“OUR PLANET REVIEWED” 2015
LARGE-SCALE BIOTIC SURVEY IN MITARAKA, FRENCH GUIANA
Edited by Julien TOUROULT

Tree-dwelling ant survey
(Hymenoptera, Formicidae)
in Mitaraka, French Guiana

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art. 41 (10) — Published on 24 April 2019
www.zoosystema.com
ABSTRACT
Ants constitute a substantial part of the arthropod biomass in rainforests. Most studies have focused on ground-dwelling ants, which constitute almost half of the diversity of the ant assemblage. We report here the results of the first survey of tree-dwelling ants in French Guiana on a plateau and in a swamp palm forest (Euterpe oleracea Mart.) in the Mitaraka Mountains. We were interested in seeing the effect of topography and geographic distance on species richness and composition and to gather information.
INTRODUCTION

Ants are arthropods of major ecological importance in tropical and temperate ecosystems. Comprising a single family and with around 15,000 described species, their diversity is in the same order of magnitude as birds (Barrowclough et al. 2016; Janicki et al. 2016); as social organisms, they are ubiquitous in tropical terrestrial environments and can be sampled with standardized protocols (Agosti & Alonso 2000). These are the main reasons why they are a manageable arthropod group for biomonitoring (Underwood & Fisher 2006). This contrasts with other arthropod groups such as Coleoptera which are much richer in tropical forests (Basset et al. 2012). Many more ant species remain to be discovered in unexplored geographical areas or habitats difficult to sample, such as the soil or the canopy (Ryder Wilkie et al. 2007, 2010; Ward 2010).

The Amazonian Basin remains one of these little explored regions. Most surveys of local richness have focused on ground-dwelling ant communities. For example, in five localities across Guiana, Lapolla et al. (2007) found 230 species in the leaf-litter with 38-84 species per site. At the Nouragues Research Station, French Guiana, from the base to the summit of inselbergs, Groc et al. (2009) found 196 species in the leaf litter and put in evidence that ant diversity was influenced by habitat type. In the Brazilian state of Acre, Miranda et al. (2012) sampled 222 ant species on the ground with pitfall traps and 115 ant species by beating the vegetation. Near Manaus, Brazil, Vasconcelos et al. (2003) also demonstrated the influence of topography, observing more species in river valleys than on forested plateaus. In the same area, at a larger scale (along a 2000-km-long gradient), Vasconcelos et al. (2010) demonstrated the effect of rainfall and flooding regimes on species turnover. In another survey, using baits on the ground and on the vegetation, Vasconcelos & Vilhena (2006) showed a stratification in the ant assemblage. This stratification was even more thoroughly documented in a study by Ryder Wilkie et al. (2010) in Amazonian Ecuador. These authors observed distinct ant assemblages in the soil, on the ground surface, and in the understorey and canopy. Of the 489 species collected, 282 were found only on trees. These ants were obtained by fogging sampling by Terry Erwin who also worked in other parts of Amazonia. In Amazonian Brazil, his fogging campaigns revealed that ants were the most abundant arthropods in trees, representing over one third of...
the collected individuals and biomass (Erwin 1983; Adis et al. 1984). Wilson (1987) found in Erwin’s samples in Peru up to 43 ant species from 26 genera from a single tree, and Tobin (1997) found 85 species from 29 genera from two trees and 11 associated vines for another site in Peru.

The aim of the current study was to complement these studies by: 1) surveying tree-dwelling ants in one of the most remote parts of the Amazon, the Mitaraka Mountains in French Guiana; 2) studying the effect of topography on arboreal ant assemblages; 3) studying the species turnover of tree-dwelling ant assemblages separated by large geographical distances; and 4) gathering information on vertical species distribution along trees.

MATERIAL AND METHODS

STUDY SITES

Mitaraka

This species inventory is part of the “Our Planet Reviewed” (“La Planète revisitée”) French Guiana 2014-2015 international biotic survey (Pascal et al. 2015; Touroult et al. 2018). It took place in the Mitaraka mountain range bordering Suriname and Brazil. Two contrasting forest sites were sampled: a plateau (“forêt de plateau”); and a swamp forest with the palm tree *Euterpe oleracea* Mart. at the bottom of the valley (“pinotière”). Both were centred on a plot from the Diadema (“DIssecting Amazonian Diversity by Enhancing a Multiple taxa Approach”) project (http://www.labex-ceba.fr/en/6337-2/). Their latitude and longitude were (2.233°N, –54.444°W) and (2.234°N, –54.448°W), respectively. The Diadema project also includes ant samplings on the ground and in the understory, relying on Winkler extraction, pitfall trapping and vegetation beating. These results have been reported elsewhere (Fichaux 2018). In the plateau forest, 30 tree canopies inside a circular plot 30 m in radius were sampled (area 0.28 ha, Fig. 1). In the swamp forest, they were collected from 30 trees within a 30 × 40 m plot (0.12 ha, Fig. 2). Ants were sampled between the 23rd of February and 8th of March 2017.

Petit Saut

To compare the faunal composition and diversity of Mitaraka, we used the data from an earlier survey in a plateau forest near the Petit Saut dam (Zone de relâcher, 5.068°N, –52.980°W) between the 13th and 25th of October 2010. A plot of 40 × 70 m (0.28 ha) was delineated there and 45 canopy trees...
were sampled. This plot was centred around a large *Azteca* cf. *chartifex* colony to map the spatial extension of its territory. This site was c. 350 km away from Mitaraka but part of the same Amazonian forest block.

**ANT SAMPLING**

We used the arboreal baitline protocol to collect tree-dwelling ants (Leponce & Dejean 2011). The baitline protocol consists in putting a rope over the uppermost branch in the canopy using a sling shot (Sherrilltree® Big Shot). Baits are spread every 5 m along the rope, from 2 m above ground up to the uppermost branch, to detect species vertical stratification. Because the rope forms a loop, baits can be easily collected. Baits consist of a mixture of tuna (in vegetable oil) and honey. These baits represent a source of proteins, lipids and carbohydrates. The mixture is wrapped inside a paper towel and tied to the rope (see Fig. 3D, F). Ants dig inside the bait and remain on it even when it is brought back down for inspection. Baits were set in the morning and collected approximately four hours later, in the afternoon. In the event of heavy rain, baits were removed and replaced the next day. In the swamp forest, the Big Shot could not be used (no firm soil to anchor the pole of the sling shot) and baits were only put 2 m above the ground. A total of 99, 30 and 146 baits were set on the plateau, the swamp and Petit Saut forests respectively. This method was designed to collect numerically dominant ants but it also collects part of the other species nesting on trees or at ground level. This method also has the advantage of allowing the vertical distribution of ant species along tree trunks to be assessed.

**ANT IDENTIFICATION**

Ants were identified on the basis of CEPLAC (Comissão Executiva do Plano da Lavoura cacauêira, Itabuna, Brasil) and RBINS (Royal Belgian Institute of Natural Sciences) (http://cb.naturalsciences.be/ants/collections/French%20Guiana%20Ants/) reference collections as well as online resources (AntWeb, AntWiki). Their distribution was checked on AntMaps (AntMaps.org). Specimens collected in Mitaraka and Petit Saut were deposited in the MNHN (Muséum national d’Histoire naturelle, Paris) and CEPLAC collections, respectively.

**FIG. 2.** — Palm swamp forest: **A**, area sampled based on a Diadema plot. Numbers 1-20 indicate the sampling points (not trees) for the Diadema Winkler program, baits were placed 2 m above ground on 30 trees within this area; **B**, general view of the habitat. Photo: Maurice Leponce.
STATISTICAL ANALYSES

Species rarefaction curves were plotted on the species occurrences data matrices using EstimateS 9.1.0 software (Colwell 2016) with 100 randomizations of the sampling order without replacement. Trees were considered as sampling units. The number of individuals collected on baits was not taken into account. The rationale is that ants are colonial insects and that it is only the number of colonies that is ecologically meaningful (Longino 2000; Leponce et al. 2004). If an ant species was found on a single or on multiple baits on the same tree its occurrence was counted as 1. To standardize the measurements of species richness between sites, an interpolation to a common number of occurrences (40) was carried out as well as the calculation of the Chao2 estimator of species richness. The non-overlapping of 95% confidence intervals constructed from unconditional variance estimators was used as a conservative criterion of statistical difference (Colwell 2016).

Fig. 3. — Representative ants belonging to the six subfamilies found at Mitaraka and Petit Saut: A, Azteca cf. chartifex Forel, 1878 (Dolichoderinae); B, Ectatomma tuberculatum (Olivier, 1792) (Ectatomminae); C, Gigantops destructor (Fabricius, 1804) (Formicinae); D, Cephalotes atratus (Linnaeus, 1758) (Myrmicinae); E, Neoponera commutata (Roger, 1860) (Ponerinae); F, Pseudomyrmex faber (Smith, F., 1858) (Pseudomyrmecinae). Photos: Maurice Leponce. Average head width: A, 1.0 mm; B, 2.3 mm; C, 2.5 mm; D, 2.1–4.5 mm; E, 3.2 mm; F, 2.0 mm.
For the analyses of species co-occurrences designed to reveal positive (i.e., parabiotic association) negative (i.e., exclusion) associations between species, the sampling unit considered was each bait. The independence of the presence of two species was measured with Fisher’s exact-tests. These tests were only conducted on the most frequent species (i.e., present each on at least 10% of the baits).

The compositional similarity between two sites was measured with the Chao-Jaccard index, which is an appropriate measure in the case of incompletely sampled fauna (Chao et al. 2005).

Results

Species richness

A total of 40 tree-dwelling species comprising 15 genera were found at Mitaraka (703 specimens collected). Five species belonging to the genus *Pheidole* Westwood, 1839 were new records for French Guiana (Table 1). The plateau forest was richer than the swamp forest: 34 vs 13 observed species (for 74 and 44 species occurrences, respectively). This difference was significant when considering a standardized species richness: 23.2 ± 6.2 vs 12.5 ± 5.5 species (rarefied richness for 40 occurrences ± 95% confidence interval) (Table 1; Fig. 4). This is valid even when considering only baits collected near the ground at both sites because the accumulation of species in the plateau forest was similar for ground- and canopy-dwelling species (Fig. 4). The Mitaraka plateau forest was also richer than the distant forest used as comparison (Petit Saut). This might be due in part to the fact that the Petit Saut plot was largely occupied (19/45 trees) by a single colony of a numerically and aggressively dominant ant (*Azteca cf. chartifex* Forel, 1896). These *Azteca* Forel, 1878 were present in massive numbers on baits and excluded most other ant species from their territory. The Chao2 estimator indicated that we possibly collected only half of the species present at Mitaraka with a total of 76.6 ± 29.2 and 36.7 ± 20.2 species expected in the plateau and swamp forest, respectively.

Taxonomic composition

Six ant subfamilies were observed at Mitaraka, namely: Myrmicinae Lepeletier de Saint-Fargeau, 1835 (25 species, 3 tribes), Formicicinae Latreille, 1809 (7 species, 3 tribes), Ectatomminae Emery, 1895 (4 species, 1 tribe), Ponerinae Lepeletier de Saint-Fargeau, 1835 (3 species, 1 tribe), and Dolichoderinae Forel, 1878 (1 species) (Table 1). Some representative species are shown in Figure 3. Pseudomyrmecinae Smith, F. 1852 were observed foraging on tree trunks but were not caught at baits. The most species rich genera were *Pheidole* (10 species), *Camponotus* Mayr, 1861 (5), *Crematogaster* Lund, 1831 (5) and *Solenopsis* Westwood, 1840 (4). Five *Pheidole* were new records for French Guiana (*Pheidole flavens* Roger, 1863; *Pheidole kukurana* Wilson, 2003; *Pheidole obscurior* Forel, 1886; *Pheidole peper* Wilson, 2003; *Pheidole tristops* Wilson, 2003)(Table 1). Among additional species found in Petit Saut, *Camponotus trapezoideus* Mayr, 1870, was a new record for French Guiana. The only exotic species observed was *Monomorium florica* (Jerdon, 1851). The relative proportion of the different subfamilies, in terms of species numbers, was not different between Mitaraka and Petit Saut (Chi-square test, P = 0.8).

The faunal similarity between the two Mitaraka sites (Chao-Jaccard: 0.372) was higher than with the Petit Saut site (0.136 or 0.047 for plateau and swamp comparisons, respectively) (Table 1). Among the common species from Mitaraka, only *Crematogaster tenuicula* Forel, 1904 was found in abundance at Petit Saut as well.

Species co-occurrences

Seven species were found in both habitat types at Mitaraka, namely (by order of decreasing occurrences on trees): *Camponotus femoratus* (Fabricius, 1804) (21), *Crematogaster tenuicula* Forel, 1904 (17), *Crematogaster levior* Longino, 2003 (14), *Nylanderia cf. fulva* (Mayr, 1862) (5), *Pheidole* group *flavens* sp.02 Roger, 1863 (4), *Pheidole transversostriata* Mayr, 1887 (3), and *Pheidole* group *flavens* sp.01 Roger, 1863 (2). A significant negative association was found between the first two species (Fisher’s exact-test; P < 0.05) and marginally between the two *Crematogaster* (P = 0.07). By contrast a very significant positive association was found between *Camponotus femoratus* and *Crematogaster levior*. These two species were particularly abundant in the swamp forest. All other species were found in a single habitat and on less than 15% of the trees.

Species vertical distribution

These data were only available for the plateau forest at Mitaraka. These, 15 out of 34 species were found up to the canopy (height ≥ 12 m) and most of them from the ground to the canopy (between 2 and 22 m, n = 10) (Table 1). The other 19 species were found only above ground (between 2 and 7 m) but were species for which only one or two occurrences were noted. Species from *Pheidole* and *Solenopsis* were
Table 1. — List of species found at Mitaraka, in the plateau and swamp forests, and in the comparison site Petit Saut. Values represent the number of trees on which each species was observed (with the number of specimens examined under brackets). The minimum and maximum heights at which each species was collected along trees are also provided (in meters above ground). All the species are native to French Guiana, except the exotic *Monomorium floricola* (Jerdon, 1851), signalled with a *. Full details of examined specimens is provided in Appendix 1.

| Subfamily   | Tribe          | Species                              | Plateau | Swamp | Petit Saut | Max | Min | New records |
|-------------|----------------|--------------------------------------|---------|-------|------------|-----|-----|-------------|
| Dolichoderinae |                | Azteca cf. chartifex Forel, 1878      | 19(53)  |       | 27         | 2   |     |             |
|             |                | Azteca cf. paraensis Forel, 1904      | 3(11)   |       | 17         |     |     |             |
| Ectatomminae | Ectatommini    | Ectatomma edentatum Roger, 1863       | (1)     |       | 17         | 17  |     |             |
|             |                | Ectatomma tuberculatum (Olivier, 1792)| 14(20)  |       | 17         |     |     |             |
|             |                | Gnamptogenys pleurodon (Emery, 1896) | 4(38)   |       | 17         | 2   |     |             |
|             |                | Gnamptogenys porcata (Emery, 1896)   | (1)     |       | 2          | 2   |     |             |
|             |                | Gnamptogenys relicta (Mann, 1916)    | (1)     |       | 2          | 2   |     |             |
| Formicinae  | Camponotini    | Camponotus (Myrmaphaenus) sp. 01      | (1)     |       | 2          | 2   |     |             |
|             |                | Camponotus (Myrmophincta) sp. 02      | 2(8)    |       | 2          | 2   |     |             |
|             |                | Camponotus femoratus (Fabricius, 1804)| 6(11)   | 15(36)| 17         |     |     |             |
|             |                | Camponotus novogranadensis Mayr, 1870| (1)     |       | 7          | 7   |     |             |
|             |                | Camponotus punctulatus andigenus Emery, 1903| (1)     |       | 2          | 2   |     |             |
|             |                | Camponotus trapezoideus Mayr, 1870   | (1)     |       | 2          | 2   |     |             |
|             | Myrmicinae     | Cephalotes atratus (Linnaeus, 1758)   | 2(9)    | 4(5)  | 22         | 2   |     |             |
|             |                | Cephalotes marginatus (Fabricius, 1804)| (1)     | 4(5)  | 22         |     |     |             |
|             |                | Cephalotes minutus (Fabricius, 1804)  | (2)     | 7     | 2          |     |     |             |
|             |                | Ochotomymex neopilis Fernández, 2003 | (1)     | 7     | 2          |     |     |             |
|             | Myrmicinae     | Pheidole fallax Mayr, 1870           | (9)     |       | 12         |     |     |             |
|             |                | Pheidole flavens Roger, 1863          | 4(32)   |       | 22         | 2   |     | ×           |
|             |                | Pheidole group fallax sp. 01          | (1)     |       | 2          | 2   |     |             |
|             |                | Pheidole group flavens sp. 01         | (1)     | 3(11)| 12         |     |     |             |
|             |                | Pheidole group flavens sp. 02         | (1)     |       | 2          | 2   |     |             |
|             |                | Pheidole kukrana Wilson, 2003         | (1)     |       | 2          | 2   |     | ×           |
|             |                | Pheidole cf. tobini Wilson, 2003      | (1)     |       | 2          | 2   |     |             |
|             |                | Pheidole obscurior Forel, 1886        | (1)     |       | 2          | 2   |     | ×           |
|             |                | Pheidole pepe Wilson, 2003            | (1)     |       | 2          | 2   |     | ×           |
|             |                | Pheidole transversostrata Mayr, 1887 | (2)     | 1(12)| 7          | 2   |     |             |
|             |                | Pheidole group tristis sp. 01         | (1)     |       | 2          | 2   |     |             |
|             |                | Pheidole group tristis sp. 02         | (2)     |       | 2          | 2   |     |             |
|             |                | Pheidole tristops Wilson, 2003        | (1)     |       | 2          | 2   |     | ×           |
|             | Solenopsidini  | Megalomyrmex leoninus Forel, 1885     | (1)     |       | 2          | 2   |     |             |
|             |                | Monomorium florica (Jerdon, 1851)*    | (1)     |       | 2          | 2   |     |             |
|             |                | Rogenia subbarmata (Kempf, 1961)      | (1)     |       | 2          | 2   |     |             |
|             | Ponerinae      | Neoponera apicalis (Latreille, 1802)  | (1)     |       | 2          | 2   |     |             |
|             |                | Neoponera commutata (Roger, 1860)     | (2)     |       | 2          | 2   |     |             |
|             |                | Neoponera villosa (Fabricius, 1840)   | (1)     |       | 2          | 2   |     |             |
|             |                | Odontomachus haematodus (Linnaeus, 1758)| (1)     |       | 2          | 2   |     |             |
|             | Ponerinae      | Pseudomyrmex faber (Smith F., 1858)   | (2)     |       | 2          | 2   |     |             |

Species occurrences (abundance) on trees: 74 (523) 44 (180) 102 (172)
Trees sampled: 30 30 45
Rarefied richness (40 occurrences) (± 95% CI): 23.2 ± 6.2 12.5 ± 5.5 15.3 ± 4.1
Chao2 (± 95%CI): 76.6 ± 29.2 36.7 ± 20.2 29.8 ± 6.2
very common 2 m above ground, even though some of their species were found not only on the ground but also in the canopy, examples being *Pheidole flavens* Roger, 1863, *Ph. group flavens* sp.02, *Ph. fallax* Mayr, 1870 and three undescribed *Solenopsis*: sp. 01, 03, 04.

**DISCUSSION**

The plateau forest at Mitaraka appeared rich in tree-dwelling species compared to the swamp forest and Petit Saut. The species richness and composition was also different between Mitaraka and Petit Saut. These differences might be amplified in part due to the presence of a large colony of *Azteca cf. charitex* in the Petit Saut plot, which decreased the diversity of ants found at baits due to exclusive competition known for territorially dominant arboreal ants (Dejean et al. 2015).

Altogether, 40 species were collected at Mitaraka but according to the Chao2 estimator, the tree-dwelling ant fauna attracted to baits might actually be twice as rich. This seems plausible since in the Ecuadorian Amazon, different types of baits at ground level collected 83 of the 269 ground-dwelling species (31%) and 17% of the local ant fauna (489 species) (Ryder Wilkie et al. 2010). During the same study 282 species were collected from the canopy by a very intense fogging programme spanning over height years. One might expect that at Mitaraka the use of various canopy sampling methods would increase the estimate of total number of tree-dwelling species. Insecticide fogging might be an option but it is time consuming in the field (i.e., it requires heavier equipment, and the weather conditions must be dry, warm and calm; Adis et al. (1998)) and in the laboratory (i.e., a huge number of individuals must be processed; e.g. 113 000 ants in Ryder Wilkie et al. (2010)). Furthermore fogging does not provide information on vertical stratification as ants from different levels fall in the nets. Other canopy sampling techniques (e.g. branch clipping, canopy pitfalls, traps, vegetation beating) usually require climbing which is difficult and risky (Yusah et al. 2012; Yusah et al. 2018). The newly developed arboreal baitline technique has the advantage of allowing researchers to collect from numerous trees quite rapidly, to detect the dominant ants in the canopy and to assess the distribution of species along the tree trunk.

The baiting method mainly attracted species with a high recruitment rate (i.e., *Crematogaster*, *Pheidole*, *Solenopsis*, *Wasmannia*). *Wasmannia auropunctata* (Roger, 1863), a notoriously invasive species, is native to this zone (Orivel et al. 2009). By contrast to other species of the genus *Neponera*, almost all generalist predators, *Neoponera commutata* (Roger, 1860) belongs to a group of species (with *N. marginata* (Roger, 1861) and *N. laevigata* (Smith F., 1858)) which is specialized in raiding termite nests in the ground (Wheeler 1936; MacKay & MacKay 2010). Other specialized ants were found, such as *Cephalotes atratus* (Linneaus, 1758) and other species of the same genus which are known to eat anemophilous pollen that sticks the leaf surfaces (Baroni Urbani & de Andrade 1997). Almost half of the species collected by the baitline method were foraging in the canopy. The other half were found 2 m above ground and may correspond to ground-nesting ant species occasionally foraging at the base of trees. Interestingly, some *Pheidole* and *Solenopsis*, two hyperdiverse genera, very common at ground level, were found foraging high in the trees and may correspond to species nesting in suspended soil or epiphytes (Klimes 2017).

The new records for French Guiana were found in the genera *Camponotus* and *Pheidole*, which are among the main hyperdiverse genera of ants (Wilson 1976, 2003). Historically French Guiana has been very irregularly inventoried for its diversity of ants. Although there are many specimens of this fauna in the collections of Europe and North America, it remained poorly studied until the 1980s when a much larger research effort was applied to its rich biodiversity. The identification of species belonging to hyperdiverse genera remains a problem in tropical ant taxonomy. Many taxa (alpha taxonomy) were reliably described in the 19th and early 20th centuries (e.g. many medium to large species of the genus *Camponotus*), but the capability to identify many smaller species needs to be based on necessary extensive generic revisions in order to eliminate many suspected synonyms. This is in particular the case of *Pheidole* which was reviewed by Wilson (2003) although very little biological material from French Guiana was available in the collections he studied. This is the main reason why several *Pheidole* species found at Mitaraka are new records for French Guiana.

At Mitaraka, *Camponotus fenestratus* and *Crematogaster levior* were common and numerically dominant. These species are known to share the same nests (parabiosis), which are in antgardens, and this association seems to be favourable to both species (Vantaux et al. 2007; Menzel et al. 2014). Moreover, they also excluded the other most common species, *Crematogaster tenusicula*.

To conclude, our results suggest that the arboreal-dwelling ant fauna at Mitaraka is rich and with a composition possibly different from other parts of Amazonia. It was dominated by two parabiotic species: *Camponotus fenestratus* and *Crematogaster levior*. Of particular interest will be the comparison of this arboreal-dwelling assemblage with the ground-dwelling ant assemblage (sampled with the Diadema protocol) to investigate if similar patterns of species turnover between sites are found.

**Acknowledgements**

We are grateful to Andrea Dejean for proofreading the manuscript. Figures were edited by Isabelle Bachy, RBINS. Ants were collected at Mitaraka during the *Our Planet Reviewed* French Guiana-2015 expedition organized by the Muséum national d’Histoire naturelle (Paris) and the NGO Pro-Natura International in the core area of the French Guiana Amazonian Park. The expedition was funded by the European Regional Development Fund (ERDF), the Conseil régional de Guyane, the Conseil général de Guyane, the Direction de l’Environnement, de l’Aménagement et du Logement and by the ministère de l’Éducation nationale, de l’Enseignement supérieur et de la Recherche. It was conducted in collabora-
tion with the Parc Amazonien de Guyane and the Société Entomologique Antilles-Guyane (SEAG). Financial support for the study was also provided by the “Investissement d’Avenir” grants managed by the French Agence nationale de la Recherche (CEBA, ref. ANR-10- LABX-25-01), a SYNTHESYS access to collections grants, a CNPq-FNRS bilateral cooperation grant, and the Brazilian PRONEX FAPESB-CNpq (project PNX 0011/2009). Lannick Retar is acknowledged for his technical assistance in Petit Saut. Finally, we thank the two reviewers, Prof. Jonathan David Majer (Curtin University, Australia) and Prof. Xim Cerda (Estación Biológica de Doñana, Spain) for their useful comments and suggestions.

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Submitted on 27 November 2017; accepted on 7 August 2018; published on 24 April 2019.
APPENDIX

APPENDIX 1. — Material examined and deposit of specimens. All specimens collected in Mitaraka are deposited at MNHN, Paris and all specimens collected in Petit Saut are deposited at CEPLAC., Ilhéus. All collected specimens are workers. Abbreviations syntax: codes for specimens follow the structure “VIAL-TREE-DATE (number of specimens collected)”. Example: “50953-C12-27/2/2015 (5)” means vial # 50953, specimens collected on tree C12 on 27/2/2015, five specimens examined. All the specimens collected at Mitaraka benefited from the Access and benefit sharing (ABS - APA in French) agreement of the “Our Planet Reviewed” program (APA 973-1). Only part of the collected specimens are listed here per species, as some species were extremely numerous; all specimens were however checked for their species identity. Distributions are based on the AntWiki website.

Subfamily DOLICHODERINAE Forel, 1878

Genus Azteca Forel, 1878

Azteca cf. chartrifex Forel, 1896

Material Examined. — French Guiana. Petit Saut, Zone de relâcher, 5.068°N –52.980°W, 13-20.X.2010.

Azteca velox Forel, 1904

Azteca paraensis – Forel 1906: 240.

Material Examined. — French Guiana. Mitaraka, “Our Planet Reviewed”, plateau forest, 2.233°N, –54.444°W, 27.II-3.III.2015.

Genus Gnamptogenys Roger, 1863

Gnamptogenys pleurodon (Emery, 1896)

Ectatomma (Holcoponera) pleurodon Emery, 1896: 47.

Material Examined. — French Guiana. Mitaraka, “Our Planet Reviewed”, plateau forest, 2.233°N, –54.444°W, 27.II-3.III.2015. 50946-C13-27/2/2015 (5); 50947-C16-27/2/2015 (5); 50956-C10-27/2/2015 (3); 50967-C06-23/3/2015 (10); 50971-C10-27/2/2015 (1); 50979-C16-3/3/2015 (11); 53138-C06-3/3/2015 (5); 53213-C13-27/2/2015 (1).

Distribution. — Neotropical Region: Bolivia, Brazil (type locality), Colombia, Ecuador, Peru, Trinidad and Tobago.
Gnamptogenys porcata (Emery, 1896)

Ectatomma (Holocephora) porcatum Emery, 1896: 48.

**Material examined.** — French Guiana. Mitaraka, “Our Planet Reviewed”, swamp forest, 2.233°N, −54.444°W, 5.III.2015. 53140-D01-5/3/2015 (1)

**Distribution.** — Neotropical Region: Brazil, Colombia, Costa Rica (type locality), Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Venezuela.

Gnamptogenys relicta (Mann, 1916)

Rhopalopone relicta Mann, 1916: 403.

**Material examined.** — French Guiana. Mitaraka, “Our Planet Reviewed”, plateau forest, 2.233°N, −54.444°W, 2.III.2015. 50962-C08-2/3/2015 (1)

**Distribution.** — Neotropical Region: Brazil (type locality), Colombia, French Guiana, Peru, Suriname, Trinidad and Tobago, Venezuela.

**Subfamily Formicinae** Latreille, 1809

**Tribe Camponotini** Forel, 1805

Genus Camponotus Mayr, 1861

**Camponotus (Myrmaphaenus) sp. 01**

**Material examined.** — French Guiana. Mitaraka, “Our Planet Reviewed”, plateau forest, 2.233°N, −54.444°W, 2.III.2015. 53178-C18-2/3/2015 (1).

**Distribution.** — French Guiana.

**Camponotus (Myrmosphincta) sp. 02**

**Material examined.** — French Guiana. Mitaraka, “Our Planet Reviewed”, plateau forest, 2.233°N, −54.444°W, 27.II-3.III.2015. 50945-C13-27/2/2015 (7); 50976-C15-3/3/2015 (1)

**Distribution.** — French Guiana.

**Camponotus femoratus** (Fabricius, 1804)

Formica femorata Fabricius, 1804: 397.

**Material examined.** — French Guiana. Mitaraka, “Our Planet Reviewed”, plateau forest, 2.233°N, −54.444°W, swamp forest, 2.234°N, −54.448°W, 2.II-7.III.2015. 50970-C09-3/3/2015 (1); 50971-C10-27/2/2015 (3); 50978-C15-3/3/2015 (1); 53139-C09-7/3/2015 (1); 53141-D01-5/3/2015 (3); 53142-D02-5/3/2015 (2); 53144-D03-5/3/2015 (2); 53145-D07-5/3/2015 (3); 53146-D08-5/3/2015 (3); 53147-D09-5/3/2015 (3); 53151-D14-5/3/2015 (1); 53153-D16-5/3/2015 (5); 53154-D17-5/3/2015 (5); 53155-D18-5/3/2015 (2); 53156-D19-5/3/2015 (1); 53159-D29-5/3/2015 (2); 53162-D22-5/3/2015 (2); 53191-D27-5/3/2015 (1); 53192-D25-5/3/2015 (1); 53207-C23-7/3/2015 (1); 53209-C21-3/3/2015 (1); 53210-C21-3/3/2015 (1); 53214-C22-7/3/2015 (2).

**DISTRIBUTION.** — Neotropical Region: Brazil (type locality), Ecuador, French Guiana, Guyana, Peru, Suriname, Trinidad and Tobago, Venezuela.

Camponotus novogranadensis Mayr, 1870

**Camponotus novogranadensis** Mayr, 1870: 380.

**Material examined.** — French Guiana. Mitaraka, “Our Planet Reviewed”, plateau forest, 2.233°N, −54.444°W, 2.III.2015. 53173-C28-2/3/2015 (1).

**Distribution.** — Nearctic Region: United States. Neotropical Region: Brazil, Colombia (type locality), Costa Rica, Ecuador, French Guiana, Guatemala, Guyana, Honduras, Mexico, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago.

Camponotus punctulatus andigenus Emery, 1903

**Camponotus punctulatus andigenus** Emery, 1903: 71.

**Material examined.** — French Guiana. Mitaraka, “Our Planet Reviewed”, plateau forest, 2.233°N, −54.444°W, 7.III.2015. 53212-C11-7/3/2015 (1).

**Distribution.** — Neotropical Region: French Guiana, Peru (type locality).

Camponotus trapezoideus Mayr, 1870

**Camponotus trapezoideus** Mayr, 1870: 385.

**Material examined.** — French Guiana. Petit Saut dam, Zone de relâcher, 5.068°N, −52.980°W, 19.X.2010. 43012-PS17-19/10/2010 (1).

**Distribution.** — Neotropical Region: Brazil, Colombia (type locality), French Guiana (new record).

Genus Gigantiops Roger, 1863

**Gigantiops destructor** (Fabricius, 1804)

Formica destructor Fabricius, 1804: 402.

**Material examined.** — French Guiana. Mitaraka, “Our Planet Reviewed”, plateau forest, 2.233°N, −54.444°W, 2.III.2015. 53179-C01-2/3/2015 (1).

**DISTRIBUTION.** — Neotropical Region: Brazil, Colombia, Ecuador, French Guiana, Guyana, Peru, Suriname, Venezuela.

**Subfamily Formicinae** Latreille, 1809

**Tribe Lasiini** Ashmead, 1905

Genus Nylanderia Emery, 1906

**Nylanderia cf. fulva** (Mayr, 1862)

Prenolepis fulva Mayr, 1862: 698.
Cryptocerus minutus

French Guiana. Petit Saut dam, Zone de relâcher, 5.068°N, –52.980°W, 13-15.X.2010.

**DISTRIBUTION.** Neotropical Region: Argentina, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Lesser Antilles, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Venezuela.

**Genus Ochetomyrmex Mayr, 1878**

Ochetomyrmex neopolitus Fernández, 2003

**DISTRIBUTION.** Neotropical Region: Colombia, Costa Rica, Ecuador, Guyana, Suriname, Uruguay, Venezuela.

**Material examined.** — French Guiana. “Our Planet Reviewed”, plateau forest, 2.233°N, –54.444°W, swamp forest, 2.234°N, –54.448°W, 2-5.III.2015.

53148-D10-5/3/2015 (4); 53150-D13-5/3/2015 (4); 53151-D14-5/3/2015 (2); 53158-D21-5/3/2015 (2); 53168-C26-2/3/2015 (3).

**Distribution.** Neotropical Region: Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Lesser Antilles, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Venezuela.

**Genus Pheidole Westwood, 1839**

Pheidole flavens Roger, 1863

Pheidole flavens Roger, 1863: 198.

**Material examined.** — French Guiana. “Our Planet Reviewed”, plateau forest, 2.233°N, –54.444°W, 2-5.III.2015.

53157-D20-5/3/2015 (8).

**Distribution.** Neotropical Region: Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Lesser Antilles, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Venezuela.

**Cryptocerus marginatus** (Fabricius, 1804)

**Family** Formicidae

**Subfamily** Myrmicinae

**Genus** Cryptocerus

**Species** Cryptocerus marginatus

**Material examined.** — French Guiana. Petit Saut dam, Zone de relâcher, 5.068°N, –52.980°W, 13-15.X.2010.

42901-PS28-13/10/2010 (1); 42942-PS05-15/10/2010 (1).

**Distribution.** Neotropical Region: Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Lesser Antilles, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Venezuela.

**Genus Ochetomyrmex Mayr, 1878**

Ochetomyrmex neopolitus Fernández, 2003

**Material examined.** — French Guiana. “Our Planet Reviewed”, plateau forest, 2.233°N, –54.444°W, 2-5.III.2015.

53148-D10-5/3/2015 (4); 53150-D13-5/3/2015 (4); 53151-D14-5/3/2015 (2); 53158-D21-5/3/2015 (2); 53168-C26-2/3/2015 (3).

**Distribution.** Neotropical Region: Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Lesser Antilles, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Venezuela.

**Cryptocerus marginatus** (Fabricius, 1804)

**Family** Formicidae

**Subfamily** Myrmicinae

**Genus** Cryptocerus

**Species** Cryptocerus marginatus

**Material examined.** — French Guiana. “Our Planet Reviewed”, plateau forest, 2.233°N, –54.444°W, swamp forest, 2.234°N, –54.448°W, 2-5.III.2015.

53148-D10-5/3/2015 (4); 53150-D13-5/3/2015 (4); 53151-D14-5/3/2015 (2); 53158-D21-5/3/2015 (2); 53168-C26-2/3/2015 (3).

**Distribution.** Neotropical Region: Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Lesser Antilles, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Venezuela.

**Genus Ochetomyrmex Mayr, 1878**

Ochetomyrmex neopolitus Fernández, 2003

**Material examined.** — French Guiana. “Our Planet Reviewed”, plateau forest, 2.233°N, –54.444°W, 2-5.III.2015.

53148-D10-5/3/2015 (4); 53150-D13-5/3/2015 (4); 53151-D14-5/3/2015 (2); 53158-D21-5/3/2015 (2); 53168-C26-2/3/2015 (3).

**Distribution.** Neotropical Region: Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Lesser Antilles, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Venezuela.

**Genus Pheidole Westwood, 1839**

Pheidole flavens Roger, 1863

Pheidole flavens Roger, 1863: 198.

**Material examined.** — French Guiana. “Our Planet Reviewed”, plateau forest, 2.233°N, –54.444°W, 2-5.III.2015.

53148-D10-5/3/2015 (4); 53150-D13-5/3/2015 (4); 53151-D14-5/3/2015 (2); 53158-D21-5/3/2015 (2); 53168-C26-2/3/2015 (3).

**Distribution.** Neotropical Region: Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Lesser Antilles, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Venezuela.

**Pheidole flavens** Roger, 1863

**Pheidole flavens** Roger, 1863: 198.

**Material examined.** — French Guiana. “Our Planet Reviewed”, plateau forest, 2.233°N, –54.444°W, 2-5.III.2015.

53148-D10-5/3/2015 (4); 53150-D13-5/3/2015 (4); 53151-D14-5/3/2015 (2); 53158-D21-5/3/2015 (2); 53168-C26-2/3/2015 (3).

**Distribution.** Neotropical Region: Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Lesser Antilles, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Venezuela.
Pheidole group flavens sp. 01

**MATERIAL EXAMINED.** — French Guiana. Mitaraka, “Our Planet Reviewed”, plateau forest, 2.233°N, –54.444°W, swamp forest, 2.234°N, –54.448°W, 5-7.III.2015. 53194-D26-5/3/2015 (5); 53214-C22-7/3/2015 (4).

**DISTRIBUTION.** — French Guiana.

Pheidole group flavens sp. 02

**MATERIAL EXAMINED.** — French Guiana. Mitaraka, “Our Planet Reviewed”, plateau forest, 2.233°N, –54.444°W, swamp forest, 2.234°N, –54.448°W, 2-5.III.2015. 53151-D14-5/3/2015 (2); 53165-D30-5/3/2015 (3); 53165-D40-5/3/2015 (6).

**DISTRIBUTION.** — French Guiana.

Pheidole flavens Wilson, 2003

**Pheidole**) sustainable**

**MATERIAL EXAMINED.** — French Guiana. Mitaraka, “Our Planet Reviewed”, plateau forest, 2.233°N, –54.444°W, 2.III.2015. 53168-C26-2/3/2015 (1).

**DISTRIBUTION.** — Neotropical Region: Colombia (type locality), French Guiana (new record).

Pheidole obscurior Forel, 1886

**Pheidole**) sustainable**

**MATERIAL EXAMINED.** — French Guiana. Mitaraka, “Our Planet Reviewed”, plateau forest, 2.233°N, –54.444°W, 7.III.2015. 53212-C11-7/3/2015 (3).

**DISTRIBUTION.** — Neotropical Region: Argentina, Barbados, Brazil, Colombia, Costa Rica, Dominican Republic, El Salvador, French Guiana (new record), Guatemala (type locality), Honduras, Mexico, Nicaragua, Paraguay, Puerto Rico, Trinidad and Tobago, Venezuela.

Pheidole pepo Wilson, 2003

**Pheidole**) sustainable**

**MATERIAL EXAMINED.** — French Guiana. Mitaraka, “Our Planet Reviewed”, plateau forest, 2.233°N, –54.444°W, 2.III.2015. 53166-C26-2/3/2015 (1).

**DISTRIBUTION.** — Neotropical Region: Colombia (type locality), French Guiana (new record).

Pheidole transversostriata Mayr, 1887

**Pheidole**) sustainable**

**MATERIAL EXAMINED.** — French Guiana. Mitaraka, “Our Planet Reviewed”, plateau forest, 2.233°N, –54.444°W, swamp forest, 2.234°N, –54.448°W, 27.II-5.III.2015. 50952-C12-27/2/2015 (20); 50953-C12-27/2/2015 (2); 50970-C09-3/3/2015 (1); 53152-D15-5/3/2015 (12).

**DISTRIBUTION.** — Neotropical Region: Barbados, Brazil, Colombia, French Guiana, Guyana (type locality), Suriname, Trinidad and Tobago, Venezuela.

Pheidole tristops Wilson, 2003

**Pheidole**) sustainable**

**MATERIAL EXAMINED.** — French Guiana. Mitaraka, “Our Planet Reviewed”, plateau forest, 2.233°N, –54.444°W, 3.III.2015. 53135-C04-3/3/2015 (3).

**DISTRIBUTION.** — Neotropical Region: Colombia (type locality), French Guiana (new record).

Genus Strumigenys Smith, 1860

Strumigenys sp. 01

**MATERIAL EXAMINED.** — French Guiana. Mitaraka, “Our Planet Reviewed”, Plateau forest, 2.233°N, –52.980°W, 14-16.X.2010. 42914-PS15-14/10/2010 (1); 42993-P538-16/10/2010 (1).

**DISTRIBUTION.** — Native in French Guiana.
**Wasmannia auropunctata** (Roger, 1863)

*Tetramorium auropunctatum* Roger, 1863: 182.

**Material Examined.** — **French Guiana.** Mitaraka, "Our Planet Reviewed", plateau forest, 2.233°N, –54.444°W, 3.III.2015. 53131-C21-3/3/2015 (7).

**Distribution.** — Afrotropical Region: Cameroon, Gabon, Sierra Leone. Australasian Region: Australia, New Caledonia. Indo-Australian Region: India, Solomon Islands, Vanuatu. Neartic Region: Canada, United States. Neotropical Region: Antigua and Barbuda, Argentina, Aruba, Barbados, Belize, Bermuda, Bolivia, Brazil, Colombia, Costa Rica, Cuba (type locality), Dominican Republic, Ecuador, French Guiana, Galapagos Islands, Grenada, Guadeloupe, Guatemala, Haiti, Honduras, Lesser Antilles, Mexico, Netherlands Antilles, Panama, Paraguay, Peru, Puerto Rico, Saint Lucia, Uruguay, Venezuela. Palaeartic Region: Israel, Spain.

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**Wasmannia rochai** Forel, 1912

**Material Examined.** — **French Guiana.** Petit Saut dam, Zone de relâcher, 5.068°N, –52.980°W, 13-20.X.2010.

**Material Examined.** — **French Guiana.** Petit Saut dam, Zone de relâcher, 5.068°N, –52.980°W, 13-19.X.2010.

**Material Examined.** — **French Guiana.** Petit Saut dam, Zone de relâcher, 5.068°N, –52.980°W, 16-20.X.2010.

**Material Examined.** — **French Guiana.** Petit Saut dam, Zone de relâcher, 5.068°N, –52.980°W, 16-20.X.2010.

**DISTRIBUTION.** — Neotropical Region: Argentina, Barbados, Bolivia, Brazil (type locality), Colombia, Costa Rica, Ecuador, French Guiana, Galapagos Islands, Grenada, Guadeloupe, Guatemala, Guyana, Honduras, Lesser Antilles, Martinique, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Uruguay, Venezuela.

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**Crematogaster erecta** Mayr, 1866

**Crematogaster erecta** Mayr, 1866: 902.

**Material Examined.** — **French Guiana.** Petit Saut dam, Zone de relâcher, 5.068°N, –52.980°W, 13-21.X.2010.

**Material Examined.** — **French Guiana.** Petite Saut dam, Zone de relâcher, 5.068°N, –52.980°W, 13-21.X.2010.

**Material Examined.** — **French Guiana.** Petite Saut dam, Zone de relâcher, 5.068°N, –52.980°W, 13-19.X.2010.

**Material Examined.** — **French Guiana.** Petite Saut dam, Zone de relâcher, 5.068°N, –52.980°W, 13-19.X.2010.

**DISTRIBUTION.** — Neotropical Region: Argentina, Barbados, Bolivia, Brazil (type locality), Colombia, Costa Rica, Ecuador, French Guiana, Galapagos Islands, Grenada, Guadeloupe, Guatemala, Guyana, Honduras, Lesser Antilles, Martinique, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Uruguay, Venezuela.
Crematogaster longispina Emery, 1890

**Crematogaster longispina** Emery, 1890: 53.

**Material Examined.** — French Guiana. Mitaraka, "Our Planet Reviewed", plateau forest, 2.233°N, −54.444°W, 7.III.2015. 53139-C09-7/3/2015 (10).

**Distribution.** — Neotropical Region: Colombia, Costa Rica (type locality), Ecuador, French Guiana, Guyana, Nicaragua, Peru, Suriname.

Crematogaster tenuicula Forel, 1904

**Crematogaster tenuicula** Forel, 1904: 36.

**Material Examined.** — French Guiana. Mitaraka, "Our Planet Reviewed", plateau forest, 2.233°N, −54.444°W, 27.II.2015. 50944-C01-27/2/2015 (28); 50963-C01-1/3/2015 (7); 50964-C02-1/3/2015 (5); 50965-C02-1/3/2015 (28); 50969-C08-2/3/2015 (4); 50973-C03-1/3/2015 (1); 53128-C18-3/3/2015 (1); 53136-C04-2/3/2015 (1); 53138-C06-2/3/2015 (1); 53142-D02-5/3/2015 (4); 53145-D07-5/3/2015 (3); 53153-D16-5/3/2015 (10); 53159-D29-5/3/2015 (5); 53169-C26-2/3/2015 (8); 53170-C27-2/3/2015 (8); 53172-C28-2/3/2015 (2); 53175-C29-2/3/2015 (1); 53208-C24-7/3/2015 (32); 53211-C25-7/3/2015 (14).

**Distribution.** — Neotropical region: Costa Rica to Amazonian Brazil (including French Guiana), Bolivia.

Tribi SOLENOPSISIDINI Forel, 1893

Genus Megalomyrmex Forel, 1885

**Megalomyrmex leoninus** Forel, 1885

**Material Examined.** — French Guiana. Mitaraka, "Our Planet Reviewed", plateau forest, 2.233°N, −54.444°W, 27.II.2015. 50949-C15-27/2/2015 (6).

**Distribution.** — Neotropical Region: Brazil, Colombia (type locality), Ecuador, French Guiana, Guyana, Suriname, Trinidad and Tobago, Venezuela.

Genus Monomorium Mayr, 1855

**Monomorium floricola** (Jerdon, 1851)

**Atta floricola** Jerdon, 1851: 107.

**Material Examined.** — French Guiana. Petit Saut dam, Zone de relâcher, 5.068°N, −52.980°W, 15.X.2010. 42931-PS01-15/10/2010 (1).

**Distribution.** — Afrotropical Region: Cameroun, Comoros, Ghana, Nigeria, Togo, United Republic of Tanzania. Australasian Region: Australia, New Caledonia, Norfolk Island. Indo-Australian Region: Borneo, Cook Islands, Fiji, French Polynesia, Guam, Hawaii, Indonesia, Kiribati, Krakatau Islands, Malaysia, Marshall Islands, Micronesia (Federated States of), New Guinea, Niue, Northern Mariana Islands, Palau, Philippines, Samoa, Solomon Islands, Tokelau, Tonga, Vanuatu, Wallis and Futuna Islands. Malagasy Region: Mauritius, Mayotte, Réunion, Seychelles. Nearctic Region: United States. Neotropical Region: Anguilla, Bahamas, Barbados, Brazil, Cayman Islands, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, French Guiana, Galapagos Islands, Greater Antilles, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Lesser Antilles, Mexico, Paraguay, Puerto Rico, Suriname, Trinidad and Tobago. Oriental Region: India (type locality), Laos, Nicobar Island, Sri Lanka, Thailand, Vietnam. Palaearctic Region: China, Japan, Republic of Korea, United Kingdom of Great Britain and Northern Ireland. Exotic to French Guiana.

Genus Rogeria Emery, 1894

**Rogeria subarmata** (Kempf, 1961)

**Irogera subarmata** Kempf, 1961: 438.

**Material Examined.** — French Guiana. Mitaraka, "Our Planet Reviewed", plateau forest, 2.233°N, −54.444°W, 2.III.2015. 53171-C28-2/3/2015 (3).

**Distribution.** — Neotropical Region: Brazil (type locality), Ecuador, French Guiana, Venezuela.

Genus Solenopsis Westwood, 1840

**Solenopsis sp. 01**

**Material Examined.** — French Guiana. Mitaraka, "Our Planet Reviewed", plateau forest, 2.233°N, −54.444°W, 27.II.2015. 53171-C28-2/3/2015 (1); 53175-C29-2/3/2015 (1); 53208-C24-7/3/2015 (32); 53211-C25-7/3/2015 (14).

**Distribution.** — Neotropical region: Brazil (type locality), French Guiana, Suriname.

**Solenopsis sp. 02**

**Material Examined.** — French Guiana. Mitaraka, "Our Planet Reviewed", swamp forest, 2.234°N, −54.448°W, 5.III.2015. 53151-D14-5/3/2015 (6).

**Distribution.** — French Guiana.

**Solenopsis sp. 03**

**Material Examined.** — French Guiana. Mitaraka, "Our Planet Reviewed", plateau forest, 2.233°N, −54.444°W, 3.III.2015. 50980-C16-3/3/2015 (1); 53132-C21-3/3/2015 (6).

**Distribution.** — French Guiana.

**Solenopsis sp. 04**

**Material Examined.** — French Guiana. Mitaraka, "Our Planet Reviewed", plateau forest, 2.233°N, −54.444°W, 2-7.III.2015.
Tree-dwelling ants of Mitaraka

Solenopsis sp. 05

Material examined. — French Guiana. Petit Saut dam, Zone de relâcher, 5.068°N, –52.980°W, 16-20.X.2010. 42986-PS31-16/10/2010 (1); 43028-PS45-19/10/2010 (1); 43081-PS29-20/10/2010 (1).

Distribution. — French Guiana.

Solenopsis sp. 06

Material examined. — French Guiana. Petit Saut dam, Zone de relâcher, 5.068°N, –52.980°W, 13-20.X.2010. 42898-PS25-13/10/2010 (1); 42912-PS11-14/10/2010 (1); 42926-PS25-14/10/2010 (1); 42984-PS29-16/10/2010 (1); 43087-PS31-20/10/2010 (1).

Distribution. — French Guiana.

Subfamily PONERINAE, Lepeletier de Saint-Fargeau, 1835
Tribe PONERINI, Lepeletier de Saint-Fargeau, 1835
Genus Neoponera Emery, 1901

Neoponera apicalis (Latreille, 1802)

Formica apicalis Latreille, 1802: 204.

Material examined. — French Guiana. Mitaraka, “Our Planet Reviewed”, swamp forest, 2.234°N, –54.448°W, 5.III.2015. 53160-D24-5/3/2015 (1).

Distribution. — Neotropical Region: Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, French Guiana, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Suriname, Trinidad and Tobago, Venezuela.

Neoponera villosa (Fabricius, 1804)

Formica villosa Fabricius, 1804: 409.

Material examined. — French Guiana. Petit Saut dam, Zone de relâcher, 5.068°N, –52.980°W, 13.X.2010. 42897-PS23-13/10/2010 (1).

Distribution. — Nearctic Region: United States. Neotropical Region: Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, French Guiana, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Suriname, Trinidad and Tobago, Venezuela.

Genus Odontomachus Latreille, 1804

Odontomachus haematodus (Linnaeus, 1758)

Formica haematoda Linnaeus, 1758: 582.

Material examined. — French Guiana. Mitaraka, “Our Planet Reviewed”, swamp forest, 2.234°N, –54.448°W, 5.III.2015. 53149-D11-5/3/2015 (2).

Distribution. — Nearctic Region: United States. Neotropical Region: Argentina, Bahamas, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, French Guiana, Greater Antilles, Grenada, Guadeloupe, Guatemala, Guyana, Honduras, Lesser Antilles, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, Venezuela. Palaearctic Region: China.

Subfamily PSEUDOMYRMECINAE Smith F., 1852
Genus Pseudomyrmex Lund, 1831

Pseudomyrmex faber (Smith F., 1858)

Pseudomyrma faber Smith F., 1858: 157.

Material examined. — French Guiana. Petit Saut dam, Zone de relâcher, 5.068°N, –52.980°W, 13-15.X.2010. 42875-PS02-13/10/2010 (1); 42930-PS01-15/10/2010 (1).

Distribution. — Neotropical Region: Brazil (type locality), Colombia, Costa Rica, Ecuador, French Guiana, Guyana, Panama, Suriname.