [INPA]; Jacareacanga [MZSP]; Marituba [CPDC]; Medicilândia [CPDC]; Melgaço [Andrade-Silva & Almeida, 2020]; Mojuí dos Campos [MZSP]; Óbidos [MZSP]; Oriximiná [CPDC; INPA; MZSP]; Santarém [INPA; Vasconcelos *et al.*, 2006]; São Félix do Xingu [MPEG]; Tucumã [MPEG].

Dolichoderus bispinosus (Olivier, 1792). Municipality unavailable [Borgmeier, 1923; Wheeler, 1942; Kempf, 1972c]; Almeirim [DZUP]; Altamira [MZSP]; Bannach [MPEG]; Belém [MZSP; Kempf, 1959a]; Belterra [MZSP; Kempf, 1959a]; Conceição do Araguaia [INPA; MPEG; MZSP]; Curionópolis [MPEG]; Faro [MZSP]; Ipixuna do Pará [MZSP]; Itaituba [INPA]; Jacareacanga [MZSP]; Melgaço [MPEG; Andrade-Silva & Almeida, 2020]; Mojuí dos Campos [MZSP]; Novo Progresso [MZSP; Kempf, 1959a]; Oriximiná [CPDC; DZUP; INPA; MZSP; Majer & Delabie, 1994]; Óbidos [MZSP]; Ourilândia do Norte [MPEG]; Paragominas [MZSP; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [INPA; Vasconcelos *et al.*, 2006]; Terra Santa [Santos *et al.*, 2008]; Trairão [INPA]; Tucuruí [INPA].

Dolichoderus debilis Emery, 1890. Municipality unavailable [Kempf, 1972c]; Almeirim [DZUP]; Belém [MZSP]; Curionópolis [MPEG]; Itaituba [MPEG]; Jacareacanga [MZSP]; Medicilândia [DZUP]; Oriximiná [CPDC; INPA; MZSP]; Parauapebas [MZSP]; Primavera [MPEG]; Santarém [INPA; MZSP; Kempf, 1959a; Vasconcelos *et al.*, 2006]; Tucuruí [MPEG].

Dolichoderus decollatus Smith, 1858. Municipality unavailable [Emery, 1913b; Borgmeier, 1923; Kempf, 1972c]; Abaetetuba [MPEG]; Acará [MPEG]; Almeirim [INPA; MPEG; MZSP]; Altamira [MZSP]; Anajás [ANTWEB]; Bannach [MPEG]; Barcarena [MPEG]; Belém [MPEG; MZSP; Kempf, 1969; Kempf, 1970]; Breves [MPEG; MZSP]; Castanhal [DZUP; INPA]; Conceição do Araguaia [MPEG]; Dom Eliseu [MPEG]; Itaituba [MPEG]; Marabá [DZUP; MZSP]; Marituba [ANTWEB; CSIRO; Kempf, 1969]; Melgaço [MPEG; Andrade-Silva & Almeida, 2020]; Moju [DZUP]; Mojuí dos Campos [MZSP]; Novo Progresso [MZSP; Kempf, 1969]; Oriximiná [CPDC; MZSP; Majer & Delabie, 1994]; Ourém [MPEG]; Ourilândia do Norte [MPEG]; Paragominas [MPEG; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santa Bárbara do Pará [MPEG]; Santarém Novo [MPEG]; São Félix do Xingu [MPEG]; Senador José Porfírio [MPEG]; Terra Santa [Santos *et al.*, 2008]; Tucumã [MPEG]; Tucuruí [INPA; MPEG].

Dolichoderus diversus Emery, 1894. Municipality unavailable [ANTWEB; Borgmeier, 1923; Shattuck, 1994]; Almeirim [MZSP]; Belém [MPEG; MZSP; Kempf, 1972c; MacKay, 1993]; Bannach [MPEG]; Conceição do Araguaia [MPEG]; Óbidos [MZSP]; Medicilândia [CPDC]; Novo Repartimento [CPDC]; Oriximiná [CPDC; INPA; MZSP]; Parauapebas [MPEG; MZSP]; Primavera [MPEG]; São Félix do Xingu [INPA].

Dolichoderus fernandezi MacKay, 1993. Ananindeua [MZSP]; Belém [MacKay, 1993].

Dolichoderus ferrugineus Forel, 1903. Municipality unavailable [ANTWEB; Forel, 1903; Emery, 1913b; Borgmeier, 1923; Baroni Urbani, 1977; MacKay, 1993; Shattuck, 1994]; Água Azul do Norte [MPEG]; Almeirim [DZUP]; Bannach [MPEG]; Belém [MZSP; Kempf, 1972c]; Jacareacanga [MZSP]; Monte Alegre [MZSP]; Oriximiná [MZSP]; São Félix do Xingu [MPEG]; Tucumã [MPEG].

Dolichoderus gagates Emery, 1890. Municipality unavailable [Emery, 1913b; Borgmeier, 1923; Kempf, 1972c; MacKay, 1993]; Bragança [ANTWEB; Emery, 1890b; Kempf, 1959a; Shattuck, 1994]; Melgaço [MPEG]; Mojuí dos Campos [MPEG]; Paragominas [Solar *et al.*, 2016b]; Santarém [Jeanne, 1979].

Dolichoderus germaini Emery, 1894*. Almeirim [DZUP].

Dolichoderus ghilianii Emery, 1894. Municipality unavailable [Emery, 1894b; Emery, 1913b; Borgmeier, 1923; Kempf, 1969]; Belém [ANTWEB; Kempf, 1972c; MacKay, 1993; Shattuck, 1994].

Dolichoderus haradae MacKay, 1993*. Mojuí dos Campos [MZSP].

Dolichoderus imitator Emery, 1894. Municipality unavailable [Borgmeier, 1923; Emery, 1894b; Emery, 1913b; Shattuck, 1994]; Acará [MPEG]; Almeirim [DZUP]; Bannach [MPEG]; Belém [INPA; MPEG; MZSP; Kempf, 1969; Kempf, 1972c; MacKay, 1993; Salinas, 2010]; Bragança [ANTWEB]; Bujaru [MPEG]; Marituba [CPDC]; Conceição do Araguaia [MPEG]; Curionópolis [MPEG]; Melgaço [MPEG; Andrade-Silva & Almeida, 2020]; Oriximiná [MZSP; Majer & Delabie, 1994]; Paragominas [MPEG; MZSP; Kempf, 1969; Solar *et al.*, 2016b]; Parauapebas [MPEG]; Primavera [MPEG]; Santarém [Vasconcelos *et al.*, 2006]; São Félix do Xingu [INPA]; São João de Pirabas [MPEG]; Tucumã [MPEG]; Tucuruí [MPEG].

Dolichoderus lamellosus (Mayr, 1870). Municipality unavailable [Emery, 1894b; Borgmeier, 1923; Kempf, 1959a; Kempf, 1972c; MacKay, 1993]; Ipixuna do Pará [MPEG]; Soure [Kempf, 1959a].

Dolichoderus laminatus (Mayr, 1870). Municipality unavailable [ANTWEB; Emery, 1894b; Emery, 1913b; Borgmeier, 1923; Kempf, 1972c; Shattuck, 1994]; Anajás [MPEG]; Barcarena [MPEG]; Belém [MPEG; MZSP; Kempf, 1959a; Kempf, 1972a; MacKay, 1993]; Breves [MPEG]; Melgaço [MPEG]; Oriximiná [MZSP]; Santarém [Vasconcelos *et al.*, 2006].

Dolichoderus lobicornis (Kempf, 1959). Municipality unavailable [MacKay, 1993; Ortiz-Sepúlveda & Fernández, 2011]; Bannach [MPEG]; Parauapebas [MPEG]; Tucuruí [MPEG].

Dolichoderus lutosus (Smith, 1858). Municipality unavailable [Kempf, 1972c; Almeirim [DZUP; MZSP]; Bannach [MPEG]; Conceição do Araguaia [MPEG]; Jacareacanga [MZSP]; Maracanã [MPEG]; Melgaço [MPEG]; Oriximiná [CPDC; Majer & Delabie, 1994]; Ourém [MPEG]; Paragominas [MPEG; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Portel [Harada, 2016]; Primavera [MPEG]; Santarém [INPA; Vasconcelos *et al.*, 2006]; São Caetano de Odivelas [INPA; MPEG]; São Félix do Xingu [MPEG]; São Francisco do Pará [MPEG]; São João de Pirabas [MPEG]; Tracuateua [INPA].

Dolichoderus mesonotalis Forel, 1907. Cametá [Borgmeier, 1923].

Dolichoderus mucronifer (Roger, 1862). Municipality unavailable [Kempf, 1972c; MacKay, 1993]; Bannach [MPEG]; São Félix do Xingu [MPEG].

Dolichoderus quadridenticulatus (Roger, 1862). Municipality unavailable [ANTWEB; Emery, 1894b; Emery, 1913b; Borgmeier, 1923; Kempf, 1972c; Brandão, 1991; MacKay, 1993]; Altamira [MZSP]; Belém [MZSP; Kempf, 1970; Kempf, 1972c; MacKay, 1993; Shattuck, 1994]; Melgaço [MPEG]; Monte Alegre [MZSP]; Óbidos [MZSP]; Oriximiná [MZSP]; Prainha [INPA].

Dolichoderus rufescens Mann, 1912. Belém [MPEG]; Itaituba [MPEG].

Dolichoderus rugosus (Smith, 1858). Municipality unavailable [Emery, 1913b; Borgmeier, 1923; Kempf, 1972c]; Jacareacanga [MZSP; Kempf, 1969]; Santarém [Vasconcelos *et al.*, 2006]; São Félix do Xingu [MPEG].

Dolichoderus schulzi Emery, 1894. Municipality unavailable [ANTWEB; Emery, 1894b; Emery, 1913b; Borgmeier, 1923; Shattuck, 1994]; Belém [Kempf, 1959a; Kempf, 1972c; MacKay, 1993].

Dolichoderus septemspinosis Emery, 1894. Municipality unavailable [ANTWEB; Emery, 1894b; Emery, 1913b; Borgmeier, 1923; MacKay, 1993; Shattuck, 1994]; Belém [MZSP; Kempf, 1959a; Kempf, 1970; Kempf, 1972c; MacKay, 1993]; Paragominas [MZSP]; Parauapebas [MZSP]; Santarém [Vasconcelos *et al.*, 2006].

Dolichoderus setosus (Kempf, 1959). Municipality unavailable [Kempf, 1972c; MacKay, 1993].

Dolichoderus spinicollis (Latreille, 1817). Municipality unavailable [Kempf, 1972c; Ortiz-Sepúlveda & Fernández, 2011]; Santarém [Kempf, 1959a; MacKay, 1993].

Dolichoderus tristis Mann, 1916. Municipality unavailable [Brandão, 1991; MacKay, 1993]; Mojuí dos Campos [MZSP]; Santarém [Jeanne, 1979].

Dolichoderus varians Mann, 1916. Municipality unavailable [Kempf, 1972c]; Belém [MPEG; Kempf, 1972a]; Paragominas [Solar *et al.*, 2016b].

***Dorymyrmex* Mayr, 1866**

Dorymyrmex biconis Forel, 1912. Municipality unavailable [Cuezzo & Guerrero, 2011].

Dorymyrmex brunneus Forel, 1908. Alenquer [INPA]; Óbidos [MZSP]; Oriximiná [INPA]; Parauapebas [MZSP]; Portel [Harada, 2016]; Santarém [CPDC].

Dorymyrmex goeldii Forel, 1904. Municipality unavailable [ANTWEB; Forel, 1904b; Emery, 1913b; Borgmeier, 1923; Baroni Urbani, 1977; Shattuck, 1994; Cuezzo & Guerrero, 2011]; Belém [Kempf, 1972c].

Dorymyrmex pyramicus alticonis Forel, 1912. Terra Santa [Santos *et al.*, 2008].

Dorymyrmex pyramicus guyanensis Santschi, 1922. Santarém [Vasconcelos *et al.*, 2006].

Dorymyrmex spurius Santschi, 1929. Almeirim [DZUP]; Paragominas [Solar *et al.*, 2016b].

Dorymyrmex thoracicus Gallardo, 1916. Conceição do Araguaia [INPA; MZSP]; Parauapebas [MZSP]; Santarém [INPA].

***Forelius* Emery, 1888**

Forelius brasiliensis (Forel, 1908). Santarém [INPA].

Forelius maranhaoensis Cuezzo, 2000. Santarém [INPA].

Gracilidris Wild & Cuezzo, 2006

Gracilidris pombero Wild & Cuezzo, 2006. Paragominas [ANTWEB; Solar *et al.*, 2016b].

Linepithema Mayr, 1866

Linepithema angulatum (Emery, 1894)*. Almeirim [DZUP].

Linepithema humile (Mayr, 1868). Moju [CPDC]; Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006].

Linepithema micans (Forel, 1908). Altamira [ANTWEB].

Linepithema neotropicum Wild, 2007. Paragominas [Solar *et al.*, 2016a; Solar *et al.*, 2016b].

Tapinoma Foerster, 1850

Tapinoma amazonae Wheeler, 1934. Municipality unavailable [Wheeler, 1934; Shattuck, 1994; Ulysséa *et al.*, 2017]; Altamira [MZSP]; Belém [Kempf, 1972c].

Tapinoma melanocephalum (Fabricius, 1793) (Exotic). Municipality unavailable [Borgmeier, 1923; Kempf, 1972c]; Água Azul do Norte [MPEG]; Almeirim [DZUP]; Oriximiná [Majer & Delabie, 1994]; Paragominas [Solar *et al.*, 2016b]; Parauapebas [MPEG]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [Jeanne, 1979].

Tapinoma ramulorum Emery, 1896. Belém [INPA; MZSP].

Dorylinae Leach, 1815 [8 genera, 43 species, and 5 subspecies]

Acanthostichus Mayr, 1887

Acanthostichus fuscipennis Emery, 1895. Municipality unavailable [ANTWEB; Emery, 1895; Emery, 1911; Brown Jr., 1975]; Belém [Borgmeier, 1923; Kempf, 1972c; MacKay, 1996].

Acanthostichus kirbyi Emery, 1895. Municipality unavailable [MacKay, 1996].

Acanthostichus laticornis Forel, 1908. Paragominas [Solar *et al.*, 2016b].

Acanthostichus quadratus Emery, 1895. Municipality unavailable [Kusnezov, 1962]; Altamira [MZSP]; Capanema [MZSP]; Oriximiná [INPA].

Cheliomyrmex Mayr, 1870

Cheliomyrmex megalonyx Wheeler, 1921*. Moju [CPDC].

Cylindromyrmex Mayr, 1870

Cylindromyrmex striatus Mayr, 1870. Melgaço [MPEG]; Santarém [MZSP; Overal & Bandeira, 1985; Vasconcelos *et al.*, 2006].

Eciton burchellii (Westwood, 1842). Municipality unavailable [INPA; Watkins, 1976; Brandão, 1991]; Água Azul do Norte [MPEG]; Almeirim [DZUP; INPA]; Bannach [MPEG]; Belém [MPEG; MZSP; Kempf, 1970]; Breves [MPEG]; Bujaru [MPEG]; Itaituba [INPA; MPEG; MZSP]; Jacareacanga [MZSP]; Marabá [MPEG]; Marituba [CPDC]; Mojú dos Campos [MZSP]; Oriximiná [CPDC; INPA]; Paragominas [MZSP; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP; Esquivel *et al.*, 2019]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santa Bárbara do Pará [MPEG]; Santarém [DZUP; MZSP; Vasconcelos *et al.*, 2006]; São Félix do Xingu [MPEG]; São João de Pirabas [MPEG]; Tracuateua [INPA]; Tucumã [MPEG].

Eciton burchellii cupiens Santschi, 1923. Municipality unavailable [Borgmeier, 1955; Kempf, 1972c; Watkins, 1976]; Altamira [Kempf, 1975a]; Aveiro [Borgmeier, 1955]; Belém [Borgmeier, 1955]; Itaituba [Borgmeier, 1955]; Marituba [Borgmeier, 1955]; Oriximiná [Kempf, 1975a]; Santarém [Borgmeier, 1955].

Eciton burchellii foreli Mayr, 1886. Municipality unavailable [Borgmeier, 1939].

Eciton drepanophorum Smith, 1858. Municipality unavailable [Kempf, 1972c; Watkins, 1976]; Belém [MPEG]; Breves [MPEG]; Bujaru [MPEG]; Dom Eliseu [MPEG]; Itaituba [INPA; MPEG; Borgmeier, 1955]; Melgaço [MPEG]; Ourém [MPEG]; Paragominas [MPEG]; Peixe-Boi [MPEG]; Portel [Harada, 2016]; Rurópolis [Borgmeier, 1955]; São Caetano de Odivelas [MPEG]; Tucuruí [MPEG].

Eciton hamatum (Fabricius, 1782). Municipality unavailable [INPA; Kempf, 1972c; Watkins, 1976]; Almeirim [MPEG]; Altamira [ANTWEB; INPA; Santschi, 1923; Santschi, 1925a; Borgmeier, 1955; Lampe *et al.*, 2006; Esteves *et al.*, 2011]; Bannach [MPEG]; Belém [Santschi, 1939; Borgmeier, 1955; Kempf, 1970]; Belterra [Borgmeier, 1955]; Itaituba [ANTWEB; INPA; Borgmeier, 1955]; Monte Alegre [Baroni Urbani, 1977]; Óbidos [INPA; Borgmeier, 1955]; Oriximiná [INPA]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santa Bárbara do Pará [MPEG]; Santa Luzia do Pará [Esquivel *et al.*, 2019]; Santarém [Borgmeier, 1955; Vasconcelos *et al.*, 2006]; São Félix do Xingu [INPA; MPEG]; Tracuateua [INPA]; Tucumã [MPEG].

Eciton mexicanum Roger, 1863. Municipality unavailable [Kempf, 1972c; Watkins, 1976]; Belém [Kempf, 1970]; Oriximiná [CPDC]; Paragominas [CPDC; Solar *et al.*, 2016b]; Portel [Harada, 2016]; Santarém [Borgmeier, 1955].

Eciton mexicanum latidens Santschi, 1911. Municipality unavailable [Kempf, 1972c; Watkins, 1976]; Altamira [MZSP]; Santarém [Borgmeier, 1955].

Eciton quadriglume (Haliday, 1836). Municipality unavailable [Watkins, 1976]; Oriximiná [INPA]; Portel [Harada, 2016]; Santa Maria do Pará [MPEG]; São Félix do Xingu [MPEG].

Eciton rapax Smith, 1855. Municipality unavailable [INPA; Emery, 1894b; Borgmeier, 1923; Borgmeier, 1953; Kempf, 1972c; Watkins, 1976]; Altamira [MZSP]; Belém [INPA; MZSP; Borgmeier, 1955; Kempf, 1970; Kempf, 1972c]; Bragança [Lima *et al.*, 2020]; Bujaru [MPEG]; Conceição do Araguaia [INPA]; Itaituba [MZSP; Borgmeier, 1955]; Marabá [DZUP]; Medicilândia [CPDC]; Melgaço [MPEG]; Moju [MPEG]; Mojú dos Campos [MZSP]; Paragominas [MZSP; Solar *et al.*, 2016b]; Parauapebas [MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santa Bárbara do Pará [MPEG]; Santana do Araguaia [MZSP]; Santarém [FMNH; INPA; MZSP; Borgmeier, 1955]; São Caetano de Odivelas [MPEG]; São Félix do Xingu [MPEG]; Tracuateua [ANTWEB]; Tucuruí [MPEG].

Eciton vagans (Olivier, 1792). Municipality unavailable [Borgmeier, 1953; Kempf, 1972c; Watkins, 1976]; Belém [MZSP; Borgmeier, 1955; Kempf, 1970]; Breu Branco [MPEG]; Itaituba [MPEG]; Oriximiná [Majer & Delabie, 1994]; Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006].

Eciton vagans dubitatum Emery, 1896*. Belém [MZSP].

Labidus Jurine, 1807

Labidus coecus (Latreille, 1802). Municipality unavailable [Borgmeier, 1923; Borgmeier, 1936; Borgmeier, 1953; Borgmeier, 1955; Kempf, 1972c; Watkins, 1976]; Água Azul do Norte [MPEG]; Almeirim [DZUP]; Altamira [MZSP]; Aveiro [Borgmeier, 1955]; Belém [MZSP; Kempf, 1970; Esquivel *et al.*, 2019]; Bujaru [Esquivel *et al.*, 2019]; Conceição do Araguaia [Esquivel *et al.*, 2019]; Goianésia do Pará [CPDC]; Ipixuna do Pará [MZSP]; Marituba [CPDC]; Melgaço [MPEG]; Moju [CPDC]; Novo Repartimento [CPDC]; Oriximiná [MZSP; Majer & Delabie, 1994]; Paragominas [CPDC; MPEG; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Portel [Harada, 2016]; Santarém [INPA; Vasconcelos *et al.*, 2006]; Soure [MZSP; Borgmeier, 1936].

Labidus mars (Forel, 1912). Almeirim [DZUP]; Paragominas [Solar *et al.*, 2016b].

Labidus mars denticulatus Borgmeier, 1955 Municipality unavailable [Kempf, 1972c; Watkins, 1976]; Novo Progresso [Borgmeier, 1955; Esteves *et al.*, 2011].

Labidus praedator (Smith, 1858). Municipality unavailable [Kempf, 1972c; Watkins, 1976]; Água Azul do Norte [MPEG]; Almeirim [DZUP]; Altamira [MZSP]; Conceição do Araguaia [MPEG; Esquivel *et al.*, 2019]; Curionópolis [MPEG]; Itaituba [INPA; MZSP; Borgmeier, 1955]; Melgaço [MPEG]; Novo Repartimento [CPDC]; Óbidos [ANTWEB; Borgmeier, 1953; Borgmeier, 1955]; Oriximiná [INPA; MZSP]; Paragominas [MPEG; Solar *et al.*, 2016b]; Parauapebas [MPEG]; Portel [Overal *et al.*, 1997; Harada, 2016].

Labidus spininodis (Emery, 1890). Municipality unavailable [Watkins, 1976]; Almeirim [DZUP]; Melgaço [INPA; MPEG; Esquivel *et al.*, 2019]; Paragominas [MZSP; Solar *et al.*, 2016b]; Parauapebas [MPEG]; Portel [Harada, 2016].

Neivamyrmex Borgmeier, 1940

Neivamyrmex adnepos (Wheeler, 1922). Municipality unavailable [Kempf, 1972c; Watkins, 1976].

Neivamyrmex angustinodis (Emery, 1888). Santarém [Vasconcelos *et al.*, 2006].

Neivamyrmex cristatus (André, 1889)*. Melgaço [MPEG].

Neivamyrmex diana (Forel, 1912). Municipality unavailable [Kempf, 1972c; Watkins, 1976]; Altamira [MZSP]; Faro [INPA]; Novo Progresso [MZSP].

Neivamyrmex dorbignii (Shuckard, 1840). Tucuruí [INPA].

Neivamyrmex emersoni (Wheeler, 1921). Municipality unavailable [Brandão, 1991]; Belém [MZSP; Kempf, 1970].

Neivamyrmex falcifer (Emery, 1900)*. Jacareacanga [MZSP].

Neivamyrmex gibbatus Borgmeier, 1953. Paragominas [ANTWEB; Solar *et al.*, 2016b]; Portel [Harada, 2016].

Neivamyrmex guerinii (Shuckard, 1840). Municipality unavailable [Kempf, 1972c; Watkins, 1976; Kempf, 1978]; Altamira [MZSP]; Novo Progresso [MZSP; Borgmeier, 1955].

Neivamyrmex halidaii (Shuckard, 1840). Municipality unavailable [Watkins, 1976]; Altamira [MZSP]; Jacareacanga [MZSP]; Oriximiná [MZSP]; Paragominas [MZSP].

Neivamyrmex jermannii (Forel, 1901). Municipality unavailable [Kempf, 1972c; Watkins, 1976]; Altamira [MZSP]; Mojuí dos Campos [MZSP]; Santarém [Borgmeier, 1955].

Neivamyrmex legionis (Smith, 1855). Municipality unavailable [Emery, 1910; Borgmeier, 1923; Borgmeier, 1930; Watkins, 1976]; Santarém [ANTWEB; Borgmeier, 1953; Borgmeier, 1955; Kempf, 1972c].

Neivamyrmex micans Borgmeier, 1953*. Altamira [MZSP].

Neivamyrmex pertii (Shuckard, 1840)*. Belém [MZSP].

Neivamyrmex pilosus (Smith, 1858). Municipality unavailable [Borgmeier, 1923; Kempf, 1972c; Watkins, 1976]; Altamira [MZSP]; Belém [MZSP; Borgmeier, 1955; Kempf, 1970]; Faro [INPA]; Melgaço [MPEG]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Neivamyrmex planidorsus (Emery, 1906). Municipality unavailable [ANTWEB; Forel, 1912a; Borgmeier, 1923; Borgmeier, 1953; Borgmeier, 1955; Kempf, 1972c; Watkins, 1976].

Neivamyrmex postangustatus (Borgmeier, 1934)*. Belém [MZSP].

Neivamyrmex postcarinatus Borgmeier, 1953. Oriximiná [Majer & Delabie, 1994].

Neivamyrmex pseudops (Forel, 1909). Melgaço [MPEG]; Portel [Harada, 2016].

Neivamyrmex punctaticeps (Emery, 1894). Municipality unavailable [Borgmeier, 1923]; Almeirim [DZUP]; Tucuruí [INPA].

Neivamyrmex romandii (Shuckard, 1840)*. Paragominas [MZSP].

Neivamyrmex swainsonii (Shuckard, 1840). Municipality unavailable [Borgmeier, 1955; Kempf, 1972c; Watkins, 1976].

Neivamyrmex walkerii (Westwood, 1842). Municipality unavailable [Emery, 1910; Borgmeier, 1923; Borgmeier, 1936; Kempf, 1972c; Watkins, 1976]; Altamira [MZSP]; Aveiro [Borgmeier, 1955]; Belém [Borgmeier, 1955]; Jacareacanga [MZSP]; Novo Progresso [MZSP; Borgmeier, 1955].

***Neocerapachys* Borowiec, 2016**

Neocerapachys splendens (Borgmeier, 1957). Paragominas [Solar *et al.*, 2016b]; Santarém [Vasconcelos *et al.*, 2006].

***Nomamyrmex* Borgmeier, 1936**

Nomamyrmex esenbeckii (Westwood, 1842). Municipality unavailable [Kempf, 1972c; Watkins, 1976]; Altamira [MZSP; Borgmeier, 1955]; Belém [MZSP; Kempf, 1970]; Curionópolis [MPEG]; Juruti [MZSP]; Melgaço [INPA; MPEG]; Mojuí dos Campos [MZSP]; Novo Progresso [MZSP; Borgmeier, 1955]; Óbidos [MZSP]; Oriximiná [INPA]; Paragominas [Solar *et al.*, 2016b]; Portel [Harada, 2016]; Santarém [MZSP; Borgmeier, 1955; Watkins, 1977].

Nomamyrmex hartigii (Westwood, 1842). Municipality unavailable [Borgmeier, 1923; Watkins, 1976]; Altamira [MZSP]; Melgaço [MPEG].

Ectatomminae Emery, 1895 [3 genera, 45 species]

***Ectatomma* Smith, 1858**

Ectatomma brunneum Smith, 1858. Municipality unavailable [INPA; Kempf, 1972c]; Abaetetuba [MPEG]; Acará [MPEG]; Água Azul do Norte [MPEG]; Almeirim [DZUP]; Altamira [DZUP; INPA; MZSP]; Ananindeua [MPEG]; Aveiro [MZSP]; Barcarena [MPEG]; Belém [INPA; MPEG; MZSP; Borgmeier, 1923; Santschi, 1939]; Benevides [INPA; MPEG]; Bragança [MPEG]; Breves [MPEG]; Bujaru [INPA; MPEG]; Capitão Poço [MPEG]; Castanhais [MPEG]; Colares [MZSP]; Conceição do Araguaia [INPA; MPEG; MZSP]; Cumaru do Norte [MPEG]; Curionópolis [MPEG]; Curuçá [MPEG]; Faro [INPA]; Goianésia do Pará [MPEG]; Itaituba [MPEG; MZSP]; Jacareacanga [MZSP]; Maracanã [MPEG]; Marapanim [MPEG]; Marituba [CPDC]; Medicilândia [CPDC]; Melgaço [MPEG]; Mocajuba [MZSP]; Moju [CPDC]; Novo Repartimento [CPDC; MPEG]; Óbidos [MPEG; MZSP; Santschi, 1939]; Oriximiná [CPDC; INPA; MZSP]; Paragominas [Solar *et al.*, 2016a; Solar *et al.*, 2016b]; Parauapebas [MPEG]; Peixe-Boi [MPEG]; Portel [Overal *et al.*, 1997; Harada, 2016]; Primavera [MPEG]; Santa Bárbara do Pará [MPEG]; Santarém [DZUP; INPA; MZSP; Vasconcelos *et al.*, 2006]; Santarém Novo [MPEG]; São Caetano de Odivelas [MPEG]; São Francisco do Pará [MPEG]; São João de Pirabas [MPEG]; Soure [MPEG]; Terra Santa [Santos *et al.*, 2008]; Tracuateua [INPA; MPEG]; Tucuruí [MPEG]; Vigia [INPA]; Viseu [MPEG].

Ectatomma edentatum Roger, 1863. Água Azul do Norte [MPEG]; Curionópolis [MPEG]; Marabá [DZUP; Pereira, 2012; Pereira *et al.*, 2016]; Maracanã [MPEG]; Melgaço [MPEG]; Novo Repartimento [CPDC]; Oriximiná [INPA]; Paragominas [MPEG; Solar *et al.*, 2016b]; Parauapebas [MPEG]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [INPA; Vasconcelos *et al.*, 2006]; Santarém Novo [MPEG]; São Francisco do Pará [MPEG]; Tucuruí [MPEG].

Ectatomma lugens Emery, 1894. Municipality unavailable [Emery, 1894b; Emery, 1911; Borgmeier, 1923; Kempf, 1959c; Kempf, 1972c]; Água Azul do Norte [MPEG]; Almeirim [DZUP; MPEG]; Altamira [MZSP]; Bannach [MPEG]; Barcarena [MPEG]; Belém [MPEG; Fernández, 1992]; Bragança [ANTWEB]; Cumaru do Norte [MPEG]; Curionópolis [MPEG]; Dom Eliseu [MPEG]; Faro [INPA]; Goianésia do Pará [CPDC]; Itaituba [MPEG]; Itupiranga [CPDC]; Marabá [MPEG; Pereira, 2012; Pereira *et al.*, 2016]; Marituba [CPDC]; Melgaço [MPEG]; Moju [CPDC]; Novo Repartimento [CPDC]; Oriximiná [CPDC; INPA]; Ourilândia do Norte [MPEG]; Paragominas [CPDC; MPEG; MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [INPA; Vasconcelos *et al.*, 2006; Solar *et al.*, 2016a; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; São Félix do Xingu [MPEG]; São Francisco do Pará [MPEG]; Terra Santa [Santos *et al.*, 2008]; Tucumã [MPEG]; Tucuruí [MPEG].

Ectatomma muticum Mayr, 1870. Santarém [INPA].

Ectatomma opaciventre (Roger, 1861). Santarém [INPA; Vasconcelos *et al.*, 2006].

Ectatomma permagnum Forel, 1908. Belém [MPEG]; Conceição do Araguaia [INPA]; Marabá [DZUP]; Parauapebas [MPEG; MZSP].

Ectatomma suzanae Almeida Filho, 1986. Oriximiná [CPDC]; Terra Santa [Santos *et al.*, 2008].

Ectatomma tuberculatum (Olivier, 1792). Municipality unavailable [INPA; Kempf, 1972c]; Abaetetuba [MPEG]; Acará [MPEG]; Água Azul do Norte [MPEG]; Almeirim [INPA; MPEG; MZSP]; Altamira [MPEG; MZSP; Kempf, 1962; Kempf, 1970]; Ananindeua [MPEG]; Belém [INPA; MPEG; MZSP; Borgmeier, 1923; Santschi, 1939; Kempf, 1962]; Bragança [MPEG]; Breves [MPEG]; Breu Branco [MPEG]; Bujaru [MPEG]; Capitão Poço [MPEG]; Conceição do Araguaia [INPA; MPEG]; Cumaru do Norte [MPEG]; Curuçá [MPEG]; Dom Eliseu [MPEG]; Goianésia do Pará [CPDC]; Itaituba [MPEG]; Jacareacanga [MZSP; Kempf, 1962]; Juruti [MZSP]; Marabá [DZUP; MPEG; Pereira, 2012; Pereira *et al.*, 2016]; Maracanã [MPEG]; Marapanim [MPEG]; Marituba [CPDC]; Melgaço [MPEG; Andrade-Silva & Almeida, 2020]; Moju [CPDC]; Mojuí dos Campos

[MZSP]; Monte Alegre [MZSP]; Muaná [MPEG]; Novo Repartimento [CPDC]; Óbidos [MZSP]; Oriximiná [CPDC; INPA; MZSP; Majer & Delabie, 1994]; Ourém [MPEG]; Ourilândia do Norte [MPEG]; Paragominas [MPEG; MZSP; Harada *et al.*, 2013; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Peixe-Boi [MPEG]; Portel [Overal *et al.*, 1997; Harada, 2016]; Primavera [MPEG]; Santa Bárbara do Pará [MPEG]; Santarém [INPA; Vasconcelos *et al.*, 2006]; Santarém Novo [MPEG]; São Caetano de Odivelas [MPEG]; São Félix do Xingu [MPEG]; São Francisco do Pará [MPEG]; São João de Pirabas [MPEG]; São Miguel do Guamá [MPEG]; Soure [MPEG]; Terra Santa [Santos *et al.*, 2008]; Tucumã [MPEG]; Tucuruí [MPEG].

***Gnampogenys* Roger, 1863**

Gnampogenys acuminata (Emery, 1896). Municipality unavailable [Emery, 1896c; Emery, 1911; Borgmeier, 1923]; Almeirim [DZUP]; Belém [Kempf, 1972c]; Curionópolis [MPEG]; Goianésia do Pará [CPDC]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Moju [CPDC]; Novo Repartimento [CPDC]; Paragominas [CPDC; Solar *et al.*, 2016b]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Gnampogenys acuta (Brown, 1956)*. Belém [DZUP].

Gnampogenys ammophila Lattke, 1990*. Goianésia do Pará [CPDC]; Itupiranga [CPDC]; Moju [CPDC]; Novo Repartimento [CPDC].

Gnampogenys annulata (Mayr, 1887). Municipality unavailable [OSUC; Kempf, 1972c; Camacho *et al.*, 2020]; Belém [OSUC; Borgmeier, 1923]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Melgaço [INPA; Souza *et al.*, 2007]; Novo Repartimento [CPDC]; Oriximiná [MZSP]; Parauapebas [MZSP]; Portel [Harada, 2016].

Gnampogenys bisulca Kempf & Brown, 1968. Municipality unavailable [Camacho *et al.*, 2020].

Gnampogenys caelata Kempf, 1967. Municipality unavailable [Camacho *et al.*, 2020]; Belém [Kempf & Brown, 1968; Kempf, 1972c; Scott-Santos *et al.*, 2008]; Itaituba [MPEG].

Gnampogenys concinna (Smith, 1858). Municipality unavailable [Camacho *et al.*, 2020]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Melgaço [MPEG]; Santarém [ANTWEB; Kempf, 1972c].

Gnampogenys continua (Mayr, 1887). Goianésia do Pará [CPDC]; Moju [CPDC].

Gnampogenys enodis Lattke *et al.*, 2004. Municipality unavailable [Camacho *et al.*, 2020].

Gnampogenys fernandezi Lattke, 1990. Municipality unavailable [Camacho *et al.*, 2020]; Portel [Harada, 2016].

Gnampogenys haenschi (Emery, 1902). Municipality unavailable [Camacho *et al.*, 2020]; Almeirim [DZUP]; Conceição do Araguaia [MPEG]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Melgaço [INPA; Souza *et al.*, 2007]; Moju [CPDC]; Novo Repartimento [CPDC]; Paragominas [INPA; Solar *et al.*, 2016b]; Portel [Harada, 2016].

Gnampogenys hartmani (Wheeler, 1915). Municipality unavailable [Camacho *et al.*, 2020].

Gnampogenys haytiana (Wheeler & Mann, 1914). Municipality unavailable [Camacho *et al.*, 2020].

Gnampogenys horni (Santschi, 1929). Municipality unavailable [Kempf, 1972c]; Almeirim [DZUP]; Altamira [INPA]; Belém [INPA; Lattke, 1995]; Benevides [OSUC]; Conceição do Araguaia [MPEG]; Goianésia do Pará [CPDC]; Gurupá [INPA]; Marabá [DZUP; Pereira, 2012; Pereira *et al.*, 2016]; Marituba [CPDC; DZUP]; Melgaço [DZUP; MPEG; Souza *et al.*, 2007]; Moju [CPDC]; Novo Repartimento [CPDC]; Oriximiná [CPDC];

INPA; MZSP; Majer & Delabie, 1994]; Paragominas [CPDC; DZUP; INPA; Solar *et al.*, 2016a; Solar *et al.*, 2016b]; Parauapebas [INPA; MZSP; Lattke, 1995]; Portel [Harada, 2016]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Gnampogenys kempfi Lenko, 1964. Municipality unavailable [Camacho *et al.*, 2020]; Itupiranga [CPDC]; Melgaço [INPA; MPEG]; Moju [CPDC; DZUP]; Novo Repartimento [CPDC]; Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006].

Gnampogenys lanei Kempf, 1960. Municipality unavailable [Kempf, 1972c; Camacho *et al.*, 2020]; Belém [MZSP; Kempf, 1968b; Kempf, 1970; Lattke, 1995]; Marabá [Pereira, 2012; Pereira *et al.*, 2016].

Gnampogenys lineolata Brown, 1993. Melgaço [INPA].

Gnampogenys mecotyle Brown, 1958. Municipality unavailable [Kempf, 1972c; Camacho *et al.*, 2020]; Belém [Kempf, 1968b].

Gnampogenys mediatrix Brown, 1958. Municipality unavailable [Scott-Santos *et al.*, 2008; Camacho *et al.*, 2020]; Belém [Brown Jr., 1958a; Kempf, 1972c]; Melgaço [Souza *et al.*, 2007]; Portel [Harada, 2016]; Santarém [INPA].

Gnampogenys mina (Brown, 1956). Municipality unavailable [Camacho *et al.*, 2020]; Portel [Harada, 2016].

Gnampogenys minuta (Emery, 1896). Municipality unavailable [Lattke, 1992]; Belém [OSUC]; Capanema [MZSP]; Curionópolis [MPEG]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Gnampogenys moelleri (Forel, 1912). Municipality unavailable [ANTWEB; Santschi, 1929b; Kempf, 1972c]; Almeirim [DZUP]; Bannach [DZUP]; Belém [DZUP; OSUC]; Capanema [MZSP]; Itaituba [DZUP]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Marituba [CPDC; DZUP]; Medicilândia [CPDC; DZUP]; Melgaço [DZUP; INPA; Souza *et al.*, 2007]; Moju [CPDC]; Novo Repartimento [CPDC]; Oriximiná [DZUP; Majer & Delabie, 1994]; Paragominas [CPDC; DZUP; Solar *et al.*, 2016a; Solar *et al.*, 2016b]; Parauapebas [DZUP]; Portel [Harada, 2016]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Gnampogenys mordax (Smith, 1858). Municipality unavailable [Emery, 1911; Borgmeier, 1923; Camacho *et al.*, 2020]; Belém [MZSP]; Paragominas [MZSP].

Gnampogenys nana Kempf, 1960. Municipality unavailable [Camacho *et al.*, 2020].

Gnampogenys pernambucana (Santschi, 1929). Parauapebas [Camacho *et al.*, 2020].

Gnampogenys perspicax Kempf & Brown, 1970. Municipality unavailable [Camacho *et al.*, 2020].

Gnampogenys pleurodon (Emery, 1896). Municipality unavailable [ANTWEB; Emery, 1896c; Emery, 1911; Santschi, 1929b]; Belém [DZUP; OSUC; MZSP; Kempf, 1970; Kempf, 1972c]; Melgaço [DZUP; MPEG]; Moju [DZUP]; Paragominas [DZUP; MZSP]; Parauapebas [MZSP]; Portel [Harada, 2016].

Gnampogenys porcata (Emery, 1896)*. Bujaru [DZUP]; Paragominas [DZUP].

Gnampogenys regularis Mayr, 1870. Municipality unavailable [Emery, 1911; Kempf, 1972c]; Belém [MZSP]; Parauapebas [MPEG]; Santarém [Vasconcelos *et al.*, 2006].

Gnampogenys relicta (Mann, 1916). Municipality unavailable [Camacho *et al.*, 2020]; Breves [DZUP]; Melgaço [DZUP; Souza *et al.*, 2007]; Moju [CPDC]; Portel [Harada, 2016].

Gnamptogenys striatula Mayr, 1884. Municipality unavailable [ANTWEB; OSUC; Emery, 1896c; Forel, 1908; Emery, 1911; Borgmeier, 1923; Santschi, 1929b; Brown Jr., 1958a; Kempf, 1972c]; Abaetetuba [DZUP]; Belém [DZUP; MZSP; Kempf, 1970]; Bujaru [DZUP]; Conceição do Araguaia [DZUP; MPEG]; Curionópolis [MPEG]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Melgaço [DZUP; Souza *et al.*, 2007]; Moju [CPDC]; Novo Repartimento [CPDC]; Oriximiná [CPDC; DZUP]; Paragominas [CPDC; DZUP; Solar *et al.*, 2016a; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Santarém [INPA; Vasconcelos *et al.*, 2006]; Terra Santa [Santos *et al.*, 2008]; Tucuruí [DZUP; Lattke, 1995].

Gnamptogenys strigata (Norton, 1868). Municipality unavailable [Kempf, 1972c].

Gnamptogenys sulcata (Smith, 1858). Municipality unavailable [Forel, 1912a; Borgmeier, 1923]; Almeirim [DZUP]; Goianésia do Pará [CPDC]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Marituba [CPDC; DZUP]; Melgaço [MPEG]; Moju [CPDC]; Novo Repartimento [CPDC]; Paragominas [Solar *et al.*, 2016b].

Gnamptogenys tortuolosa (Smith, 1858). Municipality unavailable [Emery, 1896c; Emery, 1911; Borgmeier, 1923; Kempf, 1972c; Lattke, 1990; Camacho *et al.*, 2020]; Almeirim [DZUP]; Belém [MZSP; Kempf, 1970]; Itaituba [MPEG]; Melgaço [INPA; MPEG; Souza *et al.*, 2007]; Óbidos [MZSP]; Paragominas [ANTWEB; INPA; Solar *et al.*, 2016b]; Parauapebas [MPEG]; Portel [Harada, 2016]; Santarém [INPA].

Gnamptogenys triangularis (Mayr, 1887). Municipality unavailable [Camacho *et al.*, 2020]; Belém [Kempf, 1972c]; Melgaço [Souza *et al.*, 2007]; Paragominas [INPA]; Portel [Harada, 2016].

***Typhlomyrmex* Mayr, 1862**

Typhlomyrmex pusillus Emery, 1894. Municipality unavailable [Kempf, 1972c; Lacau *et al.*, 2008]; Belém [Brown Jr., 1965]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Melgaço [INPA]; Portel [Harada, 2016].

Typhlomyrmex rogenhoferi Mayr, 1862. Municipality unavailable [Emery, 1911; Kempf, 1972c]; Altamira [MZSP]; Belém [MZSP; Borgmeier, 1923; Kempf, 1970]; Itaituba [MPEG]; Óbidos [Borgmeier, 1923]; Oriximiná [MZSP]; Paragominas [MZSP]; Parauapebas [MZSP]; Portel [Harada, 2016].

Formicinae Latreille, 1809 [7 genera, 78 species, and 6 subspecies]

***Acropyga* Roger, 1862**

Acropyga decedens (Mayr, 1887). Oriximiná [CPDC; Majer & Delabie, 1994].

Acropyga donisthorpei Weber, 1944*. Parauapebas [MZSP].

Acropyga fuhrmanni (Forel, 1914). Municipality unavailable [LaPolla, 2004]; Belém [LaPolla, 2004]; Portel [Harada, 2016].

Acropyga goeldii Forel, 1893. Municipality unavailable [Weber, 1944; Kempf, 1972c]; Chaves [Wheeler, 1915]; Paragominas [Solar *et al.*, 2016b]; Parauapebas [MZSP].

Acropyga tricuspis LaPolla, 2004*. Itupiranga [CPDC].

***Brachymyrmex* Mayr, 1868**

Brachymyrmex admotus Mayr, 1887*. Marituba [CPDC].

Brachymyrmex aphidicola Forel, 1909. Municipality unavailable [Ortiz-Sepúlveda *et al.*, 2019]; Melgaço [Ortiz-Sepúlveda *et al.*, 2019]; Parauapebas [Ortiz-Sepúlveda *et al.*, 2019].

Brachymyrmex australis Forel, 1901. Municipality unavailable [Ortiz-Sepúlveda *et al.*, 2019].

Brachymyrmex cavernicola Wheeler, 1938. Municipality unavailable [Ortiz-Sepúlveda *et al.*, 2019]; Parauapebas [Ortiz-Sepúlveda *et al.*, 2019].

Brachymyrmex cordemoyi Forel, 1895. Municipality unavailable [Ortiz-Sepúlveda *et al.*, 2019].

Brachymyrmex degener Emery, 1906. Municipality unavailable [Ortiz-Sepúlveda *et al.*, 2019].

Brachymyrmex heeri Forel, 1874. Municipality unavailable [Kempf, 1972c; Ortiz-Sepúlveda *et al.*, 2019]; Belém [Kempf, 1970]; Marituba [CPDC]; Moju [CPDC]; Novo Repartimento [CPDC]; Oriximiná [CPDC]; Portel [Harada, 2016]; Terra Santa [Santos *et al.*, 2008].

Brachymyrmex minutus Forel, 1893. Municipality unavailable [Ortiz-Sepúlveda *et al.*, 2019]; Belém [Ortiz-Sepúlveda *et al.*, 2019].

Brachymyrmex myops Emery, 1906. Municipality unavailable [Ortiz-Sepúlveda *et al.*, 2019]; Belém [Ortiz-Sepúlveda *et al.*, 2019].

Brachymyrmex patagonicus Mayr, 1868. Municipality unavailable [Ortiz-Sepúlveda *et al.*, 2019].

Brachymyrmex pictus Mayr, 1887. Municipality unavailable [Kempf, 1972c]; Conceição do Araguaia [INPA].

***Camponotus* Mayr, 1861**

Camponotus ager (Smith, 1858). Municipality unavailable [Emery, 1903; Kempf, 1972c]; Almeirim [DZUP]; Paragominas [Solar *et al.*, 2016b]; Portel [Overal *et al.*, 1997].

Camponotus apicalis (Mann, 1916). Belém [MZSP]; Jacareacanga [MZSP; Fernández, 2002]; Melgaço [Andrade-Silva & Almeida, 2020].

Camponotus arboreus (Smith, 1858). Municipality unavailable [Kempf, 1965; Kempf, 1972c]; Parauapebas [MZSP]; Ponta de Pedras [ANTWEB].

Camponotus atriceps (Smith, 1858). Municipality unavailable [Forel, 1912f; Kempf, 1972c; Hashmi, 1973]; Água Azul do Norte [MPEG]; Almeirim [DZUP; MPEG]; Altamira [MPEG; MZSP; Hashmi, 1973]; Bannach [MPEG]; Barcarena [MPEG]; Belém [INPA; MPEG; MZSP; Kempf, 1970; Kempf, 1972c; Hashmi, 1973]; Benevides [MPEG; Hashmi, 1973]; Bragança [MPEG]; Breves [MPEG]; Bujaru [MPEG]; Cachoeira do Arari [MPEG]; Chaves [MPEG; Wheeler, 1915]; Conceição do Araguaia [INPA; MPEG]; Curionópolis [MPEG]; Itaituba [MPEG; MZSP]; Jacareacanga [MZSP]; Marabá [MPEG]; Marituba [CPDC]; Melgaço [Andrade-Silva & Almeida, 2020]; Mojuí dos Campos [MPEG; MZSP]; Monte Alegre [MPEG; MZSP]; Novo Repartimento [CPDC]; Oriximiná [INPA; MZSP; Majer & Delabie, 1994]; Ourilândia do Norte [MPEG]; Paragominas [INPA; MPEG; Solar *et al.*, 2016b]; Parauapebas [MPEG]; Portel [Overal *et al.*, 1997; Harada, 2016]; Primavera [MPEG]; Santa Bárbara do Pará [MPEG]; Santarém [Hashmi, 1973; Vasconcelos *et al.*, 2006]; São Félix do Xingu [MPEG]; São Francisco do Pará [MPEG]; São João de Pirabas [MPEG]; Senador José Porfírio [MPEG]; Soure [MPEG]; Tucumã [MPEG]; Tucuruí [MPEG].

Camponotus balzani Emery, 1894. Almeirim [DZUP]; Novo Repartimento [CPDC]; Parauapebas [MPEG]; Santarém [Vasconcelos *et al.*, 2006].

Camponotus bidens Mayr, 1870. Conceição do Araguaia [INPA; MPEG]; Oriximiná [CPDC]; Paragominas [CPDC]; Santarém [Vasconcelos *et al.*, 2006].

Camponotus bidens repressus Forel, 1912. Belém [Kempf, 1972c].

Camponotus blandus (Smith, 1858). Municipality unavailable [Kempf, 1972c; de Zolessi *et al.*, 1989]; Alenquer [MPEG]; Almeirim [DZUP; MPEG]; Bannach [MPEG]; Belém [MPEG; MZSP; Kempf, 1970]; Conceição do Araguaia [MPEG]; Itaituba [MPEG]; Maracanã [INPA]; Marituba [CPDC]; Oriximiná [CPDC; INPA]; Paragominas [CPDC; Solar *et al.*, 2016a; Solar *et al.*, 2016b]; Parauapebas [MPEG]; Primavera [MPEG]; Santa Bárbara do Pará [MPEG]; Santarém [ANTWEB; Emery, 1903; Kempf, 1972c; Zolessi *et al.*, 1989; Vasconcelos *et al.*, 2006] São Caetano de Odivelas [MPEG]; São Félix do Xingu [MPEG]; São João de Pirabas [MPEG]; São Miguel do Guamá [MPEG]; Vigia [MPEG].

Camponotus brasiliensis Mayr, 1862. Municipality unavailable [Forel, 1912f]; Parauapebas [MZSP].

Camponotus brevis Forel, 1899**. Belém [MZSP].

Camponotus cacicus Emery, 1903. Municipality unavailable [Kempf, 1972c]; Bannach [MPEG]; Bujaru [MZSP].

Camponotus callistus Emery, 1911. Municipality unavailable [Kempf, 1972c].

Camponotus cameranoi Emery, 1894. Conceição do Araguaia [INPA].

Camponotus chartifex (Smith, 1860). Belém [Fernández, 2002].

Camponotus cingulatus Mayr, 1862. Municipality unavailable [Kempf, 1972c]; Almeirim [DZUP]; Altamira [Santschi, 1925a]; Novo Repartimento [CPDC]; Oriximiná [Majer & Delabie, 1994]; Parauapebas [MPEG].

Camponotus claviscapus Forel, 1899*. Bannach [MPEG]; Breves [MPEG]; São João de Pirabas [MPEG].

Camponotus clypeatus Mayr, 1866*. Parauapebas [MZSP].

Camponotus crassicornis Emery, 1920. Municipality unavailable [Kempf, 1972c].

Camponotus crassus Mayr, 1862. Municipality unavailable [Kempf, 1972c; Brandão, 1991]; Água Azul do Norte [MPEG]; Almeirim [DZUP]; Bannach [MPEG]; Belém [MZSP; Kempf, 1970]; Conceição do Araguaia [INPA]; Curionópolis [MPEG]; Faro [INPA]; Marabá [MPEG]; Mojuí dos Campos [MPEG]; Novo Repartimento [CPDC]; Oriximiná [CPDC; INPA]; Paragominas [CPDC; Solar *et al.*, 2016b]; Parauapebas [MPEG]; Santarém [Vasconcelos *et al.*, 2006]; São Félix do Xingu [MPEG]; Terra Santa [Santos *et al.*, 2008].

Camponotus crassus amazonicus Santschi, 1922. Óbidos [Santschi, 1939].

Camponotus crassus delabiatus Santschi, 1925. Municipality unavailable [Kusnezov, 1952; Kempf, 1972c]; Altamira [Santschi, 1925a; Ulysséa *et al.*, 2017].

Camponotus cressoni André, 1887. Municipality unavailable [Emery, 1903; Kempf, 1972c]; Marabá [MPEG]; Parauapebas [MPEG]; Tucuruí [MPEG].

Camponotus depressus Mayr, 1866. Bannach [MPEG]; Conceição do Araguaia [MPEG]; Marabá [MPEG]; Ourilândia do Norte [MPEG]; Parauapebas [MPEG].

Camponotus diversipalpus Santschi, 1922*. Almeirim [DZUP]; Parauapebas [MZSP].

Camponotus eurynotus Forel, 1907*. Belém [MZSP]; Oriximiná [MZSP].

Camponotus fastigatus Roger, 1863. Abaetetuba [MPEG]; Almeirim [MPEG]; Bannach [MPEG]; Belém [MPEG]; Conceição do Araguaia [MPEG]; Cumaru do Norte [MPEG]; Curionópolis [MPEG]; Marabá [MPEG]; Marituba [CPDC]; Oriximiná [CPDC]; Ourilândia do Norte [MPEG]; Paragominas [MPEG]; Parauapebas [MPEG]; Santa Bárbara do Pará [MPEG]; Santarém [INPA; Vasconcelos *et al.*, 2006]; São Félix do Xingu [MPEG]; Tucumã [MPEG]; Tucuruí [MPEG].

Camponotus femoratus (Fabricius, 1804). Municipality unavailable [Emery, 1894b; Forel, 1904a; Forel, 1904b; Kempf, 1972c; Hashmi, 1973]; Água Azul do Norte [MPEG]; Almeirim [DZUP; MZSP]; Altamira [MZSP]; Ananindeua [MZSP]; Bannach [MPEG]; Belém [INPA; MPEG; MZSP; Kempf, 1970]; Benevides [MPEG]; Cametá [MZSP]; Faro [INPA]; Jacareacanga [MZSP]; Marabá [MPEG; DZUP]; Melgaço [MPEG]; Medicilândia [CPDC]; Melgaço [Andrade-Silva & Almeida, 2020]; Novo Progresso [MZSP]; Oriximiná [CPDC; INPA; Majer & Delabie, 1994]; Ourilândia do Norte [MPEG]; Paragominas [Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [Jeanne, 1979; Vasconcelos *et al.*, 2006]; São Félix do Xingu [INPA; MPEG]; Tucumã [MPEG];

Camponotus godmani Forel, 1899. Municipality unavailable [Kempf, 1972c]; Belém [Kempf, 1970]; Oriximiná [CPDC; INPA]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Camponotus heathi Mann, 1916. Oriximiná [INPA; MZSP].

Camponotus lancifer Emery, 1894. Óbidos [MZSP]; Oriximiná [INPA; MZSP].

Camponotus latangulus Roger, 1863. Municipality unavailable [Emery, 1894b; Forel, 1912f; Wheeler, 1934; Kempf, 1972c]; Almeirim [DZUP]; Bannach [MPEG]; Belém [MZSP]; Conceição do Araguaia [INPA; MPEG]; Óbidos [MZSP]; Oriximiná [CPDC; INPA; Majer & Delabie, 1994]; Parauapebas [MZSP]; Santarém [Vasconcelos *et al.*, 2006]; Terra Santa [Santos *et al.*, 2008].

Camponotus leydigi Forel, 1886. Municipality unavailable [Kempf, 1972c]; Abaetetuba [MPEG]; Belém [MPEG]; Benevides [MPEG]; Bujaru [MPEG]; Conceição do Araguaia [MPEG]; Itaituba [MPEG]; Oriximiná [INPA]; Paragominas [Solar *et al.*, 2016b]; Parauapebas [MPEG]; Peixe-Boi [MPEG]; Primavera [MPEG]; Santa Bárbara do Pará [MPEG]; Santarém [Vasconcelos *et al.*, 2006]; São Caetano de Odivelas [Kempf, 1960b]; São Félix do Xingu [MPEG]; São Francisco do Pará [MPEG]; Tucuruí [MPEG].

Camponotus macrochaeta Emery, 1903. Municipality unavailable [ANTWEB; Emery, 1903]; Belém [MZSP; Kempf, 1972c]; Jacareacanga [MZSP].

Camponotus melanoticus Emery, 1894. Marituba [CPDC]; Prainha [INPA].

Camponotus mus Roger, 1863*. Almeirim [DZUP].

Camponotus nidulans (Smith, 1860). Municipality unavailable [Kempf, 1972c]; Almeirim [DZUP]; Belém [MZSP; Kempf, 1970; Fernández, 2002]; Benevides [Fernández, 2002]; Óbidos [MZSP]; Oriximiná [CPDC; INPA; Majer & Delabie, 1994; Fernández, 2002]; Paragominas [MZSP].

Camponotus novogranadensis Mayr, 1870. Municipality unavailable [Kempf, 1972c; Carvalho-Filho, 2020]; Almeirim [DZUP; MPEG]; Bannach [MPEG]; Belém [MPEG; Kempf, 1970]; Chaves [MPEG]; Conceição do Araguaia [MPEG]; Itaituba [MPEG]; Marabá [MPEG; MZSP]; Mojuí dos Campos [MPEG]; Óbidos [INPA]; Ourilândia do Norte [MPEG]; Paragominas [MPEG; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Primavera [MPEG]; Santa Bárbara do Pará [MPEG]; Santarém [Vasconcelos *et al.*, 2006]; São Félix do Xingu [MPEG]; São João de Pirabas [MPEG]; São Miguel do Guamá [MPEG]; Tucumã [MPEG]; Tucuruí [MPEG].

Camponotus pittieri Forel, 1899. Almeirim [DZUP]; Oriximiná [INPA].

Camponotus propinquus Mayr, 1887*. Oriximiná [CPDC].

Camponotus punctulatus andigenus Emery, 1903*. Oriximiná [CPDC].

Camponotus rapax (Fabricius, 1804). Municipality unavailable [Kempf, 1972c]; Almeirim [DZUP]; Oriximiná [CPDC; INPA; MZSP; Majer & Delabie, 1994]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006]; São Félix do Xingu [MZSP]; Terra Santa [Santos *et al.*, 2008].

Camponotus rectangularis Emery, 1890. Municipality unavailable [Forel, 1904b; Kempf, 1972c]; Conceição do Araguaia [INPA; MPEG]; Paragominas [INPA]; Parauapebas [MPEG]; Santarém [Vasconcelos *et al.*, 2006].

Camponotus renggeri Emery, 1894. Almeirim [DZUP; MPEG]; Belém [MPEG]; Breu Branco [MPEG]; Bujaru [MPEG]; Conceição do Araguaia [MPEG]; Itaituba [MPEG]; Oriximiná [Majer & Delabie, 1994]; Paragominas [Solar *et al.*, 2016a; Solar *et al.*, 2016b]; Parauapebas [MPEG]; Peixe-Boi [MPEG]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santa Bárbara do Pará [MPEG]; São Caetano de Odivelas [MPEG]; São Miguel do Guamá [MPEG]; São Sebastião da Boa Vista [MPEG]; Soure [MPEG].

Camponotus rufipes (Fabricius, 1775). Municipality unavailable [Kempf, 1972c]; Itaituba [MPEG]; Oriximiná [CPDC]; Santarém [Vasconcelos *et al.*, 2006].

Camponotus sanctaefidei Dalla Torre, 1892. Municipality unavailable [Emery, 1894b; Kempf, 1972c]; Almeirim [DZUP]; Belém [MPEG; MZSP; Kempf, 1970]; Parauapebas [MZSP].

Camponotus sanctaefidei coronatus Santschi, 1922*. Parauapebas [MZSP].

Camponotus scissus Mayr, 1887. Santarém [INPA; Vasconcelos *et al.*, 2006].

Camponotus senex (Smith, 1858). Municipality unavailable [Kempf, 1972c]; Belém [MZSP]; Paragominas [Harada *et al.*, 2013; Solar *et al.*, 2016a; Solar *et al.*, 2016b]; Portel [Overal *et al.*, 1997; Harada, 2016].

Camponotus sericeiventris (Guérin-Méneville, 1838). Municipality unavailable [Kempf, 1972c]; São Félix do Xingu [MPEG].

Camponotus sexguttatus (Fabricius, 1793). Oriximiná [CPDC]; Paragominas [Solar *et al.*, 2016b]; Parauapebas [MPEG]; Prainha [INPA].

Camponotus silvestrii Emery, 1906*. Bannach [MPEG]; Parauapebas [MPEG]; São Félix do Xingu [MPEG].

Camponotus silvicola Forel, 1902**. Belém [MZSP].

Camponotus substitutus Forel, 1899. Municipality unavailable [Kempf, 1972c; de Zolessi *et al.*, 1989]; Almeirim [DZUP]; Santarém [Kempf, 1972c; Zolessi *et al.*, 1989].

Camponotus testaceus Emery, 1894. Municipality unavailable [ANTWEB; Emery, 1886; Emery, 1894a]; Belém [Kempf, 1972c].

Camponotus textor Forel, 1899. Municipality unavailable [Kempf, 1972c]; Almeirim [DZUP].

Camponotus tonduzi Forel, 1899**. Parauapebas [MZSP].

Camponotus traili Mayr, 1878*. São Félix do Xingu [MPEG].

Camponotus trapezoideus Mayr, 1870. Belém [MZSP]; Oriximiná [CPDC; Majer & Delabie, 1994]; Parauapebas [MZSP].

Camponotus urichi sculnus Forel, 1904. Municipality unavailable [Forel, 1904b]; Belém [Kempf, 1972c].

Camponotus vittatus Forel, 1904*. Moju [CPDC].

***Gigantiops* Roger, 1863**

Gigantiops destructor (Fabricius, 1804). Municipality unavailable [Forel, 1904b; Wheeler, 1922c; Kempf & Lenko, 1968; Kempf, 1972c]; Abaetetuba [MPEG]; Acará [MPEG]; Almeirim [MPEG]; Altamira [MPEG]; Anajás [MPEG]; Ananindeua [MPEG]; Bannach [MPEG]; Belém [INPA; MPEG; MZSP; Kempf & Lenko, 1968; Kempf, 1970]; Benevides [INPA; MPEG]; Bragança [MPEG]; Breves [MPEG]; Bujaru [MPEG]; Conceição do Araguaia [INPA; MPEG]; Curionópolis [MPEG]; Dom Eliseu [MPEG]; Faro [MZSP]; Goianésia do Pará [CPDC; MPEG]; Itaituba [MPEG]; Jacareacanga [MZSP]; Juruti [MZSP]; Marapanim [MPEG]; Marituba [CPDC]; Medicilândia [CPDC]; Melgaço [INPA; MPEG]; Oriximiná [CPDC; INPA; Majer & Delabie, 1994]; Ourilândia do Norte [MPEG]; Paragominas [CPDC; MPEG; MZSP; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Primavera [MPEG]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santa Bárbara do Pará [MPEG]; Santarém [Vasconcelos *et al.*, 2006]; São Félix do Xingu [MPEG]; São Francisco do Pará [MPEG]; São Geraldo do Araguaia [MPEG]; São João de Pirabas [MPEG]; São Sebastião da Boa Vista [MPEG]; Tucumã [MPEG]; Tucuruí [INPA; MPEG]; Vitória do Xingu [MPEG].

***Myrmelachista* Roger, 1863**

Myrmelachista bambusarum Forel, 1903. Portel [Harada, 2016].

Myrmelachista brevicornis Wheeler, 1934. Municipality unavailable [Brandão, 1991]; Santarém [Wheeler, 1934; Kempf, 1972c; Longino, 2006a].

***Nylanderia* Emery, 1906**

Nylanderia fulva (Mayr, 1862). Municipality unavailable [Brandão, 1991; Kempf, 1972c]; Belém [Kempf, 1970]; Portel [Overal *et al.*, 1997; Harada, 2016]; Terra Santa [Santos *et al.*, 2008].

Nylanderia guatemalensis (Forel, 1885)*. Marituba [CPDC]; Moju [CPDC]; Novo Repartimento [CPDC].

Nylanderia steinheili (Forel, 1893). Municipality unavailable [Kempf, 1972c; Brandão, 1991]; Almeirim [DZUP]; Chaves [Wheeler, 1915].

Nylanderia vividula (Nylander, 1846). Municipality unavailable [Brandão, 1991; Kempf, 1972c].

***Paratrechina* Motschoulsky, 1863**

Paratrechina longicornis (Latreille, 1802) (Exotic). Municipality unavailable [Kempf, 1972c]; Goianésia do Pará [CPDC]; Maracanã [INPA]; Moju [CPDC]; Oriximiná [CPDC]; Paragominas [CPDC; Solar *et al.*, 2016b]; Portel [Harada, 2016]; Santarém [Mann, 1916].

Heteroponerinae Bolton, 2003 [2 genera, 3 species]

Acanthoponera Mayr, 1862

Acanthoponera peruviana Brown, 1958. Melgaço [Feitosa, 2011]; Novo Repartimento [MZSP].

Heteroponera Mayr, 1887

Heteroponera dolo (Roger, 1860)*. Altamira [MPEG].

Heteroponera microps Borgmeier, 1957*. Curionópolis [MPEG].

Myrmicinae Lepeletier de Saint-Fargeau, 1835 [41 genera, 330 species, and 2 subspecies]

Acanthognathus Mayr, 1887

Acanthognathus brevicornis Smith, 1944. Municipality unavailable [Kempf, 1972c]; Belém [Brown Jr. & Kempf, 1969]; Marituba [CPDC].

Acanthognathus ocellatus Mayr, 1887. Municipality unavailable [Kempf, 1972c]; Belém [Brown Jr. & Kempf, 1969; Kempf, 1975b]; Curionópolis [MPEG].

Acromyrmex Mayr, 1865

Acromyrmex aspersus (Smith, 1858)*. Conceição do Araguaia [MPEG].

Acromyrmex balzani (Emery, 1890)*. Bragança [MPEG].

Acromyrmex coronatus (Fabricius, 1804). Municipality unavailable [ANTWEB; Forel, 1904b; Santschi, 1925b; Kempf, 1972c; Abreu *et al.*, 1986]; Altamira [MZSP]; Belém [MPEG; MZSP; Gonçalves, 1961; Kempf, 1970]; Capanema [Gonçalves, 1961]; Conceição do Araguaia [INPA]; Igarapé-Açu [Gonçalves, 1961]; Marituba [CPDC; MZSP; Gonçalves, 1961]; Paragominas [ANTWEB; Solar *et al.*, 2016b]; Vigia [Gonçalves, 1961].

Acromyrmex coronatus globoculis Kempf, 1972. Municipality unavailable [Forel, 1916].

Acromyrmex hystrix (Latreille, 1802). Municipality unavailable [ANTWEB; Kempf, 1972c; Dátilo *et al.*, 2010]; Altamira [MZSP]; Belém [ANTWEB; MPEG; MZSP; Santschi, 1939; Gonçalves, 1961; Kempf, 1970; Kempf, 1976]; Chaves [MZSP]; Conceição do Araguaia [MPEG]; Igarapé-Açu [Gonçalves, 1961]; Irituia [MZSP; Gonçalves, 1961]; Óbidos [Gonçalves, 1961]; Portel [Overal *et al.*, 1997; Harada, 2016].

Acromyrmex landolti (Forel, 1885). Almeirim [MZSP; Gonçalves, 1961]; Itaituba [MPEG]; Marapanim [Gonçalves, 1961]; Oriximiná [MZSP].

Acromyrmex laticeps (Emery, 1905). Belém [MPEG]; Paragominas [ANTWEB; Solar *et al.*, 2016b]; Santa Bárbara do Pará [MPEG]; Soure [MPEG].

Acromyrmex lundii (Guérin-Méneville, 1838). Prainha [INPA].

Acromyrmex lundii carli Gonçalves, 1961. Municipality unavailable [Santschi, 1925b; Kempf, 1972c]; Óbidos [Gonçalves, 1961]; Portel [Harada, 2016].

Acromyrmex niger (Smith, 1858). Municipality unavailable [Forel, 1904b].

Acromyrmex nigrosetosus (Forel, 1908). Municipality unavailable [Forel, 1912b; Santschi, 1925b; Gonçalves, 1961; Kempf, 1972c]; Altamira [Gonçalves, 1961]; Belém [Gonçalves, 1961]; Igarapé-Açu [Gonçalves, 1961]; Marituba [Gonçalves, 1961]; Santarém [Gonçalves, 1961]; Soure [MPEG; Gonçalves, 1961].

Acromyrmex nobilis Santschi, 1939*. São Sebastião da Boa Vista [MPEG].

Acromyrmex octospinosus (Reich, 1793). Municipality unavailable [Kempf, 1972c; Abreu *et al.*, 1986]; Almeirim [Gonçalves, 1961]; Altamira [Gonçalves, 1961]; Itaituba [MZSP]; Óbidos [Santschi, 1939; Gonçalves, 1961]; Oriximiná [MZSP]; Prainha [MZSP].

Acromyrmex rugosus (Smith, 1858). Municipality unavailable [Forel, 1904b; Kempf, 1972c; Klingenber & Brandão, 2005]; Altamira [ANTWEB; Santschi, 1925a; Gonçalves, 1961]; Monte Alegre [MZSP]; São Félix do Xingu [MPEG].

Acromyrmex subterraneus (Forel, 1893). Melgaço [INPA]; Portel [Harada, 2016].

***Allomerus* Mayr, 1878**

Allomerus decemarticulatus Mayr, 1878. Municipality unavailable [Kempf, 1972c]; Portel [Harada, 2016].

Allomerus octoarticulatus Mayr, 1878. Municipality unavailable [Wheeler, 1942]; Melgaço [MPEG]; Oriximiná [CPDC; INPA; MZSP]; Santarém [Vasconcelos *et al.*, 2006].

Allomerus septemarticulatus Mayr, 1878. Municipality unavailable [Brandão, 1991]; Oriximiná [INPA].

***Apterostigma* Mayr, 1865**

Apterostigma auriculatum Wheeler, 1925. Municipality unavailable [Kempf, 1972c]; Belém [MZSP; Kempf, 1970; Lattke, 1997]; Marituba [CPDC].

Apterostigma collare Emery, 1896**. Belém [MZSP].

Apterostigma ierense Weber, 1937. Belém [Lattke, 1997].

Apterostigma jubatum Wheeler, 1925. Almeirim [Lattke, 1997]; Belém [MZSP; Lattke, 1997].

Apterostigma megacephala Lattke, 1999. Parauapebas [MZSP; Schultz *et al.*, 2015; Sosa-Calvo *et al.*, 2017].

Apterostigma pilosum Mayr, 1865. Melgaço [INPA]; Paragominas [INPA]; Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006].

Apterostigma robustum Emery, 1896. Belém [Lattke, 1997].

Apterostigma tropicoxa Lattke, 1997*. Marituba [CPDC].

Apterostigma urichii Forel, 1893. Municipality unavailable [Kempf, 1972c]; Belém [INPA; Kempf, 1970; Lattke, 1997]; Marituba [CPDC]; Melgaço [MPEG]; Moju [CPDC]; Oriximiná [Majer & Delabie, 1994]; Paragominas [INPA; Lattke, 1997]; Portel [Harada, 2016].

Atta Fabricius, 1804

Atta cephalotes (Linnaeus, 1758). Municipality unavailable [ANTWEB; Forel, 1904b; Forel, 1912b; Borgmeier, 1939; Gonçalves, 1942; Borgmeier, 1950a; Borgmeier, 1950b; Kempf, 1972c; Abreu *et al.*, 1986]; Almeirim [MPEG]; Ananindeua [MPEG]; Belém [MPEG]; Breves [MPEG]; Marapanim [MPEG]; Melgaço [MPEG]; Novo Repartimento [CPDC]; Paragominas [MPEG; Solar *et al.*, 2016a; Solar *et al.*, 2016b]; Parauapebas [MPEG]; Portel [Overal *et al.*, 1997; Harada, 2016]; São Félix do Xingu [MPEG]; Tucuruí [MPEG].

Atta laevigata (Smith, 1858). Municipality unavailable [Kempf, 1972c; Abreu *et al.*, 1986]; Altamira [MPEG]; Belém [MPEG]; Bujaru [MPEG]; Itaituba [MPEG]; Marabá [INPA]; Marapanim [MPEG]; Paragominas [INPA]; Parauapebas [MPEG]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [ANTWEB; INPA; Borgmeier, 1939; Gonçalves, 1942; Gonçalves, 1947; Borgmeier, 1950a; Borgmeier, 1950b; Kempf, 1972c; Vasconcelos *et al.*, 2006; Salinas, 2010]; São Félix do Xingu [MPEG]; Soure [MPEG].

Atta sexdens (Linnaeus, 1758). Municipality unavailable [Wheeler, 1942; Kempf, 1972c; Baroni Urbani, 1977; Abreu *et al.*, 1986; Longino, 1989; Brandão, 1991; Shattuck, 1994]; Almeirim [MZSP]; Belém [MPEG; MZSP; Luederwaldt, 1918; Gonçalves, 1942]; Conceição do Araguaia [MPEG]; Itaituba [MPEG]; Moju [CPDC]; Mojuí dos Campos [MPEG]; Oriximiná [Majer & Delabie, 1994]; Paragominas [CPDC; INPA; Moutinho *et al.*, 2003; Solar *et al.*, 2016a]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [INPA; MPEG; MZSP]; São Félix do Xingu [MPEG]; São João de Pirabas [MPEG]; Soure [MPEG].

Basiceros Schulz, 1906

Basiceros conjugans Brown, 1974. Canaã dos Carajás [Probst, 2015]; Parauapebas [MZSP].

Basiceros disciger (Mayr, 1887)*. Marituba [CPDC].

Basiceros militaris (Weber, 1950). Municipality unavailable [Brandão, 1991; Probst, 2015]; Belém [MZSP]; Marabá [DZUP]; Melgaço [INPA; MPEG]; Parauapebas [MPEG; MZSP]; Santarém [Vasconcelos *et al.*, 2006].

Basiceros scambognathus (Brown, 1949). Municipality unavailable [Delabie, 2000; Feitosa *et al.*, 2007; Probst, 2015]; Belém [MZSP]; Igarapé-Açu [ANTWEB; Brown Jr. & Kempf, 1960; Castilho *et al.*, 2007].

Basiceros singularis (Smith, 1858). Municipality unavailable [Probst, 2015]; Itaituba [MPEG]; Melgaço [INPA; MZSP].

Blepharidatta Wheeler, 1915

Blepharidatta brasiliensis Wheeler, 1915. Municipality unavailable [ANTWEB; da Silva, 2007; Pereira *et al.*, 2014]; Almeirim [DZUP; Brandão *et al.*, 2015]; Belém [MZSP; Kempf, 1972c; Harada & Araújo, 2002; Brandão *et al.*, 2015; Ulysséa *et al.*, 2015]; Chaves [Wheeler, 1915]; Itaituba [MPEG]; Melgaço [INPA; MPEG; Harada & Araújo, 2002]; Oriximiná [CPDC; MZSP; Majer & Delabie, 1994; Harada & Araújo, 2002; Brandão *et al.*, 2015]; Portel [Overal *et al.*, 1997; Harada & Araújo, 2002; Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006]; Terra Santa [Santos *et al.*, 2008].

Cardiocondyla Emery, 1869

Cardiocondyla emeryi Forel, 1881 (Exotic). Água Azul do Norte [MPEG]; Paragominas [Solar *et al.*, 2016a; Solar *et al.*, 2016b]; Parauapebas [MPEG]; Portel [Harada, 2016].

Cardiocondyla minutior Forel, 1899 (Exotic). Paragominas [Solar *et al.*, 2016b].

Carebara Westwood, 1840

Carebara arabara Fernández, 2010. Belém [ANTWEB; Fernández, 2004; Ulysséa & Brandão, 2013]; Santarém [Fernández, 2004; Vasconcelos *et al.*, 2006].

Carebara brevipilosa Fernández, 2004. Almeirim [DZUP]; Marabá [DZUP]; Paragominas [ANTWEB; Solar *et al.*, 2016b].

Carebara inca Fernández, 2004. Paragominas [Solar *et al.*, 2016b].

Carebara majeri Fernández, 2004. Oriximiná [CPDC; Fernández, 2004].

Carebara panamensis (Wheeler, 1925)*. Moju [CPDC]; Novo Repartimento [CPDC].

Carebara urichi (Wheeler, 1922). Almeirim [DZUP]; Belém [Fernández, 2004]; Goianésia do Pará [CPDC]; Gurupá [INPA]; Moju [CPDC]; Novo Repartimento [CPDC]; Paragominas [ANTWEB; Solar *et al.*, 2016b]; Parauapebas [MPEG]; Portel [Harada, 2016].

Cephalotes Latreille, 1802

Cephalotes adolphi (Emery, 1906)*. Almeirim [DZUP].

Cephalotes atratus (Linnaeus, 1758). Municipality unavailable [Kempf, 1972c; de Andrade & Baroni Urbani, 1999]; Abaetetuba [MPEG]; Acará [MPEG]; Alenquer [MZSP]; Almeirim [MPEG]; Altamira [MZSP]; Anajás [MPEG]; Bannach [MPEG]; Barcarena [MPEG]; Belém [INPA; MPEG; MZSP; Kempf, 1951; Kempf, 1970; de Andrade & Baroni Urbani, 1999]; Benevides [MPEG]; Bragança [MPEG]; Breves [MPEG]; Bujaru [MPEG]; Castanhal [INPA]; Conceição do Araguaia [INPA; MPEG]; Cumaru do Norte [MPEG; MZSP]; Curionópolis [MPEG]; Goianésia do Pará [CPDC; MPEG]; Itaituba [INPA; MPEG]; Jacareacanga [MZSP]; Limoeiro do Ajuru [MPEG]; Marabá [MPEG]; Marapanim [MZSP]; Marituba [ANTWEB; CPDC; MPEG]; Melgaço [INPA; MPEG; Andrade-Silva & Almeida, 2020]; Mojuí dos Campos [MZSP; de Andrade & Baroni Urbani, 1999]; Novo Repartimento [MPEG]; Óbidos [MZSP; Kempf, 1951]; Oriximiná [CPDC; INPA; MZSP]; Ourém [MPEG]; Ourilândia do Norte [MPEG]; Paragominas [CPDC; MPEG; MZSP; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Peixe-Boi [MPEG]; Portel [Overal *et al.*, 1997; Harada, 2016]; Primavera [MPEG]; Santa Bárbara do Pará [MPEG]; Santarém [MZSP; Kempf, 1951; Jeanne, 1979; Majer & Delabie, 1994; de Andrade & Baroni Urbani, 1999]; Vasconcelos *et al.*, 2006]; São Caetano de Odivelas [MPEG]; São Félix do Xingu [MPEG]; São Francisco do Pará [MPEG]; São João de Pirabas [MPEG]; São Miguel do Guamá [MPEG]; São Sebastião da Boa Vista [MPEG]; Senador José Porfírio [MPEG]; Soure [MPEG]; Terra Santa [Santos *et al.*, 2008]; Tucumã [MPEG]; Tucuruí [INPA; MPEG]; Viseu [MPEG].

Cephalotes clypeatus (Fabricius, 1804). Municipality unavailable [Kempf, 1972c; de Andrade & Baroni Urbani, 1999]; Belém [MPEG]; Cumaru do Norte [MZSP]; Mojuí dos Campos [MZSP]; Oriximiná [CPDC; MZSP]; Santarém [Mann, 1916; Kempf, 1951; Vasconcelos *et al.*, 2006]; Senador José Porfírio [MPEG]; Tucuruí [MPEG].

Cephalotes complanatus (Guérin-Méneville, 1844). Municipality unavailable [de Andrade & Baroni Urbani, 1999].

Cephalotes cordatus (Smith, 1853). Municipality unavailable [Emery, 1894b; Brandão, 1991; de Andrade & Baroni Urbani, 1999]; Bannach [MPEG]; Belém [Kempf, 1951]; Benevides [MPEG]; Chaves [MPEG]; Conceição do Araguaia [MPEG]; Paragominas [Solar *et al.*, 2016b]; Primavera [MPEG]; Santarém [ANTWEB; Emery, 1894b; Kempf, 1951; Kempf, 1972c]; Santarém Novo [MPEG]; São João de Pirabas [MPEG].

Cephalotes depressus (Klug, 1824). Municipality unavailable [Kempf, 1972c; Brandão, 1991; de Andrade & Baroni Urbani, 1999]; Altamira [MZSP]; Conceição do Araguaia [INPA; MPEG; MZSP]; Curionópolis [MPEG]; Mojuí dos Campos [MZSP; de Andrade & Baroni Urbani, 1999]; Monte Alegre [MZSP]; Óbidos [MZSP; Kempf, 1951]; Oriximiná [MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém Novo [MPEG].

Cephalotes duckei (Forel, 1906). Municipality unavailable [de Andrade & Baroni Urbani, 1999]; Bannach [MPEG]; Óbidos [MZSP].

Cephalotes eduarduli (Forel, 1921). Municipality unavailable [de Andrade & Baroni Urbani, 1999].

Cephalotes grandinosus (Smith, 1860). Municipality unavailable [Emery, 1894b; Forel, 1912b; Kempf, 1972c; Brandão, 1991; de Andrade & Baroni Urbani, 1999]; Belém [Kempf, 1952]; Goianésia do Pará [CPDC]; Marituba [CPDC]; Óbidos [MZSP]; Santarém [INPA]; São João de Pirabas [MPEG].

Cephalotes inaequalis (Mann, 1916). Municipality unavailable [de Andrade & Baroni Urbani, 1999]; Bannach [MPEG]; Breves [MPEG]; Jacareacanga [MZSP]; Marabá [MPEG]; Oriximiná [CPDC]; Santa Bárbara do Pará [MPEG]; Soure [MPEG].

Cephalotes laminatus (Smith, 1860). Municipality unavailable [Emery, 1894b; Kempf, 1951; Kempf, 1972c; Brandão, 1991; de Andrade & Baroni Urbani, 1999]; Bannach [MPEG]; Belém [MZSP; de Andrade & Baroni Urbani, 1999]; Parauapebas [MZSP]; Santarém Novo [MPEG]; Tucumã [MPEG].

Cephalotes maculatus (Smith, 1876). Municipality unavailable [Emery, 1894b; de Andrade & Baroni Urbani, 1999]; Bannach [MPEG]; Capanema [MZSP]; Conceição do Araguaia [MPEG]; Igarapé-Açu [MZSP]; Jacareacanga [MZSP]; Melgaço [MPEG]; Oriximiná [MZSP]; Paragominas [Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Santarém [INPA; Kempf, 1952; Kempf, 1972c; Vasconcelos *et al.*, 2006]; Santarém Novo [MPEG]; São João de Pirabas [MPEG].

Cephalotes manni (Kempf, 1951). Municipality unavailable [Kempf, 1972c; Brandão, 1991; de Andrade & Baroni Urbani, 1999]; Oriximiná [MZSP]; Tucuruí [MPEG].

Cephalotes marginatus (Fabricius, 1804). Municipality unavailable [de Andrade & Baroni Urbani, 1999]; Abaetetuba [MPEG]; Acará [MPEG]; Almeirim [MPEG]; Bannach [MPEG]; Belém [MPEG; de Andrade & Baroni Urbani, 1999]; Breu Branco [MPEG]; Bujaru [MPEG]; Castanhal [MPEG]; Conceição do Araguaia [MPEG]; Itaituba [MPEG]; Paragominas [MPEG]; Parauapebas [MPEG]; Santarém [INPA]; São Caetano de Odivelas [MPEG]; Senador José Porfírio [MPEG]; Tucuruí [MPEG]; Viseu [MPEG].

Cephalotes minutus (Fabricius, 1804). Municipality unavailable [Forel, 1912b; Kempf, 1951; Kempf, 1972c; Brandão, 1991; de Andrade & Baroni Urbani, 1999]; Alenquer [MPEG]; Almeirim [MZSP]; Bannach [MPEG]; Belém [INPA; MPEG; MZSP; Kempf, 1951; de Andrade & Baroni Urbani, 1999]; Bragança [MPEG]; Conceição do Araguaia [INPA]; Jacareacanga [MZSP]; Maracanã [INPA]; Mojuí dos Campos [de Andrade & Baroni Urbani, 1999]; Novo Repartimento [CPDC]; Óbidos [MZSP]; Oriximiná [CPDC; INPA; Majer & Delabie, 1994]; Ourilândia do Norte [MPEG]; Parauapebas [MPEG; MZSP]; Primavera [MPEG]; São João de Pirabas [MPEG]; Senador José Porfirio [MPEG]; Tucuruí [MPEG].

Cephalotes oculatus (Spinola, 1851). Municipality unavailable [Forel, 1912b; de Andrade & Baroni Urbani, 1999]; Acará [MPEG]; Almeirim [MPEG]; Altamira [MZSP]; Ananindeua [MZSP]; Bannach [MPEG]; Belém [MPEG;

MZSP; Kempf, 1951; Kempf, 1970; Kempf, 1972c; de Andrade & Baroni Urbani, 1999]; Bujaru [MPEG]; Conceição do Araguaia [MPEG]; Goianésia do Pará [CPDC]; Itaituba [MPEG]; Marabá [DZUP; MPEG]; Novo Repartimento [CPDC; MPEG]; Óbidos [Kempf, 1959d]; Ourém [MPEG]; Ourilândia do Norte [MPEG]; Paragominas [CPDC; MPEG; MZSP; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Santa Bárbara do Pará [MPEG]; Santa Maria do Pará [MPEG]; São Félix do Xingu [MPEG]; Tucuruí [MPEG].

Cephalotes opacus Santschi, 1920. Municipality unavailable [Kempf, 1960b; Kempf, 1972c; de Andrade & Baroni Urbani, 1999]; Bannach [MPEG]; Belém [de Andrade & Baroni Urbani, 1999]; Conceição do Araguaia [INPA]; Óbidos [MZSP; Kempf, 1951; Kempf, 1974]; Terra Santa [Santos *et al.*, 2008].

Cephalotes pallens (Klug, 1824). Municipality unavailable [Kempf, 1972c; Brandão, 1991; de Andrade & Baroni Urbani, 1999]; Bannach [MPEG]; Conceição do Araguaia [INPA]; Maracanã [MPEG]; Santa Bárbara do Pará [MPEG]; Santarém [INPA; Vasconcelos *et al.*, 2006]; São João de Pirabas [MPEG]; Senador José Porfírio [MPEG]; Tucuruí [MPEG].

Cephalotes pallidoides De Andrade, 1999. Municipality unavailable [de Andrade & Baroni Urbani, 1999]; Bannach [MPEG]; Conceição do Araguaia [INPA].

Cephalotes pallidus De Andrade, 1999*. Novo Repartimento [CPDC]; Primavera [MPEG].

Cephalotes palustris De Andrade, 1999. Municipality unavailable [de Andrade & Baroni Urbani, 1999]; Belém [MZSP; de Andrade & Baroni Urbani, 1999]; Mojuí dos Campos [de Andrade & Baroni Urbani, 1999]; Oriximiná [INPA]; Paragominas [MZSP].

Cephalotes pavonii (Latreille, 1809). Municipality unavailable [de Andrade & Baroni Urbani, 1999]; Altamira [MZSP]; Goianésia do Pará [CPDC]; Parauapebas [MZSP]; Santarém [INPA; Vasconcelos *et al.*, 2006]; São Félix do Xingu [MPEG].

Cephalotes persimilis De Andrade, 1999. Municipality unavailable [de Andrade & Baroni Urbani, 1999].

Cephalotes placidus (Smith, 1860). Municipality unavailable [de Andrade & Baroni Urbani, 1999]; Almeirim [DZUP]; Conceição do Araguaia [INPA]; Jacareacanga [MZSP]; Juruti [MZSP]; Marabá [MPEG]; Oriximiná [CPDC; INPA]; Terra Santa [Santos *et al.*, 2008].

Cephalotes pusillus (Klug, 1824). Municipality unavailable [Forel, 1906; Kempf, 1951; Kempf, 1972c; Brandão, 1991; de Andrade & Baroni Urbani, 1999]; Acará [Kempf, 1951]; Almeirim [MZSP]; Bannach [MPEG]; Belém [MPEG; MZSP; de Andrade & Baroni Urbani, 1999]; Benevides [MPEG]; Canaã dos Carajás [MZSP]; Conceição do Araguaia [INPA; MPEG; MZSP]; Curionópolis [MPEG]; Itaituba [MPEG; MZSP]; Jacareacanga [MZSP]; Mojuí dos Campos [MZSP; de Andrade & Baroni Urbani, 1999]; Óbidos [MZSP]; Oriximiná [MZSP]; Paragominas [Solar *et al.*, 2016b]; Parauapebas [MPEG]; Prainha [Kempf, 1951]; Santarém [ANTWEB; DZUP; MZSP; Kempf, 1951; de Andrade & Baroni Urbani, 1999]; São Félix do Xingu [MPEG]; São João do Araguaia [INPA; Vasconcelos *et al.*, 2006].

Cephalotes serraticeps (Smith, 1858). Municipality unavailable [Kempf, 1972c; de Andrade & Baroni Urbani, 1999]; Bannach [MPEG]; Belém [MZSP; de Andrade & Baroni Urbani, 1999]; Marabá [MPEG]; Parauapebas [MPEG]; São Félix do Xingu [MPEG]; Tucumã [MPEG]; Tucuruí [MPEG].

Cephalotes simillimus (Kempf, 1951). Municipality unavailable [de Andrade & Baroni Urbani, 1999]; Belém [MZSP; de Andrade & Baroni Urbani, 1999]; Óbidos [INPA]; Santarém [INPA; Vasconcelos *et al.*, 2006]; Soure [MPEG]; Terra Santa [Santos *et al.*, 2008].

Cephalotes spinosus (Mayr, 1862). Municipality unavailable [Kempf, 1972c; Brandão, 1991; de Andrade & Baroni Urbani, 1999]; Itaituba [MPEG]; Jacareacanga [MZSP]; Parauapebas [MZSP].

Cephalotes umbraculatus (Fabricius, 1804). Municipality unavailable [Kempf, 1972c; Brandão, 1991; de Andrade & Baroni Urbani, 1999]; Bannach [MPEG]; Belém [MPEG; MZSP; de Andrade & Baroni Urbani, 1999]; Conceição do Araguaia [MPEG]; Óbidos [MZSP]; Oriximiná [MZSP]; Santarém [Vasconcelos *et al.*, 2006]; Senador José Porfírio [MPEG].

Crematogaster Lund, 1831

Crematogaster abstinens Forel, 1899. Municipality unavailable [Longino, 2003]; Goianésia do Pará [CPDC]; Mojuí dos Campos [ANTWEB]; Novo Repartimento [CPDC]; Portel [Harada, 2016]; Santarém [ANTWEB].

Crematogaster acuta (Fabricius, 1804). Municipality unavailable [Kempf, 1972c; Felizardo & Harada, 2007]; Jacareacanga [MZSP]; Moju [CPDC]; Novo Repartimento [CPDC]; Oriximiná [CPDC; Majer & Delabie, 1994]; Santarém [Vasconcelos *et al.*, 2006].

Crematogaster brasiliensis Mayr, 1878. Municipality unavailable [Forel, 1912c; Kempf, 1972c; Brandão, 1991; Longino, 2003; Felizardo & Harada, 2007]; Almeirim [DZUP; MZSP]; Belém [MZSP; Kempf, 1970]; Marituba [CPDC]; Melgaço [ANTWEB; INPA; MPEG; Souza *et al.*, 2007]; Moju [CPDC]; Mojuí dos Campos [ANTWEB]; Novo Repartimento [CPDC]; Óbidos [MZSP]; Oriximiná [CPDC; MZSP]; Paragominas [CPDC; Solar *et al.*, 2016b]; Parauapebas [ANTWEB]; Portel [Harada, 2016]; Prainha [ANTWEB]; Santarém [Vasconcelos *et al.*, 2006]; Tucuruí [ANTWEB].

Crematogaster bryophilia Longino, 2003. Municipality unavailable [Felizardo & Harada, 2007].

Crematogaster carinata Mayr, 1862. Municipality unavailable [Forel, 1904a; Forel, 1912c; Kempf, 1972c; Felizardo & Harada, 2007]; Água Azul do Norte [MPEG]; Almeirim [DZUP; INPA]; Bannach [MPEG]; Belém [ANTWEB]; Goianésia do Pará [CPDC]; Marituba [CPDC]; Moju [CPDC]; Parauapebas [MPEG]; Portel [Harada, 2016]; Santarém [Jeanne, 1979]; São Félix do Xingu [MPEG].

Crematogaster crinosa Mayr, 1862. Municipality unavailable [Longino, 2003; Felizardo & Harada, 2007]; Almeirim [DZUP]; Belém [ANTWEB]; Melgaço [MPEG]; Mojuí dos Campos [ANTWEB]; Portel [Harada, 2016]; São Félix do Xingu [MPEG]; Tucuruí [ANTWEB].

Crematogaster curvispinosa Mayr, 1862. Municipality unavailable [Kempf, 1972c; Longino, 2003]; Belém [MZSP; Kempf, 1970]; Marituba [CPDC]; Mojuí dos Campos [ANTWEB]; Paragominas [Solar *et al.*, 2016b]; Parauapebas [ANTWEB]; Portel [Harada, 2016].

Crematogaster distans Mayr, 1870. Municipality unavailable [ANTWEB; Forel, 1904b; Kempf, 1972c; Longino, 2003; Ulysséa *et al.*, 2015]; Belém [ANTWEB; Kempf, 1968b]; Oriximiná [CPDC]; Tucuruí [ANTWEB].

Crematogaster egregior Forel, 1912. Municipality unavailable [ANTWEB; Forel, 1912c]; Belém [ANTWEB; Kempf, 1970; Kempf, 1972c]; Oriximiná [CPDC]; Parauapebas [ANTWEB].

Crematogaster erecta Mayr, 1866. Municipality unavailable [Kempf, 1972c; Longino, 2003; Felizardo & Harada, 2007]; Almeirim [INPA]; Belém [ANTWEB; MZSP; Kempf, 1968b; Kempf, 1970]; Goianésia do Pará [CPDC]; Gurupá [INPA]; Jacareacanga [MZSP]; Marituba [CPDC]; Moju [CPDC]; Mojuí dos Campos [ANTWEB]; Novo Repartimento [CPDC]; Paragominas [Solar *et al.*, 2016a; Solar *et al.*, 2016b]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Crematogaster evallans Forel, 1907. Altamira [CPDC]; Oriximiná [CPDC]; Parauapebas [ANTWEB]; Terra Santa [Santos *et al.*, 2008].

Crematogaster flavosensitiva Longino, 2003. Municipality unavailable [Felizardo & Harada, 2007]; Almeirim [DZUP]; Conceição do Araguaia [MPEG]; Marabá [DZUP; INPA]; Melgaço [ANTWEB; MPEG; Souza *et al.*, 2007]; Paragominas [Solar *et al.*, 2016b]; Parauapebas [ANTWEB]; Portel [Harada, 2016].

Crematogaster huberi (Forel, 1907). Municipality unavailable [Forel, 1907].

Crematogaster levior Longino, 2003. Municipality unavailable [Longino, 2003]; Belém [ANTWEB]; Melgaço [ANTWEB; INPA; Souza *et al.*, 2007; Andrade-Silva & Almeida, 2020]; Mojuí dos Campos [ANTWEB]; Paragominas [Solar *et al.*, 2016b]; Parauapebas [ANTWEB]; Portel [Harada, 2016]; Tucuruí [ANTWEB].

Crematogaster limata Smith, 1858. Municipality unavailable [ANTWEB; Forel, 1912c; Kempf, 1972c; Longino, 2003; Felizardo & Harada, 2007]; Almeirim [DZUP; MZSP]; Bannach [MPEG]; Belém [MZSP; Kempf, 1970]; Canaã dos Carajás [INPA]; Goianésia do Pará [CPDC]; Marabá [DZUP]; Marituba [CPDC]; Moju [CPDC]; Mojuí dos Campos [ANTWEB]; Novo Repartimento [CPDC]; Oriximiná [CPDC; MZSP]; Ourilândia do Norte [MPEG]; Paragominas [Solar *et al.*, 2016b]; Parauapebas [ANTWEB; MPEG]; Portel [Harada, 2016]; Santarém [MZSP; Vasconcelos *et al.*, 2006]; São Félix do Xingu [MPEG]; Terra Santa [Santos *et al.*, 2008]; Tucumã [MPEG].

Crematogaster longispina Emery, 1890. Moju [CPDC]; Novo Repartimento [CPDC]; Terra Santa [Santos *et al.*, 2008].

Crematogaster nigropilosa Mayr, 1870. Municipality unavailable [Longino, 2003]; Almeirim [DZUP; MZSP]; Itaituba [MPEG]; Melgaço [ANTWEB; INPA; Souza *et al.*, 2007]; Mojuí dos Campos [ANTWEB]; Parauapebas [ANTWEB]; Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006]; Terra Santa [Santos *et al.*, 2008].

Crematogaster obscurata Emery, 1895. Municipality unavailable [Felizardo & Harada, 2007]; Paragominas [Morgan & MacKay, 2017].

Crematogaster quadriformis Roger, 1863. Municipality unavailable [Felizardo & Harada, 2007]; Mojuí dos Campos [ANTWEB]; Parauapebas [ANTWEB]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Crematogaster rochae Forel, 1903. Municipality unavailable [Longino, 2003]; Mojuí dos Campos [ANTWEB].

Crematogaster sotobosque Longino, 2003. Municipality unavailable [Longino, 2003; Felizardo & Harada, 2007]; Almeirim [DZUP]; Belém [ANTWEB]; Conceição do Araguaia [MPEG]; Marituba [CPDC]; Melgaço [ANTWEB; INPA; MPEG; Souza *et al.*, 2007]; Paragominas [Solar *et al.*, 2016b]; Parauapebas [ANTWEB]; Portel [Harada, 2016].

Crematogaster stollii Forel, 1885. Municipality unavailable [Kempf, 1972c; Longino, 2003; Felizardo & Harada, 2007]; Almeirim [DZUP]; Belém [ANTWEB; Kempf, 1968b]; Portel [Harada, 2016]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Crematogaster sumichrasti Mayr, 1870. Municipality unavailable [Brandão, 1991]; Belém [Kempf, 1970].

Crematogaster tenuicula Forel, 1904. Municipality unavailable [ANTWEB; Wheeler, 1916a; Longino, 2003; Felizardo & Harada, 2007]; Belém [ANTWEB; Kempf, 1972c]; Marituba [CPDC]; Melgaço [ANTWEB; INPA; Souza *et al.*, 2007]; Moju [CPDC]; Novo Repartimento [CPDC]; Oriximiná [CPDC]; Paragominas [CPDC; Solar *et al.*, 2016a; Solar *et al.*, 2016b]; Parauapebas [ANTWEB]; Portel [Harada, 2016]; Tailândia [CPDC].

Crematogaster victimia Smith, 1858. Municipality unavailable [de Zolessi *et al.*, 1989]; Chaves [Wheeler, 1915]; Mojuí dos Campos [ANTWEB]; Oriximiná [CPDC]; Parauapebas [ANTWEB]; Santarém [ANTWEB; Kempf, 1972c; Zolessi *et al.*, 1989]; Terra Santa [Santos *et al.*, 2008].

Crematogaster wardi Longino, 2003. Marituba [CPDC]; Terra Santa [Santos *et al.*, 2008].

***Cryptomyrmex* Fernández, 2004**

Cryptomyrmex longinodus (Fernández & Brandão, 2003). Terra Santa [ANTWEB].

***Cyphomyrmex* Mayr, 1862**

Cyphomyrmex hamulatus Weber, 1938. Oriximiná [CPDC; MZSP; Majer & Delabie, 1994]; Portel [Harada, 2016]; Tailândia [MPEG].

Cyphomyrmex laevigatus Weber, 1938. Municipality unavailable [Kempf, 1972c]; Almeirim [DZUP]; Belém [MZSP; Kempf, 1968a; Snelling & Longino, 1992; Albuquerque, 2014]; Marituba [CPDC]; Melgaço [INPA; MPEG]; Moju [CPDC]; Nova Ipixuna [MPEG]; Novo Repartimento [CPDC]; Paragominas [CPDC; Solar *et al.*, 2016b]; Parauapebas [MPEG]; Portel [MPEG; Harada, 2016]; Tailândia [MPEG].

Cyphomyrmex minutus Mayr, 1862. Almeirim [DZUP]; Conceição do Araguaia [MPEG]; Curionópolis [MPEG]; Marabá [DZUP]; Mojuí dos Campos [MZSP]; Paragominas [MPEG; Albuquerque, 2014]; Santarém [INPA; Vasconcelos *et al.*, 2006]; Santarém Novo [INPA].

Cyphomyrmex peltatus Kempf, 1966. Água Azul do Norte [MPEG]; Belém [INPA]; Conceição do Araguaia [MPEG]; Curionópolis [MPEG]; Goianésia do Pará [CPDC]; Marituba [CPDC]; Melgaço [INPA; MPEG]; Moju [CPDC]; Novo Repartimento [CPDC]; Parauapebas [MPEG].

Cyphomyrmex rimosus (Spinola, 1851). Municipality unavailable [Weber, 1941; Weber, 1946; Kempf, 1972c; de Zolessi *et al.*, 1989]; Belém [MPEG; MZSP; Kempf, 1972c; Zolessi *et al.*, 1989]; Chaves [Wheeler, 1915]; Conceição do Araguaia [MPEG]; Paragominas [Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Portel [Harada, 2016]; Santa Bárbara do Pará [MPEG; Albuquerque, 2014]; Santarém [ANTWEB; INPA; Vasconcelos *et al.*, 2006]; Santarém Novo [MPEG]; Tucuruí [MPEG; Albuquerque, 2014].

Cyphomyrmex transversus Emery, 1894. Municipality unavailable [Kempf, 1972c]; Marituba [CPDC]; Moju [CPDC]; Novo Repartimento [CPDC]; Óbidos [MZSP; Kempf, 1966]; Oriximiná [MZSP]; Paragominas [MPEG]; Santa Maria das Barreiras [USNM]; Santarém [SIBR]; Soure [MZSP]; Vigia [Kempf, 1966].

Cyphomyrmex vorticis Weber, 1940*. Itaituba [MPEG].

***Daceton* Perty, 1833**

Daceton armigerum (Latreille, 1802). Municipality unavailable [Kempf, 1972c; Azorsa & Sosa-Calvo, 2008]; Almeirim [DZUP; MPEG]; Altamira [MPEG]; Bannach [MPEG]; Belém [MPEG; MZSP; Mann, 1916; Kempf, 1970]; Benevides [MPEG]; Conceição do Araguaia [INPA; MPEG; MZSP]; Faro [INPA]; Gurupá [INPA]; Itaituba [MPEG]; Marabá [MPEG]; Melgaço [DZUP; MPEG]; Medicilândia [CPDC]; Monte Alegre [MPEG]; Novo Repartimento [MPEG]; Óbidos [MZSP; Forel, 1907]; Oriximiná [CPDC; INPA; MZSP]; Paragominas [MZSP]; Parauapebas [MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Primavera [MPEG]; Juruuti [MZSP]; Santarém [MPEG; Vasconcelos *et al.*, 2006]; São Félix do Xingu [MPEG]; São Geraldo do Araguaia [MPEG];

Senador José Porfírio [MPEG]; Terra Santa [Santos *et al.*, 2008]; Tucumã [MPEG]; Tucuruí [MPEG]; Vitória do Xingu [MPEG]; Viseu [MZSP].

***Hylomyrma* Forel, 1912**

Hylomyrma balzani (Emery, 1894). Moju [CPDC]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Hylomyrma blandiens Kempf, 1961. Belém [Kempf, 1975a]; Curionópolis [MPEG]; Parauapebas [MPEG].

Hylomyrma immanis Kempf, 1973*. Marituba [CPDC]; Melgaço [MPEG].

Hylomyrma reginae Kutter, 1977*. Belém [MZSP]; Marituba [MZSP].

Hylomyrma reitteri (Mayr, 1887). Melgaço [INPA]; Oriximiná [Majer & Delabie, 1994].

***Kalathomyrmex* Klingenberg & Brandão, 2009**

Kalathomyrmex emeryi (Forel, 1907). Santarém [INPA; MZSP; Klingenberg & Brandão, 2009].

***Lachnomyrmex* Wheeler, 1910**

Lachnomyrmex amazonicus Feitosa & Brandão, 2008. Melgaço [ANTWEB; DZUP; MZSP; Feitosa & Brandão, 2008]; Parauapebas [ANTWEB; INPA; MZSP; Feitosa & Brandão, 2008; Ulysséa *et al.*, 2015].

Lachnomyrmex pilosus Weber, 1950. Marituba [Feitosa & Brandão, 2008]; Melgaço [DZUP; INPA; MZSP; Feitosa & Brandão, 2008]; Portel [Harada, 2016].

***Megalomyrmex* Forel, 1885**

Megalomyrmex ayri Brandão, 1990*. Itaituba [MPEG].

Megalomyrmex balzani Emery, 1894. Oriximiná [INPA]; Terra Santa [Santos *et al.*, 2008].

Megalomyrmex cuatiara Brandão, 1990*. Almeirim [MPEG]; Conceição do Araguaia [MPEG]; Itaituba [MPEG]; Marabá [DZUP]; Marituba [CPDC]; Melgaço [MPEG]; Primavera [MPEG].

Megalomyrmex drifti Kempf, 1961. Curionópolis [MPEG]; Parauapebas [MZSP]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Megalomyrmex emeryi Forel, 1904. Terra Santa [Santos *et al.*, 2008].

Megalomyrmex incisus Smith, 1947. Itaituba [MPEG]; Melgaço [MPEG]; Paragominas [MPEG]; Primavera [MPEG]; Santarém [Vasconcelos *et al.*, 2006].

Megalomyrmex leoninus Forel, 1885*. Oriximiná [CPDC].

Megalomyrmex mondaboroides Longino, 2010*. Melgaço [MPEG].

Megalomyrmex silvestrii Wheeler, 1909*. Bagre [MPEG]; Curionópolis [MPEG]; Igarapé-Açu [MPEG]; Itaituba [MPEG]; Paragominas [MPEG]; Parauapebas [MPEG]; São Félix do Xingu [MPEG].

Megalomyrmex symmetochus Wheeler, 1925. Municipality unavailable [Brandão, 1991]; Belém [MZSP; Brandão, 1990; Brandão, 2003]; Melgaço [MPEG]; Paragominas [MZSP].

Megalomyrmex wallacei Mann, 1916. Municipality unavailable [Longino, 2010]; Breu Branco [Brandão, 2003]; Curralinho [MPEG]; Melgaço [MPEG]; Tucuruí [MZSP].

***Monomorium* Mayr, 1855**

Monomorium floricola (Jerdon, 1851) (Exotic). Almeirim [DZUP]; Melgaço [MPEG]; Paragominas [Solar *et al.*, 2016b]; Parauapebas [MPEG]; Santarém [Jeanne, 1979]; Vitória do Xingu [MPEG].

Monomorium pharaonis (Linnaeus, 1758) (Exotic). Municipality unavailable [Kempf, 1972c]; Almeirim [DZUP]; Conceição do Araguaia [MPEG]; Jacareacanga [MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Tucuruí [MPEG].

***Mycetagoicus* Brandão & Mayhé-Nunes, 2001**

Mycetagoicus inflatus Brandão & Mayhé-Nunes, 2008. Municipality unavailable [Brandão & Mayhé-Nunes, 2008]; Santa Maria das Barreiras [MZSP; Ješovník *et al.*, 2013]; Santana do Araguaia [MZSP].

***Mycetarotes* Emery, 1913**

Mycetarotes acutus Mayhé-Nunes, 1995. Municipality unavailable [Mayhé-Nunes & Brandão, 2006]; Melgaço [INPA]; Portel [Harada, 2016].

Mycetarotes parallelus (Emery, 1906). Melgaço [INPA]; Portel [Harada, 2016].

***Mycetomoellerius* Solomon *et al.*, 2019**

Mycetomoellerius farinosus (Emery, 1894). Municipality unavailable [ANTWEB; Emery, 1894b; Weber, 1958]; Belém [Kempf, 1972c]; Marituba [CPDC]; Moju [CPDC]; Novo Repartimento [CPDC]; Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006].

Mycetomoellerius holmgreni (Wheeler, 1925). Óbidos [Mayhé-Nunes & Brandão, 2005].

Mycetomoellerius opulentus (Mann, 1922). Belém [MZSP; Mayhé-Nunes & Brandão, 2002]; Goianésia do Pará [CPDC]; Marituba [CPDC]; Portel [Harada, 2016].

Mycetomoellerius relictus (Borgmeier, 1934). Municipality unavailable [Kempf, 1972c]; Belém [MZSP; Mayhé-Nunes & Brandão, 2002]; Goianésia do Pará [CPDC]; Marituba [CPDC]; Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006].

Mycetomoellerius ruthae (Weber, 1937). Portel [Harada, 2016].

Mycetophylax Emery, 1913

Mycetophylax bigibbosus (Emery, 1894). Municipality unavailable [Emery, 1894b; Weber, 1945; Weber, 1946; Kempf, 1959c; Kempf, 1964a]; Belém [MZSP; Kempf, 1970; Kempf, 1972c]; Benevides [INPA; MZSP]; Marituba [MZSP].

Mycetophylax conformis (Mayr, 1884). Municipality unavailable [Kempf, 1972c; Kempf, 1978]; Salinópolis [MZSP; Kempf, 1962; Klingenberg & Brandão, 2009].

Mycetophylax faunulus (Wheeler, 1925). Municipality unavailable [Mayhé-Nunes & Jaffé, 1998]; Belém [MZSP]; Parauapebas [MZSP]; Oriximiná [Majer & Delabie, 1994].

Mycetophylax lectus (Forel, 1911). Capanema [Kempf, 1964a]; Conceição do Araguaia [MPEG]; Santarém [INPA].

Mycetophylax vallensis (Kusnezov, 1949)*. Belém [MZSP]; Capanema [MZSP].

Mycocepurus Forel, 1893

Mycocepurus goeldii (Forel, 1893). Municipality unavailable [Kempf, 1972c]; Água Azul do Norte [MPEG]; Belterra [MZSP; Kempf, 1963a]; Marituba [CPDC]; Novo Repartimento [CPDC]; Óbidos [MPEG; MZSP; Kempf, 1963a]; Oriximiná [INPA]; Parauapebas [MPEG]; Santarém [MZSP; Kempf, 1963a].

Mycocepurus obsoletus Emery, 1913. Melgaço [INPA]; Santarém [ANTWEB; Emery, 1913a; Kempf, 1963a; Kempf, 1972c].

Mycocepurus smithii (Forel, 1893). Municipality unavailable [Kempf, 1972c; MacKay *et al.*, 2004]; Almeirim [DZUP]; Belém [MZSP; Kempf, 1963a]; Marabá [DZUP; INPA]; Paragominas [Harada *et al.*, 2013; Solar *et al.*, 2016b]; Parauapebas [MZSP]; Portel [Harada, 2016]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Myrmicocrypta Smith, 1860

Myrmicocrypta bucki Sosa-Calvo & Schultz, 2010. Paragominas [Solar *et al.*, 2016b].

Myrmicocrypta foreli Mann, 1916. Marabá [INPA]; Paragominas [Solar *et al.*, 2016b]; Portel [Harada, 2016]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Nesomyrmex Wheeler, 1910

Nesomyrmex anduzei (Weber, 1943)*. Belém [MPEG].

Nesomyrmex asper (Mayr, 1887). Municipality unavailable [ANTWEB; Emery, 1896c; Kempf, 1972c; Longino, 2006b]; Capanema [Kempf, 1959b]; Santarém [Vasconcelos *et al.*, 2006].

Nesomyrmex brasiliensis (Kempf, 1958)*. Marabá [DZUP].

Nesomyrmex pleuriticus (Kempf, 1959)*. Belém [MZSP].

Nesomyrmex spininodis (Mayr, 1887). Municipality unavailable [Kempf, 1972c]; Belém [Kempf, 1959b]; Paragominas [ANTWEB; Solar *et al.*, 2016b]; Parauapebas [MPEG].

Ochetomyrmex Mayr, 1878

Ochetomyrmex neopolitus Fernández, 2003. Almeirim [DZUP]; Conceição do Araguaia [MPEG]; Curionópolis [MPEG]; Goianésia do Pará [CPDC]; Marabá [DZUP]; Marituba [CPDC; Meurer *et al.*, 2015]; Melgaço [MPEG]; Mendoza-Penagos *et al.*, 2020]; Moju [CPDC; Meurer *et al.*, 2015]; Novo Repartimento [CPDC]; Oriximiná [CPDC; Meurer *et al.*, 2015]; Paragominas [CPDC; Meurer *et al.*, 2015; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; São Félix do Xingu [MPEG]; Tailândia [CPDC]; Terra Santa [Santos *et al.*, 2008; Meurer *et al.*, 2015].

Ochetomyrmex semipolitus Mayr, 1878. Municipality unavailable [Brandão, 1991; Meurer *et al.*, 2015]; Almeirim [DZUP]; Conceição do Araguaia [MPEG]; Melgaço [INPA; MPEG]; Mojuí dos Campos [Fernández, 2003]; Oriximiná [Majer & Delabie, 1994]; Paragominas [Solar *et al.*, 2016b]; Santarém [Vasconcelos *et al.*, 2006]; Terra Santa [Santos *et al.*, 2008].

Octostruma Forel, 1912

Octostruma amrishi (Makhan, 2007). Belém [ANTWEB]; Marituba [CPDC].

Octostruma balzani (Emery, 1894). Municipality unavailable [Kempf, 1972c]; Água Azul do Norte [MPEG]; Curionópolis [MPEG]; Belém [Brown Jr. & Kempf, 1960]; Chaves [Wheeler, 1915]; Marituba [CPDC]; Melgaço [INPA]; Moju [CPDC]; Novo Repartimento [CPDC]; Paragominas [CPDC]; Parauapebas [MPEG]; Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006].

Octostruma batesi (Emery, 1894)*. Marituba [CPDC]; Moju [CPDC]; Parauapebas [MZSP].

Octostruma betschi Perrault, 1988. Belém [ANTWEB]; Capanema [MZSP]; Marabá [DZUP]; Marituba [CPDC]; Melgaço [MPEG]; Parauapebas [MZSP]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Octostruma iheringi (Emery, 1888). Almeirim [DZUP]; Capanema [MZSP]; Conceição do Araguaia [MPEG]; Curionópolis [MPEG]; Melgaço [MPEG]; Novo Repartimento [CPDC]; Paragominas [ANTWEB; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Octostruma obtusidens Longino, 2013**. Conceição do Araguaia [MPEG].

Octostruma pexidorsum Longino, 2013**. Belém [MZSP]; Portel [MPEG].

Oxyepoecus Santschi, 1926

Oxyepoecus inquilinus (Kusnezov, 1952). Paragominas [ANTWEB; Solar *et al.*, 2016b].

Oxyepoecus vezenyii (Forel, 1907)*. Maracanã [MPEG]; Portel [MPEG].

Paratrachymyrmex Solomon *et al.*, 2019

Paratrachymyrmex bugnioni (Forel, 1912). Marabá [DZUP]; Paragominas [Solar *et al.*, 2016b]; Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006].

Paratrachymyrmex carib (Weber, 1945)**. Belém [MZSP].

Paratrachymyrmex cornetzi (Forel, 1912)*. Goianésia do Pará [CPDC]; Moju [CPDC].

Paratrachymyrmex diversus (Mann, 1916). Municipality unavailable [Kempf, 1972c]; Altamira [MZSP]; Óbidos [MZSP]; Oriximiná [MZSP].

Paratrachymyrmex levis (Weber, 1938). Melgaço [INPA]; Portel [Harada, 2016].

Paratrachymyrmex mandibularis (Weber, 1938). Goianésia do Pará [CPDC]; Portel [Harada, 2016].

Pheidole Westwood, 1839

Pheidole aberrans Mayr, 1868. Municipality unavailable [INPA].

Pheidole aenescens Wilson, 2003. Belém [MCZC; Wilson, 2003].

Pheidole alexeter Wilson, 2003. Municipality unavailable [MCZC]; Vigia [Wilson, 2003].

Pheidole allarmata Wilson, 2003. Municipality unavailable [ANTWEB]; Belém [MCZC]; Marituba [Wilson, 2003].

Pheidole araneoides Wilson, 2003. Parauapebas [Wilson, 2003]; Senador José Porfírio [MCZC].

Pheidole astur Wilson, 2003*. Marabá [DZUP]; Melgaço [MPEG].

Pheidole biconstricta Mayr, 1870. Municipality unavailable [Kempf, 1972c]; Almeirim [DZUP]; Belém [Kempf, 1970]; Bragança [ANTWEB]; Conceição do Araguaia [MPEG]; Melgaço [MPEG; Andrade-Silva & Almeida, 2020; Mendoza-Penagos *et al.*, 2020]; Oriximiná [CPDC].

Pheidole bidens Wilson, 2003. Belém [ANTWEB; MCZC]; Marituba [Wilson, 2003].

Pheidole bruesi Wheeler, 1911. Melgaço [MPEG]; Oriximiná [CPDC]; Terra Santa [Santos *et al.*, 2008].

Pheidole bufo Wilson, 2003. Conceição do Araguaia [MPEG]; Goianésia do Pará [CPDC]; Marabá [DZUP]; Oriximiná [CPDC]; Terra Santa [Santos *et al.*, 2008].

Pheidole cataractae Wheeler, 1916*. Marabá [DZUP]; Oriximiná [CPDC].

Pheidole chrysops Wilson, 2003. Mojuí dos Campos [MZCZ]; Oriximiná [CPDC]; Santarém [Wilson, 2003].

Pheidole coffeicola Borgmeier, 1934. Municipality unavailable [Kempf, 1972c]; Belém [MPEG; Kempf, 1970]; Melgaço [MPEG]; Moju [CPDC].

Pheidole cramptoni Wheeler, 1916*. Belém [MPEG]; Marituba [CPDC].

Pheidole cursor Wilson, 2003**. Melgaço [MPEG].

Pheidole deima Wilson, 2003. Conceição do Araguaia [MPEG]; Goianésia do Pará [CPDC]; Moju [CPDC]; Oriximiná [CPDC]; Terra Santa [Santos *et al.*, 2008].

Pheidole dolon Wilson, 2003*. Curionópolis [MPEG]; Melgaço [MPEG]; Oriximiná [CPDC]; Parauapebas [MPEG].

Pheidole embolopyx Brown, 1968. Melgaço [MPEG]; Oriximiná [CPDC]; Santarém [Vasconcelos *et al.*, 2006].

Pheidole exigua Mayr, 1884. Municipality unavailable [Kempf, 1972c; Wilson, 2003]; Santarém [Vasconcelos *et al.*, 2006].

Pheidole fallax Mayr, 1870. Municipality unavailable [INPA]; Belém [Santschi, 1939]; Oriximiná [INPA]; Terra Santa [Santos *et al.*, 2008].

Pheidole fimbriata Roger, 1863. Conceição do Araguaia [MPEG]; Melgaço [MPEG]; Oriximiná [CPDC]; Terra Santa [Santos *et al.*, 2008].

Pheidole flavens Roger, 1863. Municipality unavailable [Kempf, 1972c]; Chaves [Wheeler, 1915].

Pheidole fowleri Wilson, 2003*. Curionópolis [MPEG]; Melgaço [MPEG].

Pheidole fracticeps Wilson, 2003. Melgaço [MPEG; Mendoza-Penagos *et al.*, 2020]; Santarém [Vasconcelos *et al.*, 2006].

Pheidole gauthieri Forel, 1901. Melgaço [MPEG]; Terra Santa [Santos *et al.*, 2008].

Pheidole gertrudae Forel, 1886*. Conceição do Araguaia [MPEG]; Oriximiná [CPDC].

Pheidole gibba Mayr, 1887. Municipality unavailable [Brandão, 1991].

Pheidole gigas Wilson, 2003. Oriximiná [CPDC]; Terra Santa [Santos *et al.*, 2008].

Pheidole guilelmimuelleri Forel, 1886. Belém [Kempf, 1970].

Pheidole horribilis Wilson, 2003*. Conceição do Araguaia [MPEG].

Pheidole jeannei Wilson, 2003. Melgaço [MPEG]; Mojuí dos Campos [ANTWEB; MCZC; Wilson, 2003]; Santarém [MCZC].

Pheidole jelskii Mayr, 1884. Municipality unavailable [Kempf, 1972c]; Moju [CPDC]; Novo Repartimento [CPDC].

Pheidole jujuyensis Forel, 1913*. Conceição do Araguaia [MPEG].

Pheidole lancifera Wilson, 2003*. Novo Repartimento [CPDC].

Pheidole lemur Forel, 1912. Municipality unavailable [ANTWEB; Forel, 1912c]; Belém [Kempf, 1972c].

Pheidole leonina Wilson, 2003*. Oriximiná [CPDC].

Pheidole mamore Mann, 1916. Santarém [INPA; Vasconcelos *et al.*, 2006].

Pheidole megacephala (Fabricius, 1793) (Exotic). Oriximiná [Majer & Delabie, 1994].

Pheidole meinerti Forel, 1905. Melgaço [MPEG]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Pheidole mendicula Wheeler, 1925*. Conceição do Araguaia [MPEG].

Pheidole microps Wilson, 2003*. Melgaço [MPEG].

Pheidole midas Wilson, 2003*. Conceição do Araguaia [MPEG]; Marabá [DZUP].

Pheidole minutula Mayr, 1878. Municipality unavailable [Forel, 1912c; Wheeler & Bequaert, 1929; Kempf, 1972c]; Belém [MPEG; MZSP; Kempf, 1970].

Pheidole oxyops Forel, 1908*. Conceição do Araguaia [MPEG]; Oriximiná [CPDC].

Pheidole paraensis Wilson, 2003. Belém [ANTWEB; Wilson, 2003].

Pheidole pedana Wilson, 2003*. Marabá [DZUP].

Pheidole peltastes Wilson, 2003. Belém [ANTWEB; MCZC; Wilson, 2003]; Portel [Harada, 2016].

Pheidole perpusilla Emery, 1894. Municipality unavailable [ANTWEB; Emery, 1894b; Kempf, 1972b; Kempf, 1972c; Brandão, 1991; Longino, 2009]; Belém [MPEG; MZSP].

Pheidole puttemansi Forel, 1911. Almeirim [DZUP]; Juruti [DZUP]; Marituba [CPDC]; Óbidos [INPA]; Prainha [DZUP]; Santarém [DZUP]; Terra Santa [Santos *et al.*, 2008].

Pheidole radoszkowskii Mayr, 1884. Belém [MPEG]; Marabá [DZUP]; Marituba [CPDC]; Oriximiná [CPDC]; Terra Santa [Santos *et al.*, 2008].

Pheidole risii Forel, 1892. Altamira [Santschi, 1929a].

Pheidole rogeri Emery, 1896. Municipality unavailable [Santos *et al.*, 2008].

Pheidole rudigenis Emery, 1906. Municipality unavailable [Kempf, 1972c]; Altamira [ANTWEB; Santschi, 1929a].

Pheidole rutilana Wilson, 2003. Mojuí dos Campos [ANTWEB; MCZC; Wilson, 2003]; Santarém [CASC].

Pheidole schwarzmaieri Borgmeier, 1939. Melgaço [Mendoza-Penagos *et al.*, 2020].

Pheidole scimitara Wilson, 2003*. Juruti [DZUP]; Óbidos [DZUP]; Prainha [DZUP]; Santarém [DZUP].

Pheidole scolioceps Wilson, 2003*. Marabá [DZUP]; Melgaço [MPEG].

Pheidole socrates Forel, 1912. Municipality unavailable [ANTWEB; Forel, 1912c]; Belém [ANTWEB; Kempf, 1972c]; Oriximiná [CPDC].

Pheidole stigma Wilson, 2003. Terra Santa [Santos *et al.*, 2008].

Pheidole strigosa Wilson, 2003. Mojuí dos Campos [ANTWEB; MCZC; Wilson, 2003].

Pheidole subarmata Mayr, 1884. Municipality unavailable [Kempf, 1972c]; Chaves [Wheeler, 1915]; Conceição do Araguaia [MPEG]; Marabá [DZUP]; Melgaço [MPEG; Mendoza-Penagos *et al.*, 2020]; Portel [Harada, 2016].

Pheidole susannae Forel, 1886. Conceição do Araguaia [MPEG]; Curionópolis [MPEG]; Goianésia do Pará [CPDC]; Marabá [DZUP]; Moju [CPDC]; Paragominas [CPDC]; Portel [Harada, 2016].

Pheidole synarmata Wilson, 2003*. Itupiranga [CPDC]; Melgaço [MPEG].

Pheidole transversostriata Mayr, 1887*. Marituba [CPDC].

Pheidole triconstricta Forel, 1886*. Conceição do Araguaia [MPEG]; Melgaço [MPEG]; Oriximiná [CPDC].

Pheidole vallifica Forel, 1901*. Curionópolis [MPEG].

Pheidole vorax (Fabricius, 1804)*. Municipality unavailable [Wheeler, 1928; Kempf, 1972c]; Conceição do Araguaia [MPEG]; Medicilândia [CPDC]; Melgaço [MPEG]; Oriximiná [CPDC].

Pheidole zeteki Smith, 1947*. Marabá [DZUP].

***Pogonomyrmex* Mayr, 1868**

Pogonomyrmex naegelii Emery, 1878. Municipality unavailable [Kempf, 1972c]; Água Azul do Norte [MPEG]; Conceição do Araguaia [INPA]; Óbidos [Kempf, 1960c]; Paragominas [Solar *et al.*, 2016b]; Santarém [INPA].

***Procryptocerus* Emery, 1887**

Procryptocerus attenuatus (Smith, 1876). Municipality unavailable [ANTWEB; Emery, 1894b; Kempf, 1951; Kempf, 1963b; Longino & Snelling, 2002]; Belém [Kempf, 1972c].

Procryptocerus convexus Forel, 1904. Municipality unavailable [ANTWEB; Forel, 1904b; Kempf, 1951; Longino & Snelling, 2002]; Belém [Kempf, 1972c]; Conceição do Araguaia [INPA].

Procryptocerus goeldii Forel, 1899. Portel [Harada, 2016]; Santa Maria das Barreiras [INPA].

Procryptocerus hirsutus Emery, 1896. Municipality unavailable [ANTWEB; Emery, 1896c; Kempf, 1951; Longino & Snelling, 2002]; Belém [Kempf, 1972c].

Procryptocerus hylaeus Kempf, 1951. Municipality unavailable [ANTWEB; Longino & Snelling, 2002].

Procryptocerus pictipes Emery, 1896. Municipality unavailable [ANTWEB; Kempf, 1964b; Kempf, 1972c]; Belém [INPA; Kempf, 1957]; Conceição do Araguaia [ANTWEB; INPA; MZSP; Longino & Snelling, 2002]; Oriximiná [MZSP]; Parauapebas [ANTWEB; INPA; MZSP; Longino & Snelling, 2002]; Santarém [Vasconcelos *et al.*, 2006]; Tucuruí [ANTWEB; Longino & Snelling, 2002].

Procryptocerus spiniperdus Forel, 1899. Tucuruí [ANTWEB].

Procryptocerus subpilosus (Smith, 1860). Belém [ANTWEB; Longino & Snelling, 2002].

***Rogeria* Emery, 1894**

Rogeria belti Mann, 1922. Portel [Harada, 2016].

Rogeria besucheti Kugler, 1994*. Marituba [CPDC].

Rogeria blanda (Smith, 1858). Municipality unavailable [Kempf, 1972c]; Belém [MZSP; Kugler, 1994]; Capanema [MZSP]; Jacareacanga [MZSP; Kugler, 1994]; Parauapebas [ANTWEB].

Rogeria ciliosa Kugler, 1994*. Marituba [CPDC].

Rogeria curvipubens Emery, 1894*. Portel [Harada, 2016]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Rogeria foreli Emery, 1894. Portel [Harada, 2016].

Rogeria germaini Emery, 1894*. Marituba [CPDC].

Rogeria lirata Kugler, 1994. Almeirim [DZUP]; Marituba [CPDC]; Melgaço [MPEG]; Moju [CPDC]; Novo Repartimento [CPDC]; Portel [Harada, 2016]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Rogeria micromma Kempf, 1961. Belém [Kugler, 1994]; Parauapebas [MZSP]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Rogeria procera Emery, 1896. Municipality unavailable [Kusnezov, 1978]; Belém [INPA; Kempf, 1972c; Kugler, 1994]; Melgaço [MPEG]; Óbidos [Kugler, 1994]; Ourém [ANTWEB; Emery, 1896c; Kugler, 1994].

Rogeria prominula Kugler, 1994*. Marabá [DZUP].

Rogeria scabinata Kugler, 1994. Municipality unavailable [Kugler, 1994]; Capanema [MZSP]; Conceição do Araguaia [MPEG]; Melgaço [MPEG]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Rogeria sicaria Kempf, 1962. Oriximiná [Majer & Delabie, 1994].

Rogeria subarmata (Kempf, 1961). Belém [MZSP; Kugler, 1994]; Capanema [MZSP]; Conceição do Araguaia [MPEG]; Marabá [DZUP]; Melgaço [MPEG]; Parauapebas [MZSP].

***Sericomyrmex* Mayr, 1865**

Sericomyrmex bondari Borgmeier, 1937. Gurupá [INPA]; Melgaço [ANTWEB; Ješovnik & Schultz, 2017]; Nova Ipixuna [ANTWEB; Ješovnik & Schultz, 2017]; Novo Repartimento [ANTWEB; CPDC; Ješovnik & Schultz, 2017]; Oriximiná [ANTWEB; Ješovnik & Schultz, 2017]; Parauapebas [ANTWEB; INPA; Ješovnik & Schultz, 2017]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Sericomyrmex mayri Forel, 1912. Almeirim [ANTWEB]; Belém [ANTWEB; Ješovnik & Schultz, 2017]; Goianésia do Pará [ANTWEB; CPDC; Ješovnik & Schultz, 2017]; Marabá [DZUP]; Marituba [CPDC]; Melgaço [ANTWEB; INPA; Ješovnik & Schultz, 2017]; Moju [CPDC]; Nova Ipixuna [ANTWEB; Ješovnik & Schultz, 2017]; Novo Repartimento [CPDC]; Paragominas [CPDC]; Parauapebas [ANTWEB; Ješovnik & Schultz, 2017]; Portel [Harada, 2016]; Viseu [ANTWEB; Ješovnik & Schultz, 2017].

Sericomyrmex parvulus Forel, 1912. Municipality unavailable [Forel, 1912b; Kempf, 1972c; Ješovnik & Schultz, 2017]; Altamira [ANTWEB]; Belém [ANTWEB; MZSP; Ješovnik & Schultz, 2017]; Goianésia do Pará [CPDC]; Marituba [ANTWEB; CPDC; Ješovnik & Schultz, 2017]; Melgaço [ANTWEB; Ješovnik & Schultz, 2017]; Nova Ipixuna [ANTWEB; Ješovnik & Schultz, 2017]; Paragominas [INPA]; Parauapebas [ANTWEB; Ješovnik & Schultz, 2017]; Portel [Harada, 2016]; Tailândia [ANTWEB; Ješovnik & Schultz, 2017].

Sericomyrmex saussurei Emery, 1894. Goianésia do Pará [ANTWEB; CPDC; Ješovnik & Schultz, 2017]; Gurupá [ANTWEB; INPA; Ješovnik & Schultz, 2017]; Marabá [ANTWEB; Ješovnik & Schultz, 2017]; Marituba [ANTWEB; Ješovnik & Schultz, 2017]; Melgaço [Ješovnik & Schultz, 2017]; Novo Repartimento [CPDC]; Santarém [ANTWEB; Ješovnik & Schultz, 2017]; Tailândia [ANTWEB; Ješovnik & Schultz, 2017].

Solenopsis Westwood, 1840

Solenopsis brevicornis Emery, 1888. Municipality unavailable [Pacheco & MacKay, 2013].

Solenopsis geminata (Fabricius, 1804). Municipality unavailable [Forel, 1912d]; Marituba [CPDC]; Novo Repartimento [CPDC]; Oriximiná [CPDC; Majer & Delabie, 1994]; Paragominas [Solar *et al.*, 2016a; Solar *et al.*, 2016b]; Portel [Harada, 2016]; Santarém [INPA; Jeanne, 1979; Vasconcelos *et al.*, 2006]; Terra Santa [Santos *et al.*, 2008].

Solenopsis globularia (Smith, 1858). Paragominas [Solar *et al.*, 2016b]; Santarém [Vasconcelos *et al.*, 2006]; São João do Araguaia [INPA]; Terra Santa [Santos *et al.*, 2008].

Solenopsis helena Emery, 1895. Municipality unavailable [Brandão, 1991]; Belém [MZSP].

Solenopsis invicta Buren, 1972. Paragominas [Solar *et al.*, 2016a; Solar *et al.*, 2016b].

Solenopsis laeviceps Mayr, 1870. Municipality unavailable [Kempf, 1972c]; Belém [Kempf, 1970].

Solenopsis pollux Forel, 1893. Municipality unavailable [Kempf, 1972c]; Belém [MZSP; Kempf, 1970].

Solenopsis saevissima (Smith, 1855). Municipality unavailable [Wheeler, 1916b; Kempf, 1972c; de Zolessi *et al.*, 1989]; Almeirim [MZSP]; Altamira [MZSP]; Ananindeua [ANTWEB]; Aveiro [Wheeler, 1922a; Creighton, 1930; Wilson, 1952; Zolessi *et al.*, 1989; Trager, 1991]; Belém [MPEG; MZSP; Buren, 1972]; Conceição do Araguaia [INPA]; Marituba [CPDC]; Moju [CPDC]; Mojuí dos Campos [MPEG; MZSP]; Monte Alegre [MZSP]; Novo Repartimento [CPDC]; Óbidos [Creighton, 1930]; Oriximiná [MPEG; MZSP]; Portel [Harada, 2016]; Santarém [ANTWEB; MZSP; Jeanne, 1979; Vasconcelos *et al.*, 2006]; Santarém Novo [MPEG].

Solenopsis stricta Emery, 1896. Belém [MPEG; MZSP].

Solenopsis substituta Santschi, 1925. Santarém [INPA; Vasconcelos *et al.*, 2006].

Solenopsis subtilis Emery, 1896. Municipality unavailable [Kempf, 1972c; Pacheco & MacKay, 2013]; Chaves [Wheeler, 1915].

Solenopsis succinea Emery, 1890. Paragominas [Solar *et al.*, 2016b].

Solenopsis virulens (Smith, 1858). Municipality unavailable [Kempf & Brown, 1968; Kempf, 1972c]; Belém [MZSP; Kempf, 1970]; Marabá [DZUP]; Marituba [CPDC]; Oriximiná [CPDC]; Paragominas [Harada *et al.*, 2013; Solar *et al.*, 2016b].

Stegomyrmex Emery, 1912

Stegomyrmex bensonii Feitosa *et al.*, 2008. Água Azul do Norte [Feitosa *et al.*, 2008; Ulysséa *et al.*, 2015]; Canaã dos Carajás [MZSP].

Stegomyrmex olindae Feitosa *et al.*, 2008*. Curionópolis [MPEG].

Strumigenys Smith, 1860

Strumigenys alberti Forel, 1893. Municipality unavailable [Kempf, 1972c; Bolton, 2000]; Belém [INPA; MZSP; Brown, 1964; Bolton, 2000]; Paragominas [MZSP]; Portel [Harada, 2016].

Strumigenys appretiata (Borgmeier, 1954). Santarém [Vasconcelos *et al.*, 2006].

Strumigenys auctidens (Bolton, 2000). Paragominas [ANTWEB; Solar *et al.*, 2016b]; Portel [Harada, 2016].

Strumigenys beebei (Wheeler, 1915). Municipality unavailable [Smith, 1944; Brown Jr., 1950; Bolton, 2000]; Belém [ANTWEB; MZSP; Kempf, 1972c]; Chaves [Wheeler, 1915]; Marituba [CPDC]; Melgaço [INPA]; Paragominas [ANTWEB; Solar *et al.*, 2016b]; Portel [Harada, 2016].

Strumigenys borgmeieri Brown, 1954. Municipality unavailable [Harada, 2016].

Strumigenys carinithorax Borgmeier, 1934. Melgaço [MPEG]; Paragominas [Solar *et al.*, 2016b]; Portel [Harada, 2016].

Strumigenys cincinnata (Kempf, 1975)*. Almeirim [DZUP].

Strumigenys cordovensis Mayr, 1887. Municipality unavailable [Bolton, 2000]; Melgaço [MPEG].

Strumigenys cosmostela Kempf, 1975. Belém [ANTWEB; Kempf, 1975b; Brandão, 1991; Bolton, 2000; Ulysséa & Brandão, 2013]; Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006].

Strumigenys crassicornis Mayr, 1887. Municipality unavailable [Bolton, 2000]; Curionópolis [MPEG]; Marituba [CPDC]; Oriximiná [Majer & Delabie, 1994]; Parauapebas [MPEG]; Portel [Harada, 2016]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Strumigenys denticulata Mayr, 1887. Municipality unavailable [Kempf, 1972c; Bolton, 2000]; Água Azul do Norte [MPEG]; Almeirim [DZUP]; Belém [INPA; Brown Jr., 1960]; Benevides [INPA]; Capanema [MZSP]; Conceição do Araguaia [MPEG]; Curionópolis [MPEG]; Goianésia do Pará [CPDC]; Marabá [DZUP]; Marituba [CPDC]; Melgaço [MPEG]; Moju [CPDC]; Novo Repartimento [CPDC]; Oriximiná [CPDC; Majer & Delabie, 1994]; Paragominas [ANTWEB; CPDC; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006].

Strumigenys diabola Bolton, 2000. Portel [Harada, 2016].

Strumigenys dolichognatha Weber, 1934. Municipality unavailable [Bolton, 2000].

Strumigenys eggersi Emery, 1890. Marituba [CPDC]; Oriximiná [CPDC; Majer & Delabie, 1994]; Paragominas [ANTWEB; Solar *et al.*, 2016b].

Strumigenys elongata Roger, 1863. Curionópolis [MPEG]; Marabá [DZUP]; Melgaço [INPA; MPEG]; Oriximiná [MZSP; Majer & Delabie, 1994]; Paragominas [ANTWEB; Solar *et al.*, 2016b]; Parauapebas [MPEG]; Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006].

Strumigenys emmae (Emery, 1890) (Exotic). Oriximiná [Majer & Delabie, 1994].

Strumigenys epinotalis Weber, 1934. Paragominas [ANTWEB; Solar *et al.*, 2016b].

Strumigenys furtiva (Bolton, 2000). Municipality unavailable [Bolton, 2000].

Strumigenys glenognatha (Bolton, 2000). Santarém [ANTWEB].

Strumigenys grytava (Bolton, 2000). Municipality unavailable [Bolton, 2000]; Paragominas [ANTWEB; Solar *et al.*, 2016b]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Strumigenys hadrodens (Bolton, 2000). Portel [Harada, 2016].

Strumigenys hyphata (Brown, 1953). Municipality unavailable [Kempf, 1972c]; Belém [Brown, 1964; Bolton, 2000]; Portel [Harada, 2016].

Strumigenys infidelis Santschi, 1919. Paragominas [ANTWEB; Solar *et al.*, 2016b].

Strumigenys inusitata (Lattke, 1992). Melgaço [ANTWEB; INPA]; Portel [Harada, 2016].

Strumigenys louisianae Roger, 1863. Municipality unavailable [Brandão, 1991]; Belém [Almeida-Filho, 1984]; Curionópolis [MPEG]; Paragominas [Solar *et al.*, 2016b]; Parauapebas [MPEG].

Strumigenys mandibularis Smith, 1860*. Almeirim [DZUP].

Strumigenys metopia (Brown, 1959). Municipality unavailable [Bolton, 2000]; Santarém [Vasconcelos *et al.*, 2006].

Strumigenys perparva Brown, 1958. Municipality unavailable [Kempf, 1972c]; Belém [MZSP; Brown Jr., 1958b; Bolton, 2000]; Melgaço [MPEG]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Strumigenys planeti Brown, 1953. Municipality unavailable [Kempf, 1972c]; Belém [Brown Jr., 1953a; Bolton, 2000].

Strumigenys precava Brown, 1954. Municipality unavailable [Kempf, 1972c]; Belém [MZSP; Kempf, 1970]; Melgaço [MPEG]; Portel [Harada, 2016].

Strumigenys ruta Bolton, 2000. Marituba [CPDC]; Portel [Harada, 2016].

Strumigenys schmalzi Emery, 1906*. Almeirim [DZUP]; Parauapebas [MPEG; MZSP].

Strumigenys schulzi Emery, 1894. Municipality unavailable [ANTWEB; Emery, 1894b; Brown Jr., 1953b; Bolton, 2000]; Belém [Kempf, 1972c]; Portel [Harada, 2016].

Strumigenys smithii Forel, 1886. Municipality unavailable [Kempf, 1972c]; Belém [MZSP]; Portel [Harada, 2016].

Strumigenys subedentata Mayr, 1887. Municipality unavailable [Kempf, 1972c; Bolton, 2000]; Belém [MZSP; Brown Jr., 1960]; Capanema [MZSP]; Chaves [Wheeler, 1915]; Marabá [DZUP]; Marituba [CPDC]; Melgaço [MPEG]; Oriximiná [CPDC; MZSP]; Paragominas [ANTWEB; Solar *et al.*, 2016b]; Parauapebas [MPEG]; Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006].

Strumigenys sublonga Brown, 1958*. Oriximiná [MZSP].

Strumigenys thomae Kempf, 1976. Municipality unavailable [Brandão, 1991]; Belém [MZSP; Kempf, 1976; Bolton, 2000; Ulysséa & Brandão, 2013].

Strumigenys tococae Wheeler & Bequaert, 1929. Municipality unavailable [ANTWEB; Wheeler & Bequaert, 1929; Bolton, 2000]; Belém [MZSP; Brown Jr., 1957; Brown Jr., 1962; Kempf, 1972c].

Strumigenys trinidadensis Wheeler, 1922. Municipality unavailable [Kempf, 1972c; Bolton, 2000]; Belém [Kempf, 1970]; Portel [Harada, 2016].

Strumigenys trudifera Kempf & Brown, 1969. Municipality unavailable [Kempf, 1972c]; Almeirim [DZUP]; Belém [ANTWEB; MZSP; Kempf & Brown, 1969; Bolton, 2000; Ulysséa & Brandão, 2013]; Marituba [CPDC]; Melgaço [INPA; MPEG]; Paragominas [Harada *et al.*, 2013]; Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006].

Strumigenys urrhobia (Bolton, 2000). Belém [Bolton, 2000]; Paragominas [ANTWEB; Solar *et al.*, 2016b].

Strumigenys villiersi (Perrault, 1986). Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006].

Strumigenys zeteki (Brown, 1959)*. Almeirim [DZUP]; Melgaço [MPEG].

Talaridris Weber, 1941

Talaridris mandibularis Weber, 1941*. Curionópolis [MPEG]; Itaituba [MPEG].

Tetramorium Mayr, 1855

Tetramorium bicarinatum (Nylander, 1846) (Exotic). Cametá [MZSP]; Portel [Harada, 2016].

Tetramorium guineense (Bernard, 1953) (Exotic). Cametá [Kempf, 1975a].

Tetramorium simillimum (Smith, 1851) (Exotic). Municipality unavailable [Brandão, 1991].

Tranopelta Mayr, 1866

Tranopelta gilva Mayr, 1866. Municipality unavailable [Forel, 1912d; Kempf, 1972c]; Belém [Wheeler, 1922b; Fernández, 2003]; Igarapé-Açu [Fernández, 2003].

Wasmannia Forel, 1893

Wasmannia auropunctata (Roger, 1863). Municipality unavailable [Kempf, 1972c; Wetterer & Porter, 2003]; Água Azul do Norte [MPEG]; Almeirim [DZUP]; Bannach [MPEG]; Belém [MZSP; Kempf, 1970]; Capanema [MZSP]; Conceição do Araguaia [INPA; MPEG]; Curionópolis [MPEG]; Goianésia do Pará [CPDC]; Marabá [DZUP]; Marituba [CPDC]; Melgaço [INPA; MPEG]; Moju [CPDC]; Mojuí dos Campos [MZSP]; Oriximiná [CPDC; MZSP; Majer & Delabie, 1994]; Paragominas [CPDC; Harada *et al.*, 2013; Solar *et al.*, 2016a; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006]; Terra Santa [Santos *et al.*, 2008].

Wasmannia rochai Forel, 1912. Almeirim [DZUP]; Goianésia do Pará [CPDC]; Maracanã [INPA]; Novo Repartimento [CPDC]; Paragominas [Harada *et al.*, 2013]; Santarém [Vasconcelos *et al.*, 2006].

Wasmannia scrobifera Kempf, 1961. Portel [Harada, 2016].

Paraponerinae Emery, 1901 [1 genus, 1 species]

Paraponera Smith, 1858

Paraponera clavata (Fabricius, 1775). Municipality unavailable [INPA; Kempf, 1972c]; Acará [MPEG]; Almeirim

[DZUP; MPEG; MZSP]; Altamira [INPA; MPEG; MZSP]; Aveiro [MZSP]; Bannach [MPEG]; Barcarena [MPEG]; Belém [MPEG; MZSP; Borgmeier, 1923; Santschi, 1939; Kempf, 1970]; Benevides [MPEG; MZSP]; Breu Branco [MPEG]; Bujaru [MPEG]; Conceição do Araguaia [INPA; MPEG]; Cumaru do Norte [MZSP]; Curionópolis [MPEG]; Faro [INPA]; Ipixuna do Pará [MZSP]; Itaituba [INPA; MPEG; MZSP]; Jacareacanga [MZSP]; Juruti [MZSP]; Marabá [MPEG]; Maracanã [MPEG]; Marituba [CPDC]; Medicilândia [CPDC]; Melgaço [MPEG; Andrade-Silva & Almeida, 2020]; Mocajuba [MZSP]; Mojuí dos Campos [MZSP]; Óbidos [MZSP; Forel, 1907]; Ourilândia do Norte [MPEG]; Novo Repartimento [MPEG]; Oriximiná [CPDC; MZSP; Majer & Delabie, 1994]; Paragominas [ANTWEB; MPEG; MZSP; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Primavera [MPEG]; Santa Bárbara do Pará [MPEG]; Santarém [INPA; MZSP; Borgmeier, 1923; Vasconcelos *et al.*, 2006]; Santarém Novo [MPEG]; São Caetano de Odivelas [MPEG]; São Félix do Xingu [ANTWEB; MPEG]; São João de Pirabas [MPEG]; São Miguel do Guamá [MPEG]; Soure [MPEG]; Terra Santa [Santos *et al.*, 2008]; Trairão [INPA]; Tucumã [MPEG]; Tucuruí [ANTWEB; FMNH; INPA; MPEG]; Viseu [MPEG; MZSP].

Ponerinae Lepeletier de Saint-Fargeau, 1835 [14 genus, 93 species]

Anochetus Mayr, 1861

Anochetus altisquamis Mayr, 1887. Paragominas [ANTWEB].

Anochetus bispinosus (Smith, 1858). Municipality unavailable [Emery, 1894b; Kempf, 1972c]; Belém [ANTWEB; MZSP; Brown Jr., 1978]; Marabá [DZUP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006]; São João do Araguaia [INPA].

Anochetus diegensis Forel, 1912. Municipality unavailable [Kempf, 1972c]; Belém [Brown Jr., 1978]; Capanema [MZSP]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Marituba [CPDC]; Melgaço [INPA; Bastos & Harada, 2011]; Paragominas [ANTWEB; Solar *et al.*, 2016b]; Portel [Harada, 2016].

Anochetus emarginatus (Fabricius, 1804). Municipality unavailable [Emery, 1911; Forel, 1912a; Borgmeier, 1923; Kempf, 1972c]; Anajás [ANTWEB]; Belém [MZSP; Kempf, 1970]; Cametá [MZSP]; Marituba [CPDC; DZUP]; Ourém [MZSP]; Parauapebas [ANTWEB]; Paragominas [MZSP]; Viseu [MZSP].

Anochetus horridus Kempf, 1964. Municipality unavailable [Fernández, 2008]; Almeirim [DZUP]; Belém [Kempf, 1964c; Kempf, 1970; Kempf, 1972c; Brown Jr., 1978; Scott-Santos *et al.*, 2008]; Marabá [DZUP; Pereira, 2012; Pereira *et al.*, 2016]; Marituba [CPDC; DZUP]; Melgaço [INPA; MPEG; Bastos & Harada, 2011]; Moju [CPDC]; Novo Repartimento [CPDC]; Oriximiná [CPDC; Majer & Delabie, 1994]; Paragominas [ANTWEB; Solar *et al.*, 2016b]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006].

Anochetus mayri Emery, 1884. Municipality unavailable [Kempf, 1972c]; Capanema [MZSP]; Chaves [Wheeler, 1915]; Marabá [Pereira, 2012]; Melgaço [Bastos & Harada, 2011]; Oriximiná [CPDC; Majer & Delabie, 1994]; Paragominas [Harada *et al.*, 2013]; Portel [Harada, 2016]; Marabá [Pereira *et al.*, 2016].

Anochetus neglectus Emery, 1894. Marabá [DZUP]; Marituba [CPDC]; Oriximiná [CPDC; Majer & Delabie, 1994]; Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006].

Anochetus targionii Emery, 1894. Municipality unavailable [Brandão, 1991]; Belém [Brown Jr., 1978]; Goianésia do Pará [CPDC]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Marituba [CPDC]; Melgaço [Bastos & Harada, 2011]; Portel [Harada, 2016].

Centromyrmex Mayr, 1866

Centromyrmex alfaroi Emery, 1890*. Almeirim [DZUP].

Centromyrmex brachycola (Roger, 1861). Municipality unavailable [Emery, 1911; Borgmeier, 1923; Kempf, 1972c; Kempf, 1978]; Abel Figueiredo [ANTWEB]; Belém [Kempf, 1967a]; Melgaço [MPEG]; São João do Araguaia [ANTWEB; INPA].

Centromyrmex gigas Forel, 1911. Municipality unavailable [Kempf, 1978]; Melgaço [INPA].

Dinoponera Roger, 1861

Dinoponera gigantea (Perty, 1833). Municipality unavailable [INPA; Emery, 1901; Emery, 1911; Kempf, 1972c; Lenhart *et al.*, 2013]; Acará [Kempf, 1971]; Altamira [MZSP]; Ananindeua [MZSP]; Bannach [MPEG]; Belém [DZUP; MZSP; Santschi, 1939; Kempf, 1970; Kempf, 1971; Lenhart *et al.*, 2013]; Bragança [Lenhart *et al.*, 2013]; Bujaru [INPA]; Curionópolis [MPEG]; Goianésia do Pará [CPDC]; Marabá [MZSP]; Marapanim [MZSP]; Marituba [CPDC]; Melgaço [INPA]; Mocajuba [Lenhart *et al.*, 2013]; Moju [CPDC]; Novo Repartimento [CPDC; Santos *et al.*, 2012]; Óbidos [MZSP; Kempf, 1971]; Paragominas [ANTWEB; CPDC; DZUP; MZSP; Fourcassie & Oliveira, 2002; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Peixe-Boi [Lenhart *et al.*, 2013]; Portel [Kempf, 1971; Harada, 2016]; Santarém [MZSP; Kempf, 1971]; São Caetano de Odivelas [INPA]; Tracuateua [INPA]; Tucuruí [INPA; Lenhart *et al.*, 2013].

Dinoponera hispida Lenhart *et al.*, 2013. Tucuruí [Lenhart *et al.*, 2013].

Dinoponera longipes Emery, 1901. Bannach [MPEG]; Cumaru do Norte [MPEG]; Melgaço [INPA]; Ourilândia do Norte [MPEG]; Parauapebas [MPEG]; São Félix do Xingu [MPEG].

Dinoponera mutica Emery, 1901. Tucuruí [INPA].

Dinoponera quadriceps Kempf, 1971. Aveiro [Lenhart *et al.*, 2013]; Óbidos [Lenhart *et al.*, 2013]; Santarém [Lenhart *et al.*, 2013].

Hypoponera Santschi, 1938

Hypoponera argentina (Santschi, 1922). Municipality unavailable [Pereira, 2012; Pereira *et al.*, 2016].

Hypoponera distinguenda (Emery, 1890). Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Portel [Harada, 2016].

Hypoponera foreli (Mayr, 1887)*. Benevides [MZSP]; Monte Alegre [MZSP].

Hypoponera opaciceps (Mayr, 1887). Municipality unavailable [Kempf, 1972c]; Chaves [Wheeler, 1915]; Óbidos [MZSP; Santschi, 1939]; Santarém [INPA; Vasconcelos *et al.*, 2006].

Hypoponera punctatissima (Roger, 1859) (Exotic). Municipality unavailable [Pereira, 2012].

Hypoponera schmalzi (Emery, 1896). Municipality unavailable [Pereira *et al.*, 2016].

Hypoponera trigona (Mayr, 1887). Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Oriximiná [CPDC].

Leptogenys Roger, 1861

Leptogenys arcuata Roger, 1861. Marituba [CPDC]; Senador José Porfirio [Lattke, 2011].

Leptogenys bohlisi Emery, 1896*. Almeirim [DZUP].

Leptogenys famelica Emery, 1896. Belém [Lattke, 2011]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Melgaço [Lattke, 2011]; Paragominas [ANTWEB]; Portel [Harada, 2016].

Leptogenys gaigei Wheeler, 1923. Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Melgaço [Lattke, 2011]; Paragominas [ANTWEB; Solar *et al.*, 2016b]; Portel [Harada, 2016]; Santarém [Lattke, 2011].

Leptogenys guianensis Wheeler, 1923. Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Marituba [CPDC]; Melgaço [Lattke, 2011]; Portel [Harada, 2016].

Leptogenys langi Wheeler, 1923. Belém [Lattke, 2011]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Melgaço [Lattke, 2011]; Oriximiná [Lattke, 2011]; Portel [Harada, 2016].

Leptogenys linearis (Smith, 1858). Curionópolis [MPEG]; Melgaço [Lattke, 2011]; Parauapebas [MPEG]; Portel [Harada, 2016]; Santarém [ANTWEB; Kempf, 1972c; Vasconcelos *et al.*, 2006].

Leptogenys paraensis Lattke, 2011. Belém [ANTWEB; Lattke, 2011]; Conceição do Araguaia [MPEG]; Portel [Harada, 2016]; Porto de Moz [Lattke, 2011].

Leptogenys pusilla (Emery, 1890). Melgaço [Bastos & Harada, 2011]; Oriximiná [Majer & Delabie, 1994]; Santarém [Vasconcelos *et al.*, 2006].

Leptogenys unistimulosa Roger, 1863. Municipality unavailable [Kempf, 1972c]; Belém [MZSP; Kempf, 1970; Lattke, 2011]; Benevides [MZSP]; Goianésia do Pará [CPDC]; Marituba [CPDC]; Mojuí dos Campos [MZSP]; Portel [Harada, 2016]; Santarém [Lattke, 2011].

Leptogenys vogeli Borgmeier, 1933. Moju [CPDC]; Portel [Harada, 2016].

Mayaponera Schmidt & Shattuck, 2014

Mayaponera arhuaca (Forel, 1901). Municipality unavailable [MacKay & MacKay, 2010]; Bannach [MPEG]; Belém [MacKay & MacKay, 2010]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Marituba [CPDC]; Melgaço [INPA; MPEG; Souza *et al.*, 2007; Bastos & Harada, 2011]; Moju [CPDC]; Novo Repartimento [CPDC]; Oriximiná [CPDC; INPA; MZSP]; Paragominas [ANTWEB; Solar *et al.*, 2016b]; Parauapebas [MPEG]; Portel [Harada, 2016]; Tucuruí [ANTWEB].

Mayaponera constricta (Mayr, 1884). Municipality unavailable [Kempf, 1972c; MacKay & MacKay, 2010]; Belém [MZSP; OSUC; MacKay & MacKay, 2010; Esquivel *et al.*, 2019]; Benevides [INPA]; Capanema [MZSP]; Conceição do Araguaia [MPEG]; Curionópolis [MPEG]; Goianésia do Pará [CPDC]; Gurupá [INPA]; Marabá [DZUP; Pereira, 2012; Pereira *et al.*, 2016]; Marituba [CPDC; MZSP]; Melgaço [INPA; MPEG; Souza *et al.*, 2007; Bastos & Harada, 2011; Esquivel *et al.*, 2019; Mendoza-Penagos *et al.*, 2020]; Moju [CPDC]; Novo Repartimento [CPDC]; Oriximiná [CPDC; MZSP; Majer & Delabie, 1994]; Paragominas [ANTWEB; CPDC; MPEG; Harada *et al.*, 2013; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006]; São Félix do Xingu [MPEG]; São Francisco do Pará [Esquivel *et al.*, 2019].

Neoponera Emery, 1901

Neoponera apicalis (Latreille, 1802). Municipality unavailable [Emery, 1911; INPA; OSUC; Kempf, 1972c]; Água Azul do Norte [MPEG]; Almeirim [DZUP; INPA]; Altamira [MZSP]; Bannach [MPEG]; Belém [ANTWEB; INPA; MZSP; OSUC; Borgmeier, 1923; Santschi, 1939; Wild, 2005; MacKay & MacKay, 2010]; Benevides [INPA]; Conceição do Araguaia [MPEG]; Cumaru do Norte [MPEG]; Goianésia do Pará [CPDC]; Itaituba [INPA]; Marabá [DZUP; MZSP; Pereira, 2012; Pereira *et al.*, 2016]; Marituba [CPDC]; Melgaço [INPA; MPEG; Souza *et al.*, 2007]; Moju [CPDC]; Mojuí dos Campos [ANTWEB]; Novo Repartimento [CPDC]; Oriximiná [CPDC; Majer & Delabie, 1994]; Paragominas [ANTWEB; CPDC; MPEG; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [Jeanne, 1979; Vasconcelos *et al.*, 2006]; São Félix do Xingu [MPEG]; Tucumã [MPEG]; Tucuruí [ANTWEB; Wild, 2005].

Neoponera bactronica (Fernandes *et al.*, 2014). Itaituba [MPEG; Fernandes *et al.*, 2014].

Neoponera billemma (Fernandes *et al.*, 2014). Benevides [Fernandes *et al.*, 2014]; Santa Bárbara do Pará [MZSP].

Neoponera bucki (Borgmeier, 1927). Portel [Harada, 2016].

Neoponera carinulata (Roger, 1861). Belém [MZSP]; Oriximiná [CPDC; Majer & Delabie, 1994]; Parauapebas [MPEG]; São Félix do Xingu [MPEG]; Terra Santa [Santos *et al.*, 2008].

Neoponera cavinodis Mann, 1916. Municipality unavailable [Kempf, 1972c; MacKay & MacKay, 2010]; Belém [MZSP].

Neoponera commutata (Roger, 1860). Municipality unavailable [Emery, 1911; Kempf, 1959c; Kempf, 1972c; MacKay & MacKay, 2010]; Altamira [INPA; Borgmeier, 1959]; Bannach [MPEG]; Belém [Wheeler, 1936; Santschi, 1939; Kempf, 1970; MacKay & MacKay, 2010]; Breves [Esquivel *et al.*, 2019]; Cametá [Borgmeier, 1923]; Conceição do Araguaia [INPA; MPEG]; Itaituba [INPA; MZSP; Borgmeier, 1959]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Melgaço [INPA; MPEG; Souza *et al.*, 2007; Esquivel *et al.*, 2019]; Mocajuba [MZSP]; Mojuí dos Campos [MZSP]; Monte Alegre [INPA]; Óbidos [Wheeler, 1936; Santschi, 1939]; Oriximiná [INPA; MZSP]; Ourilândia do Norte [MPEG]; Paragominas [ANTWEB; MZSP; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP; Esquivel *et al.*, 2019]; Portel [Overal *et al.*, 1997; Harada, 2016]; Prainha [Borgmeier, 1959]; Santa Bárbara do Pará [Esquivel *et al.*, 2019]; Santarém [INPA; Vasconcelos *et al.*, 2006]; São Félix do Xingu [MPEG]; Trairão [INPA]; Tucumã [MPEG].

Neoponera crenata (Roger, 1861). Municipality unavailable [Gallardo, 1918; Borgmeier, 1923; Kempf, 1972c; MacKay & MacKay, 2010]; Almeirim [MZSP]; Bannach [MPEG]; Belém [MZSP; Kempf, 1970]; Jacareacanga [MZSP]; Marabá [MPEG]; Melgaço [INPA; MPEG; Souza *et al.*, 2007; Bastos & Harada, 2011]; Moju [CPDC]; Oriximiná [MZSP]; Paragominas [ANTWEB]; Parauapebas [MPEG]; Portel [Harada, 2016]; São Félix do Xingu [MPEG]; Tucumã [MPEG].

Neoponera curvinodis (Forel, 1899). Belém [MZSP; Fernandes *et al.*, 2014]; Benevides [Fernandes *et al.*, 2014].

Neoponera globularia (MacKay & MacKay, 2010). Belém [MacKay & MacKay, 2010].

Neoponera goeldii Forel, 1912. Municipality unavailable [Kempf, 1972c; MacKay & MacKay, 2010]; Altamira [MZSP]; Belém [MZSP]; Marituba [CPDC]; Oriximiná [INPA]; Santarém [Jeanne, 1979]; Soure [MZSP].

Neoponera inversa (Smith, 1858). Municipality unavailable [MacKay & MacKay, 2010]; Belém [MZSP; Fernandes *et al.*, 2014]; Benevides [Fernandes *et al.*, 2014]; Melgaço [Fernandes *et al.*, 2014]; Santarém [INPA; Vasconcelos *et al.*, 2006; Fernandes *et al.*, 2014]; Tucuruí [Fernandes *et al.*, 2014].

Neoponera laevigata (Smith, 1858). Municipality unavailable [Emery, 1911; Borgmeier, 1923; Wheeler, 1936; Kempf, 1972c; MacKay & MacKay, 2010]; Belém [MacKay & MacKay, 2010]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Melgaço [MPEG]; Novo Repartimento [CPDC]; Parauapebas [MPEG]; Portel [Overal *et al.*, 1997; Harada, 2016].

Neoponera magnifica (Borgmeier, 1929). Marabá [DZUP]; Melgaço [INPA; Souza *et al.*, 2007]; Portel [Harada, 2016].

Neoponera marginata (Roger, 1861). Itaituba [INPA]; Paragominas [ANTWEB]; Parauapebas [MZSP].

Neoponera moesta (Mayr, 1870). Municipality unavailable [Wheeler & Bequaert, 1929; Kempf, 1972c; MacKay & MacKay, 2010]; Melgaço [Bastos & Harada, 2011]; Moju [CPDC]; Oriximiná [CPDC];

Neoponera oberthueri (Emery, 1890). Municipality unavailable [Emery, 1911; Borgmeier, 1923; Kempf, 1972c; MacKay & MacKay, 2010]; Belém [MacKay & MacKay, 2010]; Bragança [ANTWEB; Emery, 1890b].

Neoponera obscuricornis (Emery, 1890). Municipality unavailable [Emery, 1911; Borgmeier, 1923; Kempf, 1972c; Wild, 2005; MacKay & MacKay, 2010]; Água Azul do Norte [MPEG]; Bannach [MPEG]; Belém [ANTWEB; MZSP; Kempf, 1970; Wild, 2005]; Bragança [ANTWEB]; Marabá [MZSP; Pereira, 2012]; Marituba [CPDC]; Melgaço [INPA; Souza *et al.*, 2007]; Moju [CPDC]; Oriximiná [MZSP]; Paragominas [CPDC]; Parauapebas [MPEG; MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006]; Tucumã [MPEG]; Tucuruí [ANTWEB; Wild, 2005].

Neoponera procidua (Emery, 1890). Marabá [Pereira, 2012; Pereira *et al.*, 2016].

Neoponera striatinodis (Emery, 1890)*. Bannach [MPEG]; Conceição do Araguaia [MPEG]; Oriximiná [CPDC].

Neoponera unidentata (Mayr, 1862). Municipality unavailable [Borgmeier, 1923; Kempf, 1972c]; Altamira [MZSP]; Belém [MPEG; MZSP; Kempf, 1970; dos Santos *et al.*, 2007]; Canaã dos Carajás [MZSP]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Melgaço [INPA; Souza *et al.*, 2007; Bastos & Harada, 2011]; Oriximiná [CPDC; INPA; MZSP; Majer & Delabie, 1994]; Paragominas [MZSP]; Parauapebas [MPEG]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006]; Terra Santa [Santos *et al.*, 2008].

Neoponera venusta Forel, 1912. Municipality unavailable [Bastos & Harada, 2011].

Neoponera verenae Forel, 1922. Municipality unavailable [MacKay & MacKay, 2010]; Belém [ANTWEB; Wild, 2005; MacKay & MacKay, 2010]; Conceição do Araguaia [MPEG]; Curionópolis [MPEG]; Goianésia do Pará [CPDC]; Marituba [CPDC]; Melgaço [MPEG; Bastos & Harada, 2011]; Moju [CPDC]; Novo Repartimento [CPDC]; Paragominas [ANTWEB; CPDC; Solar *et al.*, 2016b]; Parauapebas [ANTWEB; MPEG]; Portel [Harada, 2016].

Neoponera villosa (Fabricius, 1804). Municipality unavailable [Borgmeier, 1923; Kempf, 1972c; MacKay & MacKay, 2010]; Alenquer [Fernandes *et al.*, 2014]; Altamira [MZSP]; Bannach [MPEG]; Belém [MZSP; Kempf, 1970]; Benevides [Fernandes *et al.*, 2014]; Cumaru do Norte [MPEG]; Juruti [MZSP]; Marapanim [Fernandes *et al.*, 2014]; Mojuí dos Campos [MZSP]; Monte Alegre [MZSP]; Novo Repartimento [Fernandes *et al.*, 2014]; Óbidos [MZSP]; Parauapebas [MPEG; MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [INPA; Fernandes *et al.*, 2014]; São Félix do Xingu [MPEG]; Tucumã [MPEG]; Tucuruí [Fernandes *et al.*, 2014].

***Odontomachus* Latreille, 1804**

Odontomachus bauri Emery, 1892. Municipality unavailable [Kempf, 1972c; Brandão, 1991]; Almeirim [DZUP];

Altamira [MZSP]; Bannach [MPEG]; Belém [MZSP; Brown Jr., 1976]; Benevides [MZSP]; Capanema [MZSP]; Curionópolis [MPEG]; Marabá [DZUP; MPEG; MZSP; Pereira, 2012; Pereira *et al.*, 2016]; Melgaço [Bastos & Harada, 2011]; Oriximiná [CPDC]; Paragominas [Harada *et al.*, 2013; Solar *et al.*, 2016a; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Portel [Harada, 2016]; Santarém [INPA; Vasconcelos *et al.*, 2006]; Tucumã [MPEG].

Odontomachus biumbonatus Brown, 1976. Municipality unavailable [Brandão, 1991; Scott-Santos *et al.*, 2008]; Bannach [MPEG]; Belém [MZSP; Brown Jr., 1976]; Benevides [INPA]; Marituba [MZSP]; Medicilândia [CPDC]; Oriximiná [CPDC; DZUP]; Paragominas [MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006].

Odontomachus brunneus (Patton, 1894). Municipality unavailable [Brown Jr., 1976; Brandão, 1991]; Almeirim [DZUP]; Belém [MZSP]; Goianésia do Pará [CPDC]; Itupiranga [CPDC]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Marituba [CPDC]; Melgaço [Bastos & Harada, 2011]; Moju [CPDC]; Mojuí dos Campos [MZSP]; Novo Progresso [MZSP]; Novo Repartimento [CPDC]; Paragominas [CPDC; Solar *et al.*, 2016b]; Parauapebas [MZSP]; Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006]; São Félix do Xingu [MPEG]; Tucumã [MPEG].

Odontomachus caelatus Brown, 1976. Municipality unavailable [Brandão, 1991]; Almeirim [DZUP]; Bannach [MPEG]; Belém [MZSP; Brown Jr., 1976]; Goianésia do Pará [CPDC]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Melgaço [Bastos & Harada, 2011]; Oriximiná [CPDC; Majer & Delabie, 1994]; Paragominas [Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Portel [Harada, 2016]; Prainha [Brown Jr., 1976]; Santarém [Vasconcelos *et al.*, 2006].

Odontomachus chelifer (Latreille, 1802)*. Almeirim [DZUP].

Odontomachus haematodus (Linnaeus, 1758). Municipality unavailable [INPA; Borgmeier, 1923; Kempf, 1972c]; Altamira [MZSP]; Belém [INPA; MZSP; Kempf, 1970; Kempf, 1972c]; Capanema [MZSP]; Conceição do Araguaia [INPA]; Curionópolis [MPEG]; Juruti [MZSP]; Marabá [MZSP; Pereira, 2012; Pereira *et al.*, 2016]; Marituba [CPDC]; Melgaço [Bastos & Harada, 2011]; Moju [CPDC]; Novo Repartimento [CPDC]; Óbidos [MZSP]; Oriximiná [CPDC; INPA; MZSP; Majer & Delabie, 1994]; Paragominas [CPDC; MZSP; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [ANTWEB; Kempf, 1972c; Vasconcelos *et al.*, 2006]; Terra Santa [Santos *et al.*, 2008].

Odontomachus hastatus (Fabricius, 1804). Municipality unavailable [Kempf, 1972c]; Almeirim [DZUP]; Belém [MZSP; Kempf, 1970]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Melgaço [INPA]; Mojuí dos Campos [MZSP]; Oriximiná [CPDC; MZSP; Majer & Delabie, 1994]; Jacareacanga [MZSP]; Parauapebas [MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; São Félix do Xingu [MPEG]; Tucumã [MPEG].

Odontomachus laticeps Roger, 1861. Municipality unavailable [Kempf, 1972c]; Bannach [MPEG]; Belém [Kempf, 1970]; Goianésia do Pará [CPDC]; Itupiranga [CPDC]; Marituba [CPDC]; Paragominas [CPDC]; Portel [Harada, 2016]; São Félix do Xingu [MPEG]; Tucumã [MPEG].

Odontomachus mayi Mann, 1912. Municipality unavailable [Kempf, 1972c]; Belém [MZSP]; Jacareacanga [MZSP]; Oriximiná [INPA].

Odontomachus meinerti Forel, 1905. Municipality unavailable [Kempf, 1972c]; Água Azul do Norte [MPEG]; Altamira [MZSP]; Belém [MZSP]; Curionópolis [MPEG]; Jacareacanga [MZSP]; Marabá [DZUP; Pereira, 2012; Pereira *et al.*, 2016]; Marituba [CPDC]; Melgaço [Bastos & Harada, 2011]; Moju [CPDC]; Novo Repartimento [CPDC]; Óbidos [MZSP]; Oriximiná [CPDC; Majer & Delabie, 1994]; Paragominas [MZSP; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006]; São João do Araguaia [INPA].

Odontomachus opaciventris Forel, 1899. Curionópolis [MPEG]; Melgaço [INPA].

Odontomachus sculptus Brown, 1978. Goianésia do Pará [CPDC]; Melgaço [Bastos & Harada, 2011]; Moju [CPDC]; Novo Repartimento [CPDC]; Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006].

Odontomachus spissus Kempf, 1962. Santarém [Vasconcelos *et al.*, 2006].

Odontomachus yucatecus Brown, 1976. Bannach [MPEG]; Marabá [Pereira, 2012]; Paragominas [Solar *et al.*, 2016b]; Portel [Overal *et al.*, 1997]; Tucumã [MPEG].

***Pachycondyla* Smith, 1858**

Pachycondyla crassinoda (Latreille, 1802). Municipality unavailable [INPA; OSUC; Borgmeier, 1923; MacKay & MacKay, 2010]; Almeirim [DZUP; INPA]; Altamira [MZSP; Kempf, 1961a]; Água Azul do Norte [MPEG]; Bannach [MPEG]; Belém [INPA; MZSP; OSUC; Kempf, 1961; MacKay & MacKay, 2010]; Conceição do Araguaia [DZUP; INPA; MPEG]; Curionópolis [MPEG]; Goianésia do Pará [CPDC]; Gurupá [INPA]; Jacareacanga [MZSP; Kempf, 1961a]; Marabá [DZUP; Pereira, 2012; Pereira *et al.*, 2016]; Marituba [CPDC]; Medicilândia [CPDC]; Melgaço [INPA; MPEG; Souza *et al.*, 2007]; Moju [CPDC]; Novo Repartimento [CPDC]; Oriximiná [CPDC; MZSP; Majer & Delabie, 1994]; Paragominas [ANTWEB; CPDC; MPEG; MZSP; Solar *et al.*, 2016a; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Portel [INPA; Overal *et al.*, 1997; Harada, 2016]; Santarém [DZUP; Vasconcelos *et al.*, 2006]; São Félix do Xingu [MPEG].

Pachycondyla fuscoatra (Roger, 1861). Municipality unavailable [Kempf, 1972c]; Óbidos [Forel, 1907].

Pachycondyla harpax (Fabricius, 1804). Municipality unavailable [Borgmeier, 1923; Kempf, 1972c; MacKay & MacKay, 2010]; Almeirim [DZUP; INPA]; Belém [Kempf, 1961a; MZSP]; Capanema [MZSP]; Chaves [Wheeler, 1915]; Curionópolis [MPEG]; Goianésia do Pará [CPDC]; Gurupá [INPA]; Itupiranga [CPDC]; Marabá [DZUP; Pereira, 2012; Pereira *et al.*, 2016]; Marituba [CPDC]; Melgaço [INPA; MPEG; Souza *et al.*, 2007; Bastos & Harada, 2011; Mendoza-Penagos *et al.*, 2020]; Moju [CPDC]; Mojuí dos Campos [MZSP]; Novo Repartimento [CPDC]; Oriximiná [CPDC; Majer & Delabie, 1994]; Paragominas [CPDC; MPEG; MZSP; Harada *et al.*, 2013; Solar *et al.*, 2016a; Solar *et al.*, 2016b]; Parauapebas [MPEG; MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006]; Terra Santa [Santos *et al.*, 2008].

Pachycondyla impressa (Roger, 1861). Municipality unavailable [MPEG; MacKay & MacKay, 2010]; Melgaço [INPA; MPEG; Souza *et al.*, 2007; Bastos & Harada, 2011]; Paragominas [ANTWEB; Solar *et al.*, 2016b]; Parauapebas [MZSP]; Portel [Harada, 2016].

Pachycondyla lenis Kempf, 1961. Melgaço [Bastos & Harada, 2011]; Paragominas [MPEG]; Portel [Harada, 2016].

Pachycondyla striata Smith, 1858. Água Azul do Norte [MPEG]; Goianésia do Pará [CPDC]; Marabá [Pereira, 2012; Pereira *et al.*, 2016]; Oriximiná [Majer & Delabie, 1994]; Paragominas [INPA]; Parauapebas [MPEG]; Portel [Harada, 2016].

***Platythyrea* Roger, 1863**

Platythyrea angusta Forel, 1901. Municipality unavailable [Kempf, 1972c]; Belém [INPA; MZSP]; Cametá [Borgmeier, 1923]; Conceição do Araguaia [INPA]; Óbidos [MZSP]; Oriximiná [MZSP]; Parauapebas [MPEG; MZSP].

Platythyrea pilosula (Smith, 1858). Belém [MZSP]; Melgaço [INPA]; Parauapebas [MPEG].

Platythyrea punctata (Smith, 1858). Municipality unavailable [Kempf, 1972c]; Almeirim [DZUP; INPA]; Oriximiná [Majer & Delabie, 1994]; Parauapebas [MPEG]; Santarém [INPA].

Platythyrea sinuata (Roger, 1860). Municipality unavailable [Kempf, 1972c; Brandão, 1991]; Belém [Borgmeier, 1923; Kempf, 1959c; Brown Jr., 1975]; Curionópolis [MPEG]; Goianésia do Pará [CPDC]; Melgaço [Bastos & Harada, 2011]; Moju [CPDC]; Paragominas [ANTWEB; CPDC; Solar *et al.*, 2016b].

***Pseudoponera* Emery, 1900**

Pseudoponera gilberti (Kempf, 1960). Municipality unavailable [MacKay & MacKay, 2010]; Marituba [CPDC; MZSP]; Parauapebas [MZSP].

Pseudoponera stigma (Fabricius, 1804). Municipality unavailable [Borgmeier, 1923; Kempf, 1972c; MacKay & MacKay, 2010]; Bannach [MPEG]; Belém [MZSP; MacKay & MacKay, 2010]; Chaves [Wheeler, 1915]; Conceição do Araguaia [INPA]; Jacareacanga [MZSP; Kempf, 1960c]; Marituba [CPDC; MZSP]; Melgaço [INPA; Souza *et al.*, 2007; Bastos & Harada, 2011]; Moju [MacKay & MacKay, 2010]; Óbidos [MZSP; Kempf, 1960c]; Oriximiná [INPA]; Paragominas [MZSP]; Parauapebas [MPEG; MZSP]; Portel [Harada, 2016]; Tucumã [MPEG].

Pseudoponera succedanea (Roger, 1863). Municipality unavailable [Brandão, 1991]; Marituba [CPDC].

***Rasopone* Schmidt & Shattuck, 2014**

Rasopone ferruginea (Smith, 1858). Capanema [MZSP]; Marabá [DZUP; Pereira, 2012; Pereira *et al.*, 2016]; Marituba [CPDC]; Melgaço [INPA; MPEG; Souza *et al.*, 2007; Bastos & Harada, 2011]; Moju [CPDC]; Novo Repartimento [CPDC]; Portel [Harada, 2016]; Santarém [Vasconcelos *et al.*, 2006].

***Simopelta* Mann, 1922**

Simopelta jeckylli (Mann, 1916). Moju [Fernandes *et al.*, 2015].

Simopelta pergandei (Forel, 1909)**. Almeirim [DZUP].

***Thaumatomyrmex* Mayr, 1887**

Thaumatomyrmex atrox Weber, 1939. Melgaço [INPA].

Thaumatomyrmex ferox Mann, 1922. Parauapebas [MPEG; MZSP]; Portel [Harada, 2016].

Thaumatomyrmex paludis Weber, 1942. Oriximiná [Majer & Delabie, 1994].

Proceratiinae Emery, 1895 [2 genera, 4 species]

***Discothyrea* Roger, 1863**

Discothyrea sexarticulata Borgmeier, 1954. Almeirim [DZUP]; Parauapebas [MPEG]; Portel [Harada, 2016]; Santarém [INPA; Vasconcelos *et al.*, 2006].

***Probolomyrmex* Mayr, 1901**

Probolomyrmex dentinodis Oliveira & Feitosa, 2019. Municipality unavailable [Oliveira & Feitosa, 2019].

Probolomyrmex lamellatus Oliveira & Feitosa, 2019. Municipality unavailable [Oliveira & Feitosa, 2019].

Probolomyrmex petiolatus Weber, 1940. Santarém [INPA; Delabie *et al.*, 2001; Nascimento *et al.*, 2004; Vasconcelos *et al.*, 2006].

Pseudomyrmecinae Smith, 1952 [1 genus, 52 species]

***Pseudomyrmex* Lund, 1831**

Pseudomyrmex alvarengai Kempf, 1961. Municipality unavailable [Kempf, 1972c]; Belém [ANTWEB]; Jacareacanga [MZSP; Kempf, 1961b; Brandão *et al.*, 2010].

Pseudomyrmex atipes (Smith, 1860). Municipality unavailable [Kempf, 1972c]; Almeirim [MZSP; Kempf, 1958; Kempf, 1967b]; Belém [MPEG]; Cametá [MPEG]; Conceição do Araguaia [INPA]; Goianésia do Pará [MPEG]; Jacundá [MPEG]; Juruti [MZSP]; Novo Repartimento [MPEG]; Oriximiná [CPDC]; Parauapebas [MPEG]; Santarém [ANTWEB]; São Geraldo do Araguaia [MPEG]; Tucuruí [ANTWEB].

Pseudomyrmex beccarii (Menozzi, 1935)*. Almeirim [MPEG]; Belém [MPEG]; Jacundá [MPEG]; Melgaço [MPEG]; Oriximiná [MZSP]; Parauapebas [MPEG]; São João de Pirabas [MPEG]; Vitória do Xingu [MPEG].

Pseudomyrmex boopis (Roger, 1863)*. Itaituba [MZSP].

Pseudomyrmex cladoicus (Smith, 1858)*. Santarém Novo [MPEG]; Senador José Porfírio [MPEG]; Vitória do Xingu [MPEG].

Pseudomyrmex concolor (Smith, 1860). Municipality unavailable [Kempf, 1972c]; Água Azul do Norte [MZSP]; Almeirim [ANTWEB; MPEG; Ward, 1999]; Altamira [ANTWEB; MZSP]; Bagre [MPEG]; Belém [ANTWEB; MZSP; Kempf, 1970; Ward, 1999]; Goianésia do Pará [MPEG]; Igarapé-Açu [MZSP]; Irituia [MZSP]; Marabá [MZSP]; Melgaço [MPEG]; Novo Repartimento [MPEG]; Óbidos [MZSP]; Oriximiná [INPA; MZSP; Ward, 1999]; Parauapebas [MZSP]; Santarém [ANTWEB]; São João de Pirabas [MPEG]; Tucuruí [INPA; MPEG; Ward, 1999]; Vitória do Xingu [MPEG].

Pseudomyrmex cordiae (Forel, 1904)*. Marabá [MZSP].

Pseudomyrmex cubensis (Forel, 1901). Municipality unavailable [Brandão, 1991]; Conceição do Araguaia [INPA]; Santarém [INPA; Vasconcelos *et al.*, 2006]; Tucuruí [Ward, 1989].

Pseudomyrmex curacaensis (Forel, 1912). Municipality unavailable [Brandão, 1991]; Almeirim [MZSP]; Belém [MZSP; Ward, 1989]; Igarapé-Açu [MZSP; Ward, 1989]; Oriximiná [MZSP]; Soure [MZSP; Ward, 1989].

Pseudomyrmex dendroicus (Forel, 1904). Belém [Ward, 1999].

Pseudomyrmex duckei (Forel, 1906)*. Goianésia do Pará [MPEG]; Novo Repartimento [MPEG]; Oriximiná [MZSP].

Pseudomyrmex eduardi (Forel, 1912). Cametá [MPEG]; Novo Repartimento [MPEG]; Tucuruí [Ward, 1989].

Pseudomyrmex ejectus (Smith, 1858). Municipality unavailable [Emery, 1894b; Kempf, 1972].

Pseudomyrmex elongatus (Mayr, 1870). Municipality unavailable [Kempf, 1972c]; Belém [INPA; MZSP; Ward, 1989]; Conceição do Araguaia [INPA; Ward, 1989]; Curionópolis [MPEG]; Igarapé-Açu [MZSP; Ward, 1989]; Marabá [MZSP]; Mojuí dos Campos [MZSP]; Oriximiná [CPDC; INPA; MZSP; Ward, 1989]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santarém [Ward, 1989; Vasconcelos *et al.*, 2006]; Senador José Porfírio [Ward, 1989]; Tucuruí [Ward, 1989].

Pseudomyrmex ethicus (Forel, 1911). Almeirim [MZSP]; Bannach [MPEG]; Belém [INPA; MPEG]; Cametá [MPEG]; Goianésia do Pará [MPEG]; Marabá [MPEG; MZSP]; Melgaço [MPEG]; Novo Repartimento [MPEG]; Paragominas [MPEG]; Parauapebas [MPEG]; Vitória do Xingu [MPEG].

Pseudomyrmex euryblemma (Forel, 1899)*. Bannach [MPEG]; Belém [MPEG]; Igarapé-Açu [MZSP].

Pseudomyrmex faber (Smith, 1858). Almeirim [MPEG]; Belém [Kempf, 1958]; Goianésia do Pará [MPEG]; Itaituba [MPEG]; Jacundá [MPEG]; Novo Repartimento [MPEG]; Parauapebas [MPEG]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santa Bárbara do Pará [MPEG]; Senador José Porfírio [MPEG]; Tucuruí [ANTWEB]; Vitória do Xingu [MPEG].

Pseudomyrmex filiformis (Fabricius, 1804). Municipality unavailable [Kempf, 1972c]; Anajás [MPEG]; Belém [MPEG]; Goianésia do Pará [MPEG]; Itupiranga [CPDC]; Jacundá [MPEG]; Melgaço [MPEG]; Novo Repartimento [MPEG]; Oriximiná [CPDC]; Primavera [MPEG]; Santa Bárbara do Pará [MPEG]; Santarém [ANTWEB; CPDC; INPA; Ward, 1989; Vasconcelos *et al.*, 2006]; São João de Pirabas [MPEG]; Senador José Porfírio [MPEG]; Tucuruí [MPEG]; Vitória do Xingu [MPEG].

Pseudomyrmex flavidulus (Smith, 1858). Bannach [MPEG]; Castanhal [INPA]; Salinópolis [MZSP]; Santarém [ANTWEB; INPA; Kempf, 1972c; Vasconcelos *et al.*, 2006].

Pseudomyrmex godmani (Forel, 1899)*. Novo Repartimento [MPEG]; São João de Pirabas [MPEG].

Pseudomyrmex gracilis (Fabricius, 1804). Municipality unavailable [INPA; Kempf, 1972c]; Água Azul do Norte [MPEG]; Alenquer [MPEG]; Almeirim [DZUP; MPEG; MZSP]; Altamira [MZSP]; Ananindeua [MPEG]; Augusto Corrêa [MPEG]; Bannach [MPEG]; Barcarena [MPEG]; Belém [ANTWEB; MPEG; MZSP]; Belterra [MZSP]; Cachoeira do Arari [MPEG]; Cametá [MZSP]; Canaã dos Carajás [MPEG]; Conceição do Araguaia [INPA; MPEG; MZSP]; Curionópolis [MPEG]; Goianésia do Pará [MPEG]; Igarapé-Açu [MZSP]; Itaituba [MPEG]; Jacareacanga [MZSP]; Jacundá [MPEG]; Marabá [MPEG]; Maracanã [INPA]; Marapanim [MPEG]; Melgaço [MPEG]; Mojuí dos Campos [MZSP]; Muaná [MPEG]; Novo Repartimento [MPEG]; Óbidos [MZSP]; Oriximiná [CPDC; MZSP; Majer & Delabie, 1994]; Ourilândia do Norte [MPEG]; Paragominas [MZSP]; Parauapebas [MPEG; MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Primavera [MPEG]; Santa Bárbara do Pará [MPEG]; Santa Maria das Barreiras [INPA]; Santarém [CPDC; INPA; Vasconcelos *et al.*, 2006]; Santarém Novo [MPEG]; São Félix do Xingu [MPEG]; São Geraldo do Araguaia [MPEG]; São João de Pirabas [MPEG]; Senador José Porfírio [MPEG]; Soure [MZSP]; Tracuateua [MPEG]; Tucumã [MPEG]; Tucuruí [MPEG]; Vitória do Xingu [MPEG].

Pseudomyrmex holmgreni (Wheeler, 1925)*. Mojuí dos Campos [MZSP]; Parauapebas [MPEG].

Pseudomyrmex hospitalis Ward, 1999*. Senador José Porfírio [MPEG].

Pseudomyrmex kuenckeli (Emery, 1890). Conceição do Araguaia [MPEG; Ward, 1999]; Oriximiná [Ward, 1999]; São Geraldo do Araguaia [MPEG].

Pseudomyrmex laevifrons Ward, 1989. Municipality unavailable [ANTWEB; Ward, 1989]; Almeirim [Ward, 2017]; Belém [MPEG; Kempf, 1972c]; Novo Repartimento [MPEG].

Pseudomyrmex laevigatus (Smith, 1877). Municipality unavailable [Emery, 1890a; Kempf, 1958; Kempf, 1972c]; Almeirim [MZSP; Kempf, 1967b]; Bragança [ANTWEB]; Maracanã [ANTWEB]; Oriximiná [CPDC]; São Geraldo do Araguaia [MPEG]; Tucuruí [MPEG].

Pseudomyrmex lisus (Enzmann, 1944)*. Novo Repartimento [MPEG]; Santa Bárbara do Pará [MPEG].

Pseudomyrmex maculatus (Smith, 1855). Municipality unavailable [Kempf, 1972c]; Almeirim [MZSP; Kempf, 1958]; Belém [MPEG]; Conceição do Araguaia [MPEG]; Oriximiná [MZSP]; Parauapebas [MZSP]; Santarém [CPDC]; São Geraldo do Araguaia [MPEG].

Pseudomyrmex malignus (Wheeler, 1921). Almeirim [MZSP]; Altamira [MZSP; Ward, 1999].

Pseudomyrmex mandibularis (Spinola, 1851). Belém [Kempf, 1972c].

Pseudomyrmex oculatus (Smith, 1855). Municipality unavailable [Ward, 1989]; Almeirim [DZUP]; Altamira [MZSP]; Bannach [MPEG]; Belém [INPA; MZSP; Kempf, 1970; Ward, 1989]; Conceição do Araguaia [INPA]; Jacareacanga [MZSP; Kempf, 1961b; Ward, 1989]; Marabá [MPEG; MZSP]; Óbidos [MZSP]; Oriximiná [MZSP; Ward, 1989; Majer & Delabie, 1994]; Parauapebas [MZSP; Ward, 1989]; Santarém [ANTWEB; INPA; Kempf, 1961b; Kempf, 1972c; Ward, 1989; Vasconcelos *et al.*, 2006]; São Félix do Xingu [MPEG]; Senador José Porfírio [Ward, 1989]; Tucuruí [Ward, 1989].

Pseudomyrmex pallidus (Smith, 1855). Municipality unavailable [Vasconcelos *et al.*, 2006].

Pseudomyrmex penetrator (Smith, 1877). Municipality unavailable [ANTWEB; Forel, 1904b; Wheeler, 1942; Baroni Urbani, 1977; Ward, 1999]; Almeirim [DZUP]; Bagre [MPEG]; Barcarena [MPEG]; Belém [ANTWEB; MPEG; Kempf, 1972c; Ward, 1999]; Dom Eliseu [ANTWEB]; Igarapé-Açu [ANTWEB; Ward, 1999]; Ipixuna do Pará [MPEG]; Irituia [Ward, 1999]; Jacundá [MPEG]; Marabá [ANTWEB]; Marituba [CPDC; DZUP]; Novo Repartimento [MPEG]; Paragominas [MPEG; Ward, 1999]; Parauapebas [ANTWEB; MPEG]; Salinópolis [MPEG]; Santa Bárbara do Pará [MPEG]; Senador José Porfírio [Ward, 1999]; Tucuruí [ANTWEB; Ward, 1999].

Pseudomyrmex peruvianus (Wheeler, 1925)*. Parauapebas [MZSP]; São Félix do Xingu [MPEG].

Pseudomyrmex pisinnus Ward, 1989. Santarém [Vasconcelos *et al.*, 2006].

Pseudomyrmex pupa (Forel, 1911). Municipality unavailable [Kempf, 1972c]; Almeirim [MPEG]; Altamira [Santschi, 1925a; Kempf, 1958]; Bannach [MPEG]; Belém [MPEG]; Castanhal [INPA]; Jacundá [MPEG]; Juruti [MPEG]; Marabá [MPEG]; Melgaço [MPEG]; Novo Repartimento [MPEG]; Parauapebas [MPEG]; Primavera [MPEG]; Santa Maria das Barreiras [INPA]; Tucuruí [ANTWEB]; São Félix do Xingu [MPEG]; Senador José Porfírio [MPEG]; Tucumã [MPEG].

Pseudomyrmex rochai (Forel, 1912)*. Goianésia do Pará [MPEG]; Melgaço [MPEG]; Novo Repartimento [MPEG]; Parauapebas [MPEG]; Vitória do Xingu [MPEG].

Pseudomyrmex sericeus (Mayr, 1870). Belém [INPA; MPEG]; Conceição do Araguaia [INPA; MPEG]; Moju

[MPEG]; Novo Repartimento [MPEG]; Oriximiná [INPA]; Portel [Overal *et al.*, 1997; Harada, 2016]; Santa Bárbara do Pará [MPEG].

Pseudomyrmex simplex (Smith, 1877). Municipality unavailable [Brandão, 1991]; Bannach [MPEG]; Conceição do Araguaia [INPA]; Oriximiná [INPA]; Santarém [DZUP; Ward, 1985]; Tucuruí [Ward, 1985].

Pseudomyrmex spiculus Ward, 1989*. Belém [MPEG]; Vitória do Xingu [MPEG].

Pseudomyrmex subater (Wheeler & Mann, 1914)*. Novo Repartimento [MPEG].

Pseudomyrmex tenuis (Fabricius, 1804). Municipality unavailable [ANTWEB; Emery, 1894b; Forel, 1912d; Enzmann, 1944; Kempf, 1972c]; Água Azul do Norte [MPEG]; Almeirim [DZUP; MPEG; MZSP]; Altamira [MZSP]; Augusto Corrêa [MPEG]; Bannach [MPEG]; Barcarena [MPEG]; Belém [MPEG; MZSP; Kempf, 1960a; Kempf, 1970]; Belterra [Kempf, 1960a]; Bragança [MPEG]; Breves [MPEG]; Capanema [MZSP]; Conceição do Araguaia [INPA; MZSP]; Curionópolis [MPEG]; Goianésia do Pará [CPDC; MPEG]; Igarapé-Açu [Kempf, 1960a]; Igarapé-Açu [MZSP]; Itaituba [MPEG]; Jacareacanga [MZSP]; Jacundá [MPEG]; Juruti [MPEG]; Marabá [DZUP; MPEG]; Marapanim [MPEG]; Medicilândia [CPDC]; Melgaço [MPEG]; Moju [CPDC; MPEG]; Novo Repartimento [CPDC; MPEG]; Oriximiná [CPDC; INPA; MZSP; Majer & Delabie, 1994]; Paragominas [MZSP]; Parauapebas [MPEG; MZSP]; Portel [Overal *et al.*, 1997; Harada, 2016]; Primavera [MPEG]; Santarém [INPA; Kempf, 1960a; Vasconcelos *et al.*, 2006]; Santarém Novo [MPEG]; São Félix do Xingu [MPEG]; São Francisco do Pará [MPEG]; São Geraldo do Araguaia [MPEG]; São João de Pirabas [MPEG]; Senador José Porfírio [MPEG]; Soure [MPEG]; Tucumã [MPEG]; Tucuruí [MPEG]; Vitória do Xingu [MPEG];

Pseudomyrmex tenuissimus (Emery, 1906). Municipality unavailable [Brandão, 1991]; Almeirim [MZSP]; Belém [MPEG; MZSP; Ward, 1989]; Conceição do Araguaia [INPA]; Igarapé-Açu [MZSP; Ward, 1989]; Jacundá [MPEG]; Oriximiná [CPDC; MZSP]; Parauapebas [MPEG; MZSP]; Primavera [MPEG]; Senador José Porfírio [Ward, 1989]; Vitória do Xingu [MPEG].

Pseudomyrmex terminalis (Smith, 1877). Municipality unavailable [ANTWEB]; Belém [Kempf, 1972c].

Pseudomyrmex termitarius (Smith, 1855). Municipality unavailable [ANTWEB; Kempf, 1972c]; Água Azul do Norte [MPEG]; Altamira [MZSP]; Anajás [MPEG; Kempf, 1960a]; Belém [MPEG; MZSP; Kempf, 1960a;]; Belterra [MZSP; Kempf, 1960a]; Conceição do Araguaia [MPEG]; Goianésia do Pará [MPEG]; Igarapé-Açu [MZSP]; Itaituba [MPEG]; Oriximiná [INPA; MZSP]; Paragominas [MPEG; Solar *et al.*, 2016a; Solar *et al.*, 2016b]; Parauapebas [MZSP]; Portel [MPEG; Overal *et al.*, 1997; Harada, 2016]; Primavera [MPEG]; Santa Bárbara do Pará [MPEG]; Santarém [ANTWEB; Vasconcelos *et al.*, 2006]; São João de Pirabas [MPEG]; Soure [MPEG].

Pseudomyrmex triplarinus (Weddell, 1850). Altamira [Ward, 1999]; Monte Alegre [MZSP; Ward, 1999]; Santarém [Ward, 1999].

Pseudomyrmex unicolor (Smith, 1855). Almeirim [MPEG; MZSP]; Altamira [MZSP]; Barcarena [MPEG]; Belém [MPEG]; Cametá [MPEG]; Canaã dos Carajás [MPEG]; Conceição do Araguaia [INPA; MPEG; MZSP]; Juruti [MPEG]; Melgaço [MPEG]; Portel [Overal *et al.*, 1997; Harada, 2016]; São Geraldo do Araguaia [MPEG]; Senador José Porfírio [MPEG]; Tucuruí [MPEG]; Vitória do Xingu [MPEG].

Pseudomyrmex urbanus (Smith, 1877). Municipality unavailable [Brandão, 1991]; Almeirim [MZSP]; Canaã dos Carajás [MZSP]; Oriximiná [MZSP; Ward, 1989]; Parauapebas [MPEG].

Pseudomyrmex venustus (Smith, 1858). Municipality unavailable [Emery, 1890a; Kempf, 1958; Kempf, 1972c];

Altamira [MZSP]; Bannach [MPEG]; Conceição do Araguaia [INPA; MZSP]; Igarapé-Açu [MZSP; Kempf, 1958]; Itaituba [MPEG]; Marabá [MPEG; MZSP]; Parauapebas [MPEG; MZSP]; São Félix do Xingu [MPEG]; São Geraldo do Araguaia [MPEG]; Tucumã [MPEG]; Tucuruí [ANTWEB]; Vitória do Xingu [MPEG].

Pseudomyrmex viduus (Smith, 1858). Municipality unavailable [Forel, 1906; Kempf, 1972c]; Alenquer [Ward, 1999]; Altamira [MZSP]; Belém [MPEG; Ward, 1999]; Chaves [Ward, 1999]; Óbidos [MZSP; Ward, 1999]; Oriximiná [INPA; Ward, 1999].

Pseudomyrmex vinneni (Forel, 1906)*. Oriximiná [MZSP].

Acknowledgments

We would like to thank Orlando Tobias Silveira (the entomology curator at MPEG) for providing access to the ant collection to retrieve data and William L. Overal and Ana Harada for making availability of data collection from MPEG. We are very grateful to Benoit Guénard and Evan Economo for sharing the GABI dataset for ants of Pará. We thank Benoit Guénard and an anonymous reviewer for their constructive and helpful comments. We also thank Phil Ward and Alexandre Casadei-Ferreira for identifying species of the genera *Pseudomyrmex* and *Pheidole* in the MPEG collection, respectively. EZA acknowledges the support from the National Science Foundation (DEB1654829) and Peter Buck Postdoctoral Fellowship at the Smithsonian Institution, and thanks Christian Rabeling of Arizona State University and Ted Schultz of the Smithsonian Institution for their support of women in science. LPP, JAS, ELSS, and RPSA were funded by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES), Código de Financiamento 001. RRS was supported by the Amazonian Foundation for Study and Research (FAPESPA), ICAAF No. 012/2018. RMF and FBB were supported by the National Council for Scientific and Technological Development (CNPq) (grants No. 301495/2019-0 and 309600/2017-0, respectively). CRFB was supported by the São Paulo Research Foundation (FAPESP; Grant No. 2017/07366-1), PROTAX-CNPq (Grant No. 150409) and National Institutes for Science and Technology (INCT) (CNPq 465562/2014-0; FAPESP 2014/50940-2). IOF received a CAPES/PNPD fellowship. JHC was supported by the PRONEX program (FAPESB/CNPq PNX0011/2009) and a research grant from CNPq (304629/2018-9). JLPS was supported by a CNPq/PCI postdoctoral scholarship (302065/2021-0).

References

- Abreu, J.M. & Delabie, J.H.C. (1986) Controle das formigas cortadeiras em plantios de cacau. *Revista Theobroma*, 16 (4), 199–211. [in Portuguese]
- Albernaz, A.L. (2014) Biodiversidade e unidades de conservação na Amazônia brasileira. In: Vieira, I.C.G., Toledo, P.M. & Santos-Junior, R.O. (Orgs.), *Ambiente e sociedade na Amazônia: uma abordagem interdisciplinar*. Garamond, Rio de Janeiro, pp. 315–340. [in Portuguese]
- Albuquerque, E.Z. (2014) *Revisão taxonômica e análise filogenética do grupo Rimosus de Cyphomyrmex (Hymenoptera, Formicidae, Attini)*. Tese de Doutorado. Faculdade de Filosofia Ciências e Letras de Ribeirão Preto, Ribeirão Preto, São Paulo, 294 pp. [in Portuguese]
- Almeida, A.S. & Vieira, I.C.G. (2010) Centro de endemismo Belém: status da vegetação remanescente e desafios para a conservação da biodiversidade e restauração ecológica. *Revista de Estudos Universitários*, 36, 95–111. [in Portuguese]
- Almeida Filho, A.J. (1984) Notas sobre *Strumigenys louisianae* (Hymenoptera, Formicidae) e sua ocorrência no Nordeste do Brasil. *Quid*, 5, 133–139. [in Portuguese]
- Andrade-Silva, J. & Almeida, R.P.S. (2020) Relationship between tree circumference and arboreal ants community (Hymenoptera Formicidae) in a protected area in the Amazon. *Boletim do Museu Paraense Emílio Goeldi- Ciências Naturais*, 15, 145–153. <https://doi.org/10.46357/bcnaturais.v15i1.287>
- AntWeb (2020) Version 8.40. California Academy of Science. Available from <https://www.antweb.org> (accessed 29 May 2020)
- Azevedo-Santos, V.M., Fearnside, P.M., Oliveira, C.S., Padial, A.A., Pelicice, F.M., Lima, D.P., Simberloff, D., Lovejoy, T.E., Magalhães, A.L.B., Orsi, M.L., Agostinho, A.A., Esteves, F.A., Pompeu, P.S., Laurance, W.F., Petrere, M., Mormul, R.P. & Vitule, J.R.S. (2017) Removing the abyss between conservation science and policy decisions in Brazil. *Biodiversity and Conservation*, 26, 1745–1752. <https://doi.org/10.1007/s10531-017-1316-x>

- Azorsa, F. & Sosa-Calvo, J. (2008) Description of a remarkable new species of ant in the genus *Daceton* Perty (Formicidae: Dacetini) from South America. *Zootaxa*, 1749 (1), 27–38.
<https://doi.org/10.11646/zootaxa.1749.1.3>
- Baroni Urbani, C. (1977) Katalog der Typen von Formicidae (Hymenoptera) der Sammlung des Naturhistorischen Museums Basel (2. Teil). *Mitteilungen der Entomologischen Gesellschaft Basel*, 27, 61–102. [in German]
- Barros, M.P. & Pimentel, F.R. (2001) A fauna de Decapoda (Crustacea) do estado do Pará, Brasil: Lista preliminar das espécies. *Boletim do Museu Paraense Emílio Goeldi, série Zoologia*, 17 (1), 15–41. [in Portuguese]
- Bastos, A.H.D.S. & Harada, A.Y. (2011) Leaf-litter amount as a factor in the structure of a ponerine ants community (Hymenoptera, Formicidae, Ponerinae) in an eastern Amazonian rainforest, Brazil. *Revista Brasileira de Entomologia*, 55, 589–596.
<https://doi.org/10.1590/S0085-56262011000400016>
- Bolton, B. (2000) The Ant Tribe Dacetini. *Memoirs of the American Entomological Institute*, 65, 1–1028.
- Bolton, B. (2020) An online catalog of the ants of the world. Available from: <https://antcat.org> (accessed 29 May 2020)
- Borgmeier, T. (1923) Catálogo sistemático e sinonímico das formigas do Brasil. 1 parte. Subfam. Dorylinae, Cerapachyinae, Ponerinae, Dolichoderinae. *Archivos do Museu Nacional*, 24, 33–103. [in Portuguese]
- Borgmeier, T. (1930) Duas rainhas de *Eciton* e algumas outras formigas brasileiras. *Archivos do Instituto Biológico*, 3, 21–40. [in Portuguese]
- Borgmeier, T. (1936) Sobre algumas formigas dos gêneros *Eciton* e *Cheliomyrmex* (Hym. Formicidae). *Archivos do Instituto de Biología Vegetal*, 3, 51–68. [in Portuguese]
- Borgmeier, T. (1939) Nova contribuição para o conhecimento das formigas neotropicais (Hym. Formicidae). *Revista de Entomologia*, 10, 403–428. [in Portuguese]
- Borgmeier, T. (1950a) Atta Studien (Hym. Formicidae). *Memórias do Instituto Oswaldo Cruz*, 48, 265–292. [in German]
<https://doi.org/10.1590/S0074-02761950000100010>
- Borgmeier, T. (1950b) Atta Studien (Hym. Formicidae). *Memórias do Instituto Oswaldo Cruz*, 48, 265–292. [in German]
<https://doi.org/10.1590/S0074-02761950000100010>
- Borgmeier, T. (1953) Vorarbeiten zu einer Revision der neotropischen Wanderameisen. *Studia Entomologica*, 2, 1–51. [in German]
- Borgmeier, T. (1955) Die Wanderameisen der neotropischen Region. *Studia Entomologica*, 3, 1–720. [in German]
- Borgmeier, T. (1959) Myrmecologische Studien. II. *Anais da Academia Brasileira de Ciências*, 31, 309–319. [in German]
- Brandão, C.R.F. (1990) Systematic revision of the Neotropical ant genus *Megalomyrmex* Forel (Hymenoptera: Formicidae: Myrmicinae), with the description of thirteen new species. *Arquivos de Zoologia*, 31, 411–481.
<https://doi.org/10.11606/issn.2176-7793.v31i5p1-91>
- Brandão, C.R.F. (1991) Adendos ao catálogo abreviado das formigas da região neotropical (Hymenoptera: Formicidae). *Revista Brasileira de Entomologia*, 35, 319–412. [in Portuguese]
- Brandão, C.R.F. (2003) Further revisionary studies on the ant genus *Megalomyrmex* Forel (Hymenoptera: Formicidae). *Papéis Avulsos de Zoologia*, 43, 145–159.
<https://doi.org/10.1590/S0031-10492003000800001>
- Brandão, C.R.F. & Mayhé-Nunes, A.J. (2008) A new species of the fungus-farming ants genus *Mycetagoicus* Brandão & Mayhé-Nunes (Hymenoptera, Formicidae, Attini). *Revista Brasileira de Entomologia*, 52 (3), 349–352.
<https://doi.org/10.1590/S0085-56262008000300006>
- Brandão, C.R.F., Esteves, F.A. & Prado, L.P. (2010) A catalogue of the Pseudomyrmecinae ant type specimens (Hymenoptera, Formicidae) deposited in the Museu de Zoologia da Universidade de São Paulo, Brazil. *Papéis Avulsos de Zoologia*, 50 (45), 693–699.
<https://doi.org/10.1590/S0031-10492010004500001>
- Brandão, C.R.F., Feitosa, R.M. & Diniz, J.L.M. (2015) Taxonomic revision of the Neotropical Myrmicinae ant genus *Blepharidatta* Wheeler. *Zootaxa*, 4012 (1), 33–56.
<https://doi.org/10.11646/zootaxa.4012.1.2>
- Brown, W.L. Jr. (1950) Revision of the ant tribe Dacetini: II. *Glamyromyrmex* Wheeler and closely related small genera. *Transactions of the American Entomology Society*, 76, 27–36.
- Brown, W.L. Jr. (1953a) The neotropical species of the ant genus *Strumigenys* Fr. Smith: group of *mandibularis* Fr. Smith. *Journal of the New York Entomological Society*, 61, 53–59.
- Brown, W.L. Jr. (1953b) Revisionary studies in the ant tribe Dacetini. *American Midland Naturalist*, 50, 1–137.
<https://doi.org/10.2307/2422158>
- Brown, W.L. Jr. (1957) The neotropical species of the ant genus *Strumigenys* Fr. Smith: group of *cultriger* Mayr and *S. tococae* Wheeler. *Journal of the New York Entomological Society*, 63, 97–102.
- Brown, W.L. Jr. (1958a) Contributions toward a reclassification of the Formicidae. II. Tribe Ectatommini (Hymenoptera). *Bulletin of the Museum of Comparative Zoology*, 118, 173–362.
- Brown, W.L. Jr. (1958b) The neotropical species of the ant genus *Strumigenys* Fr. Smith: group of *ogloblini* Santschi. *Journal of the New York Entomological Society*, 65, 133–137.
- Brown, W.L. Jr. (1960) The neotropical species of the ant genus *Strumigenys* Fr. Smith: group of *gundlachi* (Roger). *Psyche*, 66, 37–52.
<https://doi.org/10.1155/1959/80153>

- Brown, W.L. Jr. (1962) The neotropical species of the ant genus *Strumigenys* Fr. Smith: synopsis and keys to the species. *Psyche*, 69, 238–267.
<https://doi.org/10.1155/1962/79591>
- Brown, W.L. Jr. (1964) The ant genus *Smithistruma*: a first supplement to the world revision (Hymenoptera: Formicidae). *Transactions of the American Entomological Society*, 89, 183–200.
- Brown, W.L. Jr. (1965) Contributions to a reclassification of the Formicidae. IV. Tribe Typhlomyrmecini (Hymenoptera). *Psyche*, 72, 65–78.
<https://doi.org/10.1155/1965/36792>
- Brown, W.L. Jr. (1975) Contributions toward a reclassification of the Formicidae. V. Ponerinae, tribes Platythyreini, Cerapachyini, Cylindromyrmecini, Acanthostichini, and Aenictogitini. *Search Agriculture*, 5 (1), 1–115.
- Brown, W.L. Jr. (1976) Contributions toward a reclassification of the Formicidae. Part VI. Ponerinae, tribe Ponerini, subtribe Odontomachiti. Section A. Introduction, subtribal characters. Genus *Odontomachus*. *Studia Entomologica*, 19, 67–171.
- Brown, W.L. Jr. (1978) Contributions toward a reclassification of the Formicidae. Part VI. Ponerinae, tribe Ponerini, subtribe Odontomachiti. Section B. Genus *Anochetus* and bibliography. *Studia Entomologica*, 20 (1–4), 549–638.
- Brown, W.L. Jr. & Kempf, W.W. (1960) A world revision of the ant tribe Basicerotini. *Studia Entomologica*, 3, 161–250.
- Brown, W.L. Jr. & Kempf, W.W. (1969) A revision of the Neotropical dacetine ant genus *Acanthognathus* (Hymenoptera: Formicidae). *Psyche*, 76, 87–109.
<https://doi.org/10.1155/1969/19387>
- Buren, W.F. 1972. Revisionary studies on the taxonomy of the imported fire ants. *Journal of the Georgia Entomological Society*, 7, 1–26.
- Camacho, G.P., Franco, W. & Feitosa, R.M. (2020) Additions to the taxonomy of *Gnampogenys* Roger (Hymenoptera: Formicidae: Ectatomminae) with an updated key to the New World species. *Zootaxa*, 4747 (3), 450–476.
<https://doi.org/10.11646/zootaxa.4747.3.2>
- Carvalho-Filho, F.S. (2020) Dining out with commoners: queens of *Camponotus novogranadensis* Mayr, 1870 (Hymenoptera: Formicidae) feeding outside the nest with nestmate workers. *Boletim do Museu Paraense Emílio Goeldi - Ciências Naturais*, 15, 227–230.
<https://doi.org/10.46357/bcnaturais.v15i1.282>
- Carvalho, W.D., Mustin, K., Hilário, R.R., Vasconcelos, I.M., Eilers, V. & Fearnside, P.M. (2019) Deforestation control in the Brazilian Amazon: a conservation struggle being lost as agreements and regulations are subverted and bypassed. *Perspectives in Ecology and Conservation*, 17 (3), 122–130.
<https://doi.org/10.1016/j.pecon.2019.06.002>
- Castilho, A.C.C., Delabie, J.H.C., Marques, M.I., Adis, J. & Mendes, L.F. (2007) New Records of the Cryptobiotic ant *Creightonidris scambognatha* Brown (Hymenoptera: Formicidae) from Brazil. *Neotropical Entomology*, 36 (1), 150–152.
<https://doi.org/10.1590/S1519-566X2007000100020>
- Castro D., Fernández, F., Meneses, A., Tocora, M.C., Sanchez, S. & Peña-Venegas, C. (2018) A preliminary checklist of soil ants (Hymenoptera: Formicidae) of Colombian Amazon. *Biodiversity Data Journal*, 6, e29278.
<https://doi.org/10.3897/BDJ.6.e29278>
- Chaves, E.N., Correa Neto, J.J. & Gomes, L. (2018) Occurrence of ants of the genus *Atta* (Hymenoptera: Formicidae) in the Marajo archipelago, northern Brazil. *Revista Brasileira de Zoociências*, 19 (1), 137–141.
<https://doi.org/10.34019/2596-3325.2018.v19.24725>
- Creighton, W.S. (1930) The New World species of the genus *Solenopsis* (Hymenoptera, Formicidae). *Proceedings of the American Academy of Arts and Sciences*, 66, 39–151.
<https://doi.org/10.2307/20026320>
- Cuezzo, F. & Guerrero, R.J. (2012) The ant genus *Dorymyrmex* Mayr (Hymenoptera: Formicidae: Dolichoderinae) in Colombia. *Psyche*, 2012, 1–24.
<https://doi.org/10.1155/2012/516058>
- Da Silva, J.M.C., Prasad, S. & Diniz-Filho, J.A.F. (2017) The impact of deforestation, urbanization, public investments, and agriculture on human welfare in the Brazilian Amazonia. *Land Use Policy*, 65, 135–142.
<https://doi.org/10.1016/j.landusepol.2017.04.003>
- Dattilo, W., Vicente, R.E., Nunes, R.V. & Carvalho, M.S.G. (2010) Primeiro registro da quenquérm cisco-da-Amazônia *Acromyrmex hystriculus* Latreille (Formicidae: Myrmicinae) para o estado do Maranhão, Brasil. *EntomoBrasilis*, 3 (3), 92–93. [in Portuguese]
<https://doi.org/10.12741/ebrasilis.v3i3.109>
- De Andrade, M.L. & Baroni Urbani, C. (1999) Diversity and Adaptation in the ant genus *Cephalotes*, past and present. *Stuttgarter Beiträge zur Naturkunde Serie B (Geologie und Paläontologie)*, 271, 1–889.
- Delabie, J.H.C. (2000) *Creightonidris scambognatha* (Hymenoptera: Formicidae: Basicerotini) in the Atlantic Forest biome, east of Bahia, Brazil. *Revista de Biología Tropical*, 48, 272–273.
- Delabie, J.H.C., Vasconcelos, H.L., Vilhena, J.M.S. & Agosti, D. (2001) First record of the ant genus *Probolomyrmex* (Hymenoptera: Formicidae: Ponerini: Platythyreini) in Brazil. *International Journal of Tropical Biology and Conservation*, 49, 397–398.
- Ellwood, M.D.F. & Foster, W.A. (2004) Doubling the estimate of invertebrate biomass in a rainforest canopy. *Nature*, 429,

- 549–551.
<https://doi.org/10.1038/nature02560>
- Emery, C. (1886) Saggio di un catalogo sistematico dei generi *Camponotus*, *Polyrhachis* e affini. *Memorie della Reale Accademia delle Scienze dell'Istituto di Bologna*, 5, 363–382. [in Italian]
- Emery, C. (1890a) Studii sulle formiche della fauna neotropicica. *Bullettino della Società Entomologica Italiana*, 22, 38–80. [in Italian]
- Emery, C. (1890b) Voyage de M. E. Simon au Venezuela (Décembre 1887–Avril 1888). Formicidés. *Annales de la Société Entomologique de France*, 6 (10), 55–76. [in French]
- Emery, C. (1893) Studio monografico sul genere *Azteca* Forel. *Memorie della Reale Accademia delle Scienze dell'Istituto di Bologna*, 5 (3), 119–152. [in Italian]
- Emery, C. (1894a) *Camponotus sexguttatus* Fab. e *C. sexguttatus* Sm. et auct. *Bollettino dei Musei di Zoologia ed Anatomia Comparata della Reale Università di Torino*, 9 (187), 1–4.
<https://doi.org/10.5962/bhl.part.8049>
- Emery, C. (1894b) Studi sulle formiche della fauna neotropicica. VI–XVI. *Bullettino della Società Entomologica Italiana*, 26, 137–241. [in Italian]
- Emery, C. (1895) Die Gattung *Dorylus* Fab. und die systematische Einheilung der Formiciden. *Zoologische Jahrbücher. Abteilung für Systematik, Geographie und Biologie der Tiere*, 8, 685–778. [in German]
- Emery, C. (1896a) Alcune forme nuove del genere *Azteca* For. e note biologiche. *Bollettino dei Musei di Zoologia ed Anatomia Comparata della Reale Università di Torino*, 11, 1–7.
- Emery, C. (1896b) Formiche raccolte dal dott. E. Festa nei pressi del golfo di Darién. *Bollettino dei Musei di Zoologia ed Anatomia Comparata della Reale Università di Torino*, 11 (229), 1–4. [in Italian]
- Emery, C. (1896c) Studi sulle formiche della fauna neotropicica. XVII–XXV. *Bullettino della Società Entomologica Italiana*, 28, 33–107. [in Italian]
- Emery, C. (1901) Notes sur les sous-familles des Dorylines et Ponerines (Famille des Formicides). *Annales de la Société Entomologique de Belgique*, 45, 32–54. [in French]
- Emery, C. (1903) Intorno ad alcune specie di *Camponotus* dell'America Meridionale. *Rendiconti delle Sessioni della Reale Accademia delle Scienze dell'Istituto di Bologna*, 7, 62–81.
- Emery, C. (1910) Hymenoptera. Fam. Formicidae. Subfam. Dorylinae. *Genera Insectorum*, 102, 1–34.
- Emery, C. (1911) Hymenoptera. Fam. Formicidae. Subfam. Ponerinae. *Genera Insectorum*, 118, 1–125.
- Emery, C. (1913a) Etudes sur les Myrmicinae. [V–VII]. *Annales de la Société Entomologique de Belgique*, 57, 250–262. [in French]
- Emery, C. (1913b) Hymenoptera. Fam. Formicidae. Subfam. Dolichoderinae. *Genera Insectorum*, 137, 1–50.
- Enzmann, E.V. (1944) Systematic notes on the genus *Pseudomyrma*. *Psyche*, Camb., 51, 59–103.
<https://doi.org/10.1155/1944/54170>
- Esquivel, D.M.S., Wajnberg, E., Souza, L.C.M., Acosta-Avalos, D., Pinho, M.B. & Harada, A.Y. (2019) Magnetic material diversity in Brazilian ants: displacement behavior and environmental adaptability. *European Biophysics Journal*, 48 (2), 161–171.
<https://doi.org/10.1007/s00249-018-1343-x>
- Esteves, F.A., Brandão, C.R.F. & Prado, L.P. (2011) The type specimens of Dorylomorph ants (Hymenoptera, Formicidae: Aenictinae, Ecitoninae, Cerapachyinae, Leptanilloidinae) deposited in the Museu de Zoologia da Universidade de São Paulo, Brazil. *Papéis Avulsos de Zoologia*, 51 (22), 341–397.
<https://doi.org/10.1590/S0031-10492011002200001>
- Fabricius, J.C. (1775) *Systema entomologiae, sistens insectorum classes, ordines, genera, species adiectis synonymis, locis, descriptionibus, observationibus*. Korte, Flensburgi et Lipsiae [Flensburg and Leipzig], 832 pp.
<https://doi.org/10.5962/bhl.title.36510>
- Fabricius, J.C. (1804) *Systema Piezatorum secundum ordines, genera, species, adiectis synonymis, locis, observationibus, descriptionibus*. C. Reichard, Brunswick, 439 + 30 pp.
<https://doi.org/10.5962/bhl.title.10490>
- Feitosa, R.M. (2011) Revisão taxonômica e análise filogenética de Heteroponerinae (Hymenoptera, Formicidae). Tese de Doutorado. Faculdade de Filosofia Ciências e Letras de Ribeirão Preto, Ribeirão Preto, São Paulo, 311 pp. [in Portuguese]
- Feitosa, R.M., Brandão, C.R.F. & Dietz, B.H. (2007) *Basiceros scambognathus* (Brown, 1949) n. comb., with the first worker and male descriptions, and a revised generic diagnosis (Hymenoptera: Formicidae: Myrmicinae). *Papéis Avulsos de Zoologia*, 47 (2), 31–42.
<https://doi.org/10.1590/S0031-10492007000200001>
- Feitosa, R.M. & Brandão, C.R.F. (2008) A taxonomic revision of the Neotropical myrmicine ant genus *Lachnomyrmex* Wheeler (Hymenoptera: Formicidae). *Zootaxa*, 1890:1–49.
<https://doi.org/10.11646/zootaxa.1890.1.1>
- Feitosa, R.M., Brandão, C.R.F. & Diniz, J.L. (2008) Revisionary studies on the enigmatic Neotropical ant genus *Stegomyrmex* Emery, 1912 (Hymenoptera: Formicidae: Myrmicinae), with the description of two new species. *Journal of Hymenoptera Research*, 17, 64–82.

- Felizardo, S.P.S. & Harada, A.Y. (2007) The genus *Crematogaster* Lund, 1831 (Formicidae: Myrmicinae: Crematogastrini) at ant collection from Museu Paraense Emilio Goeldi (MPEG). *O Biológico*, 69 (2), 425–427.
- Fernandes, I.O., Oliveira, M.L. & Delabie, J.C.H. (2014) Description of two new species in the Neotropical *Pachycondyla foetida* complex (Hymenoptera: Formicidae: Ponerinae) and taxonomic notes on the genus. *Myrmecological News*, 19, 133–163.
- Fernandes, I.O., Souza, J.L.P., Fernandez, F., Delabie, J.H.C. & Schultz, T.R. (2015) A new species of *Simopelta* (Hymenoptera: Formicidae: Ponerinae) from Brazil and Costa Rica. *Zootaxa*, 3956 (2), 295–300.
<https://doi.org/10.11646/zootaxa.3956.2.10>
- Fernandes, I.O. & Souza, J. (2018) Dataset of long-term monitoring of ground-dwelling ants (Hymenoptera: Formicidae) in the influence areas of a hydroelectric power plant on the Madeira River in the Amazon Basin. *Biodiversity Data Journal*, 6, e24375.
<https://doi.org/10.3897/BDJ.6.e24375>
- Fernández, F. (1992) Las hormigas cazadoras del genero *Ectatomma* (Formicidae: Ponerinae) en Colombia. *Caldasia*, 16, 551–564. [in Spanish]
- Fernández, F. (2002) Revision de las hormigas *Camponotus* subgenero *Dendromyrmex* (Hymenoptera: Formicidae). *Papéis Avulsos de Zoologia*, 42, 47–101. [in Spanish]
- Fernández, F. (2003) Myrmicine ants of the genera *Ochetomyrmex* and *Tranopelta* (Hymenoptera: Formicidae). *Sociobiology*, 41, 633–661.
- Fernández, F. (2004) The American species of the myrmicine ant genus *Carebara* Westwood (Hymenoptera: Formicidae). *Caldasia*, 26, 191–238.
- Fernández, F. (2008) Subfamilia Ponerinae s.str. In: Jimenez, E., Fernandez, F., Arias, T.M. & Lozano-Zambrano, F.H. (Eds.), *Sistemática, biogeografía y conservación de las hormigas cazadoras de Colombia*. Instituto de Investigación de Recursos Biológicos Alexander von Humboldt, Bogotá, pp. 123–128. [in Spanish]
- Fernández, F., Guerrero, R.J. & Delsinne, T. (2019) *Hormigas de Colombia*. Universidad Nacional de Colombia, Instituto de Ciencias Naturales, Facultad de Ciencias, Bogotá, 1200 pp.
- Ferrante, L. & Fearnside, P.M. (2019) Brazil's new president and 'ruralists' threaten Amazonia's environment, traditional peoples and the global climate. *Environmental Conservation*, 46 (4), 261–263.
<https://doi.org/10.1017/S0376892919000213>
- Ferreira, J., Aragão, L.E.O., Barlow, J., Barreto, P., Berenguer, E., Bustamante, M., Gardner, T.A., Lees, A.C., Lima, A., Louzada, J., Pardini, R., Parry, L., Peres, C.A., Pompeu, P.S., Tabarelli, M. & Zuanon, J. (2014) Brazil's environmental leadership at risk. *Science*, 346 (6210), 706–707.
<https://doi.org/10.1126/science.1260194>
- Fittkau, E.J. & Klinge, H. (1973) On Biomass and Trophic Structure of the Central Amazonian Rainforest Ecosystem. *Biotropica*, 5 (1), 2–14.
<https://doi.org/10.2307/2989676>
- Forel, A. (1895) A fauna das formigas do Brasil. *Boletim do Museu Paraense de História Natural e Ethnographia*, 1, 89–139.
- Forel, A. (1903) Mélanges entomologiques, biologiques et autres. *Annales de la Société Entomologique de Belgique*, 47, 249–268. [in French]
- Forel, A. (1904) In und mit Pflanzen lebende Ameisen aus dem Amazonas-Gebiet und aus Peru, gesammelt von Herrn E. Ule. *Zoologische Jahrbücher. Abteilung für Systematik, Geographie und Biologie der Tiere*, 20, 677–707. [in German]
- Forel, A. (1904) Miscellanea myrmecologiques. *Revue Suisse de Zoologie*, 12, 1–52. [in French]
- Forel, A. (1906) Fourmis neotropiques nouvelles ou peu connues. *Annales de la Société Entomologique de Belgique*, 50, 225–249. [in French]
- Forel, A. (1907) Formiciden aus dem Naturhistorischen Museum in Hamburg. II. Teil. Neueingaenge seit 1900. *Mitteilungen aus dem Naturhistorischen Museum in Hamburg*, 24, 1–20. [in German]
- Forel, A. (1908) Ameisen aus São Paulo (Brasilien), Paraguay etc. gesammelt von Prof. Herm. v. Ihering, Dr. Lutz, Dr. Fiebrig, etc. *Verhandlungen der Kaiserlich-Königlichen Zoologisch-Botanischen Gesellschaft in Wien*, 58, 340–418. [in German]
- Forel, A. (1912) Formicides neotropiques. Part I. *Annales de la Société Entomologique de Belgique*, 56, 28–49. [in French]
- Forel, A. (1912) Formicides neotropiques. Part II. 3me sous-famille Myrmicinae Lep. -Attini, Dacetini, Cryptocerini-. *Mémoires de la Société Entomologique de Belgique*. 19, 179–209. [in French]
- Forel, A. (1912) Formicides neotropiques. Part III. 3me sous-famille Myrmicinae (suite). Genres *Cremastogaster* et *Pheidole*. *Mémoires de la Société Entomologique de Belgique*, 19, 211–237. [in French]
- Forel, A. (1912) Formicides neotropiques. Part IV. 3me sous-famille Myrmicinae Lep. (Suite). *Mémoires de la Société Entomologique de Belgique*, 20, 1–32. [in French]
- Forel, A. (1912) Formicides neotropiques. Part V. 4me sous-famille Dolichoderinae Forel. *Mémoires de la Société Entomologique de Belgique*, 20, 33–58. [in French]
- Forel, A. (1912) Formicides neotropiques. Part VI. 5me sous-famille Camponotinae Forel. *Mémoires de la Société Entomologique de Belgique*, 20, 59–92. [in French]
- Forel, A. (1916) Fourmis du Congo et d'autres provenances récoltées par MM. Hermann Kohl, Luja, Mayne, etc. *Revue Suisse de Zoologie*, 24, 397–460. [in French]
- Forel, A. (1921) Fourmis trouvées dans des galles de *Cordia* et d'*Agonandra*, etc. *Bulletin de la Société Botanique de Genève*,

- 2 (12), 201–208. [in French]
- Fourcassie, V. & Oliveira, P.S. (2002) Foraging ecology of the giant Amazonian ant *Dinoponera gigantea* (Hymenoptera, Formicidae, Ponerinae): activity schedule, diet, and spatial foraging patterns. *Journal of Natural History*, 36, 2211–2227. <https://doi.org/10.1080/00222930110097149>
- Franco, W., Lopes, N.M.L., Delabie, J.C.H., Dejean, A., Orivel, J., Fichaux, M., Groc, S., Leponce, M. & Feitosa, R.M. (2019) First checklist of the ants (Hymenoptera: Formicidae) of French Guiana. *Zootaxa*, 4674 (5), 509–543. <https://doi.org/10.11646/zootaxa.4674.5.2>
- Gallardo, A. (1918) Las hormigas de la Republica Argentina. Subfamilia Ponerinas. *Anales del Museo Nacional de Historia Natural de Buenos Aires*, 30, 1–112. [in Spanish]
- Goncalves, C.R. (1942) Contribuição para o conhecimento do gênero *Atta* Fabr., das formigas saúvas. *Boletim da Sociedade Brasileira de Agronomia*, 5, 333–358. [in Portuguese]
- Goncalves, C.R. (1947) Saúvas do sul e centro do Brasil. *Boletim Fitossanitário*, 2, 183–218. [in Portuguese]
- Goncalves, C.R. (1961) O gênero *Acromyrmex* no Brasil (Hym. Formicidae). *Studia Entomologica*, 4, 113–180. [in Portuguese]
- Griffiths, H.G., Ashton, L., Walker, A., Hasan, F., Evans, T., Eggleton, P. & Parr, C.L. (2018) Ants are the major agents of food resource removal from tropical rainforest floors. *Journal of Animal Ecology*, 87 (1), 293–300. <https://doi.org/10.1111/1365-2656.12728>
- Guénard, B., Weiser, M.D., Gomez, K., Narula, N. & Economo, E.P. (2017) The Global Ant Biodiversity Informatics (GABI) database: synthesizing data on the geographic distribution of ant species (Hymenoptera: Formicidae). *Myrmecological News*, 24, 83–89. https://doi.org/10.25849/myrmecol.news_024:083
- Guerrero, R.J., Delabie, J.C.H. & Dejean, A. (2010) Taxonomic contribution to the *aurita* group of the ant genus *Azteca* (Formicidae: Dolichoderinae). *Journal of Hymenoptera Research*, 19 (1), 51–65.
- Guerrero, R.J., Fernández, F., Escárraga, M.E., Pérez-Pedraza, L.F., Serna, F., Mackay, W.P., Sandoval, V., Vergara, V., Suárez, D., García, E.I., Sánchez, A., Meneses, A.D., Tocora, M.C. & Sosa-Calvo, J. (2018) New records of myrmicine ants (Hymenoptera: Formicidae) for Colombia. *Revista Colombiana de Entomología*, 44 (2), 238–259. <https://doi.org/10.25100/socolen.v44i2.7115>
- Haffer, J. (1969) Speciation in Amazonian Forest birds. *Science*, 165 (3889), 131–137. <https://doi.org/10.1126/science.165.3889.131>
- Harada, A.Y. (2016) State of art of ants (Hymenoptera: Formicidae) at Caxiuanã, Melgaço, Para, Brazil. *Advances in Entomology*, 4, 115–132. <https://doi.org/10.4236/ae.2016.43013>
- Harada, A.Y. & Araujo, A.P.R. (2002) Insecta-Hymenoptera-Formicidae-Myrmicinae-Blepharidattini-Genera *Blepharidatta*. *Fauna da Amazônia Brasileira*, 19, 1–4. [in Portuguese]
- Harada, A.Y., Farias, P.R.S., Lopes, L.F.C., Silva, A.G. & Brandão, A.D.S. (2013) Assessment of ant communities in secondary forest in the eastern Amazon. *Comunicata Scientiae*, 4 (2), 186–194.
- Hashmi, A.A. (1973) A Revision of the Neotropical Ant Subgenus *Myrmothrix* of Genus *Camponotus* (Hymenoptera: Formicidae). *Studia Entomologica*, 16 (1–4), 1–140.
- Hita Garcia, F., Mbanya, N., Audisio, T.L. & Alpert, G.D. (2017) Taxonomy of the ant genus *Nesomyrmex* Wheeler (Formicidae, Myrmicinae) in the Afrotropical region, with a review of current species groups and description of a new species of the *N. angulatus* group from Mozambique. *European Journal of Taxonomy*, 258, 1–31. <https://doi.org/10.5852/ejt.2017.258>
- Hyde J.L., Bohlman, S.A. & Valle, D. (2018) Transmission lines are an under-acknowledged conservation threat to the Brazilian Amazon. *Biological Conservation*, 228, 343–356. <https://doi.org/10.1016/j.biocon.2018.10.027>
- IBGE (2012) *Manual técnico da vegetação brasileira*. Série Manuais técnicos em Geociências, 2^a edição revista e ampliada, Rio de Janeiro.
- INPE (2020) Nota técnica. Estimativa do PRODES 2020. Available from: <http://www.obt.inpe.br> (accessed February 2021)
- IUCN (2020) The IUCN Red List of Threatened Species. Version 2020-1. Available from: <https://www.iucnredlist.org> (accessed 29 May 2020)
- Jeanne, R.J. (1979) A latitudinal gradient in rates of ant predation. *Ecology*, 60 (6), 1211–1224. <https://doi.org/10.2307/1936968>
- Jesovnik, A. & Schultz, T.R. (2017) Revision of the fungus-farming ant genus *Sericomyrmex* Mayr (Hymenoptera, Formicidae, Myrmicinae). *ZooKeys*, 670, 1–109. <https://doi.org/10.3897/zookeys.670.11839>
- Jesovník, A., Sosa-Calvo, J., Lopes, C.T., Vasconcelos, H.L. & Schultz, T.R. (2013) Nest architecture, fungus gardens, queen, males and larvae of the fungus-growing ant *Mycetagoicus inflatus* Brandão & Mayhé-Nunes. *Insectes Sociaux*, 60, 531–542. <https://doi.org/10.1007/s00040-013-0320-8>
- Jones, F.A.M., Rutherford, M.G., Deacon, A.E., Phillip, D.A.T. & Magurran, A.E. (2019) Quantifying regional biodiversity in the tropics: a case study of freshwater fish in Trinidad and Tobago. *Biotropica*, 51 (5), 700–708.

- <https://doi.org/10.1111/btp.12692>
- Kallal, R.J. & La Polla, J.S. (2012) Monograph of *Nylanderia* (Hymenoptera: Formicidae) of the World, Part II: *Nylanderia* in the Nearctic. *Zootaxa*, 3508 (1), 1–64.
<https://doi.org/10.11646/zootaxa.3508.1.1>
- Kempf, W.W. (1951) A taxonomic study on the ant tribe Cephalotini (Hymenoptera: Formicidae). *Revista de Entomologia*, 22 (1–3), 1–244.
- Kempf, W.W. (1952) A synopsis of the *pinelii*-complex in the genus *Paracryptocerus* (Hym. Formicidae). *Studia Entomologica*, 1, 1–30.
- Kempf, W.W. (1957) Sobre algumas espécies de *Procryptocerus* com a descrição duma espécie nova (Hymenoptera, Formicidae). *Revista Brasileira de Biologia*, 17, 395–404. [in Portuguese]
- Kempf, W.W. (1958) Estudos sobre *Pseudomyrmex*. II. (Hymenoptera: Formicidae). *Studia Entomologica*, 1, 433–462. [in Portuguese]
- Kempf, W.W. (1959a) A revision of the Neotropical ant genus *Monacis* Roger (Hymenoptera: Formicidae). *Studia Entomologica*, 2, 225–270.
- Kempf, W.W. (1959b) A synopsis of the New World species belonging to the *Nesomyrmex*-group of the ant genus *Leptothorax* Mayr (Hymenoptera: Formicidae). *Studia Entomologica*, 2, 391–432.
- Kempf, W.W. (1959c) Insecta Amapaensis. (Hymenoptera: Formicidae). *Studia Entomologica*, 2, 209–218.
- Kempf, W.W. (1959d) Sobre algumas formigas Cephalotini do Museu de Oxford (Hymenoptera, Formicidae). *Revista Brasileira de Biologia*, 19, 91–98. [in Portuguese]
- Kempf, W.W. (1960a) Estudo sobre *Pseudomyrmex* I. (Hymenoptera: Formicidae). *Revista Brasileira de Entomologia*, 9, 5–32. [in Portuguese]
- Kempf, W.W. (1960b) Insecta Amapaensis. Hymenoptera: Formicidae (segunda contribuição). *Studia Entomologica*, 3, 385–400. [in Portuguese]
- Kempf, W.W. (1960c) Miscellaneous studies on Neotropical ants (Hymenoptera, Formicidae). *Studia Entomologica*, 3, 417–466.
- Kempf, W.W. (1961a) As formigas do gênero *Pachycondyla* Fr. Smith no Brasil (Hymenoptera: Formicidae). *Revista Brasileira de Entomologia*, 10, 189–204. [in Portuguese]
- Kempf, W.W. (1961b) Estudos sobre *Pseudomyrmex*. III. (Hymenoptera: Formicidae). *Studia Entomologica*, 4, 369–408. [in Portuguese]
- Kempf, W.W. (1962) Miscellaneous studies on neotropical ants. II. (Hymenoptera, Formicidae). *Studia Entomologica*, 5, 1–38.
- Kempf, W.W. (1963a) A review of the ant genus *Mycocepurus* Forel, 1893 (Hymenoptera: Formicidae). *Studia Entomologica*, 6, 417–432.
- Kempf, W.W. (1963b) Nota sinonímica acerca de formigas da tribo Cephalotini (Hymenoptera, Formicidae). *Revista Brasileira de Biologia*, 23, 435–438. [in Portuguese]
- Kempf, W.W. (1964a) A revision of the Neotropical fungus-growing ants of the genus *Cyphomyrmex* Mayr. Part I: Group of *strigatus* Mayr (Hym., Formicidae). *Studia Entomologica*, 7, 1–44.
- Kempf, W.W. (1964b) Additions to the knowledge of the Cephalotini ants (Hymenoptera, Formicidae). *Papéis Avulsos de Zoologia*, 16, 243–255.
- Kempf, W.W. (1964c) The ants of the genus *Anochetus* (Stenomyrmex) in Brazil (Hym., Formicidae). *Studia Entomologica*, 7, 237–246.
- Kempf, W.W. (1965) Nota preliminar sobre algumas formigas neotropicais, descritas por Frederick Smith (Hymenoptera, Formicidae). *Revista Brasileira de Biologia*, 25, 181–186. [in Portuguese]
- Kempf, W.W. (1966) A revision of the Neotropical fungus-growing ants of the genus *Cyphomyrmex* Mayr. Part II: Group of *rimosus* (Spinola) (Hym., Formicidae). *Studia Entomologica*, 8, 161–200.
- Kempf, W.W. (1967a) A synopsis of the Neotropical ants of the genus *Centromyrmex* Mayr (Hymenoptera: Formicidae). *Studia Entomologica*, 9, 401–410.
- Kempf, W.W. (1967b) Estudos sobre *Pseudomyrmex*. IV (Hymenoptera: Formicidae). *Revista Brasileira de Entomologia*, 12, 1–12. [in Portuguese]
- Kempf, W.W. (1968a) A new species of *Cyphomyrmex* from Colombia, with further remarks on the genus (Hymenoptera, Formicidae). *Revista Brasileira de Biologia*, 28, 35–41.
- Kempf, W.W. (1968b) Miscellaneous studies on Neotropical ants. IV. (Hymenoptera, Formicidae). *Studia Entomologica*, 11, 369–415.
- Kempf, W.W. (1969) Miscellaneous studies on Neotropical ants. V. (Hymenoptera, Formicidae). *Studia Entomologica*, 12, 273–296.
- Kempf, W.W. (1970) Levantamento das formigas da mata amazônica, nos arredores de Belém do Pará, Brasil. *Studia Entomologica*, 13, 321–344. [in Portuguese]
- Kempf, W.W. (1971) A preliminary review of the ponerine ant genus *Dinoponera* Roger (Hymenoptera: Formicidae). *Studia Entomologica*, 14, 369–394.
- Kempf, W.W. (1972a) A new species of the dolichoderine ant genus *Monacis* Roger, from the Amazon, with further remarks on the genus (Hymenoptera, Formicidae). *Revista Brasileira de Biologia*, 32, 251–254.

- Kempf, W.W. (1972b) A study of some Neotropical ants of genus *Pheidole* Westwood. I. (Hymenoptera: Formicidae). *Studia Entomologica*, 15, 449–464.
- Kempf, W.W. (1972c) Catálogo abreviado das formigas da região Neotropical (Hym., Formicidae). *Studia Entomologica*, 15 (1–4), 3–344. [in Portuguese]
- Kempf, W.W. (1974) Taxonomic and faunistic notes on some Neotropical Cephalotini ants (Hymenoptera, Formicidae). *Revista Brasileira de Entomologia*, 18, 67–76.
- Kempf, W.W. (1975a) Miscellaneous studies on neotropical ants. VI. (Hymenoptera, Formicidae). *Studia Entomologica*, 18, 341–380.
- Kempf, W.W. (1975b) Report on Neotropical Dacetine ant studies (Hymenoptera: Formicidae). *Revista Brasileira de Biologia*, 34, 411–424.
- Kempf, W.W. (1976) A new species of *Strumigenys* from the lower Amazon, Brazil (Hym., Formicidae). *Studia Entomologica*, 19, 39–44.
- Kempf, W.W. (1978) A preliminary zoogeographical analysis of a regional ant fauna in Latin America. *Studia Entomologica*, 20, 43–62.
- Kempf, W.W. & Brown Jr., W.L. (1968) Report on some Neotropical ant studies. *Papéis Avulsos de Zoologia*, 22, 89–102.
- Kempf, W.W. & Brown Jr., W.L. (1969) Two new *Strumigenys* ants from the Amazon valley in Brasil (Hymenoptera, Formicidae). *Revista Brasileira de Biologia*, 29, 17–24.
- Kempf, W.W. & Lenko, K. (1968) Novas observações e estudos sobre *Gigantiops destructor* (Fabricius) (Hymenoptera: Formicidae). *Papéis Avulsos de Zoologia*, 21, 209–230. [in Portuguese]
- Klingenbergs, C. & Brandão, C.R.F. (2005) The type specimens of fungus growing ants, Attini (Hymenoptera, Formicidae, Myrmicinae) deposited in the Museu de Zoologia da Universidade de São Paulo, Brazil. *Papéis Avulsos de Zoologia*, 45 (4), 41–50.
<https://doi.org/10.1590/S0031-10492005000400001>
- Klingenbergs, C. & Brandão, C.R.F. (2009) Revision of the fungus-growing ant genera *Mycetophylax* Emery and *Paramycetophylax* Kusnezov rev. stat., and description of *Kalathomyrmex* n. gen. (Formicidae: Myrmicinae: Attini). *Zootaxa*, 2052 (1), 1–31.
<https://doi.org/10.11646/zootaxa.2052.1.1>
- Kugler, C. (1994) A revision of the ant genus *Rogeria* with description of the sting apparatus (Hymenoptera: Formicidae). *Journal of Hymenoptera Research*, 3, 17–89.
- Kusnezov, N. (1952) El género *Camponotus* en la Argentina (Hymenoptera, Formicidae). *Acta Zoologica Lilloana*, 12, 183–252. [in Spanish]
- Kusnezov, N. (1962) El género *Acanthostichus* Mayr (Hymenoptera, Formicidae). *Acta Zoologica Lilloana*, 18, 121–138. [in Spanish]
- Kusnezov, N. (1978) Hormigas argentinas: clave para su identificación. Miscelánea. *Instituto Miguel Lillo*, 61, 1–147. [in Spanish]
- Lacau, S., Villemant, C. & Jahyny, B. (2008) *Typhlomyrmex* Mayr, 1862: un genre meconnu de petites fourmis cryptiques et prédatrices (Ectatomminae: Typhlomyrmecini). In: Jimenez, E., Fernandez, F., Arias, T.M. & Lozano-Zambrano, F.H. (Eds.), *Sistemática, biogeografía y conservación de las hormigas cazadoras de Colombia*. Instituto de Investigación de Recursos Biológicos Alexander von Humboldt, Bogota, pp. 241–283. [in French]
- Ladino, N. & Feitosa, R.M. (2020) Taxonomic revision of the genus *Prionopelta* Mayr, 1866 (Formicidae: Amblyoponinae) for the Neotropical region. *Zootaxa*, 4821 (2), 201–249.
<https://doi.org/10.11646/zootaxa.4821.2.1>
- Lampe, K.H., Rohwedder, D. & Rach, B. (2006) Insect Types in the ZFMK Collection, Bonn: Hymenoptera. Unpublished Manuscript http://www.zfmk.de/web_2_Downloads,6_Typen,Hym_Typen_ZFMK_Hymenoptera.pdf
- LaPolla, J.S. (2004) *Acropyga* (Hymenoptera: Formicidae) of the world. Contributions of the *American Entomological Institute*, 33 (3), 1–130.
- La Polla, J.S., Hawkes, P.G. & Fisher, B.L. (2011) Monograph of *Nylanderia* (Hymenoptera: Formicidae) of the World, Part I: *Nylanderia* in the Afrotropics. *Zootaxa*, 3110 (1), 10–36.
<https://doi.org/10.11646/zootaxa.3110.1.2>
- Lattke, J.E. (1990) Revisión del género *Gnamptogenys* Roger en Venezuela (Hymenoptera: Formicidae). *Acta Terramaris*, 2, 1–47. [in Spanish]
- Lattke, J.E. (1992) Revision of the *minuta*-group of the genus *Gnamptogenys*. *Deutsche Entomologische Zeitschrift*, 39, 123–129.
<https://doi.org/10.1002/mmnd.19920390116>
- Lattke, J.E. (1995) Revision of the ant genus *Gnamptogenys* in the New World (Hymenoptera: Formicidae). *Journal of Hymenoptera Research*, 4, 137–193.
- Lattke, J.E. (1997) Revisión del género *Apterostigma* Mayr (Hymenoptera: Formicidae). *Arquivos do Instituto Biológico*, 34, 121–221.
<https://doi.org/10.11606/issn.2176-7793.v34i5p121-221>
- Lattke, J.E. (2011) Revision of the New World species of the genus *Leptogenys* Roger (Insecta: Hymenoptera: Formicidae: Ponerinae). *Arthropod Systematics and Phylogeny*, 69, 127–264.

- Laurance, W.F. (1998) A crisis in the making: responses of Amazonian forests to land use and climate change. *Trends in Ecology & Evolution*, 13 (10), 411–415.
[https://doi.org/10.1016/S0169-5347\(98\)01433-5](https://doi.org/10.1016/S0169-5347(98)01433-5)
- Laurance, W.F., Cochrane, M.A., Bergen, S., Fearnside, P.M., Delamônica, P., Barber, C., D’Angelo, S. & Fernandes, T. (2001) The future of Brazilian Amazon. *Science*, 291 (5503), 438–439.
<https://doi.org/10.1126/science.291.5503.438>
- Lenhart, P.A., Dash, S.T. & Mackay, W.P. (2013) A revision of the giant Amazonian ants of the genus *Dinoponera* (Hymenoptera, Formicidae). *Journal of Hymenoptera Research*, 31, 119–164.
<https://doi.org/10.3897/jhr.31.4335>
- Lima, H.P., Chaline, N.G., Lima, R.L.C. & Chaline, R.S.F. (2020) First record of an arboreal bivouac for the army ant species *Ection rapax* Smith, 1855 (Formicidae: Dorylinae). *Boletim do Museu Paraense Emílio Goeldi - Ciencias Naturais*, 15, 221–225.
<https://doi.org/10.46357/bcnaturais.v15i1.289>
- Linnaeus, C. (1758) *Systema naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Tomus I. Editio decima, reformata.* L. Salvii, Holmiae [Stockholm], 824 pp.
<https://doi.org/10.5962/bhl.title.542>
- Longino, J.T. (1989) Taxonomy of the Cecropia-inhabiting ants in the *Azteca alfari* species group (Hymenoptera: Formicidae): evidence for two broadly sympatric species. *Contributions in Science*, 412, 1–16.
- Longino, J.T. (1991) Taxonomy of the Cecropia-inhabiting *Azteca* ants. *Journal of Natural History*, 25, 1571–1602.
<https://doi.org/10.1080/00222939100770981>
- Longino, J.T. (2003) The *Crematogaster* (Hymenoptera, Formicidae, Myrmicinae) of Costa Rica. *Zootaxa*, 151 (1), 1–150.
<https://doi.org/10.11646/zootaxa.151.1.1>
- Longino, J.T. (2006) A taxonomic review of the genus *Myrmelachista* (Hymenoptera: Formicidae) in Costa Rica. *Zootaxa*, 1141 (1), 1–54.
<https://doi.org/10.11646/zootaxa.1491.1.1>
- Longino, J.T. (2006) New species and nomenclatural changes for the Costa Rican ant fauna (Hymenoptera: Formicidae). *Myrmecologische Nachrichten*, 8, 131–143.
- Longino, J.T. (2007) A taxonomic review of the genus *Azteca* (Hymenoptera: Formicidae) in Costa Rica and a global revision of the *aurita* group. *Zootaxa*, 1491 (1), 1–63. <https://doi.org/10.11646/zootaxa.1491.1.1>
- Longino, J.T. (2009) Additions to the taxonomy of New World *Pheidole* (Hymenoptera: Formicidae). *Zootaxa*, 2181 (1), 1–90.
<https://doi.org/10.11646/zootaxa.2181.1.1>
- Longino, J.T. (2010) A taxonomic review of the ant genus *Megalomyrmex* Forel (Hymenoptera: Formicidae) in Central America. *Zootaxa*, 2720 (1), 35–58.
<https://doi.org/10.11646/zootaxa.2720.1.3>
- Longino, J.T. (2013) A review of the Central American and Caribbean species of the ant genus *Eurhopalothrix* Brown and Kempf, 1961 (Hymenoptera, Formicidae), with a key to New World species. *Zootaxa*, 3693 (2), 101–151.
<https://doi.org/10.11646/zootaxa.3693.2.1>
- Longino, J.T., Coddington, J. & Colwell, R.K. (2002) The ant fauna of a tropical rain forest: estimating species richness three different ways. *Ecology*, 83 (1), 689–702.
[https://doi.org/10.1890/0012-9658\(2002\)083\[0689:TAFOAT\]2.0.CO;2](https://doi.org/10.1890/0012-9658(2002)083[0689:TAFOAT]2.0.CO;2)
- Longino, J.T. & Snelling, R.R. (2002) A taxonomic revision of the *Procryptocerus* (Hymenoptera: Formicidae) of Central America. *Contributions in Science*, 495, 1–30.
- Lovejoy, T. (2019) The land of cinnamon and gold: 500 years of Amazon science and exploration. In: Galúcio, A.V. & Prudente, A.L. (Orgs.), *Museu Goeldi: 150 anos de ciência na Amazônia*. Museu Emílio Goeldi, Belém, pp. 18–49.
- Luederwaldt, H. (1918) Notas mirmecológicas. *Revista do Museu Paulista*, 10, 29–64. [in Portuguese]
- Mackay, W.P. (1993) A review of the New World ants of the genus *Dolichoderus* (Hymenoptera: Formicidae). *Sociobiology*, 22 (1), 1–148.
- MacKay, W.P. (1996) A revision of the ant genus *Acanthostichus* (Hymenoptera: Formicidae). *Sociobiology*, 27, 129–179.
- Mackay, W.P., Maes, J.P., Fernandez, P.R. & Luna, G. (2004) The ants of North and Central America: the genus *Mycocepurus* (Hymenoptera: Formicidae). *Journal of Insect Science*, 4 (27), 1–7.
<https://doi.org/10.1093/jis/4.1.27>
- MacKay, W.P. & MacKay, E.E. (2010) *The systematics and biology of the New World ants of the genus Pachycondyla* (Hymenoptera: Formicidae). Edwin Mellen Press, Lewiston, New York, 642 pp.
- Magnusson, W.E., Grelle, C.E.V., Marques, M.C.M., Rocha, C.F.D., Dias, B., Fontana, C.S., Bergallo, H., Overbeck, G.E., Vale, M.M., Tomas, W.M., Cerqueira, R., Collevatti, R., Pillar, V.D., Malabarba, L.R., Lins-e-Silva, A.C., Neckel-Oliveira, S., Martinelli, B., Akama, A., Rodrigues, D., Silveira, L.F., Scariot, A. & Fernandes, G.W. (2018) Effects of Brazil’s Political Crisis on the Science Needed for Biodiversity Conservation. *Frontiers in Ecology and Evolution*, 6, 163.
<https://doi.org/10.3389/fevo.2018.00163>
- Majer, J.D. & Delabie, J.H.C. (1994) Comparison of the ant communities of annually inundated and terra firme forests at Trombetas in the Brazilian Amazon. *Insectes Sociaux*, 41, 343–359.
<https://doi.org/10.1007/BF01240639>

- Mann, W.M. (1916) The Stanford Expedition to Brazil, 1911, John C. Branner, Director. The ants of Brazil. *Bulletin of the Museum of Comparative Zoology*, 60, 399–490.
- Mayhé-Nunes, A.J. & Brandão, C.R.F. (2002) Revisionary studies on the Attine ant genus *Trachymyrmex* Forel. Part 1: Definition of the Genus and the *Opulentus* Group (Hymenoptera: Formicidae). *Sociobiology*, 40 (3), 667–698.
- Mayhé-Nunes, A.J. & Brandão, C.R.F. (2005) Revisionary studies on the attine ant genus *Trachymyrmex* Forel. Part 2: the *Iheringi* group (Hymenoptera: Formicidae). *Sociobiology*, 45 (2), 271–305.
- Mayhé-Nunes, A.J. & Brandão, C.R.F. (2006) Revisionary notes on the fungus-growing ant genus *Mycetarotes* Emery (Hymenoptera, Formicidae). *Revista Brasileira de Entomologia*, 50 (4), 463–472.
<https://doi.org/10.1590/S0085-562620006000400005>
- Mayhé-Nunes, A.J. & Jaffe, K. (1998) On the biogeography of Attini (Hymenoptera: Formicidae). *Ecotropicos*, 11 (1), 45–54.
- Meineke, E.K., Davies, T.J., Daru, B.H. & Davis, C.C. (2018) Biological collections for understanding biodiversity in the Anthropocene. *Philosophical Transactions of the Royal Society of London B*, 374 (1763), 20170386.
<https://doi.org/10.1098/rstb.2017.0386>
- Mendoza-Penagos, C., Hessen, K. & Almeida, R. (2020) Assessing sodium limitation as a resource for ground-dwelling ants (Hymenoptera Formicidae) in an area of the Amazonian Terra Firme Forest. *Boletim do Museu Paraense Emílio Goeldi—Ciências Naturais*, 15, 135–143.
<https://doi.org/10.46357/bcnaturais.v15i1.269>
- Meurer, E., Battirola, L.D., Marques, M.I. & Delabie, J.H.C. (2015) New records and distribution for the Neotropical ant genus *Ochetomyrmex* Mayr (Hymenoptera: Formicidae). *Sociobiology*, 62 (2), 266–269.
<https://doi.org/10.13102/sociobiology.v62i2.266-269>
- Miranda, P.N., Oliveira, M.A., Baccaro, F.B., Morato, E.F. & Delabie, J.H.C. (2012) Check list of ground-dwelling ants (Hymenoptera: Formicidae) of the eastern Acre, Amazon, Brazil. *Check List*, 8 (4), 722–730.
<https://doi.org/10.15560/8.4.722>
- Morgan, C. & Mackay, W.P. (2017) *The North America acrobat ants of the hyperdiverse genus Crematogaster*. LAP LAMBERT Academic Publishing, Mauritius, 540 pp.
- Moure, J.S., Urban, D. & Melo, G.A.R. (2013) Catalogue of Bees (Hymenoptera, Apoidea) in the Neotropical Region. Available from: <http://www.moure.eria.org.br/catalogue> (accessed 30 January 2020)
- Moutinho, P., Nepstad, D.C. & Davidson, E.A. (2003) Influence of Leaf-Cutting Ant Nests on Secondary Forest Growth and Soil Properties in Amazonia. *Ecology*, 84 (5), 1265–1276.
[https://doi.org/10.1890/0012-9658\(2003\)084\[1265:IOLANO\]2.0.CO;2](https://doi.org/10.1890/0012-9658(2003)084[1265:IOLANO]2.0.CO;2)
- Nascimento, I.C., Delabie, J.H.C., Campiolo, S. & Neto, E.M. (2004) Présence de *Probolomyrmex brujitae* Agosti, 1994, au Brésil (Hym., Formicidae). *Bulletin de la Société Entomologique de France*, 109 (3), 321–322. [in French]
- Nepstad, D., Soares-Filho, D.B.S., Merry, F., Lima, A., Moutinho, P., Carter, J., Bowman, M., Cattaneo, A., Rodrigues, H., Schwartzman, S., McGrath, D.G., Stickler, C.M., Lobowski, R., Piris-Cabezas, P., Rivero, S., Alencar, A., Almeida, O. & Stella, O. (2009) The end of deforestation in the Brazilian Amazon. *Science*, 326 (5958), 1350–1351.
<https://doi.org/10.1126/science.1182108>
- Nobre, C.A., Sampaio, G., Borma, L.M., Castilla-Rubio, J.C., Silva, J.S., Cardoso, M. (2016) Land-use and climate change risks in the Amazon and the need of a novel sustainable development paradigm. *PNAS*, 113 (39), 10759–10768.
<https://doi.org/10.1073/pnas.1605516113>
- Oksanen, J., Blanchet, F.G., Friendly, M., Kindt, R., Legendre, P., McGlinn, D., Minchin, P. R., O'Hara, R.B., Simpson, G.L., Solymos, P., Stevens, M.H.H., Szoecs, E.D., Wagner, H. (2019) Vegan: Community Ecology Package. R package. Version 2.5-6. Available from: <https://CRAN.R-project.org/package=vegan> (accessed 29 May 2020)
- Oliveira, A.M. & Feitosa, R.M. (2019). Taxonomic revision of the genus *Probolomyrmex* Mayr, 1901 (Hymenoptera: Formicidae: Proceratiinae) for the Neotropical Region. *Zootaxa*, 4614 (1), 61–94.
<https://doi.org/10.11646/zootaxa.4614.1.3>
- Oliveira, U., Paglia, A.P., Brescovit, A.D., De Carvalho, C.J.B., Silva, D.P., Rezende, D.T., Leite, F.S.F., Batista, J.A.N., Barbosa, J.P.P.P., Stehmann, J.R., Ascher, J.S., De Vasconcelos, M.F., De Marco Jr., P., Löwenberg Neto, P., Dias, P.G., Ferro, V.G. & Santos, A.J. (2016) The strong influence of collection bias on biodiversity knowledge shortfalls of Brazilian terrestrial biodiversity. *Diversity and Distribution*, 22 (12), 1232–1244.
<https://doi.org/10.1111/ddi.12489>
- Olivier, A.G. (1792) *Encyclopédie méthodique. Histoire naturelle. Insectes*. Tome 6. (pt. 2). Panckoucke, Paris, pp. 369–704.
- Ortiz, C.M. & Fernandez, F. (2011) *Hormigas del genero Dolichoderus Lund (Formicidae: Dolichoderinae) en Colombia*. Universidad Nacional de Colombia. Facultad de Ciencias. Instituto de Ciencias Naturales, Bogotá, 118 pp. [in Spanish]
- Ortiz-Sepulveda, C.M., Van Bocxlaer, B., Meneses, A.D. & Fernandez, F. (2019) Molecular and morphological recognition of species boundaries in the neglected ant genus *Brachymyrmex* (Hymenoptera Formicidae): Toward a taxonomic revision. *Organisms Diversity & Evolution*, 19, 447–542.
<https://doi.org/10.1007/s13127-019-00406-2>
- Overall, W.L. & Bandeira, A.G. (1985) Note on the habits of *Cylindromyrmex striatus* Mayr, 1870, in Amazonia (Formicidae, Ponerinae). *Revista Brasileira de Entomologia*, 29 (3–4), 521–522.
- Overall, W.L. & Gorayeb, I.S. (1981) Entomologia do Museu Goeldi. *Acta Amazonica*, 11 (1), 171–181.
<https://doi.org/10.1590/1809-4392198111s177>

- Overall, W.L., Harada, A.Y. & Mascarenhas, B.M. (1997). As formigas. In: Lisboa, P.L. (Ed.), *Caxiuanã*. Museu Paraense Emílio Goeldi, Belém, pp. 369–379. [in Portuguese]
- Pacheco, J.A. & Mackay, W.P. (2013) *The systematics and biology of the New World thief ants of the genus Solenopsis (Hymenoptera: Formicidae)*. Edwin Mellen Press, Lewiston, New York, 501 pp.
- Pereira, J.C., Delabie, J.H.C., Zanette, L.R.S. & Quinet, I. (2014) Studies on an Enigmatic *Blepharidatta* Wheeler Population (Hymenoptera: Formicidae) from the Brazilian Caatinga. *Sociobiology*, 61 (1), 52–59.
<https://doi.org/10.13102/sociobiology.v61i1.52-59>
- Pereira, L.P.C. (2012) *Estrutura da comunidade de formigas poneromorfas (Hymenoptera: Formicidae) em uma área da Floresta Amazônica*. Dissertação de Mestrado. Universidade Federal Rural do Rio de Janeiro, Rio de Janeiro, Rio de Janeiro, 64 pp. [in Portuguese]
- Pereira, L.P.C., Almeida, F.S., Vargas, A.B., Araujo, M.S., Mayhe-Nunes, A.J. & Queiroz, J.M. (2016) Seasonal analysis of taxonomic and functional diversity of poneromorph ant assemblages in the amazon forest. *Sociobiology*, 63 (3), 941–949.
<https://doi.org/10.13102/sociobiology.v63i3.1053>
- Pitts, J.P., Camacho, G.P., Gotzek, D., McHugh, J.V., Ross, K.G. (2018) Revision of the fire ants of the *Solenopsis saevissima* species-group (Hymenoptera: Formicidae). *Proceedings of the Entomological Society of Washington*, 120 (2), 308–411.
<https://doi.org/10.4289/0013-8797.120.2.308>
- Prado, L.P., Feitosa, R.M., Triana, S.P., Gutierrez, J.A.M., Rousseau, G.X., Silva, R.A., Siqueira, G.M., Santos, C.L.C., Silva, F.V., Silva, T.S.R., Ferreira, A.C., Silva, R.R. & Andrade-Silva, J. (2019) An overview of the ant fauna (Hymenoptera: Formicidae) of the state of Maranhão, Brazil. *Papéis Avulsos De Zoologia*, 59, e20195938.
<https://doi.org/10.11606/1807-0205/2019.59.38>
- Prado, L.P., Favacho, C.A.C., Silveira, O.T. & Silva, R.R. (2020) Uma jornada científica na Amazônia: revisitando os 121 anos do acervo de Formicidae (Insecta: Hymenoptera) do Museu Paraense Emílio Goeldi. *Boletim do Museu Paraense Emílio Goeldi. Ciências Naturais*, 15 (1), 245–255.
<https://doi.org/10.46357/bcnaturais.v15i1.277>
- Probst, R.S. (2015) Revisão taxonômica e análise filogenética de *Basiceros* Schulz, 1906 (Formicidae, Myrmicinae, Basicerotini). Dissertação de Mestrado. Museu de Zoologia da Universidade de São Paulo, São Paulo, São Paulo, 263 pp. [in Portuguese]
- Prudente, A.L.C., Sarmento, J.F.M., Avila-Pires, T.C.S., Maschio, G. & Sturaro, M.J. (2018) How much do we know about the diversity of squamata (Reptilia) in the most degraded region of Amazonia? *South American Journal of Herpetology*, 13, 117–130.
<https://doi.org/10.2994/SAJH-D-17-00009.1>
- QGIS Development Team (2020) QGIS Geographic Information System. Open Source Geospatial Foundation Project. Available from: <http://qgis.osgeo.org> (accessed 29 May 2020)
- R Core Team (2020) R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. Available from: <https://www.R-project.org> (accessed 29 May 2020)
- Salinas, P.J. (2010) Catalogue of the ants of the Tachira State, Venezuela, with notes on their biodiversity, biogeography, and ecology (Hymenoptera: Formicidae: Amblyoponinae, Ponerinae, Proceratiinae, Myrmicinae, Ecitoninae, Formicinae, Pseudomyrmecinae, Dolichoderinae). *Boletín de la Sociedad Entomológica Aragonesa*, 47, 315–328.
- Santos, J.C., Delabie J.H.C. & Fernandes, G.W. (2008) Uma avaliação apos 15 anos do efeito do fogo sobre a comunidade de formiga em uma área de floresta amazônica. *Revista Brasileira de Entomologia*, 52 (1), 82–87. [in Portuguese]
<https://doi.org/10.1590/S0085-56262008000100015>
- Santos, I.S., Delabie, J.H.C., Silva, J.G., Costa, M.A., Barros, L.A.C., Pompolo, S.G. & Mariano, C.S.F. (2012) Karyotype differentiation among four *Dinoponera* (Formicidae: Ponerinae) species. *Florida Entomologist*, 95 (3), 737–742.
<https://doi.org/10.1653/024.095.0324>
- Santos, I.A., Harada, A.Y., Alves, S.B., Santos, M.P.D. & Ribas, C.R. (2007) Diversity of ants on palms in Várzea habitats at Amazonia (Hymenoptera: Formicidae). *Sociobiology*, 50 (1), 23–33.
- Santos, J.R.M., Mariano, C.S.F., Martins, L.C.B., Ramos-Lacau, L.S., Nascimento, I.C., Da Rocha, W.D. & Delabie, J.H.C. (2015) Assembleias de formigas epigeias (Hymenoptera: Formicidae) em um cacaual e remanescente de floresta da Amazônia Oriental, Brasil. *Agrotropica*, 27 (2), 149–160.
<https://doi.org/10.21757/0103-3816.2015v27n2p149-160>
- Santschi, F. (1923) *Pheidole et quelques autres fourmis néotropiques*. *Annales de la Société Entomologique de Belgique*, 63, 45–69. [in French]
- Santschi, F. (1925) Nouveaux Formicidés brésiliens et autres. *Bulletin et Annales de la Société Entomologique de Belgique*, 65, 221–247. [in French]
- Santschi, F. (1925) Révision du genre *Acromyrmex* Mayr. *Revue Suisse de Zoologie*, 31, 355–398. [in French]
- Santschi, F. (1929) Révision du genre *Holcoponera* Mayr. *Zoologischer Anzeiger*, 82, 437–477. [in French]
- Santschi, F. (1929) Nouvelles fourmis de la République Argentine et du Brésil. *Anales de la Sociedad Científica Argentina*, 107, 273–316. [in French]
- Santschi, F. (1939) Résultats scientifiques des croisières du navire-école belge, Mercator. XIV. Formicidae s. lt. *Mémoires du Musée Royal d'histoire Naturelle de Belgique*, 15 (2), 159–167. [in French]
- Schmidt, F.A., Costa, M.M.S. Martello, F., Oliveira, A.B., Menezes, A.S., Fontenele, L.K., Morato, E.F. & Oliveira, M.A.

- (2020) Ant diversity studies in Acre: what we know and what we could do to know more? *Boletim do Museu Paraense Emílio Goeldi. Ciências Naturais*, 15 (1), 113–134.
<https://doi.org/10.46357/bcnaturais.v15i1.235>
- Schultz, T.R., Sosa-Calvo, J., Brady, S.G., Lopes, C.T., Mueller, U.G., Bacci, M. & Vasconcelos, H.L. (2015) The most relictual fungus-farming ant species cultivates the most recently evolved and highly domesticated fungal symbiont species. *The American Naturalist*, 185 (5), 693–703.
<https://doi.org/10.1086/680501>
- Scott-Santos, C.P., Esteves, F.A. & Brandão, C.R.F. (2008) Catalogue of Poneromorph ant type specimens (Hymenoptera, Formicidae) deposited in the Museu de Zoologia da Universidade de São Paulo, Brazil. *Papéis Avulsos de Zoologia*, 48 (11), 75–88.
<https://doi.org/10.1590/S0031-10492008001100001>
- Shattuck, S.O. (1994) *Taxonomic catalog of the ant subfamilies Aneuretinae and Dolichoderinae (Hymenoptera: Formicidae)*. Vol. 112. University of California Press, Los Angeles, California, 241 pp.
- Silva, F.C. & Silva, L.J.M. (2008) História regional e participação social nas mesorregiões paraenses. *Paper do Núcleo de Altos Estudos Amazônicos*, 226, 1–25.
- Silva, J.M.C., Novaes F.C. & Oren, D.C. (2002) Differentiation of *Xiphocolaptes* (Dendrocolaptidae) across the river Xingu, Brazilian Amazonia: recognition of a new phylogenetic species and biogeographic implications. *Bulletin of the British Ornithologists' Club*, 122, 185–194.
- Silva, P.R. (2007) Biologia de algumas espécies de *Blepharidatta*. *O Biológico*, 69 (2), 161–164.
- Siqueira, R.P. (2017) brazilmaps: Brazilian Maps from Different Geographic Levels. Version 0.1.0. Available from: <http://github.com/rpradosiqueira/brazilmaps> (accessed 29 May 2020)
- Smith, M.R. (1944) A second species of *Glamyromyrmex* Wheeler (Hymenoptera: Formicidae). *Proceedings of the Entomological Society of Washington*, 46, 254–256.
- Snelling, R.R. & Longino, J.T. (1992) Revisionary notes on the fungus-growing ants of the genus *Cyphomyrmex, rimosus* group (Hymenoptera: Formicidae: Attini). In: Quintero, D. & Aiello, A. (Eds.), *Insects of Panama and Mesoamerica: selected studies*. Oxford University Press, Oxford, pp. 479–494.
- Social Insects Specialist Group (1996) *Megalomyrmex symmetochus*. *The IUCN Red List of Threatened Species*, 1996, e.T12979A3403827. Available from: <https://www.iucnredlist.org/species/12979/3403827> (accessed 29 May 2020)
<https://doi.org/10.2305/IUCN.UK.1996.RLTS.T12979A3403827.en>
- Social Insects Specialist Group (1996) *Oxyepoecus inquilinus*. *The IUCN Red List of Threatened Species*, 1996, e.T15775A5138374. Available from: <https://www.iucnredlist.org/species/15775/5138374> (accessed 29 May 2020)
<https://doi.org/10.2305/IUCN.UK.1996.RLTS.T15775A5138374.en>
- Solar, R.R.C., Barlow, J., Andersen, A.N., Schoereder, J.H., Berenguer, E., Ferreira, J.N. & Gardner, T.A. (2016) Biodiversity consequences of land-use change and forest disturbance in the Amazon: A multi-scale assessment using ant communities. *Biological Conservation*, 197, 98–107.
<https://doi.org/10.1016/j.biocon.2016.03.005>
- Solar, R.R.C., Chaul, J.M.C., Maues, M. & Schoereder, J.H. (2016) A quantitative baseline of ants and orchid bees in human-modified Amazonian landscapes in Paragominas, Pará, Brazil. *Sociobiology*, 63 (3), 925–940.
<https://doi.org/10.13102/sociobiology.v63i3.1052>
- Sosa-Calvo, J., Jesovnik, A., Lopes, C.T., Rodrigues, A., Rabeling, C., Bacci, M., Vasconcelos, H.L. & Schultz, T.R. (2017) Biology of the relict fungus-farming ant *Apterostigma megacephala* Lattke, including descriptions of the male, gyne, and larva. *Insectes Sociaux*, 64 (3), 329–346.
<https://doi.org/10.1007/s00040-017-0550-2>
- Souza, J.L.P., Moura, C.A.R., Harada, A.Y. & Franklin, E. (2007) Diversity of species of the genera *Crematogaster*, *Gnamptogenys* and *Pachycondyla*, (Hymenoptera: Formicidae) and complementarity of sampling methods during the dry season in an ecological station in the Brazilian state of Pará. *Acta Amazonica*, 37 (4), 649–656.
<https://doi.org/10.1590/S0044-59672007000400022>
- Strand, J., Soares-Filho, B., Costa, M.H., Oliveira, U., Ribeiro, S.C., Pires, G.F., Oliveira, A., Rajão, R., May, P., Van der Hoff, R., Siikamäki, J., Da Motta, R.S. & Toman, M. (2018) Spatially explicit valuation of the Brazilian Amazon Forest's Ecosystem Services. *Nature Sustainability*, 1, 657–664.
<https://doi.org/10.1038/s41893-018-0175-0>
- Taddei, V.A., Martins, U.R., Vivo, M. & Percequillo, A.R. (1999) O acervo das coleções zoológicas do estado de São Paulo. In: Brito, M.C.W. & Joly, C.A. (Eds.), *Biodiversidade do Estado de São Paulo. Síntese do conhecimento ao final do século XX: infraestrutura para conservação da biodiversidade*. Vol. 7 FAPESP, São Paulo, pp. 81–101.
- Toledo, P.M. & Anjos, L. (2019) O antropoceno e os desafios para a construção de estratégias de conservação na Amazônia. In: Galúcio, A.V. & Prudente, A.L. (Orgs.), *Museu Goeldi: 150 anos de Ciência na Amazônia*. Belém. Museu Paraense Emílio Goeldi, Belém, pp. 196–221
- Trager, J.C. (1991) A revision of the fire ants, *Solenopsis geminata* group (Hymenoptera: Formicidae: Myrmicinae). *Journal of the New York Entomological Society*, 99, 141–198.
- Ulysséa, M.A. & Brandão, C.R.F. (2013) Catalogue of Dacetini and Solenopsidini ant type specimens (Hymenoptera, Formicidae, Myrmicinae) deposited in the Museu de Zoologia da Universidade de São Paulo, Brazil. *Papéis Avulsos de Zoologia*, 53

- (14), 187–209.
<https://doi.org/10.1590/S0031-10492013001400001>
- Ulysséa, M.A., Prado, L.P. & Brandão, C.R.F. (2015) Type specimens of the traditional Myrmicinae (Hymenoptera: Formicidae) ant tribes deposited in the Museu de Zoologia da Universidade de São Paulo, Brazil: Adelomyrmecini, Basicerotini, Blepharidattini, Crematogastrini, Formicoxenini, Lenomyrmecini, Myrmicini, Phalacromyrmecini, Pheidolini, Stegomyrmecini, Stenammini and Tetramoriini. *Papéis Avulsos de Zoologia*, 55 (12), 175–204.
<https://doi.org/10.1590/0031-1049.2015.55.12>
- Ulysséa, M.A., Prado, L.P. & Brandão, C.R.F. (2017) Catalogue of the Dolichoderinae, Formicinae and Martialinae (Hymenoptera: Formicidae) types deposited at the Museu de Zoologia da Universidade de São Paulo, Brazil. *Papéis Avulsos de Zoologia*, 57 (23), 295–311.
<https://doi.org/10.11606/0031-1049.2017.57.23>
- Van Proosdij, A.S.J., Sosef, M.S.M., Wieringa, J.J. & Raes, N. (2018) Minimum required number of specimens records to develop accurate species distribution models. *Ecography*, 39, 542–552.
<https://doi.org/10.5061/dryad.8sb8v>
- Vanzolini, P.E. (2004) *Episódios da Zoologia Brasílica*. Hucitec, São Paulo, 212 pp.
- Vasconcelos, H.L., Vilhena, J.M.S., Magnusson, W.E. & Albernaz, A.L. (2006) Long-term effects of forest fragmentation on Amazonian ant communities. *Journal of Biogeography*, 33 (8), 1348–1356.
<https://doi.org/10.1111/j.1365-2699.2006.01516.x>
- Vasconcelos, H.L., Leite, M.F., Vilhena, J.M.S., Lima, A.P. & Magnusson, W.E. (2008) Ant diversity in an Amazonian savanna: relationship with vegetation structure, disturbance by fire, and dominant ants. *Austral Ecology*, 33 (2), 221–231.
<https://doi.org/10.1111/j.1442-9993.2007.01811.x>
- Vedovato, L.B., Fonseca, M.G., Arai, E., Anderson, L.O. & Aragão, E.O.C. (2016) The extent of 2014 forest fragmentation in the Brazilian Amazon. *Regional Environmental Change*, 16, 2485–2490.
<https://doi.org/10.1007/s10113-016-1067-3>
- Veríssimo A., Rolla, A., Vedoveto, M. & Futada, S.M. (2011) *Áreas protegidas na Amazônia Brasileira: avanços e desafios*. Imaamazon e ISA, Belém/São Paulo, 87 pp.
- Vilela, T., Harb, A.M., Bruner, A., Arruda, V.L.S., Ribeiro, V., Alencar, A.A.C., Grandez, A.J.E., Rojas, A., Laina, A. & Botero, R. (2020) A better Amazon road network for people and the environment. *Proceedings of the National Academy of Sciences of the United States of America*, 117 (13), 7095–7102.
<https://doi.org/10.1073/pnas.1910853117>
- Vivo, M., Silveira, L.F. & Nascimento, F. (2014) Reflexões sobre coleções zoológicas, sua curadoria e a inserção dos Museus na estrutura universitária brasileira. *Arquivos de Zoologia*, Número Especial, 45 (Esp), 105–114.
<https://doi.org/10.11606/issn.2176-7793.v45iespp105-113>
- Wallace, A.R. (1854) On the monkeys of the Amazon. *Journal of Natural History*, 14 (2), 451–454.
<https://doi.org/10.1080/037454809494374>
- Ward, P.S. (1985) The Nearctic species of the genus *Pseudomyrmex* (Hymenoptera: Formicidae). *Quaestiones Entomologicae*, 21, 209–246.
- Ward, P.S. (1989) Systematic Studies on Pseudomyrmecine Ants: Revision of the *Pseudomyrmex oculatus* and *P. subtilissimus* Species Groups with Taxonomic Comments on Other Species. *Quaestiones Entomologicae*, 25, 393–468.
- Ward, P.S. (1999) Systematics, biogeography, and host plant associations of the *Pseudomyrmex viduus* group (Hymenoptera: Formicidae), Triplaris (and Tachigali) inhabiting ants. *Zoological Journal of the Linnean Society*, 126, 451–540.
<https://doi.org/10.1111/j.1096-3642.1999.tb00157.x>
- Ward, P.S. (2017) A review of the *Pseudomyrmex ferrugineus* and *Pseudomyrmex goeldii* species groups: acacia-ants and relatives (Hymenoptera: Formicidae). *Zootaxa*, 4227 (4), 524–542.
<https://doi.org/10.11646/zootaxa.4227.4.3>
- Watkins, J.F. II. (1976) *The identification and distribution of New World army ants (Dorylinae: Formicidae)*. Baylor University Press, Waco, Texas, 102 pp.
- Watkins, J.F. II. (1977) The species and subspecies of *Nomamyrmex* (Dorylinae: Formicidae). *Journal of the Kansas Entomological Society*, 50, 203–214.
- Weber, N.A. (1941) The biology of the fungus-growing ants. Part VII. The Barro Colorado Island, Canal Zone, species. *Revista de Entomología*, 12, 93–130.
- Weber, N.A. (1944) The neotropical coccid-tending ants of the genus *Acropyga* Roger. *Annals of the Entomological Society of America*, 37, 89–122.
<https://doi.org/10.1093/aesa/37.1.89>
- Weber, N.A. (1945) The biology of the fungus-growing ants. Part VIII. The Trinidad, B. W. I., species. *Revista de Entomología*, 16, 1–88.
- Weber, N.A. (1946) The biology of the fungus-growing ants. Part IX. The British Guiana species. *Revista de Entomología*, 17, 114–172.
- Weber, N.A. (1958) Nomenclatural changes in *Trachymyrmex* (Hym.: Formicidae). *Entomological News*, 69, 49–55.
- Wetterer, J.K. & Porter, S.D. (2003) The little fire ant, *Wasmannia auropunctata*: distribution, impact, and control. *Sociobiology*, 41 (3), 1–41.

- Wheeler, W.M. (1915) Two new genera of myrmicine ants from Brazil. *Bulletin of the Museum of Comparative Zoology*, 59, 483–491.
- Wheeler, W.M. (1916) Ants collected in British Guiana by the expedition of the American Museum of Natural History during 1911. *Bulletin of the American Museum of Natural History*, 35, 1–14.
- Wheeler, W.M. (1916) Note on the Brazilian fire-ant, *Solenopsis saevissima* F. Smith. *Psyche*, 23, 142–143.
<https://doi.org/10.1155/1916/73739>
- Wheeler, W.M. (1922) Ants of the American Museum Congo expedition. A contribution to the myrmecology of Africa. VIII. A synonymous list of the ants of the Ethiopian region. *Bulletin of the American Museum of Natural History*, 45, 711–1004.
- Wheeler, W.M. (1922) Neotropical ants of the genera *Carebara*, *Tranopelta* and *Tranopeltoides*, new genus. *American Museum Novitates*, 48, 1–14.
- Wheeler, W.M. (1922) Observations on *Gigantiops destructor* Fabricius and other leaping ants. *Biological Bulletin*, 42 (4), 185–201.
<https://doi.org/10.2307/1536521>
- Wheeler, W.M. (1928) Mermis parasitism and intercastes among ants. *Journal of Experimental Biology*, 50, 165–237.
<https://doi.org/10.1002/jez.1400500202>
- Wheeler, W.M. (1934) Neotropical ants collected by Dr. Elisabeth Skwarra and others. *Bulletin of the Museum of Comparative Zoology*, 77, 157–240.
- Wheeler, W.M. (1936) Ecological relations of ponerine and other ants to termites. *Proceedings of the American Academy of Arts and Sciences*, 71, 159–243.
<https://doi.org/10.2307/20023221>
- Wheeler, W.M. (1942) Studies of Neotropical ant-plants and their ants. *Bulletin of the Museum of Comparative Zoology*, 90, 1–262.
- Wheeler, W.M. & Bequaert, J.C. (1929) Amazonian myrmecophytes and their ants. *Zoologischer Anzeiger*, 82, 10–39.
- Wild, A.L. (2005) Taxonomic revision of the *Pachycondyla apicalis* species complex (Hymenoptera: Formicidae). *Zootaxa*, 834 (1), 1–25.
<https://doi.org/10.11646/zootaxa.834.1.1>
- Wilson, E.O. (1952) The *Solenopsis saevissima* complex in South America (Hymenoptera: Formicidae). *Memórias do Instituto Oswaldo Cruz*, 50, 60–68.
<https://doi.org/10.1590/S0074-02761952000100003>
- Wilson, E.O. (1987) The little things that run the world. *Conservation Biology*, 1 (4), 344–346.
<https://doi.org/10.1111/j.1523-1739.1987.tb00055.x>
- Wilson, E.O. (2003) *Pheidole in the New World: A Dominant, Hyperdiverse Genus*. Harvard University Press, Cambridge, Massachusetts, 794 pp.
- Whittaker, R.J., Araújo, M.B., Paul, J., Ladle, R.J., Watson, J.E.M. & Willis, K.J. (2005) Conservation biogeography: assessment and prospect. *Diversity and Distributions*, 11, 3–23.
<https://doi.org/10.1111/j.1366-9516.2005.00143.x>
- Zolessi, L.C., Abenante, Y.P. & Philippi, M.E. (1989) *Catálogo sistemático de las especies de Formicídos del Uruguay* (Hymenoptera: Formicidae). Oficina Regional de Ciencia y Tecnología de la Unesco para América Latina y el Caribe - ORCYT, Uruguay, Montevideo, 40 pp. [in Spanish]