Updating the taxonomy of the bee genus *Megalopta* (Hymenoptera: Apidae, Augochlorini) including revision of the Brazilian species

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(Received 14 August 2013; accepted 17 June 2014; first published online 2 September 2014)

*Megalopta* (Smith 1853) is a nocturnal and/or crepuscular bee genus, with Neotropical distribution. The present work presents a taxonomic revision of *Megalopta* with emphasis on the Brazilian species through diagnosis and description of species and an identification key for most species that occur in South and Central America, with figures and distribution maps. Moreover eight new species are described: *Megalopta guarani* sp. n, *M. mura* sp. n, *M. piraha* sp. n, *M. munduruku* sp. n, *M. yanomami* sp. n, *M. xavante* sp. n, *M. mapinguari* sp. n. and *Megalopta karitiana* sp. n. Sex association for the male of *M. chaperi* (Vachal, 1904) is presented. Also we present taxonomical notes of valid species, with designation of lectotypes, new synonymies and checklist of valid species. Now, 32 valid species are recognized for the genus, with 19 in the Brazilian fauna. The present work enables correct identification of the species, which should facilitate further studies with *Megalopta*.

http://zoobank.org/urn:lsid:zoobank.org:pub:6DB510C5-259A-4A66-AB36-774FAD4F53E9

**Keywords:** dim-light bees; Halictidae; neotropics; systematics; sweat bees; taxonomy

‘Agora, imediatamente, é aqui que começa o primeiro sinal do peso do corpo que sobe. Aqui troco de mão e começo a ordenar o caos’ (Cesar 1988).

‘Instantly now, it is here that the first sign of the body begins, upwards. I then change gear, and begin to organize the chaos’. Free translation.

Introduction

*Megalopta* is a speciose genus within the bee tribe Augochlorini, with distribution from southern Brazil (state of Santa Catarina) to the state of Sinaloa, in Mexico (Michener 2007; Gonzalez et al. 2010). Currently, the genus has 30 valid species, most of them inhabiting the Amazon basin (Moure 2007; Santos and Silveira 2009; Engel 2011). Dating based on molecular analyses estimates that the genus diversification probably started in the Tertiary, with a range between 15 and 30 mya (Danforth et al. 2004; Tierney et al. 2012).

These relatively large halictine bees, with body length varying between 9 and 20 mm, are conspicuous elements of the Neotropical wet forests. The species of *Megalopta* are well known for being obligate dim-light bees, with a specialized visual system that allows them to forage in twilight conditions, unlike diurnal bees (Greiner...
et al. 2004a, 2004b, 2005; Warrant et al. 2004; Wcislo and Tierney 2009; Baird et al. 2011; Berry et al. 2011). Due to their nocturnal behaviour, these bees can be easily captured by light traps, but can also be collected while visiting flowers with nocturnal or crepuscular anthesis, by Malaise traps and by traps baited with fragrances commonly used to attract male orchid bees (Knoll and Santos 2012).

*Megalopta* bees excavate their nests in dead wood, most frequently in fallen tree branches in the understory (Janzen 1968; Wcislo et al. 2004; Tierney et al. 2008; Santos et al. 2010). The few species investigated are facultatively social, with nests containing up to 17 females and conspicuous variation in body size among females from a single nest. In these multifemale nests, dominating females are larger and coerce their subordinates to engage in trophallactic behaviour (Wcislo and Gonzalez 2006). Differences in female body size have been shown to depend on the amount of food received during larval development (Kapheim et al. 2011).

The main studies on the taxonomy of the genus are: Cockerell (1900, 1923), Ducke (1908, 1910), Schrottky (1906), Vachal (1904), Meade-Waldo (1916), Friese (1911, 1923, 1926), Moure (1943, 1958), Michener and Moure (1964), Engel et al. (1997), Hinojosa-Diaz and Engel (2003), Engel (2006, 2011), Santos and Silveira (2009) and Gonzalez et al. (2010).

The genus was revised by Friese (1926), who included in it species currently placed in *Megalopta* proper, *Megaloptidia* Cockerell, 1900, *Megommation* Moure, 1943 and *Xenochlora* Engel, Brooks and Yanega, 1997. Although he dealt with almost all of the currently known species, the characters used in the identification key are extremely variable, which makes proper identification not reliable. In this context, Sakagami and Moure (1967) stated that it was virtually impossible to identify the species correctly, mainly due to female polymorphisms, involving macrocephalic and normal-headed females (Sakagami and Moure 1965). Janzen (1968) defined the taxonomy of the genus as chaotic and Engel (2000, 2006, 2011) stated that the genus needed a modern revision and that many synonyms should exist, because new species described by authors in the first half of the twentieth century were based on extremely variable characters. An exception to the statement made by Engel is the work of Vachal (1904), who used structural characters with little intraspecific variation.

A few genus-group names have been proposed within *Megalopta* proper, *Megaloptella* Schrottky, 1906, for species with a distinct wing venation; *Tmetocoelia* Moure, 1943, for species whose males exhibits a mid longitudinal sulcus in the third sternum; and *Noctoraptor* Engel, Brooks and Yanega, 1997 proposed as a subgenus for cleptoparasitic species. Here, these three names are treated as junior synonyms of *Megalopta*, following Moure (2007).

The monophyly of *Megalopta* and its relationships with other genera of Augochlorini have been studied by Eickwort (1969), Danforth and Eickwort (1997) and Engel (2000). According to Engel (2000) the genus belongs to the clade named ‘Megalopta group’ (*Xenochlora, (Megalopta, Noctoraptor)*) and is supported by the broad distal labral process, the basal expansion of the distal labral keel, the formation of an acute angle by the epistomal sulcus that protrudes into the basal margin of the clypeus, the presence of the interocellar furrow, the shortened and declivitous basal area of the propodeum, and the use of wood substrate for nest construction (Engel 2000). However, a recent molecular analysis by Tierney et al. (2012) with three genes showed that *Megalopta* is paraphyletic, with *Megalopta atra* appearing as sister group of *Xenochlora* and separate from
the remaining *Megalopta*. Only the analysis based in the gene for the long-wavelength green opsin recovered a monophyletic *Megalopta*.

Previously to this study, 10 species were recorded from Brazil (Moure 2007; Santos and Silveira 2009): *M. aegis* Vachal, 1904; *M. aeneicollis* Friese, 1926; *M. amoena* (Spinola 1853); *M. atlantica* Santos and Silveira, 2009; *M. cuprea* Friese, 1911; *M. guimaraesi* Santos and Silveira, 2009; *M. opacicollis* Friese, 1926; *M. purpurata* Smith, 1879; *M. sodalis* Vachal, 1904 and *M. sulciventris* Friese, 1926. The present work revises most of the Brazilian fauna of *Megalopta*, and provides an identification key to the species found in Brazil and other South American countries, such as Bolivia, Ecuador, French Guiana, Guyana, Peru, Suriname, Venezuela and Trinidad and Tobago. Moreover, the study presents description of eight new species, lectotype designations, new synonymies, sex associations for the described species, comments on available names, and new morphological characters that improve the current knowledge of the genus. A checklist of all valid species in the genus is provided in Appendix 1.

**Material and methods**

For this study, more than 2500 specimens of *Megalopta* were examined. In addition to the material from the ‘Coleção Entomológica Padre Jesus Santiago Moure’, Universidade Federal do Paraná (DZUP), specimens were loaned from the following institutions and curators: CRC, Claus Rasmussen’s private collection, Aarhus, Denmark; DZMG, Departamento de Zoologia, Universidade Federal de Minas Gerais, Belo Horizonte, Brazil – Dr. Fernando Amaral da Silveira; INPA, Instituto Nacional de Pesquisas da Amazônia, Manaus, Brazil – Dr. Márcio Luiz de Oliveira; LEBIC, Laboratório de Ecologia e Biogeografia de Insetos da Caatinga – Fernando Zanella; MRRR, Museu Estadual de Roraima, Boa Vista, Brazil – Dr. Silvio José Reis da Silva; MUSM, Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima, Peru – Dr. Gerardo Lamas Müller; MEUFV, Museu Regional de Entomologia da Universidade Federal de Viçosa, Viçosa, Brazil – Dr. Lúcio Antônio de Oliveira Campos; MPEG, Museu Paraense Emílio Goeldi, Belém, Brazil – Dr. Orlando Tobias; MSNT, Museo Regionale di Scienze Naturale, Turin, Italy – Dr. Luca Picciu; MZUSP, Museu de Zoologia da Universidade de São Paulo, São Paulo, Brazil – Dr. Carlos Roberto Brandão; SEMK, Snow Entomological Collection, Division of Entomology, Natural History Museum, University of Kansas, Lawrence, USA – Dr. Zachary Falin; RMNH, Nationaal Natuurhistorisch Museum, Leiden, Netherlands – Dr. Ing. C. van Achterberg; UFBA, Laboratório de Ecologia da Polinização, da Universidade Federal da Bahia, Salvador, Brazil – Dr. Mauro Ramalho; UFPB, Laboratório de Entomologia da Universidade Federal da Paraíba, João Pessoa, Brazil – Dr. Celso Feitosa Martins; ZMB, Museum für Naturkunde, Berlin, Germany – Dr. Frank Koch Berlin, Germany. Additional institutions mentioned in the work are: AMNH, American Museum Natural of History, New York, USA; BLCU, Utah State University, Bee Biology and Systematics Laboratory, Utah, Logan, USA; BMNH, Natural History Museum, London, UK; CUIC, Cornell University, Ithaca, New York, USA; MNHP, Muséum National d’Histoire Naturelle, Paris, France; SNCBSH, State of North Carolina Biological Station, North
Carolina, USA; and STRI, Smithsonian Tropical Research Institute, Balboa, Panama. The specimens of *Megalopta* collected in the pollination study of *Parkia velutina* (Hopkins et al. 2000) could not be studied, because they were not located in the INPA collection.

The terminology for the external morphology follows Eickwort (1969) and Michener (2000, 2007), except for the scutum, here referred to as mesoscutum, and the ‘basal area of propodeum’, here the metapostnotum, following Brothers (1976). The following abbreviations are used: F1–F11 for the flagellomeres; T1–T6, metasomal terga; and S1–S8, metasomal sterna. The punctuation density is described in relation to the interspaces between punctures, measured in terms of puncture diameter (pd). Measurements of metanotum and basal area of metapostnotum were taken at their midline. The surface of the basal area of metapostnotum is defined as rugulose when possessing minute and fine rugulosities, or polished when shiny and lacking microsculpture. The longitudinal rugulosities are considered long when extending to posterior margin of basal area of metapostnotum, and short when not extending to the posterior margin. The mandible of nonparasitic species is bidentate, with a ridge on its inner surface forming two short supplementary inner teeth (Engel et al. 1997), while in the parasitic species the mandible is simple and lacks supplementary teeth.

The measurements presented, all in millimetres, are: approximate body length, maximum width of head, intertegular distance, length of forewing with tegula, and length of forewing. Measurements are not provided for *Megalopta purpurata* because the holotype was examined only through photographs.

In the description of species, the variable characters are marked by asterisks and are discussed below in the item ‘Comments’. In the item ‘Examined material’, all label data are transcribed, with information from each label presented between quotation marks, and the different lines in the label by a backslash (\).

Specimens were photographed using a Leica DFC 500 camera attached to a Leica MZ16 stereomicroscope (Leica, Germany), and images were treated using the software Auto-Montage Pro (Syncroscopy) of the Projeto Taxon line, Rede Paranaense de Coleções Biológicas da Universidade Federal do Paraná (DZUP). Some of the photographs presented here appeared previously in Santos and Silveira (2009).

The geographical coordinates (latitude, longitude), when absent in the original labels were obtained through GeoLoc at http://splink.cria.org.br/geoloc?criaLANG=pt and Global Gazetteer Version 2.1 at www.fallingrain.com/world/. The distribution maps were prepared in ArcView® (ESRI, http://www.esri.com/). In the item ‘Distribution’ additional distribution records were taken from Moure (2007) and Santos and Silveira (2009), based on specimens not examined in this study.

*Megalopta* Smith, 1853

*Megalopta* Smith, 1853: 83. Type species: *Megalopta idalia* Smith, 1853.

*Megalopta* (*Megaloptella*) Schrottky, 1906: 312. Type species: *Halictus ochrias* Vachal, 1904.

*Tmetocoelia* Moure, 1943: 481. Type species: *Megalopta sulciventris* Friese, 1926.

*Megalopta* (*Noctoraptor*) Engel et al. 1997: 12. Type species: *Megalopta byroni* Engel et al. 1997.
Diagnosis

*Megalopta* differs from other augochlorines, including *Xenochlora*, by the large ocelli and the closely packed series of hamuli in the hind wing (Engel 2000; Michener 2007), as well as in the morphology of the male S3–S5 (Santos and Melo 2013). *Megalopta* and *Xenochlora* differ from most augochlorines for their non-metallic, pale brown metasoma. A pale metasoma is present in *Megaloptidia* Cockerell, *Megommation* Moure, and some species of *Megaloptina* Eickwort, but these genera have a very slender proboscis, with the prementum 10 to over 20× as long as broad, and except for *Megaloptina*, also a serrate inner metatibial spur, while in *Megalopta* and *Xenochlora* the proboscis is not so slender, with the prementum about 4–8× as long as broad, and the inner metatibial spur is pectinate.

Three main lineages are recognized in the genus, the first one formed by the cleptoparasitic species, corresponding to the subgenus *Noctoraptor*, and treated here as the byrony group, the second one formed by the species in which the males have a conspicuous large process covered with velvety pilosity in the posterior upper margin of the metepisternum, and the last lineage comprises those species lacking a well-developed metepisternal process (Santos and Melo, unpublished data). The species of the second and third lineages can be further subdivided in four species groups: aegis, amoena, yanomami and sodalis. A subgeneric classification is not adopted here because the available name *Megaloptella* applies only to the amoena species group and *Tmetocoelia* has been shown to form a paraphyletic assemblage (Santos and Melo, unpublished data).

Identification key to the species of *Megalopta* from Brazil

This key includes species that occur in other South American countries (Bolivia, Ecuador, French Guiana, Guyana, Nicaragua, Peru, Suriname, Trinidad and Tobago, and Venezuela) and in Central America.

Females

1. Posterior upper margin of metepisternum modified into a conspicuously large process covered with velvety pilosity (Figure 1A, B) ........................................ 2
   - Posterior upper margin of metepisternum unmodified, lacking a velvety process (Figure 1C) ................................................................. 8

2 (1). Posterior margin of basal area of metapostnotum arcuate, gradually curved toward the metanotum laterally, the longitudinal rugulosities sometimes numerous and present laterally (Figure 1D); upper frons conspicuously convex, strongly declivous toward sulcus around median ocellus (Figure 1E)...
   aegis group ............................................................................................. 3
   - Posterior margin of basal area of metapostnotum straight, abruptly bending laterally toward the metanotum, the longitudinal rugulosities restricted to mid portion, absent laterally (Figure 1F); upper frons flat, not strongly declivous toward sulcus around median ocellus (Figure 2A)...
   amoena group (in part) ........................................................................... 6
Figure 1. Females of *Megalopta*. (A–C) Lateral view of mesosoma; (A) *M. aeneicollis* Friese from Novo Airão, Brazil; (B) *M. mura* sp. n. from Manaus, Brazil; (C) *Megalopta yanomami* sp. n. from Parauapebas, Brazil; (D, F) posterolateral view of mesosoma; (D) *M. sulciventris* Friese from Manaus, Brazil; (E) lateral view of head of *M. aegis* Vachal from Caldas Novas, Brazil; (F) *M. guimaraesi* Santos & Silveira from Alto Paraíso de Goiás, Brazil. Scale bar 1 mm, except in part E scale bar 0.5 mm.
Figure 2. Females of Megalopta. (A) Lateral view of head of *M. guimaraesi* Santos & Silveira from Alto Paraíso de Goiás, Brazil; (B–F). posterolateral view of mesosoma; (B) *M. nitidicollis* Friese from Rio Branco, Brazil; (C) *M. aeneicollis* Friese from Novo Airão, Brazil; (D) *M. aegis* Vachal from Caldas Novas, Brazil; (E) *M. chaperi* Vachal from Amajari, Brazil; (F) *M. amoena* Spinola from Alenquer, Brazil. Scale bar 1 mm.
3 (2). Basal area of metapostnotum with longitudinal rugulosities weakly impressed medially and more developed laterally, the integument often reddish brown on basal half and metallic green on apical half (Figure 2B) .................................................................  \textit{M. nitidicollis}
   - Basal area of metapostnotum with weak longitudinal rugulosities along its entire surface (Figures 1D, 2C, D) ........................................ 4

4 (3). Basal area of metapostnotum orangish, without metallic reflections, surface entirely finely rugulose, stronger rugulosities rectilinear and long along entire surface (Figure 2C) ............................................................. \textit{M. aeneicollis}
   - Basal area of metapostnotum reddish brown or metallic green, the longitudinal rugulosities imbricated laterally (Figures 1D, 2D) .............. 5

5 (4). Metanotum with dense short plumose pilosity, present on entire surface and obscuring the integument in oblique view (Figure 2D); basal area of metapostnotum with the integument entirely reddish brown, sometimes with green highlights laterally (Figure 2D) ........................................  \textit{M. aegis}
   - Metanotum sometimes with pilosity short and plumose, present only in two-thirds of disc, not obscuring the integument in oblique view (Figure 1D); basal area of metapostnotum with the integument metallic green with strongly imbricated longitudinal rugulosities (Figure 1D) ...... .................................................................................. \textit{M. sulciventris}

6 (2). Basal area of metapostnotum very short, about one-third as long as metanotum (Figure 2E) ................................................................. \textit{M. chaperi}
   - Basal area of metapostnotum longer, about as long as or only slightly shorter than metanotum (Figures 1F, 3A) ............................................ 7

7 (6). Basal area of metapostnotum uniformly metallic green (Figure 1F); mesoscutum, adjacent to parapsidial line, densely punctured (< 1 pd), punctation sparser in direction to mesocutal lip (≥ 1 pd) (Figure 3B); scutellum with posterior margin levelled to anterior margin of metanotum (Figure 3C) ...... .................................................................................. \textit{M. guimaraesi}
   - Basal area of metapostnotum often reddish brown medially and metallic green laterally (Figure 3A); mesoscutum, adjacent to parapsidial line, with very dense contiguous punctation, in direction to mesocutal lip punctures separated by < 1 pd (Figure 3D); scutellum with posterior margin raised in relation to anterior margin of metanotum (Figure 3E) .... .................................................................................. \textit{M. mura} sp. n.

8 (1). Basal area of metapostnotum smooth laterally (Figures 2F, 3F, 4A–C) ... 9
   - Basal area of metapostnotum microreticulated laterally (Figure 4D, E)... \textit{sodalis group} ................................................................................ 13

9 (8). Mandible simple and lacking supplementary teeth; ocellococular distance longer than F1 length (Figure 4F); scopa absent; basitibial plate with undefined margins (Figure 5A) .......................................................... \textit{M. xavante} sp. n.
   - Mandible bidentate and with supplementary teeth; ocellococular distance shorter than F1 length (Figure 5B); scopa present; basitibial plate with defined margin (Figure 5C) .............................................................................. 10
Figure 3. Females of *Megalopta*. (A, F) Posterolateral view of mesosoma; (B, D) dorsal view of mesoscutum; (C, E) lateral view of mesosoma; (A) *M. mura* sp. n. from Manaus, Brazil; (B, C) *M. guimaraesi* Santos & Silveira from Alto Paraíso de Goiás, Brazil; (D, E) *M. mura* sp. n. from Manaus, Brazil; (F) *M. xavante* sp. n. (holotype) from Nova Xavantina, Brazil. Scale bar 1 mm.
Figure 4. Females of *Megalopta*. (A–E) Posterolateral view of mesosoma; (A) *Megalopta yanomami* sp. n. from Parauapebas, Brazil; (B) *M. piraha* sp. n. from Manaus, Brazil; (C) *M. munduruku* sp. n. from Belterra, Brazil; (D) *M. cuprea* Friese from Nigrillani, Bolivia; (E) *M. sodalis* Vachal from Antonina, Brazil; (F) frontal view of head of *M. xavante* sp. n from Nova Xavantina, Brazil. Scale bar 1 mm.
Figure 5. Females of *Megalopta*. (A, C) Lateral view of basitibial plate; (A) *Megalopta xavante* sp. n. from Nova Xavantina, Brazil; (B) frontal view of head in the female of *M. piraha* sp. n. from Manaus, Brazil; (C) *M. piraha* sp. n. from Manaus, Brazil; (D) lateral view of mesosoma of *M. amoena* from Alenquer, Brazil; (E, F) dorsal view of mesosoma; (E) *M. yanomami* sp. n. from Parauapebas, Brazil; (F) *M. piraha* sp. n. from Manaus, Brazil. Scale bar 1 mm.
10 (9). Basal area of metapostnotum without longitudinal rugulae (Figure 2F); metepisternum usually with dense pilosity obscuring at the least upper half of sclerite (Figure 5D) .......................................................... M. amoena
   − Basal area of metapostnotum with longitudinal rugulae (Figure 4A–C); metepisternum with sparse pilosity, integument not obscured by pubescence (Figure 1C)… yanomami group .................................................. 11

11 (10). Basal area of metapostnotum with longitudinal rugulosities restricted to mid portion, external rugulosities strongly impressed and forming semicircles, integument often dark green (Figure 4A); metanotum with contiguous punctuation (Figure 5E); T1 densely punctured (< 1 pd) …… M. yanomami sp. n.
   − Basal area of metapostnotum without defined external sulcus delimiting the longitudinal rugulosities, integument light green (Figure 4B); metanotum often densely punctured (< 1 pd) (Figure 5F); T1 with sparse punctuation (≥ 1 pd) ........................................................................................................ M. piraha sp. n.

12 (8). Basal area of metapostnotum with mid depression restricted to anterior half, not extending to posterior margin (Figure 4C)……. M. munduruku sp. n.
   − Basal area of metapostnotum with mid depression extending to posterior margin ......................................................................................................................... 13

13 (12). Head and thorax mostly dark brown, lacking metallic reflections (Figure 4D) .................................................................................................................. M. cuprea
   − Head and thorax metallic green (Figure 4E) ....................................... M. sodalis

Males

1. Posterior upper margin of metepisternum modified into a conspicuously large process covered with velvety pilosity (Figure 6A) ......................... 2
   − Posterior upper margin of metepisternum unmodified, lacking a velvety process (Figure 6B) ........................................................................................................ 9

2 (1). Posterior margin of basal area of metapostnotum arcuate, gradually curved toward the metanotum laterally, longitudinal rugulosities sometimes numerous and present laterally (Figure 6C–F); pilosity of metepisternum sparse, not obscuring the integument; diameter of velvety metepisternal process about 0.5× the tegula length (Figure 6A); 1st and 2nd tarsomere of foreleg with longest simple setae longer than summed length of the three apical tarsomeres; longitudinal sulcus of S3 strongly impressed (Figure 7A)... aegis group ........................................................................................................... 3
   − Posterior margin of basal area of metapostnotum straight, abruptly bending laterally toward the metanotum, the longitudinal rugulosities restricted to mid portion, absent laterally (Figure 7B, E); pilosity of metepisternum dense, obscuring the integument; diameter of velvety metepisternal process about 0.75× tegula length (Figure 7F); 1st and 2nd tarsomere of foreleg with longest simple setae smaller than summed length of the three apical tarsomeres; S3 lacking a longitudinal sulcus or sulcus only weakly indicated (Figure 8A–C)... amoena group ................................................................................................. 6
Figure 6. Males of *Megalopta*. (A, B) Lateral view of mesosoma; (A) *M. aeneicollis* Friese from Manaus, Brazil; (B) *M. yanomami* sp. n. from Parauapebas, Brazil; (C–F) posterolateral view of mesosoma; (C) *M. sulciventris* Friese from Manaus, Brazil; (D) *M. aeneicollis* Friese from Manaus, Brazil; (E) *M. aegis* Vachal from Caldas Nova, Brazil; (F) *M. nitidicollis* Friese from São Paulo de Olivença, Brazil. Scale bar 1 mm.
Figure 7. Males of *Megalopta*. (A) Ventral view of sternum 3–6 of *M. aegis* Vachal from Caldas Novas, Brazil; (B–E) posterolateral view of mesosoma; (B) *M. chaperi* Vachal from Amajari, Brazil; (C) *M. amoena* Spinola from Alenquer, Brazil; (D) *M. guimaraesi* Santos & Silveira from Formosa, Brazil; (E) *Megalopta mura* sp. n. from Presidente Figueiredo, Brazil; (F) lateral view of mesosoma *M. mura* sp. n. from Ouro Preto do Oeste, Brazil. Scale bar 1 mm.
Figure 8. Males of *Megalopta*. (A–C) Ventral view of sternum 3–4; (A) *M. chaperi* Vachal Amajari, Brazil; (B) *M. amoena* Spinola from Alenquer, Brazil; (C) *M. mura* sp. n. from Parauapebas, Brazil; (D, E) Dorsal view of posterior surface of F6–F11; (D) *M. sulciventris* Friese from Manaus, Brazil; (E) *M. aegis* Vachal from Parauapebas, Brazil; (F) dorsal view of flagellum of *M. amoena* from Alenquer, Brazil. Scale bar 1 mm.
3 (2). Glabrous basal portion of F6–F11 raised in relation to remainder of flagellomere surface (Figure 8D); pilosity of metanotum restricted to two-thirds of disc, not obscuring the integument in oblique view (Figure 6C); basal area of metapostnotum entirely metallic green or sometimes reddish brown medially (Figure 6C) .......................................................... \textit{M. sulciventris}

\begin{itemize}
  \item Glabrous basal portion of F6–F11 levelled to remainder of flagellomere surface (Figure 8E); metanotum often with very dense pilosity covering entire disc and obscuring the integument in oblique view (Figure 6D, F); basal area of metapostnotum reddish brown, orangish or reddish brown with metallic green, never entirely metallic green (Figure 6D, F) ................................................. 4
\end{itemize}

4 (3). Surface of basal area of metapostnotum entirely finely rugulose, its posterior margin slightly raised but not forming a carina (Figure 6D) ............................................................ \textit{M. aeneicollis}

\begin{itemize}
  \item Surface of basal area of metapostnotum variable, its posterior margin forming a carina (Figure 6E, F) ......................................................................................... 5
\end{itemize}

5 (4). Basal area of metapostnotum with strongly impressed longitudinal rugulosities along its entire surface, lateral portions with only short rugulosities (Figure 6E) ......................................................................................... \textit{M. aegis}

\begin{itemize}
  \item Basal area of metapostnotum lacking longitudinal rugulosities or only with a few weak rugulosities in its mid portion (Figure 6F) ........................ \textit{M. nitidicollis}
\end{itemize}

6 (2). Metanotum with dense pilosity; mid portion of basal area of metapostnotum very short, about one-third as long as metanotum (Figure 7B) .......................................................................................... \textit{M. chaperi}

\begin{itemize}
  \item Metanotum with sparse pilosity; mid portion of basal area of metapostnotum short, about one half as long as metanotum (Figure 7D, E) .......................................................... 7
\end{itemize}

7 (6). F6–F11 about as wide as remaining flagellomeres (Figure 8F); basal area of metapostnotum often lacking longitudinal rugulosities, only rarely with a few weak rugulosities in its mid portion (Figure 7C); S3 mostly flat, lacking a mid longitudinal sulcus (Figure 8B); S4 with pilosity basally, its apical margin slightly notched laterally (Figure 9B) ................................................ \textit{M. amoena}

\begin{itemize}
  \item F6–F11 wider than remaining flagellomeres (Figure 9A); basal area of metapostnotum with longitudinal rugulosities in mid portion (Figure 7D, E); S3 with a weakly impressed longitudinal sulcus (Figure 8C); S4 lacking pilosity basally, its apical margin strongly notched laterally (Figure 8C) ... 8
\end{itemize}

8 (7). Mesoscutum, adjacent to parapsidial line, sparsely punctured ($\geq$ 1 pd) .......................................................... \textit{M. guimaraesii}

\begin{itemize}
  \item Mesoscutum, adjacent to parapsidial line, densely punctured (< 1 pd) .......................................................... \textit{M. mura} sp. n.
\end{itemize}

9 (1). Inner orbit of eye only slightly angled; ocelloculocular distance longer than F1 length (Figures 9C–F, 10A); F2 about two-thirds of F3 in length; dorsal surface of flagellomeres flat (Figure 10B) \textit{byroni group} ............................................. 10

\begin{itemize}
  \item Inner orbit of eye strongly angled (Figure 10C); ocelloculocular distance shorter than F1 length; F2 about as long as F3; dorsal surface of flagellomeres strongly depressed (Figure 10D) .......................................................... 15
\end{itemize}
Figure 9. Males of *Megalopta*. (A) Dorsal view of flagellum of *M. guimaraesi* from Formosa, Brazil; (B) ventral view of sternum 3–4 of *M. amoena* from Alenquer, Brazil; (C, E) dorsal view of head; (D, F) Frontal view of head; (C) *M. guarani* sp. n. from Chapada dos Guimarães, Brazil; (D) *M. mapinguari* sp. n. from Rio Branco, Brazil; (E) *M. xavante* sp. n. from Nova Xavantina, Brazil; (F) *M. atlantica* Santos & Silveira from Ipanema, Brazil. Scale bar 1 mm.
Figure 10. Males of *Megalopta*. (A, C) Frontal view of head; (B, D) frontal view of flagellomeres; (A) *M. purpurata* Smith (holotype) from Tefé, Brazil; (B) *M. atlantica* Santos & Silveira from Ipanema, Brazil; (C) *M. yanomami* sp. n. from Parauapebas, Brazil; (D) *M. piraha* sp. n. from Manaus, Brazil; (E) lateral view of sternum 4 of *M. guarani* sp. n. from Chapada dos Guimarães, Brazil; (F) posterolateral view of basal area of mesosoma *M. guarani* sp. n. from Chapada dos Guimarães, Brazil. Scale bar 1 mm, except in E, scale bar 0.1 mm.
10 (9). Protruding process of S4 short, triangular shaped in lateral view (Figure 10E); basal area of metapostnotum without longitudinal rugulosities ........................................................................................................... 11
- Protruding process of S4 digitiform (Figure 11B); basal area of metapostnotum with longitudinal rugulosities, or if rugulosities absent then the integument mostly dark brown to black (Figures 11C–F) .......................................................................... 12

11 (10). Head and mesosoma metallic green with coppery tints, metasoma reddish brown (Figures 9C, 10F) M. guarani sp. n.
- Head and mesosoma dark brown with metallic green reflections, metasoma dark brown with purple tints (Figure 11A) ......................... M. karitiana sp. n.

12 (10). Mesosoma homogeneously metallic green (Figure 11C) .................................................. M. mapinguari sp. n.
- Mesosoma dark brown to black with metallic green tints on mesoscutum, scutellum, metanotum and basal area of metapostnotum (Figure 12A–C) ................................................................................................. 13

13 (12). Integument mostly brown with metallic green tints (Figure 12A) ..........................
- Integument mostly dark brown to black (Figure 12B, C) ................. 14

14 (13). Basal area of metapostnotum with longitudinal rugulosities longer on mid portion, becoming shorter laterally (Figure 11E) ............. M. atlantica
- Basal area of metapostnotum smooth, without longitudinal rugulosities (Figure 11F) .................................................................................................................. M. purpurata

15 (9). Mid portion of basal area of metapostnotum flattened, longitudinal rugulosities absent or only a few present (Figure 12D, E) ......................... 16
- Mid portion of basal area of metapostnotum weakly concave, numerous longitudinal rugulosities present (Figures 12F, 13A, B) ............... 17

16 (15). Scape uniformly enlarged (Figure 13C); flagellomeres with depressed and glabrous area (Figure 13D); basal area of metapostnotum dark green, longitudinal rugulosities strongly impressed and enclosed laterally by two sulci (Figure 12D) .................................................................................................................. M. yanomami sp. n.
- Scape gradually enlarging toward the apex (Figure 13E); flagellomeres without depressed and glabrous area (Figure 10D); basal area of metapostnotum light green, longitudinal rugulosities not enclosed by two lateral sulci (Figure 12E) ........................................................................................................ M. piraha sp. n.

17 (15). Basal area of metapostnotum with shorter and weakly impressed longitudinal rugulosities (Figure 12F) ........................................ M. munduruku sp. n.
- Basal area of metapostnotum with longer and strongly impressed longitudinal rugulosities ........................................................................................................... 18

18 (17). Integument mostly dark brown to black (Figure 13A, F) .......... M. cuprea
- Integument mostly metallic green (Figure 13B) .................................. M. sodalis
Figure 11. Males of *Megalopta*. (A, C, D). Posterolateral view of mesosoma; (A) *M. karitiana* sp. n. from Ouro Preto do Oeste, Brazil; (B) ventral view of sternum 3–4 of *M. mapinguari* sp. n. from Rio Branco, Brazil; (C) *M. mapinguari* sp. n. from Rio Branco, Brazil; (D) *M. xavante* sp. n. from Nova Xavantina, Brazil; (E) dorsal view of mesosoma of *M. atlantica* Santos & Silveira from Ipanema, Brazil; (F) posterior view of mesosoma of *M. purpurata* Smith (holotype) from Tefé, Brazil. Scale bar 1 mm.
Figure 12. Males of *Megalopta*. (A–C) Habitus, dorsal view; (A) *M. xavante* sp. n. from Nova Xavantina, Brazil; (B) *M. atlantica* Santos & Silveira from Ipanema, Brazil; (C) *M. purpurata* (holotype) Smith from Tefé, Brazil; (D–F) posterolateral view of mesosoma; (D) *M. yanomami* sp. n. from Parauapebas, Brazil; (E) *M. piraha* sp. n. from Manaus, Brazil; (F) *M. munduruku* sp. n. from Belterra, Brazil. Scale bar 1 mm.
Figure 13. Males of *Megalopta*. (A, B) Posterolateral view of mesosoma; (C, E) frontal view of head; (D) frontal view of flagellomeres; (A) *M. cuprea* Friese from Santa Cruz, Bolivia; (B) *M. sodalis* Vachal from Antonina, Brazil; (C, D) *M. yanomami* sp. n. from Parauapebas, Brazil; (E) *M. piraha* sp. n. from Manaus, Brazil; (F) *M. cuprea* Friese from Espejo, Santa Cruz, Bolivia. Scale bar 1 mm.
The aegis species group

Diagnosis
The aegis species group includes *M. aegis*, *M. aeneicollis*, *M. nitidicollis* and *M. sulciventris*. Its species can be identified by the following characters: posterior margin of basal area of metapostnotum arcuate, gradually curved toward the metanotum laterally, the longitudinal rugulosities sometimes numerous and present laterally (Figure 1D); upper frons conspicuously convex, strongly declivous toward sulcus around median ocellus (Figure 1E); male with glabrous basal portion of F6–F11 expanded (Figure 8D, E); posterior upper margin of metepisternum modified into a conspicuously large process covered with velvety pilosity in both sexes, its diameter at least 0.5× the tegula length (Figure 1A); basal area of metapostnotum laterally with rugulose surface, the posterior margin arcuate, gradually curved towards the anterior margin laterally (Figure 1D, 2B–D, 6C–6F); 1st and 2nd tarsomere of foreleg with longest simple setae longer than summed length of the three apical tarsomeres and T1 with contiguous punctuation.

*Megalopta aeneicollis*, *M. nitidicollis* and *M. sulciventris* inhabit the Amazon Basin (Figure 14A–C), while *M. aegis* occurs in the savannas of central Brazil (cerrado) and in the Atlantic Forest of eastern Brazil (Figure 14A).

*Megalopta aegis* (Vachal 1904)
(Figures 1E, 2D, 6E, 7A, 8E, 14A)

*Halictus aegis* Vachal, 1904: 115. Lectotype male, Brazil: Goiás, Jataí (MNHP, not examined).

Examined material
(374♀, 49♂). See Appendix 2.

Diagnosis
The female differs from that of *M. nitidicollis* by the weak longitudinal rugulosities along its entire surface of the basal area of metapostnotum; from *M. aeneicollis* by reddish brown basal area of metapostnotum and by the imbricated rugulosities in its lateral surface (Figure 2D); from *M. sulciventris* by metanotum with dense short plumose pilosity present on its entire surface and by colour of integument of basal area of metapostnotum, entirely reddish brown or reddish brown in the centre with green tints laterally (Figure 2D). The male differs from that of *M. sulciventris* by the F6–F11 basally with glabrous area levelled to remainder of flagellomere surface (Figure 8E), metanotum with very dense pilosity covering entire disc, obscuring the integument in dorsal view, and by reddish brown basal area of metapostnotum; from *M. aeneicollis* and *M. nitidicollis* by basal area of metapostnotum with strongly impressed longitudinal rugulosities along its entire surface (Figure 6E).
Figure 14. Distribution records of Megalopta species. (A) *M. aegis* Vachal (grey circles) and *M. aeneicollis* Friese (black squares); (B) *M. nitidicollis* Friese; (C) *M. sulciventris* Friese; (D) *M. amoena* Spinola.
Description

Female. (1) Mandible bidentate and with supplementary teeth. (2) Labral elevation with lateral surface slightly raised in relation to central portion. (3) Clypeus* with the surface between punctures on basal and central area variable, micro-reticulate in most specimens or smooth in a few ones. (4) Central portion of supraclupeal area with sparse punctuation, punctures separated by ≥ 1 pd. (5) Antenna reddish brown. (6) Upper frons conspicuously convex, strongly declivous toward sulcus around median ocellus (Figure 1E). (7) Ocellocular distance smaller than the F1 length. (8) Mesoscutum adjacent to parapsidial line densely punctured, punctures contiguous, punctuation becoming sparser towards mesoscutal lip (< 1 pd). (9) Scutellum with posterior margin raised in relation to anterior margin of metanotum. (10) Metanotum with integument, in oblique view, hidden by dense short plumose pilosity. (11) Basal area of metapostnotum* reddish brown; its length half of that of metanotum; with longer longitudinal rugulosities medially, rugulosities shorter and weakly impressed laterally, surface between longitudinal rugulosities punctured (Figure 2D) or with longitudinal rugulosities weakly impressed throughout, strongly impressed rugulosities restricted to lateral areas and along apical margin. (12) Mesepisternum with contiguous punctuation. (13) Metepisternum with sparse pilosity, integument visible through pilosity, posterior upper margin of modified into a conspicuously large process covered with velvety pilosity, its diameter at least 0.5× tegula length. (14) T1 with dorsal surface of disc densely punctured (< 1 pd), posterior marginal zone smooth between punctures. Male. (15) Scape with diameter gradually enlarging toward the apex. (16) Flagellum reddish brown, F1–F11 not differing in diameter; F2 about as long as F3; F6–F11, in anterior view, with the anterior and posterior margins depressed, in posterior view with basal glabrous area at same level of remaining surface (Figure 8E). (17) Metanotum with integument, in dorsal view, hidden by dense short plumose pilosity (Figure 6E). (18) Basal area of metapostnotum reddish brown, sometimes with green highlights laterally; its length half of that of metanotum; with longer longitudinal rugulosities medially, rugulosities shorter and weakly impressed laterally (Figure 6E). (19) Metepisternum as in female. (20) 1st and 2nd tarsomeres of foreleg with longest simple setae longer than summed length of the three apical tarsomeres. (21) S3 with longitudinal sulcus, posterolateral margin notched (Figure 7A). (22) S4 with medial protruding process, profile of process triangular in lateral view; basal portion glabrous; posterolateral margin notched, notch not extending to basal half of sclerite (Figure 7A).

Measurements

Approximate body length: (10.5–15.0); maximum width of head: (2.9–4.8); intertegular distance: (3.0–4.2); forewing length with the tegula: (9.4–11.8).

Comments

Some specimens of M. aegis from eastern Brazil have smooth interspaces between punctures in the basal and central area of the clypeal disc and weakly impressed
rugulosities in the basal area of the metapostnotum. This variation, however, is not consistently present in all specimens and the recognition of a separate species from eastern Brazil seems unwarranted.

**Distribution**

**BRAZIL.** Alagoas: Ibateguara. Bahia: Ituberá. Ceará: Maranguape. Distrito Federal. Espírito Santo: Conceição da Barra, Linhares. Goiás: Alto Paraíso de Goiás, Caldas Novas, Formosa, Goiás, Jataí, Planaltina. Maranhão: Balsas, Caxias, Mirador, Urbano Santos. Mato Grosso: Campo Novo dos Parecis, Canabrava do Norte, Canarana, Chapada dos Guimarães, Nova Mutum, Santa Terezinha. Mato Grosso do Sul: Corumbá, [Rio Caraguatá 21°48′ S, 52°27′ W], Rio Verde de Mato Grosso. Minas Gerais: Buritis, Caratinga, Dionísio, Ipanema, Jaboticatubas, Marliéria, Morro da Garça, São Gonçalo do Rio Abaixo, São Gonçalo do Rio Preto, Santana do Riacho, Três Marias, Unaí, Viçosa. Pará: Alenquer, Altamira, Belém, Belterra, Bragança, Buíjaru, Capitão Poço, Óbidos, Ourém, Paraíapebas, Santarém, Santarém Novo, São João de Pirabas, Tome Açu, Tucuruí. Paraíba: Mamanguape. Pernambuco: Igarassu, Paudalho, São Lourenço da Mata. Rio Grande do Norte: Portalegre, Natal. Rondônia: Itapuã do Oeste. São Paulo: Bauru, Cajuru, Luís Antônio, São Carlos. Tocantins: Formoso do Araguaia (Figure 14A).

*Megalopta aeneicollis* Friese, 1926

(Figures 1A, 2C, 6A, 6D, 14A)

*Megalopta aeneicollis* Friese, 1926:132. Lectotype female, Brazil: Amazonas, Barcelos (ZMB, examined).

**Additional examined material**

(38♀, 5♂). See Appendix 2.

**Diagnosis**

The female differs from that of *M. nitidicollis* by the evenly strongly impressed longitudinal rugulosities along entire surface of the basal area of metapostnotum (Figure 2C); from *M. aegis* and *M. sulciventris* by the basal area of metapostnotum often orangish, entirely finely rugulose, stronger rugulosities rectilinear and long along entire surface (Figure 2C). The male is distinguished from that of *M. sulciventris* by the F6–F11 basally with glabrous area levelled to remainder of flagellomere surface, metanotum with very dense pilosity covering entire disc, obscuring the integument in dorsal view, and by basal area of metapostnotum light orangish brown (Figure 6D); from *M. aegis* and *M. sulciventris* by the basal area of metapostnotum entirely finely rugulose, and with its posterior margin slightly raised (Figure 6D).
Description

Female. (1) Mandible bidentate and with supplementary teeth. (2) Labral elevation with lateral surface slightly raised in relation to central portion. (3) Clypeus with the surface between punctures on basal and central area smooth. (4) Central portion of supraclipeal area with sparse punctation, punctures separated by $\geq 1$ pd. (5) Antennae reddish brown. (6) Upper frons conspicuously convex, strongly declivous toward sulcus around median ocellus. (7) Ocellocular distance smaller than the F1 length. (8) Mesoscutum adjacent to parapsidial line densely punctured, punctures contiguous, punctation becoming sparser towards mesoscutal lip ($< 1$ pd). (9) Scutellum with posterior margin raised in relation to anterior margin of metanotum. (10) Metanotum with integument, in oblique view, hidden by dense short plumose pilosity (Figure 2C). (11) Basal area of metapostnotum orangish, without metallic reflections, its length at least $0.8 \times$ that of metanotum; surface entirely finely rugulose, stronger rugulosities rectilinear and long along entire surface (Figure 2C). (12) Mesepisternum with contiguous punctation. (13) Metepisternum with sparse pilosity, integument visible through pilosity, posterior upper margin modified into a conspicuously large process covered with velvety pilosity, its diameter at least $0.5 \times$ tegula length (Figure 1A). (14) T1 with dorsal surface of disc densely punctured ($< 1$ pd), posterior marginal zone smooth between punctures. Male. (15) Scape with diameter gradually enlarging toward the apex. (16) Flagellum reddish brown, F1–F11 not differing in diameter; F2 about as long as F3; F6–F11, in anterior view, with the anterior and posterior margins depressed, in posterior view with basal glabrous area at same level of remaining surface. (17) Metanotum with integument, in dorsal view, hidden by dense short plumose pilosity (Figure 6D). (18) Basal area of metapostnotum orangish, its length half of that of metanotum, medially with longer longitudinal rugulosities, laterally with microreticulated surface (Figure 6D). (19) Metepisternum as in the female. (20) 1st and 2nd tarsomeres of foreleg with longest simple setae longer than summed length of the three apical tarsomeres. (21) S3 with longitudinal sulcus, posterolateral margin notched. (22) S4 with medial protruding process, profile of process triangular in lateral view; basal portion glabrous; posterolateral margin notched, notch not extending to basal half of sclerite.

Measurements

Approximate body length: (12.9–14.0); maximum width of head: (3.5–4.3); intertegular distance: (3.6–4.3); forewing length with the tegula: (10.9–11.8).

Distribution

BRAZIL. Amazonas: Barcelos, Japurá, Manaus, Novo Airão, Novo Aripuanã, Presidente Figueiredo, Tabatinga. Roraima: Mucajaí (Figure 14A).

\textit{Megalopta nitidicollis} Friese, 1926

(Figures 2B, 6F, 14B)

\textit{Megalopta nitidicollis} Friese, 1926: 130. Lectotype female, presently designated, Bolivia: Cochabamba, Tarata (ZMB, examined).
Type material
There is one female and one male syntype in the ZMB collection. The female, with the labels ‘Bolivia Tarata\1900’, ‘Megalopta\ nitidicollis\♀ 910 Friese det.’, ‘Coll\ Friese’ ‘LECTOTYPE\ Megalopta\ nitidicollis\♀ Friese, 1926\ desig. Melo 2010’, is here designated lectotype.

Additional examined material
(31 ♀, 27 ♂). See Appendix 2.

Diagnosis
The female differs from those of M. aegis, M. aeneicollis and M. sulciventris by the weakly impressed longitudinal rugulosities in the central portion of the basal area of metapostnotum, in contrast with the strong rugulosities laterally, and by the integument of the basal area often reddish brown on basal half and metallic green on apical half (Figure 2B). The male is distinguished from that of M. sulciventris by glabrous basal portion of F6–F11 levelled to remainder of flagellomere surface; metanotum with very dense pilosity covering entire disc, obscuring the integument in dorsal view, and by the basal area of metapostnotum reddish brown on basal half and metallic green apically (Figure 6F); from M. aeneicollis by basal area of metapostnotum in posterior margin forming a carina; from M. aegis by basal area of metapostnotum lacking longitudinal rugulosities or only with a few weak rugulosities in its mid portion (Figure 6F).

Description
Female. Mandible bidentate and with supplementary teeth. (2) Labral elevation with lateral surface slightly raised in relation to central portion. (3) Clypeus. Surface between punctures on basal and central area smooth. (4) Central portion of supraclypeal area with sparse punctation, punctures separated by ≥ 1 pd. (5) Antennae reddish brown. (6) Upper frons conspicuously convex, strongly declivous toward sulcus around median ocellus. (7) Ocellocular distance smaller than the F1 length. (8) Mesoscutum adjacent to parapsidal line densely punctured, punctures contiguous, punctation becoming sparser towards mesoscutal lip (< 1 pd). (9) Scutellum with posterior margin raised in relation to anterior margin of metanotum. (10) Metanotum with integument, in oblique view, hidden by dense short plumose pilosity (Figure 2B). (11) Basal area of metapostnotum reddish brown in basal half and metallic green in apical half; its length at least 0.6× that of metanotum; longitudinal rugulosities absent or slightly impressed in central area and weakly impressed laterally (Figure 2B). (12) Mesepisternum with contiguous punctation. (13) Metepisternum with sparse pilosity, integument visible through pilosity, posterior upper margin modified into a conspicuously large process covered with velvety pilosity, its diameter at least 0.5× tegula length. (14) T1 with dorsal surface of disc densely punctured (< 1 pd), posterior marginal zone smooth between punctures. Male. (15) Scape with diameter gradually enlarging toward the apex. (16) Flagellum reddish brown; F1–F11 not differing in...
diameter; F2 about as long as F3; F6–F11, in anterior view, with the anterior and posterior margins depressed, in posterior view with basal glabrous area at same level of remaining surface. (17) Metanotum with integument, in dorsal view, hidden by dense short plumose pilosity (Figure 6F). (18) Basal area of metapostnotum reddish brown, except for the metallic green apex, its length half of that of metanotum, the longitudinal rugulosities limited to sides (Figure 6F). (19) Metepisternum as in the female. (20) 1st and 2nd tarsomeres of foreleg with longest simple setae longer than summed length of the three apical tarsomeres. (21) S3 with longitudinal sulcus, posterolateral margin notched. (22) S4 with medial protruding process, profile of process triangular in lateral view; basal portion glabrous; posterolateral margin notched, notch not extending to basal half of sclerite.

Measurements
Approximate body length: (10.5–14.6); maximum width of head: (3.3–3.9); intertegular distance: (3.4–4.1); forewing length with the tegula: (10.1–11.5).

Distribution
BOLIVIA. Cochabamba: Tarata. La Paz: Nigrillani. BRAZIL. Acre: Capixaba, Cruzeiro do Sul, Rio Branco. Amazonas: Ipixuna, Novo Aripuana, São Paulo de Olivença, Urucará. Rondônia: Ariquemes, Jí-Paraná, Itapuã do Oeste, Porto Velho. PERU. Junín: Satipo. Loreto: Maynas. Madre de Dios: Mazuko, Santa Rosa, Tambopata. San Martin: Juan Guerra (Figure 14B).

Megalopta sulciventris Friese, 1926
(Figures 1D, 6C, 8D, 14C)

Megalopta sulciventris Friese, 1926:129. Lectotype male, French Guiana: Nouveau Chantier, Bas Maroni (ZMB, examined).

Additional examined material
(93♀, 14♂). See Appendix 2.

Diagnosis
The female differs from that of M. nitidicollis by the weakly impressed longitudinal rugulosities along entire basal area of metapostnotum (Figure 1D); from M. aeneicollis by the metallic green basal area of metapostnotum and by its imbricated longitudinal rugulosities towards lateral portions (Figure 1D); from M. aegis by the metanotum sometimes with pilosity short and plumose, present only on two-thirds of disc, not obscuring the integument in oblique view (Figure 1D) and basal area of metapostnotum metallic green and with strongly imbricated longitudinal rugulosities (Figure 1D). The male differ from those of M. aegis, M. aeneicollis and M. nitidicollis by the glabrous basal portion of F6–F11 raised in relation to remainder of
flagellomere surface (Figure 8D); metanotum pilosity present only in two-thirds of disc and not obscuring the integument in dorsal view (Figure 6C); basal area of metapostnotum entirely metallic green or sometimes reddish brown medially (Figure 6C).

Description

**Female.** (1) Mandible bidentate and with supplementary teeth. (2) Labral elevation with lateral surface slightly raised in relation to central portion. (3) Clypeus with the surface between punctures on basal and central area smooth. (4) Central portion of supraclypeal area with sparse punctuation, punctures separated by ≥ 1 pd. (5) Antennae reddish brown. (6) Upper frons conspicuously convex, strongly declivous toward sulcus around median ocellus. (7) Ocellocular distance smaller than the F1 length. (8) Mesoscutum adjacent to parapsidial line densely punctured, punctures contiguous, punctuation becoming sparser towards mesoscutal lip (< 1 pd). (9) Scutellum with posterior margin raised in relation to anterior margin of metanotum. (10) Metanotum with integument, in oblique view, hidden by short plumose pilosity only in two-thirds of disc (Figure 1D). (11) Basal area of metapostnotum sometimes metallic green; its length at least 0.7× that of metanotum; with imbricated longitudinal rugulosities weakly impressed (Figure 1D). (12) Mesepisternum with contiguous punctuation. (13) Metepisternum with sparse pilosity, integument visible through pilosity, posterior upper margin modified into a conspicuously large process covered with velvety pilosity, its diameter at least 0.5× tegula length. (14) T1 with dorsal surface of disc densely punctured (< 1 pd), posterior marginal zone smooth between punctures. **Male.** (15) Scape with diameter gradually enlarging toward the apex. (16) Flagellum reddish brown; F1–F11 not differing in diameter; F2 about as long as F3; F6–F11, in anterior view, with the anterior and posterior margins depressed; in posterior view with basal glabrous area elevated in relation to remaining surface (Figure 8D). (17) Metanotum with integument, in dorsal view, not hidden by short plumose pilosity (Figure 6C). (18) Basal area of metapostnotum variable, reddish brown with green metallic tints or entirely metallic green; its length half of that of metanotum; with longer longitudinal rugulosities medially, rugulosities shorter laterally (Figure 6C). (19) Metepisternum as in the female. (20) 1st and 2nd tarsomeres of foreleg with longest simple setae longer than summed length of three apical tarsomeres. (21) S3 with longitudinal sulcus, posterolateral margin notched. (22) S4 with medial protruding process, profile of process triangular in lateral view; basal portion glabrous; posterolateral margin notched, notch not extending to basal half of sclerite.

Measurements

Approximate body length: (10.2–14.3); maximum width of head: (3.4–4.4); intertegular distance: (3.5–4.2); length of forewing with the tegula: (10.8–11.8).

Distribution

**BRAZIL.** Amapá: Pedra Branca do Amapari, Ferreira Gomes, Serra do Navio. Amazonas: Barcelos, Beruri, Ipiúna, Manaus, Presidente Figueiredo. Pará: Altamira, Belém, Oriximiná. Roraima: Amajari. **FRENCH GUIANA.** Saint-
The amoena species group

Diagnosis
The amoena species group includes *M. amoena*, *M. chaperi*, *M. guimaraesi* and *M. mura* sp. n. Its species can be recognized by the following characters: posterior upper margin of metepisternum modified into a conspicuously large process covered with velvety pilosity, its diameter at least 0.75× the tegula length (except in the female of *M. amoena*); male E3 centrally in the apex with sinuous notch adjacent to expanded area of sternum (Figure 8A–C).

*M. amoena* is widely distributed (Figure 14D), *M. chaperi* is restricted to north of the Amazonas and Negro rivers (Figure 15A), *M. guimaraesi* to the Atlantic Forest and Cerrado and *M. mura* sp. n. to north-western South America (Figure 15B).

**Megalopta amoena** (Spinola 1853)
(Figures 2F, 5D, 7C, 8B, 8F, 9B, 14D)

*Halictus amoenus* Spinola, 1853: 85. Holotype male, Brazil: Pará (MSNT, examined through photographs).

*Megalopta idalia* Smith, 1853: 84. Syntypes, Brazil: Amazonas and Pará, Santarém (BMNH, not examined).

*Halictus argoides* Vachal, 1904:115. Holotype male, Guyana (MNHP, not examined).

*Megalopta ochrias* Vachal, 1904:115. Holotype male, Brazil: Goiás, Jataí (MNHP, not examined).

*Megalopta ecuadoria* Friese, 1926: 127. Lectotype female, Ecuador: Guayas, Guayaquil (ZMB, examined).

*Megalopta centralis* Friese, 1926: 128. Lectotype male, Guatemala (ZMB, examined).

*Megalopta gibbosa* Friese, 1926:128. Holotype male, Ecuador: Guayas, Guayaquil, (ZMB, examined). **New synonymy.**

*Megalopta lecointei* Friese, 1926:122. Lectotype female, presently designated, Brazil: Pará, Óbidos (ZMB, examined). **New synonymy.**

*Megalopta vigilans* Cockerell, 1923:1. Holotype male, uncertain type locality (AMNH, examined through photographs). **New synonymy.**

Type material examined
In addition to the type material listed above, we also examined one female and one male syntypes of *Megalopta lecointei* in the ZMB collection. The female, with the labels ‘Obidos\ 1904\ P. Lecointe’, ‘Brazil\ Estado\ Pará’, ‘Megalopta \♀\ lecointei\ Ducke\ n.sp.’, ‘Megalopta\ lecointei\ Ducke\ n.sp.’, ‘Coll. \ Friese’ ‘Zool. Mus.\ Berlin’, ‘Type’, is here designated lectotype. The male paralectotype bears the labels ‘Obidos\ 1904\ P. Lecointe’, ‘Brazil\ Estado do\ Pará’, ‘Megalopta \♂\ lecointei\ Ducke\ n.sp.’, ‘Coll. \ Friese’, ‘Megalopta\ lecointei\ H. Friese 19 Ducke’ ‘Typus’. 
Figure 15. Distribution records of *Megalopta* species. (A) *M. chaperi* Vachal; (B) *M. guimaraesii* Santos & Silveira (black circles) and *M. mura* sp. n. (grey squares); (C) *M. piraha* sp. n (grey squares) and *M. yanomami* sp. n. (black circles); (D) *M. atlantica* Santos & Silveira (grey square), *M. guarani* sp. n (triangle), *M. xavante* sp. n (hexagon), *M. karitiana* sp. n (black circle), *M. mapinguari* sp. n (black square) and *M. purpurata* Smith (grey circle).
**Additional examined material**

(833♀, 155♂). See Appendix 2.

**Diagnosis**

The female differs from those of *M. chaperi*, *M. guimaraesi* and *M. mura* sp. n. by posterior upper margin of metepisternum unmodified, lacking a velvety process (Figure 5D) and by the smooth basal area of metapostnotum lacking rugulosities (Figure 2F). The male is distinguished from that of *M. chaperi* by the metanotum in dorsal view with sparse pilosity and by the short basal area of metapostnotum, its length at least 0.8× that of metanotum (Figure 7C); from *M. guimaraesi* and *M. mura* sp. n. by F6–F11 about as wide as basal flagellomeres (Figure 8F), central area of basal area of metapostnotum without longitudinal rugulosities (Figure 7C), S3 without longitudinal carina (Figure 8B) and S4 basally with pilosity, its apical margin slightly notched laterally (Figure 9B).

**Description**

(1) Mandible bidentate and with supplementary teeth. (2) Labral elevation sometimes with flattened surface. (3) Clypeus with surface between punctures on basal and central area smooth. (4) Central portion of supraclypeal with dense punctuation, punctures separated by < 1 pd. (5) Antennae reddish brown. (6) Upper frons flat, not strongly declivous toward sulcus around median ocellus. (7) Ocellocular distance smaller than the F1 length. (8) Mesoscutum adjacent to parapsidial line densely punctured, punctures contiguous, punctuation becoming sparser towards mesocutal lip (< 1 pd). (9) Scutellum with posterior margin raised in relation to anterior margin of metanotum. (10) Metanotum with integument, in oblique view, not hidden by short plumose pilosity. (11) Basal area of metapostnotum often reddish brown (sometimes metallic green), its length 0.8–1× that of metanotum, often lacking longitudinal rugulosities (Figure 2F), but rarely with weak grooves. (12) Mesepisternum with contiguous punctuation. (13) Metepisternum often with dense pilosity, integument not visible through pilosity, posterior upper margin unmodified, lacking a velvety process (Figure 5D). (14) T1 with dorsal surface of disc sparsely punctured (≥ 1 pd), posterior marginal zone smooth between punctures. **Male.** (15) Scape with diameter gradually enlarging toward the apex. (16) Flagellum reddish brown, F1–F11 not differing in diameter (Figure 8F); F2 about as long as F3; F6–F11, in anterior view with the anterior and posterior margins depressed, in posterior view with basal portion levelled with remaining surface. (17) Metanotum in dorsal view, not hidden by short plumose pilosity (Figure 7C). (18) Basal area of metapostnotum as in the female (Figure 7C). (19) Metepisternum with dense pilosity, integument not visible through pilosity, posterior upper margin modified into a conspicuously large process covered with velvety pilosity, its diameter at least 0.75 × the tegula length. (20) 1st and 2nd tarsomeres of foreleg with longest simple setae shorter than the summed length of the three apical tarsomeres. (21) S3 with longitudinal sulcus absent, the central and apical margin sinuous and posterolateral margin sinuous, not notched (Figure 8B). (22) S4 with medial protruding process, profile of process triangular in
lateral view; basal portion with dense short pilosity; posterolateral margin sinuous, the apical margin without a set of dense hairs (Figure 9B).

**Measurements**

Approximate body length: (9.2–12.9); maximum width of head: (2.7–3.6); intertegular distance: (2.7–4.3); length of forewing with the tegula: (8.2–10.4).

**Comments**

Several females exhibit metallic green highlights in the mesoscutum and some males have a metallic green basal area of the metapostnotum.

**Distribution**

**BRAZIL**. Acre: Acrelândia, Cruzeiro do Sul, Rio Branco. Alagoas: Ibateguara. Amapá: Ferreira Gomes, Oiapoque. Amazonas: Caruari, Japurá, Fonte Boa, Itacoatiara, Lábrea, Manauquiri, Manaus, Marãa, Novo Airão, Novo Aripuanã, Presidente Figueiredo, Santo Antônio do Iça, Tabatinga, Tefé. Bahia: Alagoinhas, Belmonte, Brejões, Lençois, Salvador, Senhor do Bonfim. Ceará: Maranguape. Distrito Federal. Espírito Santo: Conceição da Barra. Goiás: Alto Paraíso de Goiás, Jataí, Planaltina. Maranhão: Balsas, Caxias, Imperatriz. Mato Grosso: Alto Araguaia, Aripuanã, Barra dos Garças, Chapada dos Guimarães, Canarana, Juruena, Nova Mutum. Mato Grosso do Sul: Bataguassu, Bonito. Minas Gerais: Belo Horizonte, Berizal, Bocaiúva, Buritis, Caratinga, Dionísio, Ipanema, Jaboticatubas, Marlíria, Minas Novas, Morada Nova de Minas, Paracatu, São Gonçalo do Rio Abaixo, Três Marias, Unai, Viçosa. Pará: Acará, Alenquer, Altamira, Aveiro, Belterra, Bujaru, Capitão Poço, Maracanaú, Medicilândia, Melgaço, Monte Alegre, Oriximiná, Santarém, São João de Pirabas, Tucuruí, Vigia. Paraíba: João Pessoa, Mamanguape, Maturéia. Pernambuco: Camaragibe, Igarassu. Rio de Janeiro: Macaé, Nova Iguaçu, Rio de Janeiro. Rio Grande do Norte: Baia Formosa, Natal. Rondônia: Itapuí do Oeste, Ji-Paraná, Ouro Preto do Oeste, Porto Velho. Roraima: Amajari, Pacaraima. São Paulo: Alvinlândia, Bauru, Caraguatatuba, Luis Antônio, Miracatu, Nova Europa, Sete Barras. Sergipe: Santa Luzia do Itanhy. Tocantins: Pindorama do Tocantins. ECUADOR. Guayas: Guayaquil. GUATEMALA. GUYANA. Upper Demerara-Berbice: Linden. NICARAGUA. Masaya: Tiguantepe. PANAMA. PERU. Loreto: Maynas. SURINAME. Brokopondo: Brokopondo. Para: Zuid. Paramaribo: Paramaribo. Sipaliwini: Coeroeni, unknown locality. TRINIDAD AND TOBAGO: Tunapuna/Piarco: Curepe. VENEZUELA: Miranda: Curupao (Figure 14D).

**Megalopta chaperi** (Vachal, 1904)  
(Figures 2E, 7B, 8A, 15A)

**Halictus chaperi** Vachal, 1904:113. Holotype female, Venezuela (MNHP, not examined).
Examined material

(8♀, 2♂). See Appendix 2.

Diagnosis

This species differs from *M. amoena*, *M. guimaraesi* and *M. mura* sp. n. by the very short basal area of metapostnotum, its length about one-third as long as metanotum (Figure 2E). Its males are also distinguished by the metanotum in dorsal view with dense pilosity (Figure 7B).

Description

**Female.** (1) Mandible bidentate and with supplementary teeth. (2) Labral elevation with lateral surface slightly raised in relation to central portion. (3) Clypeus with the surface between punctures on basal and central area variable, microreticulate or sometimes smooth. (4) Central portion of supraclypeal area with sparse punctuation, punctures separated by ≥ 1 pd. (5) Antennae reddish brown. (6) Upper frons flat, not strongly declivous toward sulcus around median ocellus. (7) Ocellocular distance smaller than the F1 length. (8) Mesoscutum adjacent to parapsidal line densely punctured, punctures contiguous, punctuation becoming sparser towards mesoscutal lip (< 1 pd). (9) Scutellum with posterior margin raised to anterior margin of metanotum. (10) Metanotum with integument, in oblique view, not hidden by short plumose pilosity. (11) Basal area of metapostnotum reddish brown, about one-third as long as metanotum, with few longitudinal rugulosities restricted to central area, laterally smooth along basal half and microreticulated along apical region (Figure 2E). (12) Mesepisternum with contiguous punctuation. (13) Metepisternum sometimes with dense pilosity, integument not entirely visible through pilosity; posterior upper margin modified into a conspicuously large process covered with velvety pilosity, its diameter at least 0.5× the tegula length. (14) T1 with dorsal surface of disc with sparse punctuation, the punctures separated by ≥ 1 pd, posterior marginal zone smooth between punctures. **Male.** (15) Scape with diameter gradually enlarging toward the apex. (16) Flagellum reddish brown. F1–F11 not differing in diameter; F2 about as long as F3; F6–F11, in anterior view, with the anterior and posterior margins depressed, in posterior view with basal glabrous area at same level of remaining surface. (17) Metanotum with integument, in dorsal view, hidden by dense short plumose pilosity (Figure 7B). (18) Basal area of metapostnotum reddish brown, its length one-third of that of metanotum, covered by dense short plumose pilosity (Figure 7B). (19) Metepisternum as in the female. (20) 1st and 2nd tarsomeres of foreleg with longest simple setae shorter than summed length of the three apical tarsomeres. (21) S3 with longitudinal sulcus only in the apical half, the posterolateral margin notched (Figure 8A). (22) S4 with medial protruding process, profile of process triangular in lateral view; basal portion glabrous; posterolateral margin notched, notch not extending to basal half of sclerite (Figure 8A).
Measurements
Approximate body length: (12.0–13.1); maximum width of head: (3.2–4.1); intertegular distance: (3.5–4.1); length of forewing with the tegula: (9.6–11.2); length of forewing: (8.9–10.4).

Comments
In the specimens from Uiramutã and Amajari, in Roraima, the basal and central areas of the clypeus have a smooth surface between punctures. The specimen deposited in DZUP, with data label ‘Batatais-SP 27/XI/87 J.S. Moure col.’, has likely been mislabelled. It was probably collected by Moure in his trip to the Ilha de Maracá, Roraima, conducted in 1987.

Distribution
BRAZIL. Roraima: Amajari, Uiramutã. VENEZUELA: Unknown locality.

Megalopta guimaraesi Santos and Silveira, 2009
(Figures 1F, 2A, 3B, C, 7D, 9A, 15B)

Megalopta guimaraesi Santos and Silveira, 2009:10. Holotype female, Brazil: Minas Gerais, Jaboticatubas (DZMG, examined).

Additional examined material
(45♀, 8♂). See Appendix 2.

Diagnosis
The female differs from that of M. amoena by possessing in posterior upper margin of metepisternum a conspicuously large process covered with velvety pilosity; from M. chaperi by the longer basal area of metapostnotum, its length always longer than one-third of metanotum length (Figure 1F); from M. mura sp. n. by the mesoscutum, adjacent to parapsidial line, densely punctured (< 1 pd), punctuation sparser in direction to mesocutal lip (≥ 1 pd) (Figure 3B), scutellum with posterior margin levelled to anterior margin of metanotum (Figure 3C), and by basal area of metapostnotum uniformly metallic green (Figure 1F). The male differs from that of M. chaperi by the longer basal area of metapostnotum, its length always longer than one-third of metanotum length and by sparse pilosity in metanotum (Figure 7D); from M. amoena by F6–F11 wider than remaining flagellomeres (Figure 9A), basal area of metapostnotum with longitudinal rugulosities in mid portion (Figure 7D), S3 with a weakly impressed longitudinal sulcus, S4 lacking pilosity basally, its apical margin strongly notched laterally; from M. mura sp. n. by the sparse punctures (≥ 1 pd) in mesoscutum adjacent to parapsidial line.
**Description**

**Female.** (1) Mandible bidentate and with supplementary teeth. (2) Labral elevation sometimes with flattened surface. (3) Clypeus with surface between punctures on basal and central area variable, microreticulate or smooth. (4) Central portion of supraclypeal area with sparse punctation, punctures separated by ≥ 1 pd. (5) Antennae reddish brown. (6) Upper frons flat, not strongly declivous toward sulcus around median ocellus. (Figure 2A). (7) Ocellocular distance smaller than the F1 length. (8) Mesoscutum adjacent to the parapsidal line densely punctured (< 1 pd), punctuation sparser in direction to mesoscutal lip (≥ 1 pd) (Figure 3B). (9) Scutellum with posterior margin levelled in relation to anterior margin of metanotum (Figure 3C). (10) Metanotum with integument, in oblique view, not hidden by short plumose pilosity. (11) Basal area of metapostnotum* sometimes metallic green, its length up to 0.7× that of metanotum, with few slightly impressed longitudinal rugulosities (Figure 1F). (12) Mesepisternum with contiguous punctation. (13) Metepisternum with dense pilosity, integument not visible through pilosity, posterior upper margin modified into a conspicuously large process covered with velvety pilosity, its diameter at least 0.75× the tegula length. (14) T1 with dorsal surface of disc sparsely punctured (≥ 1 pd), posterior marginal zone smooth between punctures. **Male.** (15) Scape with diameter gradually enlarging toward the apex. (16) Flagellum reddish brown; F1–F11 differing in diameter, F6–F11 wider than remaining flagellomeres (Figure 9A); F2 about as long as F3; F6–F11, in anterior view, with the anterior and posterior margins depressed, in posterior view, basally with basalar glabrous area at same level of remaining surface. (17) Metanotum with integument, in dorsal view, not hidden by short plumose pilosity. (18) Basal area of metapostnotum metallic green, its length up to 0.9× that of metanotum, with few longitudinal rugulosities restricted to central area (Figure 7D). (19) Metepisternum with very dense pilosity, the integument not visible through pilosity, posterior upper margin modified into a conspicuously large process covered with velvety pilosity, its diameter at least 0.75× the tegula length. (20) 1st and 2nd tarsomeres of foreleg with longest simple setae shorter than summed length of the three apical tarsomeres. (21) S3 with longitudinal sulcus slightly impressed, posterolateral margin slightly notched. (22) S4 with medial protruding process, profile of process triangular in lateral view; basal portion glabrous; posterolateral margin notched, notch not extending to basal half of sclerite.

**Measurements**

Approximate body length: (8.8–11.3); maximum width of head: (2.6–3.6) mm; intertegular distance: (2.7–3.8); length of forewing with the tegula: (8.8–10.6).

**Comments**

Specimens from eastern Brazil exhibit blackish integument, while those from central Brazil have a metallic green integument. However, one female from Camacan, Bahia, has a mostly black integument mixed green tints and one male from Rio de Janeiro is metallic green.
Distribution

BRAZIL. Bahia: Camacan, Rio de Contas, Distrito Federal. Goiás: Alto Paraíso de Goiás, Caldas Novas, Formosa, Jataí, Planaltina. Maranhão: Açailândia, Balsas, Caxias. Mato Grosso: Alto Araguaia. Mato Grosso do Sul: Costa Rica. Minas Gerais: Bocaiúva, Corinto, Marliéria, Morro da Garça, Paracatu, São Gonçalo do Rio Abaixo, Três Marias, Vícosa. Paraná: Campo Mourão. Rio de Janeiro: Rio de Janeiro. São Paulo: Alvinlândia, Bauru, Cananéia (Figure 15B).

Megalopta mura sp. n.  
(Figures 1B, 3A, 3D–E, 7E–F, 8C, 15B)

Diagnosis

Different from *M. chaperi* by the length of basal area of metapostnotum in relation to metanotum length, its length never a third, and usually a half of metanotum length (Figure 3A). The female differs from *M. amoena* by presence in posterior upper margin of metepisternum of a conspicuously large process covered with velvety pilosity (Figure 1B) and the male by the F6–F11 wider than remaining flagellomeres; basal area of metapostnotum with longitudinal rugulosities present in central area (Figure 7E); S3 longitudinal sulcus slightly impressed (Figure 8C); S4 basally lacking pilosity, the apical margin strongly notched laterally (Figure 8C). Both sexes are distinguished from *M. guimaraesi* by the mesoscutum adjacent to parapsidial line with contiguous punctation, punctation becoming sparser towards the mesoscutal lip (< 1 pd) (Figure 3D); also the female differs by the scutellum with posterior margin raised in relation to anterior margin of metanotum (Figure 3E); basal area of metapostnotum often brownish in the centre and metallic green in the sides (Figures 3A, 7E).

Description

**Female.** (1) Mandible bidentate and with supplementary teeth. (2) Labral elevation with the central area slightly depressed in relation to the sides. (3) Clypeus with surface between punctures on basal and central area smooth. (4) Central portion of supraclypeal area with sparse punctation, punctures separated by ≥ 1 pd. (5) Antenna reddish brown. (6) Upper frons flat, not strongly declivous toward sulcus around median ocellus. (7) Ocellocular distance smaller than the F1 length. (8) Mesoscutum adjacent to the parapsidial line densely punctured, punctures contiguous, punctation becoming sparser towards mesoscutal lip (< 1 pd) (Figure 3D). (9) Scutellum with posterior margin raised in relation to anterior margin of metanotum (Figure 3E). (10) Metanotum with integument, in oblique view, not hidden by short plumose pilosity. (11) Basal area of metapostnotum reddish brown with green metallic tints laterally, its length up to 0.6× that of metanotum, with longer longitudinal rugulosities restricted to central area (Figure 3A). (12) Mesepisternum with contiguous punctation. (13) Metepisternum with dense pilosity, integument not visible through pilosity; posterior upper margin modified into a conspicuously large process covered with velvety pilosity, its diameter at least 0.75× the tegula length (Figure 1B). (14) T1 with dorsal surface of disc sparsely punctured (≥ 1 pd), posterior marginal zone smooth between
punctures. Male. (15) Scape with diameter gradually enlarging toward the apex. (16) Flagellum reddish brown; F1–F11 differing in diameter, F6–F11 wider than remaining flagellomeres; F2 about as long as F3; F6–F11, in anterior view, with the anterior and posterior margins depressed, in posterior view, basally with basal glabrous area at same level of remaining surface. (17) Metanotum with integument, in dorsal view, not hidden by short plumose pilosity (Figure 7E). (18) Basal area of metapostnotum metallic green, its length up to 0.5× that of metanotum, longitudinal rugulosities restricted to central area (Figure 7E). (19) Metepisternum with very dense pilosity, the integument not visible through pilosity; posterior upper margin modified into a conspicuously large process densely covered with velvety pilosity, its diameter at least 0.75× the tegula length (Figure 7F). (20) 1st and 2nd tarsomeres of foreleg with longest simple setae shorter than summed length of the three apical tarsomeres. (21) S3 with longitudinal sulcus, slightly impressed posterior margin strongly notched (Figure 8C). (22) S4 with medial protruding process, profile of process triangular in lateral view, basal portion glabrous, posterolateral margin notched, notch not extending to basal half of sclerite (Figure 8C).

Measurements
Approximate body length: (9.8–11.0); intertegular distance: (3.1–4.0); maximum width of head: (2.9–3.1); length of forewing with tegula: (9.2–10.8).

Type material
Holotype female (DZUP): BRAZIL. Amazonas: ‘BRASIL, Amazonas, Manaus, ZF-2 KM 34, Base LBA, 09.vii.2008, 100m, 2°35′33″S 60°12′52″W arm. luz dossel P.C. Grossi col.’. Paratypes (42♀, 9♂): BRAZIL. Acre: ‘Brasil, Acre, Acrelândia 10°04′S/67°25′W Oliveira, Morato & Cunha leg. Benzil acetato (1♀ INPA). Amazonas: ‘BRASIL, Amazonas, ESENA Juami-Japurá 02°19′09″S 68°25′16″W ’04-17 agosto 2005 L.S. Aquino leg. (1♀ INPA); ‘BRASIL, AM, Manaus, ZF2 km-14. Torre, 023521S 600555W, 19–21.ii.2004 luz mista/BL, BLB, lençol ‘40 mt alt. J.A. Rafael, C.S. Motta, F.F. Xavier Fº & A. Silva Fº, S. Trovisco’ (1♀ INPA); ‘BR AM Manaus ZF-03Km 23 Res. 1112 2°28′02″S/59°51′15″W 19/11/98 (RLD) KLEIN BERT col.’ FAZENDA ESTEIO (1♀ INPA); ‘BRASIL, Amazonas, BR 174 ZF6Km 91 Data. 03.07-86 Col. M.V.B. Garcia’Megalopta sp.’ (1♀ MEUFV); ‘BRASIL, AMAZONAS MANAUS Fazenda Porto Alegre (Reserva 3114) 2°23′00″S/59°56′35″W 15-16/VIII/1996’ Hutchings, R.W.H. & Hutchings, R.S.G. col. ‘Arm. tipo Pennsylvania C/Cianeto de potássio (Roger W. Hutchings)’ Luz Negra (UV-BL) (1♀ INPA); ‘BRASIL, Amazonas, Manaus, Reserva Biológica de Campina\ 12.vii.2008, 77m, 2°35′27″S 60°1′51″W arm. luz dossel P.C. Grossi col.’ (2♀ DZUP); ‘LO-4 1500m ’Brasil Amazonas Reserva Ducke\ Am 010 Km26 ‘07-18 Dez 2005\ M.L. Oliveira & E.R.F. Pereira’ (1♀ INPA); ‘BRASIL, Amazonas, Manaus, Res. Ducke\ XI.2003\ OLI-700ms Vermelho’ ‘Arm. Suspensa 20 mts\ A. Henriques et. al. Leg. ’ (1♀ INPA); ‘BRASIL, AM, Manaus\ Reserva Ducke, Ig. B. Branco, 15–18.iiii.2004,' ‘Arm. Malaise 04\ A. Henriques et. al.’ (1♀ INPA); ‘BRASIL, Amazonas, ‘Arm. Nac.
do Jaú; 17-19/nov./2005: ‘M.L. Oliveira & E.R. F. Pereira leg.’ campinarana’ (♀ INPA); ‘BR, AM, Pq. Nac. do Jaú Rio Carabinami mg. dirª 1°59’ S/51°32’ W às 11-12/ IV/1994\ Motta, C. et al. col.’ ‘Luz mista mercurio\ Luz negra BL e BLS\ Lencol’ (♀ INPA); ‘Brasil, Amazonas\ PARNA do Jaú 19-III à 05-IV-2003: ‘M.L. Oliveira & J.A. Cunha leg.’ Campinarana’ (♀ INPA); ‘BRASIL, AM, Presidente\ Figueiredo, BR 174, Ramal\ do Km-200, 27.i.2006’ ‘J.A. Rafael, F.F. Xavier, A. Silva Fº, D. M. M Mendes,\ em luz’ (♀), (INPA); ‘Brasil, Amazonas, Pres. Figueiredo\ Am 240, Km 12, Sítio Água Viva, 18-19/X/2006, Luz Mista,\ Motta C.S. & R.S. Hutchings’ (♀ INPA); ‘Brasil, Amazonas, Presidente Figueiredo,\ AM 240, Km 24, 2°1’2.2’’ S 59° 49’35.8’’ W à 14-18 ix.2009, F.F.\ Xavier Filho, Paladini, A.;\ Ciprandi, A.; Leivas, F.’ (♀, DZUP); ‘BRASIL, AM, Pres. Figueiredo, AM\ 240Km 24, Comunidade Sãao\ Francisco, 14-18 ix.2009: 2°1’2.2’’ S 59°49’35.8’’ W à A.C. Pires (leg.) Luz’ (♀ DZUP). Pará: ‘Brasil, PA\ Capitã Poço\ 19-22.xi.1984\ V.O. Becker col’ (♀ DZUP); ‘Marajo P. Pedras\ 13.III-1978’ ‘Brasil Pará M F Torres’ (♀ MPEG); ‘Brasil, Pará\ Serra Norte\ Fofoca\ Col. Noturna\ 18.IX. 1985’ ‘MPEG HYM:\ 11005595’ (♀ MPEG); ‘Brasil, Pará\ Serra Norte\ N-1 SERRARIA\ COL. NOTURNA\ 25.X. 1984’ ‘Brasil Pará M. F Torres’ ‘MPEG HYM:\ 11005589’ (♀ MPEG); ‘Brasil Pará Serra Norte\ SERRARIA\ COL. NOTURNA\ 19-X-1984’ ‘MPEG HYM:\ 11005583’ (♀ MPEG); ‘Brasil Pará\ São João de Pirabas\ Japerica\ Ilha Conceição\ 22-XII-1992’ ‘Brasil Pará\ J Dias’ ‘Armadilha de Luz’ (♂ MPEG); ‘BRASIL: Pará\ Tucuruí – REMANSÃO 03-VIII-1980\ eq. Nunes de Mello’ ‘5598’ (♀ INPA). Rondônia: ‘Brasil, RO, Itapúa do Oeste, Flona do Jamari, 90m\ 9.146° S 63.012° W às 5 ix.2012, Cavichioli\ Melo, Rosa & Santos’ ‘Armadilha\ Luminosa’ (♀, DZUP). ‘Ouro Preto\ d’Oeste, RO, 29-X-1987\ C. Elias, leg.’ ‘ProjetoPo\ lonoroeste’ (♀ DZUP); ‘BRASIL: RO\ Porto Velho 180m\ 24–30.iv.1989\ V.O. Becker col’ (♀ DZUP); ‘BRASIL:RO\ Porto Velho 180m\ 2–12.v.1989\ V.O. Becker’ (♀ DZUP). Roraima: ‘Brasil, Roraima, Amajari\ Tepequém Trilha\ Igarapé da Anta 03°46’19.7’’ N\61°45’21.6’’ W 649m\ mas 09\ 11:00 Grigio, Jr.O; Salicilato’ ‘MIRR 12685’ (♀ MIRR); ‘Brasil, Roraima, Amajari\ Tepequém Trilha\ Igarapé da Anta 03°46’19.7’’ N\61°45’21.6’’ W 649m 14-\maio-09\ 11:00 Grigio, Jr.O; Salicilato’ ‘MIRR 12686’ (♀ MIRR); ‘Brasil, Roraima,\ Rorainopolis, Bairro\ Novo Horizonte, 00°56’25.8’’ N\6°25’39.0’’ W 82m 28-mar\ 09 Gama Neto, J.L.’ ‘MIRR 11798’ (♀ MIRR). FRENCH GUIANA. Saint-Laurent-du-Maroni: ‘FEVRIER\GUYANE\ NOUVEAU CHANTIER\ BAS-MARONI’ (♀ DZUP). PERU. Huanuco: ‘Tingo Maria\ Huan. Peru\ Nov. 28 1946\ Alt. 2200 ft. J.C. Pallister\ Coll.\ Donor\ Frank Johnson’ (♀, DZUP). Junín: ‘SATIPO-PERU\ 750\ Mr\ 12.1948’ (♀, RMNH). Loreto: ‘Peru, LO, Maynas, Alpahauyo-Mishanal KM\ 28–Ex light trap\ 12vii01 Mario Callegeri’ ‘col. CR col’ (♀, CRC). San Martín: ‘PERU, SM, Tarapoto,\ Meliponário Rasmussen\ Near Taki-Wasi, 386m, 6°28, 819’ S, 76°21,315’ W Claus Rasmussen leg\ IX-2002 Ex. light.’ ‘col. CR col’ (♀, CRC); ‘PERU, SM, Tarapoto,\ Near Taki-Wasi, 386m, 6°28,819’ S, 76°21,315’ W Claus Rasmussen leg\ II-2003, Rasmussen leg.’ ‘col. CR col’ (♀, CRC); ‘PERU, SM,\ Tarapoto,\ Near River Shilcayo\ 0629/7622, 350 masl\ April 2003 Rasmussen ‘col. CR col’ (♀, CRC). SURINAME. Brokopondo: ‘Suriname\ Phedra\ 15 Nov-1946 Ir-\Schals’ (♀, RMNH). Para: ‘Suriname\ Zanderij\ O.P. Sardare\ 15 Sept 1961’ ‘at light’ (♀, RMNH). Sipaliwini: ‘Museum Leiden\ SURINAME\ Sipaliwinner\ 13–24. II.1966\ G P Mees’ (♀, RMNH). Wageningen: ‘Museum Leiden\ W. Suriname Exp.’
Maratakka River; Cupido (Indian vill.) 25.II.1971 at light D.C. Geijskes’ (1♀, RMNH).

Comments
The female from Acrelândia, Acre, was collected in a euglossine trap baited with benzil acetate.

Distribution
BRAZIL. Acre: Acrelândia. Amazonas: Japurá, Manaus, Novo Airão, Presidente Figueiredo. Pará: Capitão Poço, São João de Pirabas, Parauapebas, Tucuruí. Rondônia: Itapuã do Oeste, Ouro Preto do Oeste, Porto Velho. Roraima: Amajari, Rorainopolis. FRENCH GUIANA. Saint-Laurent-du-Maroni: Saint-Laurent-du-Maroni. PERU. Huanuco: Tingo Maria. Junín: Satipo. Loreto: Maynas. San Martin: Tarapoto. SURINAME. Brokopondo: Phedra. Nickerie: Wageningen. Para: Zanderij. Sipaliwini: Bven Saramacca (Figure 15B).

Etymology
The specific epithet honours the ‘Mura’, the name for an ethnic group of South American natives, used here as a noun in apposition. They are known for navigating along extensive areas in the rivers Amazonas, Madeira and Purus. In their long history of contact with European settlers, this group has been repeatedly stigmatized and suffered from massacres, as well as demographic, linguistic and cultural losses. Today, they live at indigenous reserves and urban centres in northern Brazil (Amoroso 2009).

The yanomami species group

Diagnosis
The yanomami species group includes only two species, both described here as new, M. piraha sp. n. and M. yanomami sp. n. They can be identified by the following characters: posterior upper margin of metepisternum unmodified, lacking a velvety process; basal areal of metapostnotum smooth laterally and with a few longitudinal rugulosities restricted to mid portion. Megalopta piraha sp. n. is more widely distributed in the Amazon basin, while M. yanomami sp. n. is known only from Roraima and a single locality in eastern Pará (Figure 15C).

Megalopta piraha sp. n.
(Figures 4B, 5B, C, 5F, 10D, 12E, 13E, 15C)

Diagnosis
It differs from M. yanomami sp. n. by the basal area of metapostnotum without defined external sulcus delimiting the longitudinal rugulosities, the integument light
green (Figure 4B, 12E); the male is also distinguished by the scape enlarged gradually in direction to the apex (Figure 13E) and by flagellomeres without depressed and glabrous area (Figure 10D).

Description
Female. (1) Mandible bidentate and with supplementary teeth. (2) Labral elevation with the flattened surface. (3) Clypeus with surface between punctures on basal and central area microreticulate.(4) Central portion of supraclypeal area with dense punctuation, punctures separated by < 1 pd, punctuation becoming sparser in the lower portion (≥ 1 pd). (5) Antenna reddish brown (Figure 5B). (6) Upper frons flat, not strongly declivous toward sulcus around median ocellus. (7) Ocellocular distance smaller than the F1 length (Figure 5B). (8) Mesoscutum adjacent to the parapsidial line densely punctured, punctures contiguous on remainder of disc. (9) Scutellum with posterior margin raised in relation to anterior margin of metanotum. (10) Metanotum with integument, in oblique view, not hidden by short plumose pilosity (Figure 5F). (11) Basal area of metapostnotum reddish brown with green metallic tints, its length up to 0.8× that of metanotum, centrally with a single weak longitudinal rugulosity and a few shorter and slightly impressed ones in central portion, lateral surface smooth (Figures 4B, 5F). (12) Mesepisternum with contiguous punctuation. (13) Metepisternum with sparse pilosity, integument visible through pilosity; posterior upper margin of metepisternum unmodified, lacking a velvety process. (14) T1 with dorsal surface of disc sparsely punctured (≥ 1 pd), posterior marginal zone microreticulate between punctures. Male. (15) Scape with diameter gradually enlarging toward the apex. (16) Flagellum pale yellow (Figure 13E), F1–F11 not differing in diameter; F2 about as long as F3 (Figure 13E); F6–F11, in anterior view with the anterior and posterior margin depressed (Figure 10D), in posterior view with basal glabrous area at same level of remaining surface. (17) Metanotum with integument, in dorsal view, not hidden by short plumose pilosity. (18) Basal area of metapostnotum as in the female (Figure 12E). (19) Metepisternum as in the female. (20) 1st and 2nd tarsomeres of foreleg with longest simple setae shorter than summed length of the three apical tarsomeres. (21) S3 with longitudinal sulcus, the posterolateral margin notched. (22) S4 with medial protruding process, profile of process triangular in lateral view; basal portion glabrous; posterolateral margin notched, notch not extending to basal half of sclerite.

Measurements
Approximate body length: (13.0–14.8); maximum width of head: (3.4–4.3); intertegular distance: (3.6–4.4) mm; length of forewing with the tegula: (11.7–13.2).

Type material
Holotype female (DZUP): BRAZIL. Amazonas: ‘Manaus – AM \ PDBFF 29/11/89\ M.L. Oliveira’ ‘1008’. Paratypes (61♀, 13♂): BRAZIL. Amazonas: ‘BRASIL, AM, Fonte Boa\ 023227S – 660408W\ 27.ix.2005, arm.luz\ F.F. Xavier Fº’ (1♂,
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INPA); ‘MANAUS – AM\ PDBFF 21/12/89/ M.L. OLIVEIRA ‘1315’ (1 ♂ MEUFV); ‘MANAUS – AM\ PDBFF 29/11/89/ M.L. OLIVEIRA ‘1006’ (1 ♂ MEUFV); ‘MANAUS – AM\ PDBFF 23/1/90/ M.L. OLIVEIRA ‘1516’ (1 ♂ MEUFV); ‘MANAUS – AM\ PDBFF 23/1/90/ M.L. OLIVEIRA ‘1914’ (1 ♂ MEUFV); ‘MANAUS – AM\ PDBFF 8/1/90/ M.L. OLIVEIRA ‘1448’ (1 ♂ MEUFV); ‘MANAUS – AM\ PDBFF 24/VI/90/ M.L. OLIVEIRA ‘2325’ (1 ♂ MEUFV); ‘MANAUS – AM\ PDBFF 8/VII/90/ M.L. OLIVEIRA ‘2389’ (1 ♂ MEUFV); ‘BRASIL: AMAZONAS\ MANAUS – P. DAS LARANJEIRAS\ LO-5\ 500m’ (1 ♂ INPA); ‘Brasil. Amazonas\ Reserva Ducke\ Am 010 Km26’ 07-18 Dez 2005\ M.L. Oliveira & E.R.F. Pereira ‘LO-5\ 500m’ (1 ♂ INPA); ‘Brasil. Amazonas\ Reserva Ducke\ Am 010 Km26’ 07-18 Dez 2005\ M.L. Oliveira & E.R.F. Pereira ‘LO-5\ 2500m’ (1 ♂ INPA); ‘BRASIL-AMAZONAS\ MANAUS RES. DUCKE\ II-1995\ M.J.G. HOLYIN’ (1 ♂ INPA); ‘BRASIL AMAZONAS\ MANAUS RES. DUCKE\ Fazenda Porto Alegre\ (Reserva 3114) 2°23′00″S/59°56′35″W\ 14-15/VIII/1996’ Hutchings, R. W. H. & Hutchings, R. S. G. col. ‘Arm. tipo Pennsylvania\ C/cianeto de potássio (Roger W. Hutchings) Luz negra(UV-BL)’ 0019536 (1 ♂ INPA); ‘BR AM MANAUS\ ZF-03 km 23 Res. 1112 2°26′02″S/59°51′15″W\ 20/II/1986 (RLE) KLEIN, BERT col. ‘FAZ.ESTEIO’ MALAISE’ (1 ♂ INPA); ‘BRASIL AM Manaus ZF-2\ km-14, Torre, 023521S-600655W, 18–21.v.2004\ lenço, luz mista e BLB, lenço\ 40 mts altura, J.A. Rafael\ F.B. Baccaro, F.F. Xavier Fº & A. Silva Fº.’ (1 ♂ INPA); ‘BRASIL AM Manaus ZF-2\ km-14, Torre, 023521S-600655W, 16–19.iv.2004\ luz mista/BLB, lenço\ 40 mts altura, J.A. Rafael\ C.S. Motta, A. Silva Fº\ J.M.F. Ribeiro.’ (1 ♂ INPA); ‘BRASIL, AM, Manaus,\ Estrada ZF-2, 01.x.2005\ arm. luz móvel, J.A. Rafael\ F.F. Xavier Fº, R. Machado\ A.A. Agudelo & Y.K. Dantas’ (1 ♂ INPA); ‘BRASIL AM Manaus, ZF\ 2 km34, Base LBA, 02°35′37″ S – 60°12′39″ W\ 09-10.vii.2008. arm. luz\ nível do solo, J.A. Rafael\ & F.F. Xavier Fº’ (1 ♂ INPA); ‘BRA, AM, Manaus\ PDBFF – Colosso\ 02°23′58″ S – 59°52′20″ W\ 1–4.xii.2009’ D. Storck-Tonon Leg.’ (2 ♀ INPA); ‘BRA, AM, Manaus\ PDBFF – Colosso\ 02°23′58″ S – 59°52′20″ W\ 11–15.i.2010’ D. Storck-Tonon Leg.’ (6 ♀ INPA); ‘BRA, AM, Manaus\ PDBFF – Colosso\ 02°23′58″ S – 59°52′20″ W\ 9–12. ii.2010’ D. Storck-Tonon Leg.’ (13 ♀ INPA); ‘BRA, AM, Manaus PDBFF – Colosso\ 02°23′58″ S – 59°52′20″ W\ 28–30.iv.2010’ D. Storck-Tonon Leg.’ (2 ♀ INPA); ‘BRA, AM, Manaus PDBFF – Colosso\ 02°23′58″ S – 59°52′20″ W\ 18–20.v.2010’ D. Storck-Tonon Leg.’ (4 ♀ INPA); ‘BRA, AM, Manaus PDBFF – Colosso\ 02°23′58″ S – 59°52′20″ W\ 23–27.vi.2010’ D. Storck-Tonon Leg.’ (3 ♀ INPA); ‘BRA, AM, Manaus PDBFF – Colosso\ 02°23′58″ S – 59°52′20″ W\ 27–29.iii.2010’ D. Storck-Tonon Leg.’ (5 ♀ INPA); ‘BRASIL, Amazonas\ Rio Madeira, Lago Xadá, Comunidade Bela\ Vista. Ponto 1\ Margem Esquerda’ 05°15′39″ S/60°42′32″ W, 05–17.iii.2005 Xavier\ Fo, F.F.; Godoi, F. & Lourido, A.M. leg.’ (1 ♀ INPA); ‘BRASIL, AM, MANGAQUIRI \ LA GO JANUACÁ\ RIOI SOLIMÕES, 03°24′21″ S/60°13′99″ W\ 12–13/IV/96\ COL: DIAZ, G.A.’ HYMENOPTERA: HALICLITIDAE’ (1 ♀ INPA); ‘BRASIL, Amazonas, Pq. Nac. Jau, Rio Carabinahi,\ 0159S-6132W, 07–17.iv.1994, C. Motta e outros’ (4 ♀, 2♂ INPA); ‘Taracuá (Rio Uapés) – AM\ Brasil-VIII-1964’ Pereira & Machado’ (1 ♀ MZUSP). Pará: ‘Canindé\ Rio Gurupi, Pará \ IV.1963\ B. Malkin’ (1 ♀ MZUSP); ‘BRASIL Pará Ourém\ Pataueute 21-VIII-1992’ Brasil Pará\ B. Mascarenhas’ (1 ♀ MPEG); ‘BRASIL Pará Ourém\ Pataueute\ 1-IV-1994’ Brasil Pará\ B. Mascarenhas’ (1 ♀ MPEG); ‘BRASIL, Pará Oriximiná, Porto Trombeta\ Platô Aviso’ 12/II/2008\
0554685/9806548 UTM\ Y. Antonini, M.L. Oliveira leg. (2♀ INPA); ‘BRASIL, Pará\ Oriximiná, Porto Trombetas\ Platô Saracá 12/II/2008\ 0555958/9812404 UTM\ Y. Antonini, M.L. Oliveira leg.’ (4♀ INPA). Rondônia: ‘Brasil Rondônia\ Gleba G\ Est. Rio Machado\ 14.VI.1983’ ‘Brasil RO\ J.R. Arias’ (1♂ MPEG); Rondônia\ Vilhena\ 22 \– 5.viii 1983\ F.J.A. Peralta ‘25\ ARM\ LUZ’ (1♂ INPA).

Distribution
BRAZIL. Amazonas: Fonte Boa, Manaquiri, Manaus, Novo Airão, Novo Aripuanã. Pará: Ourém, Oriximiná. Rondônia: Ji-Paraná, Vilhena (Figure 15C).

Etymology
The specific epithet honours the ‘Pirahã’ or ‘Mura-Pirahã’, the name for an ethnic group of South American natives, descendents of the ‘Mura’, used here as a noun in apposition. The Pirahã inhabit a tract of lands traversed by the Marmelos river and almost the entire length of the Maici river, located in the municipality of Humaitá, in Amazonas, northern Brazil (Gonçalves 2000).

*Megalopta yanomami* sp. n. (Figures 1C, 4A, 5E, 6B, 10C, 12D, 13C, D, 15C)

Diagnosis
Differs from *M. piraha* by the basal area of metapostnotum with longitudinal rugulosities restricted to mid portion, external rugulosities strongly impressed and forming semicircles, the integument often dark green (Figure 4A); metanotum with contiguous punctation (Figure 5E); T1 densely punctured (< 1 pd). The male also differs by the scape uniformly enlarged (Figures 10C, 13C) and by flagellomeres with depressed and glabrous area (Figures 10C, 13D).

Description
**Female.** (1) Mandible bidentate and with supplementary teeth. (2) Labral elevation with lateral sides slightly raised in relation to central area. (3) Clypeus with surface between punctures on basal and central area smooth. (4) Central portion of supra-clypeal area with dense punctuation, the punctures separated by < 1 pd, except by a small impunctate area in the centre of the lower portion. (5) Antenna reddish brown. (6) Upper frons flat, not strongly declivous toward sulcus around median ocellus. (7) Ocellocular distance smaller than the F1 length. (8) Mesoscutum adjacent to the parapsidial line densely punctured, punctures contiguous, punctuation becoming sparser towards mesoscutal lip (< 1 pd). (9) Scutellum with posterior margin raised in relation to anterior margin of metanotum. (10) Metanotum with integument, in oblique view, not hidden by short plumose pilosity, with contiguous punctuation (Figure 5E). (11) Basal area of metapostnotum metallic green, its length up to 0.7×
that of metanotum, with longitudinal rugulosities restricted to central area (Figures 4A, 5E). (12) Mesepisternum with contiguous punctuation. (13) Metepisternum with sparse pilosity, integument visible through pilosity; posterior upper margin of metepisternum unmodified, lacking a velvety process (Figure 1C). (14) T1 with dorsal surface of disc with contiguous to dense punctuation (< 1 pd), posterior marginal zone smooth between punctures. Male. (15) Scape uniformly enlarged (Figures 10C, 13C). (16) Flagellum reddish brown (Figure 10C), F1–F11 not differing in diameter but with depressed and glabrous area in frontal view (Figures 10C, 13D); F2 about as long as F3 (Figure 10C); F6–F11, in anterior view, with the anterior and posterior margins depressed, in posterior view with basal glabrous area at same level of remaining surface. (17) Metanotum with integument, in dorsal view, not hidden by short plumose pilosity. (19) Basal area of metapostnotum dark metallic green, its length up to 0.8× that of metanotum, longitudinal rugulosities strongly impressed and enclosed laterally by two sulci (Figure 12D). (20) Metepisternum. As described for the female. (21) 1st and 2nd tarsomeres of foreleg with longest simple setae shorter than summed length of the three apical tarsomeres. (22) S3 with longitudinal sulcus, posterolateral margin notched. (23) S4 with medial protruding process, profile of process widely triangular in lateral view; basal portion glabrous; posterolateral margin notched, notch not extending to basal half of sclerite.

Measurements
Approximate body length: (11.5–14.2); maximum width of head: (3.5–4.5); intertegular distance: (3.2–4.4); length of forewing with tegula: (10.3–12.3).

Type material
Holotype female (INPA): BRAZIL. Roraima: ‘BRASIL – Roraima\ Rio Uraricoera\ Ilha de Maracá’ 02–13.v.1987 ‘J.A. Rafael\ J.E.B. Brasil\ L.S. Aquino’ ‘Armadilha de Malaise’. Paratypes (9♀, 4♂): BRAZIL. Pará: ‘Brasil Pará\ Serra Norte\ N1 Est. Serraria’ 6-IX-1983 ‘Luz U.V.’ ‘MPEG HYM\ 11005592’ (1♀, MPEG); ‘Brasil Pará\ Serra Norte\ MANGÂNES/C/Luz’ 24-X-1984 ‘Brasil Pará\ T. Pimentel’ ‘MPEG HYM\ 11005587’ (1♀, MPEG); ‘Brasil Pará\ Serra Norte\ MANGÂNES\ COL. NOTURNA’ 06-IX-1985 ‘Brasil Pará\ Marcio Zanuto’ ‘MPEG HYM\ 11005600’ (1♀, MPEG); ‘Brasil Pará\ Serra Norte\ N2 CANGA\ 3-XI-1985’ ‘Brasil Pará\ N. Bittencourt’ ‘MPEG HYM\ 11005611’ (1♂, MPEG); ‘Brasil Pará\ Serra Norte\ N1. Col. Luz’ 19-IX-1985 ‘Brasil Pará\ J. Dias’ ‘MPEG HYM\ 11005596’ (1♂, MPEG). Roraima: ‘Brasil, Roraima, Amajari,\ Tepequém, Trilha Igarapé da Anta 03°46′ 19.7″ N’ ‘61°45′21.6″ W 649m 14\ mai-09 11:00 Grigio, Jr. O\ Salicilato’ ‘MIRR 12678’ (1♀, MIRR); ‘BRASIL – Roraima\ Ilha de Maracá’ 02-13. v.1987 ‘J.A. Rafael\ J.E.B. Brasil\ L.S. Aquino’ ‘Armadilha\ de Luz’ 21-30.xi.1987 J.A. Rafael et\ equipe’ (1♀, INPA); ‘Brasil Roraima\ Tepequêm\ Pousada SESC\ 03°45′186′ N\ 61°42′959′ W’ ‘637m 14\vi.2009\ M.L. Oliveira, O\ Mielke & M\ Casagrande leg’ (1♂, INPA); ‘BR RR Uiramutã, Rio Wailã\ 043750/600946\ 22/III/2007\ F.F. Xavier Filho, col.\ Luz Mista Mercúrio’ (1♂, INPA).
Distribution
BRAZIL. Pará: Parauapebas. Roraima: Amajari, Uiramutã (Figure 15C).

Etymology
The specific epithet honours the ‘Yanomami’, the name for an ethnic group of South American natives, used here as a noun in apposition. The ‘Yanomami’ comprise a society of hunter-agriculturists of the tropical rainforest of northern Amazonia, whose contact with non-indigenous society over most of their territory has been relatively recent. Their territory covers an area of approximately 192,000 km², located on both sides of the border between Brazil and Venezuela, in the Orinoco–Amazon interfluvial region (affluents of the right shore of the Rio Branco and left shore of the Rio Negro). The total population of the ‘Yanomami’ in Brazil and Venezuela is today estimated to be around 26,000 people (Albert 1999).

The byroni species group

Diagnosis
The byroni group includes M. atlantica Santos & Silveira, M. guarani sp. n., M. xavante sp. n., M. mapinguari sp. n., M. purpurata Smith, M. karitiana sp. n. and additional species previously placed in the subgenus Megalopta (Noctoraptor) Engel, Brooks and Yanega. It is distinguished from other species groups by the ocellocular distance equal to length of F1 and by the sparsely punctured mesoscutum posteriorly to mesoscutal lip (≥ 1 pd). The female differs from those of other groups by lacking the mandibular subapical and supplementary teeth and the basal macula in the inner surface of the mandible. The male is characterized by the F2 as wide as about two-thirds of F3, dorsal surface of flagellomeres flattened to slightly depressed and by the protruding process of S4, in lateral view, digitiform or triangular and short. It is shown here that this group also contains species with a metallic green integument, differing from the previously described dark brown non-metallic species.

Bees in this group are rarely collected and most species are known from single specimens or small series. All known females in the byroni group have a morphology associated with non nest-making, parasitic behaviour. Biani and Wcislo (2007), in their work on M. byroni, consider that this group might behave as obligatory cleptoparasites or social parasites. Taking into consideration that female morphology in this group is more similar to that of macrocephalic females of nest-making species, it is more plausible to believe that they behave as social parasites. Macrocephalic females exhibit dominant queen-like behaviour over the non macrocephalic subordinate females.

Megalopta atlantica Santos and Silveira, 2009
(Figures 9F, 10B, 11E, 12B, 15D)

Megalopta atlantica Santos and Silveira, 2009:14. Holotype male, Brazil: Minas Gerais, Ipanema (DZUP, examined).
Diagnosis
The male differs from *M. guarani* sp. n. and *M. karitiana* sp. n. by the medial protruding process of S4 digitiform in lateral view and by rugulosities present in central portion of basal area of metapostnotum; from *M. mapinguari* sp. n. by the mesosoma homogeneously black to brown and by medial protruding process of S4 lacking setae in the apex; from *M. xavante* sp. n. by the integument black and by presence of rugulosities in the basal area of metapostnotum. This latter character also distinguishes *M. atlantica* from *M. purpurata*.

Description
**Male.** (15) Scape with diameter gradually enlarging toward the apex. (16) Flagellum blackish brown, F1–F11 not differing in diameter, F2 about two-thirds of F3 in length, F6–F11, in anterior view, with the anterior and posterior margins flat (Figures 9F, 10B), in posterior view with basal glabrous area at same level of remaining surface. (17) Metanotum with integument, in dorsal view, not hidden by short plumose pilosity (Figure 11E). (18) Basal area of metapostnotum blackish brown; its length half of that metanotum; with longitudinal rugulosities present in central area, the rugulosities oblique towards the sides (Figure 11E). (19) Metepisternum with sparse pilosity, integument visible through pilosity; posterior upper margin of metepisternum unmodified, lacking a velvety process. (20) 1st and 2nd tarsomeres of foreleg with longest simple setae shorter than the summed length of the three apical tarsomeres. (21) S3 with longitudinal sulcus, posterolateral margin notched. (22) S4 with medial protruding process, profile of process digitiform in lateral view; basal portion glabrous; posterolateral margin notched, notch not extending to basal half of sclerite.

Measurements
Approximate body length: (12.5); intertegular distance: (3.35); maximum width of head: (3.12); length of forewing with tegula: (11.31).

**Female.** Unknown.

Distribution
BRAZIL. Minas Gerais: Ipanema (Figure 15D).

*Megalopta guarani* sp. n.
(Figures 9C, 10E, F, 15D)

Diagnosis
The male differs from those of *M. atlantica*, *M. purpurata*, *M. xavante* sp. n., and *M. mapinguari* sp. n. by the shape of the medial protruding process of S4, being short and having a triangular profile in lateral view (Figure 10E); from *M. karitiana* sp. n. by the colour of the integument, metallic green in the head and mesosoma with coppery tints (Figures 9C, 10F) and reddish brown on metasoma.
Description

Male. (15) Scape with diameter gradually enlarging toward the apex. (16) Flagellum brown, except F2 reddish brown (Figure 9C), F1–F11 not differing in diameter; F2 about two-thirds of F3 in length (Figure 9C); F6–F11, in anterior view, with the anterior and posterior margins flat, in posterior view with basal glabrous area at same level of remaining surface. (17) Metanotum with integument, in dorsal view, not hidden by short plumose pillosity (Figure 10F). (18) Basal area of metapostnotum green metallic; its length 0.75× that of metanotum; smooth without longitudinal rugulosities (Figure 10F). (19) Metepisternum with sparse pilosity, integument visible through pilosity; posterior upper margin of metepisternum unmodified, lacking a velvety process (20) 1st and 2nd tarsomere of foreleg with longest simple setae shorter than the summed length of the three apical tarsomers. (21) S3 with longitudinal sulcus, posterolateral margin notched. (22) S4 with medial protruding process, profile of process minute triangular in lateral view (Figure 10E); basal portion glabrous; posterolateral margin notched, notched not extending to basal half of sclerite.

Measurements

Approximate body length: (10.7); intertegular distance: (2.9); maximum width of head: (2.6); length of forewing with tegula: (9.0); length of forewing: (8.3).

Female. Unknown.

Type material

Holotype male (MPEG): BRAZIL. Mato Grosso: ‘Brasil MT\ Chap. dos Guimarães\ Colégio Agr. Buriti\ 8 a 13-II-1986\ Col. I.S. Gorayeb’ ‘Armadilha\ Malayse’.

Distribution

BRAZIL. Mato Grosso: Chapada dos Guimarães (Figure 15D).

Etymology

The specific epithet honours the ‘Guarani’, the name for an ethnic group of natives used here as a noun in apposition. Since the mid-1920s, for the Guarani subgroup Kaiowa, there has been a continuous process of expropriation of Guarani lands, which are constantly threatened by farmers (Almeida and Mura 2003).

Megalopta karitiana sp. n.
(Figures 11A, 15D)

Diagnosis

The male differs from those of M. atlantica, M. purpurata, M. xavante sp. n., and M. mapinguari sp. n. by the minute medial protruding process of S4, with a triangular profile in lateral view; from M. guarani sp. n. by the dark brown integument with metallic green reflections, and the dark brown metasoma with purple tints.
Description

Male. (15) Scape with diameter gradually enlarging toward the apex. (16) Flagellum blackish; F1–F11 not differing in diameter; F2 about two-thirds of F3 in length. (17) Metanotum with integument, in dorsal view, not hidden by short plumose pilosity. (18) Basal area of metapostnotum blackish, its length 0.6× that of metanotum; smooth and without longitudinal rugulosities along its surface (Figure 11A). (19) Metepisternum with sparse pilosity, integument visible through pilosity; posterior upper margin of metepisternum unmodified, lacking a velvety process. (20) 1st and 2nd tarsomeres of foreleg with longest simple setae shorter than the summed length of the three apical tarsomeres. (21) S3 with longitudinal sulcus, posterolateral margin notched. (22) S4 with medial protruding process present, minute, its profile triangular in lateral view, basal portion glabrous; posterolateral margin notched, notch not extending to basal half of sclerite.

Measurements
Approximate body length: (14.8); interticular distance: (3.8); maximum width of head: (3.7); length of forewing with tegula: (12.7).

Female. Unknown.

Type material
Holotype male (DZUP): BRAZIL. Rondônia: ‘Brasil, RO, Itapuã
do Oeste, Flona
do Jamari, 110m\ 9.260° S 62.913° W,\ 4.ix.2012, Cavichioli,\ Melo, Rosa & Santos’ ‘Armadilha\ Luminosa’.

Distribution
BRAZIL. Rondônia: Itapuã do Oeste (Figure 15D).

Etymology
The specific epithet honours the ‘Karitiana’, the name for an ethnic group of natives, used here as a noun in apposition. The ‘Karitiana’ experienced a brutal demographic decline after contact with the whites. Indeed, the anthropologist Darcy Ribeiro considered them extinct in 1957, however the current population numbers around 320 individuals (Storto and Velden 2005).

Megalopta mapinguari sp. n.
(Figures 9D, 11B, C, 15D)

Diagnosis
The male differs from those of M. guarani sp. n. and M. karitiana sp. n. by the shape of the medial protruding process of S4, its profile digitiform in lateral view; from M.
atlantica, M. purpurata and M. xavante sp. n. by the mesosoma homogeneously metallic green and by lacking setae in the apex of medial protruding process of S4.

Description

Male. (15) Scape with diameter gradually enlarging toward the apex. (16) Flagellum blackish; F1–F11 not differing in diameter; F2 about two-thirds of F3 in length (Figure 9D); F6–F11, in anterior view, with the anterior and posterior margins flat, in posterior view with basal glabrous area at same level of remaining surface. (17) Metanotum with integument, in dorsal view, not hidden by short plumose pillosity (Figure 11C). (18) Basal area of metapostnotum metallic green, its length 0.5× that of metanotum, longitudinal rugulosities present in the mid portion (Figure 11C). (19) Metepisternum with sparse pilosity, integument visible through pilosity; posterior upper margin of metepisternum unmodified, lacking a velvety process. (20) 1st and 2nd tarsomeres of foreleg with longest simple setae shorter than the summed length of the three apical tarsomeres. (21) S3 with longitudinal sulcus, posterolateral margin notched (Figure 11B). (22) S4 with medial protruding process, profile of process digitiform in lateral view (Figure 11B); basal portion glabrous; posterolateral margin notched, notch not extending to basal half of sclerite.

Measurements

Approximate body length: (12.4); intertegular distance: (3.8); maximum width of head: (2.9); length of forewing with tegula: (10).

Female. Unknown.

Type material

Holotype male (DZUP): BRAZIL. Acre: ‘Faz. Catuaba – UFAC\ armadilha luminosa\ capoeira’.

Comments

The collecting date of the type specimen is unknown. The species can be easily recognized by intense metallic green reflections, sometimes mixed with black tints in integument, except for predominantly blackish metasoma.

Distribution

BRAZIL. Acre: Rio Branco (Figure 15D).

Etymology

The specific epithet honours the ‘Mapinguari’, used here as a noun in apposition. The ‘Mapinguari’, a Brazilian folklore character, is popularly known as a monster that lives in the Amazon Rainforest.
**Megalopta purpurata** Smith, 1879
(Figures 10A, 11F, 12C, 15D)

*Megalopta purpurata* Smith, 1879: 48. Holotype male, Brazil: Amazonas, Tefé (‘Ega’) (BMNH, not directly examined).

**Diagnosis**
The male differs from those of *M. guarani* sp. n. and *M. karitiana* sp. n. by the digitiform medial protruding process of S4, in lateral view; from *M. mapinguari* sp. n and *M. xavante* sp. n. by the mesosoma homogeneously blackish (Figures 11F, 12C); also distinguished from *M. mapinguari* by medial protruding process of S4 lacking setae in the apex; from *M. atlantica* by the absence of rugulosities in basal area of metapostnotum (Figure 12C).

**Description**
*Male.* (15) Scape missed. (16) Flagellum missed (Figure 10A). (17) Metanotum with integument, in dorsal view, not hidden by short plumose pilosity (Figure 11F). (18) Basal area of metapostnotum blackish; its length less than half of metanotum (Moure 1958); smooth, without rugulosities (Figure 12C). (19) Metepisternum with sparse pilosity, integument visible through pilosity; posterior upper margin of metepisternum unmodified, lacking a velvety process. (20). 1st and 2nd tarsomere of foreleg unobserved. (21) S3 with longitudinal sulcus, posterolateral margin notched. (22) S4 with medial protruding process, profile of process digitiform in lateral view; basal portion glabrous; posterolateral margin notched, notch not extending to basal half of sclerite.

*Female.* Unknown.

**Comments**
The type was not examined directly, but through photographs obtained from the British Museum (BMNH). Its inclusion in the byroni species group was based on the following features: body coloration without metallic green reflections and S4 in basal area with a digitiform medial protruding process. Some characteristics of this species were extracted from Moure’s (1958) redescription.

**Distribution**
BRAZIL. Amazonas: Tefé (Figure 15D).

*Megalopta xavante* sp. n.
(Figures 3F, 4F, 5A, 9E, 11D, 12A, 15D)

**Diagnosis**
Differs from *M. guarani* sp. n. and *M. karitiana* sp. n. by medial protruding process of S4 digitiform in lateral view; from *M. atlantica, M. purpurata* and *M. mapinguari*
sp. n. by integument mostly reddish brown with metallic green tints on head and mesosoma (Figures 3F, 4F).

Description
(1) Mandible simple and lacking supplementary teeth (Figure 4F). (2) Labral elevation in central portion, with rounded elevated area in relation to the sides. (2) Clypeus with surface between punctures on basal and central area smooth, the apical macula reddish brown. (4) Central portion of supracypeal area with sparse punctation, punctures separated by ≥ 1 pd. (5) Antenna reddish brown (Figure 4F). (6) Upper frons flat, not strongly declivous toward sulcus around median ocellus. (7) Ocellocellular distance equal to length of F1 (Figure 4F). (8) Mesoscutum adjacent to the parapsidal line densely punctured, punctures contiguous, punctation becoming sparser towards the mesoscutal lip (< 1 pd). (9) Scutellum with posterior margin raised in relation to anterior margin of metanotum. (10) Metanotum with integument, in oblique view, not hidden by short plumose pilosity. (11) Basal area of metapostnotum reddish brown, its length 0.4× that of metanotum, with smooth surface, without longitudinal rugulosities (Figure 3F). (12) Mesepisternum with contiguous punctation. (13) Metepisternum with sparse pilosity, integument visible through pilosity, posterior upper margin unmodified, lacking a velvety process. (14) T1 with dorsal surface of disc sparsely punctured (≥ 1 pd), posterior marginal zone microreticulated between punctures. Male. (15) Scape with diameter gradually enlarging toward the apex (Figure 9E). (16) Flagellum reddish brown, except F2 and F3 lighter than the others (Figure 9E); F1–F11 not differing in diameter; F2 about two-thirds of F3 in length (Figure 9E); F6–F11, in anterior view, with the anterior and posterior margins flat, in posterior view with basal glabrous area at same level of remaining surface. (17) Metanotum with integument, in dorsal view, not hidden by short plumose pilosity (Figure 11D). (18) Basal area of metapostnotum reddish brown with metallic green tints; its length about 0.7× that of metanotum; the longitudinal rugulosities slightly impressed centrally (Figure 11D). (19) Metepisternum as in the female. (20) 1st and 2nd tarsomeres of foreleg with longest simple setae shorter than summed length of the three apical tarsomeres. (21) S3 with longitudinal sulcus, posterolateral margin notched. (22) S4 with medial protruding process, profile of process digitiform in lateral view; basal portion glabrous; posterolateral margin notched, notched not extended to basal half of sclerite.

Measurements
Approximate body length: (10.7–10.7); intertegular distance: (3–3.4); maximum width of head: (2.9–3.3); length of forewing with tegula: (9.5).

Type material
Holotype female (RPSP): BRAZIL. Mato Grosso: ‘Nova Xavantina MT BR \ CUNX – bacaba luz\ 14/I/99. Canolho A.’ Paratype male: BRAZIL. Mato Grosso: ‘Nova Xavantina\ MT BR\ CUNX – Bacaba luz\ 30/I/98 Leg\ Barreira RL’.
Distribution
BRAZIL. Mato Grosso: Nova Xavantina (Figure 15D).

Etymology
The specific epithet honours the ‘Xavante’, the name for an ethnic group of natives, used here as a noun in apposition. The Xavantes live in nine indigenous areas which are part of the territory they traditionally occupied for at least 180 years, in eastern Mato Grosso. The region where they live has suffered the environmental impact of extensive cattle ranching since the 1960s, an impact which is almost certainly irreversible. From the 1980s the impact has been intensified by the spread of giant grain farms, especially soybeans produced for export (Graham 2008).

The sodalis species group

Diagnosis
The sodalis species group includes: *M. cuprea*, *M. munduruku* sp. n. and *M. sodalis*. Members of this species group can be recognized by having the mid portion of the basal area of the metapostnotum with depressed triangular area with longitudinal rugulosities branching from central rugulosities, or with transverse depression in *M. munduruku* sp. n., and by having the posterior upper margin of the metepisternum unmodified, lacking a velvety process in both sexes. Furthermore, this species group exhibits a large amount of intraspecific variation in the shape of the basal elevation of the labrum and in the basal area of the metapostnotum.

*M. cuprea* occurs in Bolivia and northern Brazil (Figure 16A), while *M. munduruku* sp. n. is found only in northern Brazil (Figure 16B) and *M. sodalis* is widely distributed (Figure 16C).

*Megalopta cuprea* Friese, 1911
(Figures 4D, 13A, 16A)

*Megalopta cuprea* Friese, 1911: 453. Lectotype female, Bolivia: Mapiri (ZMB, examined).

Additional examined material
(5♀, 1♂). See Appendix 2.

Diagnosis
The female differs from that of *M. munduruku* sp. n. by mid depression extending to posterior margin in basal area of metapostnotum (Figure 4D) and the male, by basal area of metapostnotum with longer and strongly impressed longitudinal rugulosities (Figure 13A); both sexes can be distinguished from *M. sodalis* by head and thorax mostly dark brown, lacking metallic reflections.
Figure 16. Distribution records of *Megalopta* species. (A) *M. cuprea* Friese; (B) *M. munduruku* sp. n; (C) *M. sodalis* Vachal.
Description

**Female.** (1) Mandible bidentate and with supplementary teeth. (2) Labral elevation with lateral surface strongly elevated in relation to central portion. (3) Clypeus with surface between punctures on basal and central area microreticulated. (4) Central portion of supraclypeal area with dense punctuation, punctures separated by < 1 pd. (5) Antennae with scape brown, pedicel and flagellomeres reddish brown. (6) Upper frons flat, not strongly declivous toward sulcus around median ocellus. (7) Ocellocular distance smaller than the F1 length. (8) Mesoscutum adjacent to parapsidal line densely punctured, punctures contiguous, punctuation becoming sparser towards mesoscutal lip (< 1 pd). (9) Scutellum with posterior margin raised in relation to anterior margin of metanotum. (10) Metanotum with integument, in oblique view, not hidden by short plumose pilosity (Figure 4D). (11) Basal area of metapostnotum blackish, its length at least 0.7× that of metanotum; with longer and imbricated longitudinal rugosities strongly impressed in the central area (Figure 4D). (12) Mesepisternum with contiguous punctuation. (13) Metepisternum with sparse pilosity, integument visible through pilosity; posterior upper margin of metepisternum unmodified, lacking a velvety process. (14) T1 with dorsal surface of disc densely punctured (< 1 pd), posterior marginal zone microreticulated between punctures. **Male.** (15) Scape with diameter gradually enlarging toward the apex. (16) Flagellum reddish brown; F1–F11 not differing in diameter; F2 about as long as F3; F6–F11, in anterior view, with the anterior and posterior margins depressed, in posterior view with basal glabrous area at same level of remaining surface. (17) Metanotum with integument, in dorsal view, not hidden by short plumose pilosity. (18) Basal area of metapostnotum blackish, its length at least 0.7× that metanotum, medially with longer longitudinal rugosities, laterally with microreticulated surface (Figure 13A). (19) Metepisternum as in the female. (20) 1st and 2nd tarsomeres of foreleg with longest simple setae smaller than summed length of the three apical tarsomeres. (21) S3 with longitudinal sulcus, posterolateral margin notched. (22) S4 with medial protruding process, profile of process triangular in lateral view; basal portion glabrous; posterolateral margin notched, notch not extended to basal half of sclerite.

Measurements

Approximate body length: (13.2–14.5); maximum width of head: (3.6–3.8); intertegular distance: (4.0–4.3); length of forewing with tegula: (13.0–14.3).

Comments

All studied specimens were from Bolivia. The only record of this species in Brazil was published by Friese (1923:3), based on a female from ‘Manaos’. However, no additional specimens from Brazil have been found during this study and Friese (1926:124) does not include the Brazilian record in his treatment of *M. cuprea*.

Distribution

BOLIVIA. La Paz: Mapiri, Nigrillani, Santa Cruz: Espejo. BRAZIL. Amazonas: Manaus (Friese 1923) (Figure 16A).
**Megalopta munduruku** sp. n.  
(Figures 4C, 12F, 16B)

**Diagnosis**
The female differs from those of *M. cuprea* and *M. sodalis* by basal area of metapostnotum with mid depression restricted to anterior half, not extending to posterior margin (Figure 4C) and the male, by basal area of metapostnotum with shorter and weakly impressed longitudinal rugulosities (Figure 12F).

**Description**

**Female.** (1) Mandible bidentate and with supplementary teeth. (2) Labral elevation with lateral surface slightly raised in relation to central portion, the surface slightly bilobated basally. (3) Clypeus with surface between punctures on basal and central area microreticulated. (4) Central portion of supraclypeal area with sparse punctuation, punctures separated by ≥ 1 pd. (5) Antenna reddish brown. (6) Upper frons flat, not strongly declivous toward sulcus around median ocellus. (7) Ocellocular distance smaller than the F1 length. (8) Mesoscutum, adjacent to parapsidial line densely punctured, punctures contiguous, punctation becoming sparser towards mesoscutal lip (< 1 pd). (9) Scutellum with posterior margin raised in relation to anterior margin of metanotum. (10) Metanotum with integument, in oblique view, not hidden by short plumose pilosity (Figure 4C). (11) Basal area of metapostnotum metallic green with reddish brown tints; its length at least 0.6× that of metanotum; with mid depression restricted to anterior half, not extending to posterior margin, longitudinal rugulosities restricted to central area (Figure 4C). (12) Mesepisternum with contiguous punctation. (13) Metepisternum with sparse pilosity, integument visible through pilosity; posterior upper margin of metepisternum unmodified, lacking a velvety process. (14) T1 with dorsal surface of disc densely punctured (< 1 pd), posterior marginal zone microreticulated between punctures. **Male.** (15) Scape with diameter gradually enlarging toward the apex. (16) Flagellum reddish brown; F1–F11 not differing in diameter; F2 about as long as F3; F6–F11, in anterior view with the anterior and posterior margins depressed, in posterior view with basal glabrous area at same level of remaining surface. (17) Metanotum with integument, in dorsal view, not hidden by short plumose pilosity (Figure 12F). (18) Basal area of metapostnotum with shorter and weakly impressed longitudinal rugulosities (Figure 12F). (19) Metepisternum as in the female. (20) 1st and 2nd tarsomeres of foreleg with longest simple setae shorter than the summed length of the three apical tarsomeres. (21) S3 with longitudinal sulcus, posterolateral margin notched. (22) S4 with medial protruding process, profile of process triangular in lateral view; basal portion glabrous; posterolateral margin notched, notch not extending to basal half of sclerite.

**Measurements**
Approximate body length: (13.3–14.0); maximum width of head: (4.0–4.8); intertegular distance: (4.4–4.8); length of forewing with the tegula: (13.3–14.0).
Type material

Holotype female (INPA): BRAZIL: ‘BRASIL, PA, Belterra\ FLONA Tapajós, 100m \ 02°36’15” S – 54°56’35” W ‘15-16.iv.2008, arm. luz\ J.A. Rafael, F.F. Xavier F°.’. Paratypes (1♀, 1♂): BRAZIL: Amazonas: ‘Brasil. Amazonas\ Fonte Boa\ Estr. do Mamopina, Km 3 ‘02°32’27” S 66°04’08” W\ 05–30.IX 2005\ J.A. Rafael &\ F.F. Xavier-Filho\ Em luz’ (2♀, INPA); ‘BRASIL: ‘2070’ ‘MANAUS-AM\ PDBFF 25/ IV/90\ M.L. OLIVEIRA’ (1♀, MEUFV); ‘2072’ ‘MANAUS-AM\ PDBFF 25/IV/90\ M.L. OLIVEIRA’ ‘Megalopta spp.’ det. G. Melo 1996(1♀, MEUFV); ‘BRASIL-AMAZONAS\ MANAUS-FUA\ 23/II/82\ MORAIS. J.W.’ (1♀, INPA); ‘BRASIL, Amazonas, Pq\ Nac. Jaú R. Carabiani,\ 0159S-6132W, 07–17.iv.1994. C. Motta e outros’ (1♂, INPA) ‘BRA, AM, Manaus\ PDBFF – Colosso\ 02°23’58” S – 59°52’20” W\ 11–15.i.2010\ D. Storck-Tonon Leg.’. (1♀, INPA); ‘BRA, AM, Manaus\ PDBFF – Colosso\ 02°23’58” S – 59°52’20” W\ 9–12.ii.2010\ D. Storck-Tonon Leg.’. (3♀, INPA); ‘BRA, AM, Manaus\ PDBFF – Colosso\ 02°23’58” S – 59°52’20” W\ 18–20. v.2010\ D. Storck-Tonon Leg.’. (1♀, INPA); ‘BRA, AM, Manaus\ PDBFF – Colosso\ 02°23’58” S – 59°52’20” W\ 23–27.vi.2010\ D. Storck-Tonon Leg.’. (2♀, INPA); ‘Br, AM, Pres. Figueiredo\ Am. 240 Km 24\ Com. São Francisco\ 02°01’05” S/59°49’59” W’ ‘26/iii-03/ivii/2005, Armadilha luz mista\ F.F. Xavier F°, G.M.A.\ Lourido, R. Machado’ (1♀, INPA).

Distribution

BRAZIL. Amazonas: Fonte Boa, Manaus, Novo Airão. Pará: Belterra (Figure 16B).

Etymology

The specific epithet honours the ‘Munduruku’, the name for an ethnic group of natives used here as a noun in apposition. Historically a people with a warrior tradition, the Munduruku culturally dominated the region of the valley of the Tapajós River, Brazil. Today, the wars they wage are to guarantee the integrity of their territory, threatened by pressures from the illegal activities of gold-panning, hydroelectric projects, and the construction of a great waterway on the Tapajós river (Ramos 2003).

*Megalopta sodalis* (Vachal 1904)

(Figures 4E, 13C, 16C)

*Halictus sodalis* Vachal, 1904:114. Holotype female, Brazil: Santa Catarina, Joinville (MNHP, not examined).

*Halictus fornix* Vachal, 1904:114. Holotype female, Peru: Huallaga, Rio Mixiollo 1200 m (MNHP, not examined). New synonymy.

*Halictus aethautis* Vachal, 1904:115. Holotype male, Peru: Lima, Callanga. (MNHP, not examined).

Examined material

(525♀, 111♂). See Appendix 2.
Diagnosis
This species differs from *M. cuprea* only by the metallic green integument; from females of *M. munduruku* sp. n. by basal area of metapostnotum with mid depression extending to posterior margin (Figure 4E), and from males, by longer and strongly impressed longitudinal rugulosities in the basal area of metapostnotum (Figure 13C).

Description
**Female.** (1) Mandible bidentate and with supplementary teeth. (2) Labral elevation* with flattened, slightly depressed or with lateral surface strongly raised in relation to central portion. (3) Clypeus with surface between punctures on basal and central area variable, often microreticulated and sometimes smooth. (4) Central portion of supraclypeal area with sparse punctuation, the punctures are separated by ≥ 1 pd. (5) Antennae reddish brown. (6) Upper frons flat, not strongly declivous toward sulcus around median ocellus. (7) Ocellocular distance smaller than the F1 length. (8) Mesoscutum, adjacent to parapsidial line densely punctured, punctures contiguous, punctuation becoming sparser towards mesocutal lip (< 1 pd). (9) Scutellum with posterior margin raised in relation to anterior margin of metanotum. (10) Metanotum with integument, in oblique view, not hidden by short pilosity (Figure 4E). (11) Basal area of metapostnotum metallic green, its length 0.55 to 0.8× that of metanotum, with longer and strongly impressed longitudinal rugulosities in mid portion (Figure 4E). (12) Mesepisternum with contiguous punctuation. (13) Metepisternum with sparse pilosity, integument visible through pilosity; posterior upper margin of metepisternum unmodified, lacking a velvety process. (14) T1 with dorsal surface of disc densely punctured (< 1 pd), posterior marginal zone microreticulated between punctures. **Male.** (15) Scape with diameter gradually enlarging toward the apex. (16) Flagellum reddish brown; F1–F11 not differing in diameter; F2 about as long as F3; F6–F11, in anterior view with the anterior and posterior margins depressed, in posterior view with basal glabrous area at same level of remaining surface. (17) Metanotum with integument, in oblique view, not hidden by short plumose pilosity (Figure 13C). (18) Basal area of metapostnotum metallic green, its length at least 0.8× that of metanotum, medially with longer longitudinal rugulosities, laterally with smooth surface (Figure 13C). (19) Metepisternum as in the female. (20) 1st and 2nd tarsomeres of foreleg with longest simple setae shorter than the summed length of the three apical tarsomeres. (21) S3 with longitudinal sulcus, posterolateral margin notched. (22) S4 with medial protruding process, profile of process triangular in lateral view; basal portion glabrous; posterolateral margin notched, notch not extending to basal half of sclerite.

Measurements
Approximate body length: (11.4–20.7); maximum width of head: (3.4–4.5); intertegular distance: (3.5–5.4); length of forewing with tegula: (10.8–16.1).
Comments

One specimen from Itu, São Paulo, and another from Nova Lima, Minas Gerais (Santos and Silveira 2009), exhibit a dark body coloration. The specimens from Mucugê, Bahia and another from Itatiaia, Rio de Janeiro, were collected respectively in Cambessedesia wurdackii (Melastomataceae) and Bauhinia forficata (Fabaceae). This is the largest species of Megalopta, with some females reaching almost 20 cm in body length, but many specimens exhibit smaller body size. These smaller specimens may be the result of parasitism by Fiebrigella spp. (Diptera: Chloropidae), whose larvae consume pollen of brood cells and are known to reduce the body size of adult Megalopta bees (Smith et al. 2008). Information on nests of this species was published by Sakagami and Moure (1967). Furthermore, specimens have been attracted by eugenol and methyl salicilate.

The present synonymy is based on the morphology of both sexes; many characters exhibit intraspecific variation, such as the shape of the labral elevation, length of metapostnotum, tergal punctuation and body size. Some individuals show purple tints in the basal area of metapostnotum adjacent to the rugulosities.

Distribution

BOLIVIA. Cochabamba: Villa Tunari. La Paz: Mapiri. BRAZIL. Acre: Acrelândia, Cruzeiro do Sul, Porto Acre, Rio Branco. Amapá: Pedra Branca do Amapari. Amazonas: Barcelos, Beruri, Fonte Boa, Humaitá, Itacoatiara, Japurá, Lábrea, Manaus, Novo Aripuanã, Presidente Figueiredo, Tabatinga. Bahia: Camacan, Encruzilhada, Lençóis, Mucugê, Salvador, Santa Terezinha. Espírito Santo: Concepção da Barra, Guarapari, Linhares, Santa Leopoldina. Goiás: Caldas Novas, Colinas do Sul, Jataí. Maranhão: Buriticupu. Mato Grosso: Aripuanã, Chapada dos Guimarães, Nova Lacerda, Nova Mutum, Nova Xavantina, Campo Novo do Parecis. Minas Gerais: Belo Horizonte, Bom Jesus do Amparo, Caratinga, Ipanema, Nova Lima, Santana do Riacho, Três Marias, Uberlândia, Viçosa. Pará: Alenquer, Belém, Belterra, Benevides, Bujaru, Capitãpoço, Itaituba, Melgaço, Ourém, Parauapebas, Peixe Boi, São Miguel do Guama, Tome-Açu, Tucuruí. Paraíba: Mamanguape. Paraná: Antonina, Morretes, São José dos Pinhais. Pernambuco: Caruaru, Jaqueira. Rio de Janeiro: Angra dos Reis, Arraial do Cabo, Cachoeiras de Macacu, Itatiaia, Macaé, Maricá, Teresópolis. Rondônia: Ariquemes, Guajará-Mirim, Itapuí do Oeste, Ouro Preto do Oeste, Porto Velho, Vilhena. Roraima: Atalaia, Pacaraima. Santa Catarina: Brusque, Joinville. São Paulo: Caraguatatuba, Juquiá, Itu, Macaubal, Miracatu, Ribeirão Grande, Sete Barras. ECUADOR. Sucumbios: Limoncocha. Sucumbios: Limoncocha. PERU. Cuzco: Espinar, La Convención, Quincemil, Urabamba. Junín: Chanchamayo. Huánuco: Leoncio Prado, Puerto Inca. Lima: Cañete. Loreto: Mariscal Ramón Castilla. Maynas. Madre de Dios: Mazuko, Santa Rosa, Tambopata. Pasco: Oxapampa. Puno: Carabaya. San Martín: San Martín. SURINAME. Brokopondo: Brokopondo. Paramaribo: Paramaribo. Saramacca: Calcutta. Sipaliwini: Kabaleibo. VENEZUELA. Amazonas: Puerto Ayacucho (Figure 16C).
Acknowledgements

We thank the numerous collectors of *Megalopta* referenced herein for specimens collected over the years and for indirectly making possible this study. We also thank all the curators and their institutions for making available material under their care. LMS thanks Fernando A. Silveira for encouraging the study of the taxonomy of *Megalopta* during the undergraduate studies. We also thank Fernando Silveira and Claudio J.B. Carvalho for making many suggestions to previous version of this publication; Antonio J.C. Aguiar and Rodrigo B. Gonçalves for separating the material deposited in MPEG and MZUSP respectively; Felipe Vivallo for checking the types deposited in BMNH; Vitor Nardino (*Taxon Line*) for taking photographs; Kevin A. Williams for help with grammar in the manuscript; and Rui C. Peruquetti, Victor H. Gonzalez, Terry Griswold, Ricardo Ayala, William T. Wcislo, Simon M. Tieney and I.C. (Kees) van Achterberg for donating specimens to the DZUP collection. We thank David Notton (BMNH), Jerome Rozen and (AMNH) and Luca Picciau (MSNT) for providing photographs of type material. Anthropologist Pedro R.A. Castro, ‘Fundação Nacional do Índio (FUNAI)’, is also thanked for providing information on Brazilian indigenous peoples. Finally, we thank ‘Conselho Nacional de Pesquisa e Desenvolvimento Tecnológico (CNPq)’ for providing the Master’s Degree Fellowship (process no. 130687/2008-1) to the first author and a research scholarship to the second author.

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Appendix 1. Checklist and notes on valid species of Megalopta

**Megalopta aegis** (Vachal, 1904) [aegis group]

*Halictus aegis* Vachal, 1904: 115. Lectotype male, designated by Moure & Hurd (1987: 235), Brazil: Goiás, Jataí (MNHP, not examined).

**Megalopta aeneicollis** Friese, 1926 [aegis group]

*Megalopta aeneicollis* Friese, 1926: 119, 122, 132. Lectotype female, designated by Santos & Silveira (2009:16), Brazil: Amazonas, Barcelos (ZMB, examined).

**Megalopta amoena** (Spinola, 1853) [amoena group]

*Halictus amoenus* Spinola, 1853: 85. Holotype male, Brazil: Pará (MSNT, examined through photographs)

*Megalopta idalia* Smith, 1853: 84. Syntypes, Brazil: Amazonas and Pará, Santarém (BMNH, not examined).

*Halictus argoides* Vachal, 1904: 115. Holotype male, Guiana (MNHP, not examined).

*Megalopta ochrias* Vachal, 1904: 115. Holotype male, Brazil: Goiás, Jataí (MNHP, examined).

*Megalopta ecuadoria* Friese, 1926: 127. Lectotype female, designated by Engel (2006:43), Ecuador: Guayas, Guayaquil (ZMB, examined).

*Megalopta centralis* Friese, 1926: 128. Lectotype male, designated by Engel (2006:43) Guatemala (ZMB, examined).

*Megalopta gibbosa* Friese, 1926: 128. Holotype male, Ecuador: Guayas, Guayaquil (ZMB, examined). **New synonymy.**

*Megalopta lecointei* Friese, 1926: 122. Lectotype female, presently designated (see above), Brazil: Pará, Óbidos (ZMB, examined). **New synonymy.**

*Megalopta vigilans* Cockerell, 1923:1. Holotype male, uncertain type locality (AMNH, examined through photographs). **New synonymy.**

**Megalopta armata** Friese, 1926 [sodalis group]

*Megalopta armata* Friese 1926: 132. Lectotype female, designated by Santos & Silveira (2009:16), Ecuador: Guayas, Guayaquil (ZMB, examined).
**Comments**

It is possible that this species is a junior synonym of *M. sodalis*.

*Megalopta atlantica* Santos & Silveira, 2009 [byroni group]

*Megalopta atlantica* Santos & Silveira, 2009: 14. Holotype male, Brazil: Minas Gerais, Ipanema (DZUP, examined).

*Megalopta atra* Engel, 2006 [atra group]

*Megalopta atra* Engel, 2006: 115. Holotype female, Panama: Chiriquí, Fortuna Research Station, 1200m (SEMK, not examined).

‘*Megalopta diurnalis’* Kelber et al. (2006: 67, 68, 69) [nomen nudum].

**Comments**

Two specimens of *Megalopta atra* were examined in the collection of David Roubik in STRI, with the following labels: ‘Museum Leiden, N. Panama, 1050m, Fortuna Chiriqui, 8°44′N 82°15′W, 07-13/02/1978′ H. Wolda, at light ‘*M. diurnalis’* Brooks & Engel’ (1♀, STRI); ‘Museum Leiden, North Panama, 1050m, Fortuna Chiriqui, 8°44′N 82°15′W, 09-16/02/1977′ H. Wolda, at light ‘*M. diurnalis’* Brooks & Engel’ (1♀, STRI).

*Megalopta boliviensis* Friese, 1926 [sodalis group]

*Megalopta boliviensis* Friese, 1926: 131. Lectotype female, designated by Santos & Silveira (2009:16), Bolivia: La Paz, Mapiri (ZMB, examined).

**Comments**

This species is most similar to *M. sodalis*, but differs from that species mainly in the bluish integumental color. Synonymy here would be premature without examining more material from Bolivia.

*Megalopta byroni* Engel, Brooks & Yanega, 1997 [byroni group]

*Megalopta byroni* Engel, Brooks & Yanega, 1997: 12. Holotype female, Panama: Panama, Barro Colorado Island (SEMK, not examined).

*Megalopta chaperi* (Vachal, 1904) [amoena group]

*Halictus chaperi* Vachal, 1904: 113. Holotype female, Venezuela (MNHP, not examined).

*Megalopta cuprea* Friese, 1911 [sodalis group]

*Megalopta cuprea* Friese, 1911: 453. Lectotype female, designated by Santos & Silveira (2009:16), Bolivia: La Paz, Mapiri (ZMB, examined).
**Megalopta furunculosa** Hinojosa-Díaz & Engel, 2003 [byroni group]

*Megalopta furunculosa* Hinojosa-Díaz & Engel, 2003: 137. Holotype female, Guyana: Iwokrama Forest, 26 km SW Kurupukari (SEMK, not examined).

**Megalopta genalis** Meade-Waldo, 1916 [sodalis group]

*Megalopta genalis* Meade-Waldo, 1916: 452,453. Holotype female, Panama: Bugaba (BMNH, not examined).

**Megalopta guarani** sp. n. Santos & Melo [byroni group]

**Megalopta guimaraesi** Santos & Silveira, 2009 [amoena group]

*Megalopta guimaraesi* Santos & Silveira, 2009: 10. Holotype female, Brasil: Minas Gerais, Jaboticatubas, ‘Serra do Cipó’ (DZMG, examined).

**Megalopta huaoranii** Gonzalez, Griswold and Ayala, 2010 [byroni group]

*Megalopta huaoranii* Gonzalez, Griswold & Ayala, 2010: 260. Holotype female, Ecuador: Napo, 'Yasuni Res.' (BLCU, not examined).

**Megalopta karitiana** sp. n. Santos & Melo [byroni group]

**Megalopta mapinguari** sp. n. Santos & Melo [byroni group]

**Megalopta mura** sp. n. Santos & Melo [amoena group]

**Megalopta munduruku** sp. n. Santos & Melo [sodalis group]

**Megalopta nigriventris** Friese, 1926 [amoena group]

*Megalopta nigriventris* Friese, 1926: 119, 121, 129. Holotype female, French Guiana: ‘Nouveau Chantier, Bas Maroni’ (ZMB, examined).

**Megalopta nitidicollis** Friese, 1926 [aegis group]

*Megalopta nitidicollis* Friese, 1926: 121, 122, 130. Lectotype female, presently designated (see above), Bolivia: Cochabamba, Tarata (ZMB, examined).

**Megalopta noctifurax** Engel, Brooks & Yanega, 1997 [byroni group]

*Megalopta noctifurax* Engel, Brooks & Yanega, 1997: 14. Holotype female, Ecuador: Napo, Coca (CUIC, not examined).

**Megalopta notiocleptis** Engel, 2011 [byroni group]

*Megalopta notiocleptis* Engel, 2011: 67. Holotype female, Bolivia: Cochabamba, ‘Cristal Mayu’ (SNCBSH, not examined).

**Megalopta peruana** Friese, 1926 [sodalis group]

*Megalopta peruana* Friese, 1926:121, 131. Holotype female, Peru (ZMB, examined).
Comments
It is possible that this species is a junior synonym of *M. sodalis*.

*Megalopta piraha* sp. n. Santos & Melo [yanomami group]

*Megalopta purpurata* Smith, 1879 [byroni group]

*Megalopta purpurata* Smith, 1879: 48. Holotype male, Brazil: Amazonas, Tefé (BMNH, examined through photographs).

*Megalopta sodalis* (Vachal, 1904) [sodalis group]

*Halictus sodalis* Vachal, 1904: 114. Holotype female, Brazil: Santa Catarina, Joinville (MNHP, not examined).

*Halictus fornix* Vachal, 1904: 114. Holotype female, Peru: ‘Huallaga’ (MNHP, not examined). **New synonymy.**

*Halictus aethautis* Vachal, 1904:115. Holotype male, Peru: Lima, Callanga (MNHP, not examined).

*Megalopta sulciventris* Friese, 1926 [aegis group]

*Megalopta sulciventris* Friese, 1926: 129. Lectotype female, designated by Santos & Silveira (2009:16), French Guiana: ‘Nouveau Chantier, Bas Maroni’ (ZMB, examined).

*Megalopta tacarunensis* Cockerell, 1923 [sodalis group]

*Megalopta tacarunensis* Cockerell, 1923: 444. Holotype male, Guyana: ‘Cattle Trail Survey, Takaruni R. (sec. 2)’ (BMNH, not examined).

*Megalopta tetewana* Gonzalez, Griswold & Ayala, 2010 [amoena group]

*Megalopta tetewana* Gonzalez, Griswold & Ayala, 2010: 256. Holotype female, Mexico: Jalisco, Chamela (BLCU, not examined).

Comments
It is possible that this species is an additional junior synonym of *M. amoena*.

*Megalopta xavante* sp. n. Santos & Melo [byroni group]

*Megalopta yanomami* sp. n. Santos & Melo [yanomami group]

**APPENDIX 2. Data label of additional material examined**

*Megalopta aegis*

**BRAZIL:** *Alagoas*: ‘BRASIL:AL\ Ibateguara, 400m\ 10-20.iii.1994\ V.O. Becker col.’ (1♀, 1♂, DZUP). *Bahia*: ‘Ituberá Reserva\ Michelín\ 13°50’S; 39°15’W\ 01\ 05\ 2007\ Equipe Ecopol Leg’ (1♀, UFBA). *Ceará*: ‘Ceará\ Maranguape\ 14-9-1908\ Ducke’ ‘Brazil\ Estado do\ Ceará’ (1♀, DZUP). *Distrito Federal*: ‘BRASIL, DF, Brasília, Faz.\ Água Limpa UNB, 1050m\ 15°56’49”S 47°56’15”W’ ‘25.iii.2008, arm. luz\ J.A.
Rafael, F.F. Xavier Fº(1♀, INPA); ‘Coleção\ EMBRAPA-CPAC\ Nº10536’
‘Planaltina, DF\ BRASIL – 1000m\ 25.ix.1985\ V.O. Becker col.\ 15º35’S\ 47º42’W’
(1♀, DZUP); ‘Planaltina, DF\ BRASIL – 1000m\ 18.ix.1984\ V.O. Becker col.\ 15º35’S\ 47º42’W’
(2♀, DZUP); ‘Planaltina, DF\ BRASIL – 1000m\ 22.ii.1985\ V.O. Becker col.\ 15º35’S\ 47º42’W’
(1♀, DZUP); ‘Planaltina, DF\ BRASIL – 1000m\ 3.viii.1986\ V.O. Becker col.\ 15º35’S\ 47º42’W’
(5♀, 1♂, DZUP); ‘BRASIL: DF\ Brasília, 1000m\ 15.IX.1984\ V.O. Becker col.\ (2♀, DZUP).

Espírito Santo: ‘Brasil, ES, Linhares\ Res. Vale Rio Doce, sede 56m\ 19º09’05’S\ 40º04’10’W, 07.v.2007, J. Rafael & F. Xavier Fo, luz’ (1♀, DZUP);
‘Brasil, ES, Linhares\ 19.XI.1990 (3♀, DZUP); ‘Ribeiro do Engano\ Espírito Santo\ C.I.O. Cruz 10-40’ (1♀, DZUP); ‘Rib. do Engano E.S.\ Vale do Itaúnal\ Trav. E Santos-9-10-42’ (1♀, DZUP).

Goiás: ‘BRASIL: GO\ Alto Paraíso\ 1100m 4.x.1985\ V.O. Becker col’ (5♀, DZUP); ‘13079-38790’ ‘21h-22h’ ‘Caldas Novas GO\ BRASIL
19/10/2006\ S.C. Augusto’ (1♀, DZMG); ‘13079-38791’ ‘21h-22h’ ‘Caldas Novas GO\ BRASIL
19/10/2006\ S.C. Augusto’ (1♀, DZMG); ‘13079-38792’ ‘18h-45-19h-45’ ‘Caldas Novas\ GO\ BRASIL 20\ 10\ 2006\ S.C. Augusto (1♂, DZMG); ‘BRASIL, GO, Caldas\ Novas Parque Est. Serra de Caldas Novas, 1000m’
‘17º46’13’S – 46º39’22’W – 22.23.iio.2008, Luiz J.A. Rafael & F.F. Xavier Fº’ (3♀, INPA); ‘Brasil, Goiás, Chapada dos\ Veadeiros, Vale Dorado,’ 14º11’W, 07.v.2007, J. Rafael & F. Xavier Fº, luz’ (1♂, DZUP);
‘BRASIL: GO\ Goiás, Cor\ Paciência\ A. Raw col\ 12.10.1984 (1♀, DZUP);’
‘Faz. Nova Orândia\ Jataí, GO-Brasíl I.1964-Martins, Morgante & Silva.’ ‘À luz’ (1♀, MZUSP).

Maranhão: ‘22-x-2001 SERRA DO\ PENITENTE, BALSAS\ MA, 500m\ C. MIELKE LEG’ (4♀, DZUP); ‘Brasil, Maranhão\ Serra do Penitente,\ 01-02.\ xi.2002, C. Mielke’ (3♀, 2♂, DZUP); ‘Brasil (MA), Caxias\ Res. Ecol. Inhamum\ Armadilha Luminosa’ ‘03-05.viii.2005, F. Limeira-de-Oliveira\ et al cols.’ (6♀, INPA); ‘Brasil (MA), Caxias\ Riac. Fazenda Nova\ Armadilha Luminosa\ 25-26.\ ii.2004, F. Limei\ ra-de-Oliveira et al.’ (1♀, 3♂, INPA); ‘Brasil, Ma, Caxias\ Res. Ecol. Inhamum\ Lenço e luz mista’ 01-03.05. F. Limeira-de-Oliveira et al’ (3♀, INPA);
‘BRASIL (MA), Mirador\ Parque Est. Mirador\ Base de Geraldina’ Arma. Luminosa\ 20-24.xiii.2006, R.O.\ Souza; J.C. Silva et al’ (1♂, INPA); ‘Brasil, Maranhão, Urbano\ Santos 3º14’S 43º25’W\ 20.x.2009, C.M. Maia leg.’ (2♀, INPA).

Mato Grosso: ‘Barra do Tapirapé\ Mato Grosso – Brasíl XI. 1964\ B. Malkin col.’ (3♀, MZUSP); ‘Chapada dos\ Guimarães (Buriti)\ MT BRASIL
X.1972\ G.R. Kloss & F. Val’ (1♀, MZUSP); ‘BRASIL: MT\ Chapada\ Guimarães\ 25.v.1989\ VO Becker’ (1♂, DZUP); ‘BRASIL MT Nova Mutum 20.1.2000 H.F. Mendes leg’ (1♀,1♂, LEBIC); ‘Brasil, MT\ 6 km a W de Chapada dos Guimarães, 770m\ 15.452’S 55.806’W\ 8.x.2012, Cavichioli, Melo, Rosa & Santos’ ‘Armadilha Luminosa’ (1♀, 11♂, DZUP); ‘Jacaré – P.N. Xingu\ MT Brasil XI.1961\ Alvarenga, Werrer’ (1♂, DZUP); ‘Rio Caraguatá\ Mato Grosso\ Brazil III 1953\ F. Plaumann’ (1♂, DZUP); ‘Utiariti\ Rio Papagaio, Mt\ 1-12.\ XI.1966\ Lenko & Pereira’ (1♀, MZUSP); ‘Alto Xingu\ M. Grosso P. Leonardo Agost\ R. Arlé Col. 1963’ (1♀, MZEUG). ‘Mato Grosso do Sul: ‘BRASIL:MS\ Corumbá, 600m\ 20-22.iv.1985\ V.O. Becker col.’ (1♀, DZUP); ‘Brasil, Mato
Grosso do Sul, 20 Km ao norte de\ Rio Verde, 7.ix.2003\ Mielke & Casagrande’ (1♀, DZUP); ‘Serra do Urucum\ Corumbá – Mato Grosso\ Brasil 5.XII.1960\ K.
Entomofauna do Pq. E. Rio Doce

Marliéria MG\ BRASIL 08/03/1978\ D’ Andretta e Perreira’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12771-37549’ ‘Marliéria MG\ BRASIL 08/07/1978\ D’ Andretta e Monteiro’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12771-37546’ ‘Marliéria MG\ BRASIL 08/07/1978\ D’ Andretta e Monteiro’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12771-37550’ ‘Marliéria MG\ BRASIL 08/07/1978\ D’ Andretta e Monteiro’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12771-37552’ ‘Marliéria MG\ BRASIL 08/07/1978\ D’ Andretta e Monteiro’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12771-37562’ ‘Marliéria MG\ BRASIL 08/07/1978\ D’ Andretta e Monteiro’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12775-37628’ ‘Marliéria MG\ BRASIL 01/12/1978\ D’ Andretta e Monteiro’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12787-37701’ ‘Marliéria MG\ BRASIL 22/07/1980\ D’ Andretta e Monteiro’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12787-37709’ ‘Marliéria MG\ BRASIL 22/07/1980\ D’ Andretta e Monteiro’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12787-37715’ ‘Marliéria MG\ BRASIL 22/07/1980\ D’ Andretta e Monteiro’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12787-37731’ ‘Marliéria MG\ BRASIL 22/07/1980\ D’ Andretta e Monteiro’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12787-37737’ ‘Marliéria MG\ BRASIL 22/07/1980\ D’ Andretta e Monteiro’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12758-37234’ ‘Marliéria MG\ BRASIL 20/10/1980\ Monteiro & Mascarenhas’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12758-37235’ ‘Marliéria MG\ BRASIL 20/10/1980\ Monteiro & Mascarenhas’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12758-37236’ ‘Marliéria MG\ BRASIL 20/10/1980\ Monteiro & Mascarenhas’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12758-37237’ ‘Marliéria MG\ BRASIL 20/10/1980\ Monteiro & Mascarenhas’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12758-37238’ ‘Marliéria MG\ BRASIL 20/10/1980\ Monteiro & Mascarenhas’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12758-37239’ ‘Marliéria MG\ BRASIL 20/10/1980\ Monteiro & Mascarenhas’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12758-37240’ ‘Marliéria MG\ BRASIL 20/10/1980\ Monteiro & Mascarenhas’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12758-37241’ ‘Marliéria MG\ BRASIL 20/10/1980\ Monteiro & Mascarenhas’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12758-37242’ ‘Marliéria MG\ BRASIL 20/10/1980\ Monteiro & Mascarenhas’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12758-37243’ ‘Marliéria MG\ BRASIL 20/10/1980\ Monteiro & Mascarenhas’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12758-37244’ ‘Marliéria MG\ BRASIL 20/10/1980\ Monteiro & Mascarenhas’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12758-37245’ ‘Marliéria MG\ BRASIL 20/10/1980\ Monteiro & Mascarenhas’ (♀, DZMG);
‘Entomofauna do Pq. E. Rio Doce\ 12758-37246’ ‘Marliéria MG\ BRASIL 20/10/1980\ Monteiro & Mascarenhas’ (♀, DZMG).

Minas Gerais: 29-i-3-ii-2003 ESTAÇÃO BIOLÓGICA DE CARATINGA, CARATINGA, MG, 400m\ MIELKE & CASAGRANDE LEG.’ (♀, DZUP).
‘Marliéria MG\ BRASIL 20/10/1980\ Monteiro & Mascarenhas’ (♀, DZMG); ‘Entomofauna do\ Pq. E. Rio Doce\ 12787-37707’ ‘Marliéria MG\ BRASIL 22/07/1980\ D’ Andretta e Monteiro’ (♀, DZMG); ‘13068-38768’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 1/10/2005\ L. M. Santos’ (♀, DZMG); ‘13071-38772’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 28/04/2006\ L. M. Santos’ (♀, DZMG); ‘13071-38773’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 28/04/2006\ L. M. Santos’ (♀, DZMG); ‘13071-38772’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 28/04/2006\ L. M. Santos’ (♀, DZMG); ‘13072-38778’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 28/04/2006\ L. M. Santos’ (♀, DZMG); ‘Reinventário\ EPDA de Peti\ 8814-26549’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 11/01/2003\ C. F. Cardoso’ (♀, DZMG); ‘Reinventário\ EPDA de Peti\ 8814-26550’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 11/01/2003\ C. F. Cardoso’ (♀, DZMG); ‘Reinventário\ EPDA de Peti\ 8814-26551’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 11/01/2003\ C. F. Cardoso’ (♀, DZMG); ‘10286-30097’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 14/11/2003\ A. F. Kumagai’ (♀, DZMG); ‘10286-30098’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 14/11/2003\ A. F. Kumagai’ (♀, DZMG); ‘10286-30099’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 14/11/2003\ A. F. Kumagai’ (♀, DZMG); ‘10287-30110’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 15/11/2003\ A. F. Kumagai’ (♀, DZMG); ‘10287-30111’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 15/11/2003\ A. F. Kumagai’ (♀, DZMG); ‘10287-30112’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 15/11/2003\ A. F. Kumagai’ (♀, DZMG); ‘Pq. E. Rio Doce\ 5186-14249’ ‘Marliéria MG\ BRASIL 01/01/1997\ D. A. Yanega’ (♀, DZMG); ‘Serra do Cipó\ 5187-14250’ ‘BRAZIL, Minas Gerais\ Est. Ecológica do Peti\ 10-X-1997’ (♀, DZMG); ‘Serra do Cipó\ 5187-14250’ ‘BRAZIL, Minas Gerais\ Est. Ecológica do Peti\ 10-X-1997’ (♀, DZMG); ‘Abelhas Noturnas\ EPDA de Peti\ CEMIG\ 8434-25751’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 30/05/2003\ L. M. Santos’ (♀, DZMG); ‘Abelhas Noturnas\ EPDA de Peti\ CEMIG\ 8435-25752’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 31/05/2003\ L. M. Santos’ (♀, DZMG); ‘13068-38761’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 30\ 09\ 2005\ L. M. Santos’ (♀, DZMG); ‘13068-38762’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 30\ 09\ 2005\ L. M. Santos’ (♀, DZMG); ‘13068-38763’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 30\ 09\ 2005\ L. M. Santos’ (♀, DZMG); ‘13069-38765’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 01\ 10\ 2005\ L. M. Santos’ (♀, DZMG); ‘13069-38766’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 01\ 10\ 2005\ L. M. Santos’ (♀, DZMG); ‘13069-38767’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 01\ 10\ 2005\ L. M. Santos’ (♀, DZMG); ‘10287-30109’ ‘São Gonçalo do Rio Abaixo MG\ BRASIL 15\ 11\ 2003\ A. F. Kumagai’ (♀, DZMG); ‘S. do Cipó\ 9093-27157’ ‘Jaboticatubas MG\ BRASIL 07/10/2002\ E. O. Machado’ (♀, DZMG); ‘Curso de campo\ ECMVS/DZMG\ Pq. E. Rio Preto\ 10888-32170’ ‘S. Gonçalo do Rio Preto MG\ BRASIL 25/09/2003\ L. R. R. Faria Jr’ (♀, DZMG); ‘Curso de campo\ ECMVS/DZMG\ Pq. E. Rio Preto\ 10888-32169’ (♀, DZMG); ‘S. Gonçalo do Rio Preto MG\ BRASIL 17/09/2003\ L. R. R. Faria Jr’ (♀, DZMG); ‘Pq. E. Rio Preto\ 9083-27138’ ‘São Gonçalo do Rio Preto MG\ BRASIL 18/10/2000\ J. A. Lombardi’ (♀, DZMG); ‘Pq. E. Rio Preto\ 9083-27141’ ‘São Gonçalo do Rio Preto MG\ BRASIL 03/04/2003\ J. A. Lombardi’ (♀, DZMG); ‘Pq. E. Rio Preto\ 9088-27144’ ‘São Gonçalo do Rio Preto MG\ BRASIL 15/10/2003\ F. S. Faria’ (♀, DZMG); ‘Est. Pirapitinga\ 3042-8974’ ‘Três Marias MG\ BRASIL 01/05/1998\ D. A. Yanega’ (♀, DZMG); ‘Est. Pirapitinga\
3042-8975 ‘Três Marias MG\ BRASIL 01/05/1998\ D. A. Yanega’ (♀, DZMG); ‘Serra do Cipó\ 5187-142522’ ‘Santana do Riacho MG\ BRASIL 12/03/1997\ D. A. Yanega’ (♀, DZMG); ‘Serra do Cipó\ 5202-14272’ ‘Santana do Riacho MG\ BRASIL 12/03/1997\ D. A. Yanega’ (♀, DZMG); ‘Serra do Cipó\ 5212-14285’ ‘Santana do Riacho MG\ BRASIL 12/03/1997\ D. A. Yanega’ (♀, DZMG); ‘Serra do Cipó\ 5212-14286’ ‘Santana do Riacho MG\ BRASIL 12/03/1997\ D. A. Yanega’ (♀, DZMG); ‘Serra do Cipó\ 5212-14282’ ‘Santana do Riacho MG\ BRASIL 12/03/1997\ D. A. Yanega’ (♀, DZMG); ‘Serra do Cipó\ 5212-14287’ ‘Santana do Riacho MG\ BRASIL 12/03/1997\ D. A. Yanega’ (♀, DZMG); ‘Serra do Cipó\ 2235-7050’ ‘Serra Norte\ Serraria\ COL. NOTURNA\ 19-X-1984’ (♀, DZMG). **Pará:** ‘Brasil Pará\ Alenquer\ 2 Julho de 1979’ ‘Brasil Pará\ W França’ (1♀, 2♂, MPEG); ‘Brasil Pará\ Alenquer\ 2 Julho de 1979’ ‘Brasil Pará\ P Tadeu’ (4♀, MPEG); ‘BRASIL, PA, Alter do Chão, Igarapé Sonrisal\ 18.iv.2008, arm. luz J.A. Rafael, F.F. Xavier Fº.’ (♀, INPA); ‘BRASIL, Pará, Belterra\ Rio Xingú, Rodovia Transamazônica’ ‘03°05′52″S – 51°41′31″W\ 07.iv.2008, armadilha luz J.A. Rafael & F.F. Xavier Fº.’ (1♀, 1♂, INPA); ‘Brasil, PA, Belterra\ FLONA Tapajós, 100m 02°36′15″S – 54°56′35″W’ ‘15-16.iv.2008, arm. luz J.A. Rafael, F.F. Xavier Fº’ (2♀, 1♂, INPA); ‘PA Bragança\ 27-v-1978’ ‘Brasil Pará\ R B Neto’ (1♀, MPEG); ‘PA Bragança\ 26-1978’ ‘Brasil Pará\ WL Overel’ (1♀, MPEG); ‘Brasil Pará\ Bujaru\ 15.iv.1978’ ‘Brasi Pará\ R B Neto’ (7♀, MPEG); ‘Pará Bujaru\ 24-III-1978’ ‘Brasil Pará N. de Souza’ (1♀, MPEG); ‘Brasil Pará\ Campus do MPEG\ 17.II.1991’ ‘Brasil Pará\ Márcio Zanuto’ (1♀, MPEG); ‘BRASIL: PA\ Capitão Poço\ 28-31,i.1984’ V.O. Becker col’ (7♀, DZUP); ‘BRASIL: PA\ Capitão Poço\ 19-22.xi.1984’ V.O. Becker col’ (8♀, DZUP); ‘Aldeia Yavaruluhi\ (Igarapé Guarupe-Uma\ 45 Km E Canindé)’ Pará Brasil XII. 1964. B. Malkin (♀, MZUSP); ‘OBIDOS\ Pará BRASIL\ Dezembro 1955\ F.M. Oliveira’ ‘COLEÇÃO\ CAMPOS SEABRA’ (1♀, DZUP); ‘Obidos\ 1905’ P. Lecointe ‘Brazil\ Estado do Pará’ (1♀, DZUP); ‘Brasil Pará\ B. Mascarenhas’ ‘Armadilha de Luz’ (1♀, MPEG); ‘Brasil Pará\ B. Mascarenhas’ ‘Armadilha de Luz’ (1♀, MPEG); ‘Brasil Pará\ B. Mascarenhas’ ‘Armadilha de Luz’ (1♀, MPEG); ‘Brasil Pará\ S. de Souza’ (♀, 1♂, INPA); ‘Brasil Pará\ P. Lecointe’ ‘Brazil\ Estado do Pará’ (♀, DZUP); ‘Brasil Pará\ Ourém\ Faz. Gavião Real\ 20-VIII-1991’ ‘Brasil Pará\ Ourém\ Patuatuéa/Faz. Gavião Real\ 30.IV. a 3.V.1992\ Arm. Luz\ Col B. Mascarenhas e eq.’ (1♀, MPEG); ‘Brasil Pará\ Ourém\ Patuatuéa\ 19-VIII-1992’ ‘Brasil Pará B. Mascarenhas’ ‘Armadilha de Luz’ (♀, MPEG); ‘Brasil Pará\ Ourém\ Patuatuéa\ 20-VIII-1992’ ‘Brasil Pará B. Mascarenhas’ ‘Armadilha de Luz’ (2♀, MPEG); ‘Brasil Pará\ Ourém\ Patuatuéa/Faz. Gavião Real\ 30.IV. a 3.V.1992\ Arm. Luz\ Col B. Mascarenhas e eq.’ (1♀, MPEG); ‘Brasil Pará\ Ourém\ Patuatuéa/Faz. Gavião Real\ 30.IV. a 3.V.1992\ Arm. Luz\ Col B. Mascarenhas e eq.’ (1♀, MPEG); ‘Brasil Pará\ Ourém\ Patuatuéa/Faz. Gavião Real\ 30.IV. a 3.V.1992\ Arm. Luz\ Col B. Mascarenhas e eq.’ (1♀, MPEG); ‘Brasil Pará\ Ourém\ Patuatuéa/Faz. Gavião Real\ 30.IV. a 3.V.1992\ Arm. Luz\ Col B. Mascarenhas e eq.’ (1♀, MPEG); ‘Brasil Pará\ Ourém\ Patuatuéa/Faz. Gavião Real\ 30.IV. a 3.V.1992\ Arm. Luz\ Col B. Mascarenhas e eq.’ (1♀, MPEG); ‘Brasil Pará\ Ourém\ Patuatuéa/Faz. Gavião Real\ 30.IV. a 3.V.1992\ Arm. Luz\ Col B. Mascarenhas e eq.’ (1♀, MPEG); ‘Brasil Pará\ Ourém\ Patuatuéa/Faz. Gavião Real\ 30.IV. a 3.V.1992\ Arm. Luz\ Col B. Mascarenhas e eq.’ (1♀, MPEG).
HYM\ 11005591’ (1♀, MPEG); Brasil Par\ Serra Norte\ N3\ 20.vi.1985 ‘MPEG HYM\ 11005601’ (1♀, MPEG); Brasil Par\ Serra Norte\ N-1. C/LUZ\ 19-IX-1985 ‘Brasil Pará J. Dias’ ‘MPEG HYM\ 11005598’ (1♀, MPEG); ‘Brasil Pará\ Tome Açu\ 18.IX.1978 ‘Mata de terra firme\ Isca luminosa\ Captura noturna’ (4♀, MPEG); ‘BRASIL Pará\ Rio Trombetas\ LAGO JUGUIRIRI\ 6-III-1986’ ‘U. Barbosa’ (1♀, INPA); ‘BRASIL Pará\ Rio Trombetas\ LAGO CAETANO\ 9-III-1986’ Eq.APOIDEA’ (1♀, INPA); ‘PA: BR-14 Km 93\ Belém-Brasilia\ Ago-out.1959\ Exp.Dep.Zoo.’ (1♀, MZUSP); ‘Brasil Pará\ Bujaru\ 15.ix.1978 ‘Brasil Para\ R B Neto’ (1♀, MPEG); ‘Brasil Pará Tucuruí\ Rio Tocantins\ Base 4\ 8 a 22. II.1985 ‘Brasil Pará\ N. Degallier’ ‘Armadilha Interceptação’ (1♀, MPEG). \ Paraiba: MAMANGUAPE, PB\ Res. Biol. Guaribas\ Brasil, 14.1.1999 C. Schlindwein leg. ‘13749 F:93\ Luz Negra 4:15 ‘285 UFPE’ (1♀, UFPE); ‘MAMANGUAPE, PB\ Res. Biol. Guaribas\ Brasil, 14.1.1999 C. Schlindwein leg. ‘13748 F:93\ Luz Negra 4:15 ‘1200 UFPE’ (1♀, UFPE). \ Pernambuco: ‘Igarassu PE\ Usin. S. José: Macacos\ Brasil 22.01.2010 A.T. Carvalho leg. ‘L196’ luz negra’ ‘61169’ (1♀, UFPE); ‘Igarassu PE\ Usin. S. José: Macacos\ Brasil 22.01.2010 A.T. Carvalho leg. ‘L196’ luz negra’ ‘61170 UFPE’ (1♀, UFPE); ‘Paudalho, PE\ Brasil 24/11/2003\ Oliveira, H. leg. ‘44465 UFPE’ ‘L119’ (1♀, UFPE); ‘TAPACURÁ PE\ Brasil, 10.2000\ L. Pierrot leg. ‘1823 UFPE’ ‘L 124’ sem anotações ‘Megalopta sp.2\ A1036♀ Moure det.2000’ (1♀, UFPE). \ Rio Grande do Norte: ‘Brasil, RN, Portalegre\ Cachoeira do Pinga, 06°00’58”S 37°59’30”W\ 500m, 21.v.2007, J.A.\ Rafael & F.F. Xavier Fo.,\ luz’ (2♀, DZUP); ‘Brasil, R. G. Norte, Natal, III.1952, M. Alvarenga leg. (1♀, DZUP). \ Pernambuco: ‘Igarassu PE\ Usin. S. José: Macacos\ Brasil 22.01.2010 A.T. Carvalho leg. ‘L196’ luz negra’ ‘61169’ (1♀, UFPE); ‘Igarassu PE\ Usin. S. José: Macacos\ Brasil 22.01.2010 A.T. Carvalho leg. ‘L196’ luz negra’ ‘61170 UFPE’ (1♀, UFPE); ‘Paudalho, PE\ Brasil 24/11/2003\ Oliveira, H. leg. ‘44465 UFPE’ ‘L119’ (1♀, UFPE); ‘TAPACURÁ PE\ Brasil, 10.2000\ L. Pierrot leg. ‘1823 UFPE’ ‘L 124’ sem anotações ‘Megalopta sp.2\ A1036♀ Moure det.2000’ (1♀, UFPE). \ Rio Grande do Norte: ‘Brasil, RN, Portalegre, Cachoeira do Pinga, 06°00’58”S 37°59’30”W\ 500m, 21.v.2007, J.A.\ Rafael & F.F. Xavier Fo.,\ luz’ (2♀, DZUP); ‘Brasil, R. G. Norte, Natal, III.1952, M. Alvarenga leg. (1♀, DZUP). \ Rondônia: ‘Brasil, RO, Itapuã\ do Oeste, Flona\ do Jamari, 110m\ 9,260°S 62.913°W\ 4.ix.2012, Cavichioli\ Melo, Rosa & Santos’ ‘Armadilha Luminosa’ (2♀,1♂ DZUP). ‘Brasil, RO, Itapuã\ do Oeste, Flona\ do Jamari, 90m\ 9,146°S 63.012°W\ 5.ix.2012, Cavichioli\ Melo, Rosa & Santos’ ‘Armadilha Luminosa’ (8♀, 1♂ DZUP). \ São Paulo: ‘Brasil, São Paulo,\ Bauru, APA Água Limpa, 22°21’S 49°00’W\ 09.x.2008, Ninho 1\ L.M. Santos & S. Tierney’ (1♀, DZUP); ‘Brasil, São Paulo,\ Bauru, APA Água Limpa, 22°21’S 49°00′W\ 09.\ x.2008, Ninho 4\ L.M. Santos & S. Tierney’ (1♀, DZUP); ‘Brasil, São Paulo,\ Bauru, APA Água Limpa, 22°21’S 49°00’W\ 09.x.2008, Ninho 5\ L.M. Santos & S. Tierney’ (3♀, DZUP); ‘Fazenda Sta.Carlota\ Cajuru-SP\ BR U.V.15/IX /1993 Mateus, S. leg.’ (1♀, DZUP); ‘UNESP – Bauru, SP\ Brasil 10/12/1998\ Col. R. Marono P\ EUG EE’ (1♀, DZUP); ‘Brasil, São Paulo, São Carlos\ 25.ix.1995\ M. Costa’ (1♀, DZUP). \ Tocantins: ‘BRASIL: GO\ Ilha do Bananal\ Rio Javari, 200m\ 14-19.ix.1985\ V.O. Becker col.’ (9♀, DZUP).

Megalopta aeneicollis

BRAZIL: Amazonas: ‘BRASIL, Amazonas\ Barcelos, viii.2008\ Rio Aracâ\ 0° 37’11”S, 62°52’34”W’ ‘Na luz, no barco\ A. Filho & R. Machado’ (1♀, 1♂, INPA); ‘BRASIL, Amazonas\ Barcelos, Bacuquara\ 0°09’09”N, 63°10’38”W\ viii.2007 ‘Luz mista Mercúrio\ A.S. Filho & T. Krolow’ (1♂, INPA); ‘BR, AMAZONAS, BARCELOS\ RIO PADUARI, COM\ ACUQUAIA, 8-10-2010\ 0°13’36”\ N/ 63°59’20”\ W MIELKE & CASAGRANDE LEG.’ (1♀, DZUP); ‘BRASIL: Amazonas State,\ Barcelos, Rio Paduari, Com. Aarão/Ararinha, 00.50487N\ 064.05831W Light 04-08/VI\ 2010 Takiya E Cavichioli’ (1♀, DZUP); ‘Amazonas Manaus\ Parko 12.1941’ ‘Megalopta\ amazonica\ P. Moure 1951’; ‘Bento
Megalopta nitidicollis

**BOLIVIA:** La Paz: ‘NIGRILLANI\ NOR – YUNGA\ I – 50\ WILLNER’ (1♀, DZUP). **BRAZIL:** Acre: ‘Capixaba, Acre\ armadilha luminosa\ mata continua’ (1♀, DZUP); ‘Rio Branco – Ac\ Brasil 06\ 06\ 1996\ RECCO, R.D. leg’ (1♀, DZUP); ‘Rio
Bittencourt – AC\ Brasil 20/4/1993\ E.F. MORATO’ 'LUZ\ MIXTA’ (2♀, INPA); ‘BRACruzeiro do Sul\ 61° BIS Hotel de Trânsito\ 07°36'26"S/ 72°40'55"W\ 21-22/XI/1996\ Motta,C.S. et alii col’ ‘Luz mista mercúrio\ Luz negra BL e BLB\ Lençol’ ‘0019546’ (1♀, INPA); ‘BRACruzeiro do Sul\ 61° BIS Hotel de Trânsito\ 07°36'26"S/ 72°40'55"W\ 21-22/XI/1996\ Motta,C.S. et alii col’ ‘Luz mista mercúrio\ Luz negra BL e BLB\ Lençol’ ‘0019547’ (1♂, INPA). Amazonas: ‘BRASIL AM, São Paulo\ de Oliveira, Bonfim\ 13.ix.2005, arm. luz, J.A. Rafael & F.F. Xavier F°’ (1♂, INPA); ‘Brasil, AM, Ipixuna, Rio\ Liberdade, Com. SãoVincente, Estrião da Preta,\ 175m, 7°21'47"S 71°52'07"W\ 11-14.v.2011, R. Cavichioli’ (1♀, INPA); ‘Brasil, Amazonas, Rio\ Abacaxis\ 140 km SE, 26-28.v.2008\ 05°15'09"S\ 60°41'52"W D.M. Takiya, luz’ (1♀, DZUP); ‘Brazil, Amazonas State,\ Rio Abacaxis, Faxiúba\02. vi.2008 01°28S\ 58°34W, J.A. Rafael,\ D.M. Takiya et al.\ light trap at 30m.’ (1♂, DZUP). Rondônia: ‘BRASIL: RO\ Ariquemes\ 180m\ 13-16 iv.1989\ V.O. Becker’ (1♂, DZUP); ‘BRASIL: Rondônia\ Ji-Paraná\ 14-II-1983\ equipe J.R. Arias’ (2♀, INPA); ‘Brasil Rondônia\ Ji-Paraná Gleba G\ Est.Rio Machadol\ 14.VI-1983\ ‘Brasil RO\ J.R. Arias’ (1♂, MPEG); ‘BRASIL: RO\ Porto Velho,\ 180m\ 24-30.iv.1989\ V. O. Becker’ (2♂, DZUP); ‘BRASIL: RO\ Porto Velho,180m\ 2-12.v.1989\ V.O. Becker’ (1♂, DZUP); ‘Brasil, RO, Itapuâ\ do Oeste, Flona\ do Jamari, 110m\ 9.260'S 62.913°W 4.ix.2012, Cavichioli\ Melo, Rosa & Santos’ ‘Armadilha\ Luminosa’ (7♂ DZUP); ‘Brasil, RO, Itapuâ\ do Oeste, Flona\ do Jamari, 90m\ 9.146'S 63.012°W 5.ix.2012, Cavichioli\ Melo, Rosa & Santos’ ‘Armadilha\ Luminosa’ (2♂, DZUP). PERU: Junin: ‘SATIPO- PERU\ 750 m\ Coll. J. Lindemans’ (1♂, 1♀, RMNH), ‘Megalopta\ nitidicollis Friese’ (♂ ‘SATIPO-\ PERU\ 750 m/ Coll. J. Lindemans’ (1♂, RMNH), ‘Megalopta\ sulciventris Friese’, ‘♂ ‘SATIPO-\ PERU\ 750 m\ Coll. J. Lindemans’ (1♂, RMNH) ‘Megalopta\ sulciventris Friese’; ‘♂ ‘SATIPO-\ PERU\ 750 m\ Coll. J. Lindemans’ (1♂, RMNH), ‘Megalopta\ sulciventris Friese’; ‘♂ ‘SATIPO-\ PERU\ 750 m\ Coll. J. Lindemans’ (1♂, RMNH), ‘Megalopta\ sulciventris Friese’; ‘♂ ‘SATIPO-\ PERU\ 750 m\ Coll. J. Lindemans’ (1♂, RMNH), ‘Megalopta\ sulciventris Friese’; ‘♂ ‘SATIPO-\ PERU\ 750 m\ Coll. J. Lindemans’ (1♂, RMNH), ‘Megalopta\ sulciventris Friese’; ‘♂ ‘SATIPO-\ PERU\ 750 m\ Coll. J. Lindemans’ (1♂, RMNH), ‘Megalopta\ sulciventris Friese’; ‘♂ ‘SATIPO-\ PERU\ 750 m\ Coll. J. Lindemans’ (1♂, RMNH), ‘Megalopta\ sulciventris Friese’; ‘♂ ‘SATIPO-\ PERU\ 750 m\ Coll. J. Lindemans’ (1♂, RMNH), ‘Megalopta\ sulciventris Friese’; ‘♂ ‘SATIPO-\ PERU\ 750 m\ Coll. J. Lindemans’ (1♂, RMNH), ‘Megalopta\ sulciventris Friese’; ‘♂ ‘SATIPO-\ PERU\ 750 m\ Coll. J. Lindemans’ (1♂, RMNH). Loreto: ‘Peru, LO, Maynas, Alpahuayo-Mishana\ KM 28 – Ex light trap\ 12vii01 Mario Callegari’ ‘col. CR col’ (3♀, CRC); ‘Peru, LO\ A&E Tours, frog valley\ Rio Tahuayo\ 27vii01\ Mario Callegari’ ‘♂ ‘Ex light trap’ ‘col. CR col’ (1♂, CRC). Madre de Dios: ‘PERU, MD, Tamboata\ Jungle Lo1dge, 225 masf\ S12 49,456 N69 24, 163\ 9-20x01, C Rasmussen leg’ ‘Megalopta sp.\ CR01’ ‘col. CR col’ (2♂, CRC); ‘PERU, MD, Tamboata\ Jungle Lo1dge, 225 masf\ S12 49,456 N69 24, 163\ 9-20x01, C Rasmussen leg’ ‘col. CR col’ (3♂, CRC); ‘Peru, Madre de Dios, 5km SW de St. Rosa,\ 12.967°S 70.332°W, 404m, 21.viii.2012, R. Cavichioli.’ (8♀, 5♂ DZUP). ‘Peru, Madre de Dios, Manu, 9 km a SW de\ Mazuko, 364m,\ 13.181°S, 70.384°\ W, 19.vii.2012, R. Cavichioli’ (2♂ DZUP). San Martin: ‘PERU, SM, Tarapoto-\ Yurimaguas, km 20 ‘BIODIVERSIDAD’ (0634/7620) 950 masl\ IV-VI.2002 C. Rasmussen’ ‘Megalopta sp’ ‘Det. Claus Rasmussen, 2002’ ‘col. CR col’ (1♀, CRC);

Megalopta sulciventris
BRAZIL: Amapá: ‘Brasil Amapá Amapari\ Tucano-2\ 9.XI.1983’ ‘Brasil AP\ N. Bittencourt’ ‘Armadilha de Luz’ (2♀,1♂, MPEG); ‘Brasil Amapá Amapari\ Tucano-2\ 10.XI.1983’ ‘Brasil AP F F Ramos’ ‘Armadilha de Luz’ (1♂, MPEG); ‘Brasil: AP\ TRACAJÁ-TUBA IX.64\ E. Denti col.’ (1♀, MZUSP); ‘SERRA DO NAVIO\ Terr. Amapá BRASIL\ Out.-1957\ K. Lenko leg.’ ‘COLEÇÃO\ CAMPOS SEABRA’ (1♀, DZUP); Amazonas: ‘BRASIL, AM, Barcelos\ Igarapé Erere/
Coruja 00°06’16”N – 63°51’01”W ‘18-25.vi.2008, F.F. Xavier Fº. Arm luz’ (♀, INPA); ‘Beruri-AM/R. Purus’ BRASIL 15.x.1991 G.A.R. MELO’ (♀, D2UP); ‘Brasil-Am-Manaus I. Anavilhanas 3-3-1976 PARALUPPI’ (♀, INPA); ‘Brasil - AM — M I Anavilhanas / 16/03/76 Mauricio’ (♀, INPA); ‘BRASIL: Amazonas CEPLAC, AM 010 KM 30 / 13.X.1977 ALTAMIRO SOARES’ (♀, INPA); ‘BRASIL: Amazonas CEPLAC, AM 010 KM 30 / 14.X.1977 ALTAMIRO SOARES’ (♀, INPA); ‘BRASIL Amazonas Manaus RIO URUGUÍ 9-V-1983’ F. PERALTA (♀, INPA); ‘BRASIL Amazonas Manaus FUA 25-V-1982’ F. PERALTA, (♀, 4♂, INPA); ‘BRASIL: Amazonas, BR 174, Km 130 / XI-16-77’ ‘Collector: B.C. Ratcliffe’ (indy, INPA); ‘BRASIL, AM, Manaus ZF-2 Km-14, torre 40mt 2°35’21”S / 60°06’55”W 21-24.I.2004’ ‘Luz mista lençol +BLB+BL’ Motta, CS, Trovisco, SF, Xavier Fº, Filho, AS. Col.’ (♀, INPA); ‘BRASIL, AM, Manaus ZF2 km-14, Torre, 023521S \ 600655W, 19-22.iii.2004’ luz mista/ BL, BLB, lençol’ ‘30mt alt. J.A. Rafael, C.S. Motta, F.F. Xavier Fº, J.T. Câmara’ (♀, INPA); ‘BRASIL, AM, Manaus ZF2 km-14, Torre, 023521S \ 600655W, 16-19.iv.2004’ luz mista/BLB, lençol’ ‘40mts alt. J.A. Rafael, C.S. Motta, A. Silva Fº, J.M. F. Ribeiro’ (♀, INPA); ‘BRASIL, AM, Manaus ZF2 km-14, Torre, 023521S \ 600655W, 18-21.v.2004’ lençol: luz mista e BLB’ ‘40mts alt. J.A. Rafael, F.B. Bacarro, F.F. Xavier Fº, A. Silva Fº’ (♀, INPA); ‘BRASIL, AM, Manaus ZF2 km-14, Torre, 023521S \ 600655W, 15-18.vi.2004’ lençol: luz mista e BLB’ ‘40mts alt. J.A. Rafael, C.S. Motta, F. Godoi, S. Trovisco & A. Silva Fº (♀, INPA); ‘BRASIL, AM, Manaus ZF2 km-14, Torre, 023521S \ 600655W, 16-19.vii.2004’ lençol: luz mista e BLB’ ‘40mts alt. J.A. Rafael, C.S. Motta, F.F. Xavier Fº, J.M. F. Ribeiro & S. Trovisco (♀, INPA); ‘BRASIL, AM, Manaus ZF2 km-14, Torre, 023521S \ 600655W, 13-16.viii.2004’ lençol: luz mista e BLB’ ‘35mts alt. J.A. Rafael, F.F. Xavier Fº’ A.R. Ururahy, A. Silva, & S. Trovisco (♀, INPA); ‘BRASIL, AM, Manaus ZF-2 km-14, Torre, 023521S \ 600655W, 13-16.ix.2004’ lençol: luz mista e BLB’ ‘35mts alt. F.F. Xavier Fº, A.R. Ururahy, F. Godoi, & S. Trovisco (♀, INPA); ‘BRASIL, AM, Manaus ZF2 km-14, Torre, 023521S \ 600655W, 12-15.x.2004’ lençol: luz mista e BLB’ ‘35mts altura, J.A. Rafael, C.S. Motta, F.F. Xavier Fº, A. Silva Fº & S. Trovisco (♀, INPA); ‘BRASIL, AM, Manaus ZF-2 km-14, torre, 023521S \ 600655W, 10-13.xii.2004’ lençol: luz mista e BLB’ ‘35mts altura, C.S. Motta, A. Silva Fº, & M. Cutrin Leg.’ (♀, INPA); ‘BRASIL, Amazonas, Manaus, ZF-2- Km 34, Base LBA, 09.viii.2008, 100m, 2°35’33”S / 60°12’52”W luz P.C. Grossi’ (♀, D2UP); ‘BRASIL, Amazonas, Manaus, ZF-2- Km 34, Base LBA, 10.viii.2008, 100m, 2°35’33”S / 60°12’52”W P.C. Grossi’ (♀, D2UP); ‘BRASIL, AM, Manaus, Torre ZF-2, 023521S 600655W, 26.X.2003’ ‘J.A. Rafael, F.F. Xavier Filho & A.S. Filho, Arm. luz (lençol), 40mt alt. (♀, INPA); ‘Brasil, AM, Pres. Figueiredo, Am 240 Km 12, Sítio águá viva’ 18-22.xii.2006, Luz mista.’ ‘F.F. Xavier Fº, G.M. Lourindo, P.K.M. Almeida & D.M.M. Mendes’ (♀, INPA); ‘AM Manaus Resv. Ducke III.1977’ ‘Brasil, Amazônas W L Overal Col.’ ‘Megalopeta of genalis’ M.W. Det. Camargo.82’ (♀, MPEG); ‘BRASIL AM MANAUS’ Torre da ZF-2/45m 2°35’20”S/00°06’55”W 06-07/II/1997 Motta,C.S. & Vidal, J. col’ ‘Luz mista mercúrio Lençol’ ‘0019543’ (♀, INPA); ‘BRASIL AM MANAUS’ Torre da ZF-2/45m 2°35’20”S/00°06’55”W 06-07/II/1997 Motta,C.S. & Vidal, J. col’ ‘Luz mista mercúrio Lençol’ ‘0019544’ (♀, INPA); ‘Brasil, Amazonas CEPLAC 30 km NE Manaus 12.XII.76’ Col: B.C. Ratcliffe’ (♀, INPA); ‘BRASIL: Amazonas BR 174 ZF6 Km9’ Data. 04.07.86 Col. MVB Garcia’ (♀, MEUFV); ‘BRASIL,
AM, Manaus\ Res. Biológica do Cuieiras\ Base de apoio da ZF-2 \ 02°35’21”S 60° 06’55”W \ 24.x.2007, Torre 45mts \ ‘Lençol – Luz mista/BLB’ J.A. Rafael; F.S.P. Godoi; R.J.P. Machado; A. Filho & R.R. Cavichioli (1♂, INPA); ‘Brasil Amazonas\ Manaus-FUA\ 25-III-1982\ E.F. Ribeiro’ (1♀, INPA); ‘3008’ ‘A. Faustino’ ‘Estr. Am. 1 Km 64\ Manaus, Amazonas\ Brasil 24-VIII-970’ (1♀, INPA); ‘Brasil, Amazonas, 60Km ao norte de Manaus,\ 11.IX.1991, G.A.R. Melo\ Faz.Esteio (2°27’S 59°46’W”), Res. 1501’ (1♀, DZUP); ‘Brasil, Amazonas, 60Km\ ao norte de Manaus,\ 1.X.1991, G.A.R. Melo\ Faz. Esteio (2°27’S 59°46’W”), Res. 1501\ Atraído a luz.’ (1♀, DZUP); ‘BRASIL: Amazonas\ Reserva Campinas\ BR 174, km.60\ 6-v-1977\ I.S. GORAYEB’ (1♀, INPA); ‘BRASIL: Amazonas\ AM 010, Km.244\ I-II-1977\ B.C. Ratcliffe’ (1♀, INPA); ‘BRASIL, Amazonas, Rio\ Nhamundá, Ig. Areias\ 01°35’11”S – 57°37’32”W’ 25m, 17-20.v.2008, J.A.\ Rafael e equipe, arm. Luz no barco’ (3♀, INPA); ‘Ipxunna – AM, Rio\ Liberdade. Com. São\Vicente (Estádio da\ Preta) 7°21’47”S\ 71°52’7”W’ 175m Light trap\ 11-14/V/2011\Cavichioli, Gonçalves &Takiya’ (1♀, DZUP); ‘Brasil, Amazonas,\ Presidente Figueiredo,2°1’2”S 59° 49’35”W”, 14.ix.2009. L.D.\ Wendt’ (1♀, 1♂ INPA); ‘BRASIL, Amazonas\ Presidente Figueiredo\ AM 240, km 24\ 02°01’05”S; 59°\ 49’59”W’ ‘Lençol, com luz mista’ 04-08.ix.2008\ F.F. Xavier Fº, T. K. Krolow &\ G. Lourido’ (1♀, INPA); ‘BRASIL, AM, Manaus\ Reserva Duche\ AM-010 km26\ 2°55’51”S, 59°58’29”W\10-14.iii.2009\ Lençol\ branco\ T. Mahlmann Leg.’ (3♀,\ INPA); ‘BRASIL, AM, Manaus, ZF-2\ km-14, Torre, 023521S -- 600655W,\ 16-19.\ iv.2004\Luz mista/ BLB, lençol\ ‘40mts altura, J.A. Rafael\ C.S. Motta, A. Silva Fº\ J.\ M.F. Ribeiro’ (1♀, INPA); ‘BRASIL, AM, Manaus, ZF-2\ km-14, Torre, 023521S –\ 600655W, 16-19.iv.2004\ lençol: luz mista e BLB\ ‘40mts altura, J.A. Rafael\ C.S.\ Motta, F.F. Xavier Fº\ J.M.F. Ribeiro & S. Trovisco’ (1♀, INPA); ‘BRASIL, AM,\ Manaus\ ZF-2 km-14, torre 40m\ 2°35’21”S / 60°60’55”W\ 21-24.i.2004’ ‘Luz mista\ lençol + BLB+BL’ Motta, CS, Trovisco SF, Xavier FFF, Filho, AS. Col.’ (1♀,\ INPA); ‘BRASIL, Amazonas,\ Itapiranga, 300 Km de\ Manaus, Aramidilha\ luminosa,\ 03-05.x.2010\ D. Grisales & M. Guedes’ (1♀, 1♂ DZUP). \Pará: ‘Cach. das\ Guaribas\ 14.8.’ ‘Brasil PA/AP\ Rio Jari, 1961\ Dr. W. Egler’ ‘Megalopota\ cf.\ amoena’ (Spinola)\ Det. Camargo.82’ (1♀, MPEG); ‘Brasil: Pará\ ORIXININÁ-\ALCOA: MINER\ Ig. JUNDIRÁ 6-1982\ LUZ BRANCA\ A.Y. Harada’ ‘Megalopata sp’ M.C. Almeida-det 1985’ (1♀, INPA); ‘BRASIL: PA\ Belém, 20m\ 10-15.xi.1984\ V.O. Becker col’ (1♀, DZUP); ‘BRASIL: Pará\ Rio\ Poana a direita\ Subindo 6-X-85\ Eq. Comander’ (1♀, INPA); ‘Rod.Belém -\ Brasilia Km 93\ 20.\ xi.1959’ (1♀, MZUSP); ‘BRASIL, Pará, Rio\ Nhamundá,\ 01°35’11”S – 57°\ 37’32”W’ 25m, 17-20.v.2008, J.A.\ Rafael e equipe, Manual’ (1♀, INPA).

**Roraima:** ‘Brasil, Roraima, Amajari\ Tepequém (SESC) 03°35’ 11.2”N 61°\ 42’53.7”W 630m’ ‘16-abr-09 Gama Neto, J.L.\ Pensilvânia’ (1♀, MRRR).

**FRENCH GUIANA:** \Saint-Laurent-du-Maroni\: ‘FEVRER’ ‘GUYANE\ NOUVEAU CHANTIER\ BAS-MARONI’ (1♀, DZUP); ‘FEVRER’ \‘GUYANE\ FRANCAISE’ St-Laurent du Maroni\ Coll. LE MOULT’ (1♀, DZUP). \French Guiana: \Saint-Laurent-du-Maroni\: ‘FEVRER’ \‘GUYANE\ NOUVEAU CHANTIER\ BAS-MARONI’ (1♀, DZUP); ‘FEVRER’ \‘GUYANE\ FRANCAISE’ St-Laurent du Maroni\ Coll. LE MOULT’ (1♀, DZUP).

**SURINAME:** \Brokopondo\: ‘Suriname\ Sarakreek\ Lemmetje kondre\ 16 Dec. 1963\ D.C. Geyskes’ (4♀, RMNH); ‘Suriname\ Sarakreek Dannya\ 17. Dec., 1963\ D.C. Geyskes\ op Licht’ (1♀, RMNH); ‘Sipaliwini: ‘Museum Leiden\ W. Suriname Exp.\
Megalopta amoena

**BRAZIL: Acre:** 'Brasil, Acre\ Acrelândia\ 10°04'S/ 67°25''W' '02-04/XI/2001\ Oliveira, Morato & Cunha leg.\ benzil acetato' (♀, INPA); 'BR AC Cruzeiro do Sul\ 61° BIS Hotel de Trânsito\ 07°36'26'S;72°40'55''W\ 21-22/XI/1996\ Motta, C.S. et alii col.' 'Luz mista mercúrio\ Luz negra BL e BLB\ Lençol' (♀, INPA); 'BR AC Cruzeiro do Sul\ 61° BIS Hotel de Trânsito\ 07°36'26'S;72°40'55''W\ 20-21/XI/1996\ Motta, C.S. et alii col.' 'Luz mista mercúrio\ Luz negra BL e BLB\ Lençol' (♀, INPA); '115°\ Rio Branco-AC\ Data: 04.03.99\ Albuquerque, E.S.\ Veiga, S.A.' (♀, INPA); Acre: '130°\ Rio Branco-AC\ Data: 09.07.99\ Albuquerque, E.S.\ Veiga, S.A.' (♀, INPA); 'Rio Branco-AC\ Data: 10/05/00\ Col. Naves, E.A.' (♀, INPA); 'Rio Branco-AC\ Brasil 20/04/1993\ E.F. Morato\ 'LUZ MIXTA' (♀, INPA).

**Alagoas:** 'BRASIL: AL\ Ibateguara, 400m\ 10-20.iii.1994\ V.O. Becker Col.' (♀, 2♂, DZUP).

**Amapá:** 'Brasil-AP\ 01-XI-1981\ I.S. Gorayeb e equipe\ 'MATA P/\ Armadilha\ Suspensa 4m' (♀, DZUP); 'Rio Felicité\ Terr. Amapá BRASIL\ 8.VIII.1959\ J. Lane leg.' (♀, DZUP); 'BRASIL-AP\ TRACAJA-\ TUBA. XI-64\ E. Denti col.' (♀, MZUP); 'OIAPUQUE – Amapá\ Brasil V-1959\ M. Alvarenga' (♀, DZUP).

**Amazonas:** 'Tefé\ 11.8.1906\ Ducke\ 'Brazil\ Estado do\ Amazonas' (♂, DZUP); 'xXJapu\ 16.6.1904\ Ducke\ 'Brazil\ Estado do\ Amazonas' (♂, DZUP); 'BRASIL Amazonas\ Caruariu – Margem\ Esquerda rio Juruá, Com:\ Nova Esperança\ Ig. Do Mutuca, trilha do\ Roberto\ 05°04'31''S 67°10'11''W\ 28VI- 15VIII 2005\ Xavier Filho, F.F. & Henriques, A.L. leg' (♀, INPA); 'Brasil, Amazonas\ Rio Uneixui, Bacuri, 0°32'S 65°04'W\ 15.vii.1999. G. Melo' (♀, DZUP); 'BRASIL- AM\ MANAUS\ 14/OUR/2004\ J.C. ALMEIDA' (♀, INPA); 'BRASIL, AM, Presidente\ Figueiredo, BR-174, Ramal do Km-200, 27.1.2006\ J.A. Rafael, F.F. Xavier, A. Silva Fº, D.M.M. Mendes\ arm.luz' (♀, INPA); 'BRASIL Amazonas\ Novo Aripuanã, Rio\ Madeira, Lago Xadá\ Cmunidade Bela\ Vista. Ponto\ Margem Esquerda\ 05°15'39''S/60°42'32''W. 17-23 IV 2005\ Xavier-\ Fo., F.F.; Godoi, F. & Lourindo, A.M. leg' (♀, INPA); 'BRASIL Amazonas\ ESENA Jumai-Japura\ 02°19'09''S 68°25'16''W\ 04-17 agosto 2005\ L.S. Aquino leg.' (♀, INPA); 'BR AM, Pq. Nac. do Jaú\ Mg. Dir. baixo rio Jaú\ 1°97'S/61°45''W\ 27-28/XI/1993\ Motta, C.; Andreazze, R. & Vidal, J. col. (♀, INPA); 'BR AM, Pq. Nac. do Jaú\ Mg. Dir. baixo rio Jaú\ 1°97'S/61°45''W\ 28-29/X/1993\ Motta, C.; Andreazze, R. & Vidal, J. col. (♀, INPA); 'BRASIL, Amazonas, Pq.\ Nac. Jau R. Carabinaní\ 0159S-6132W. 07-17.iv.\ 1994. C. Motta e outros' (5♂, INPA); 'Brasil\ Amazonas\ PARNA do Jaú\ 19-III à\ 05-IV\ 2003' (M.L. Oliveira & J.A. Cunha leg.\ Amazonas: Left Coppenamel\ Base Camp) 1 Feb. 1965\ P.A. Florschütz & P.J.M. Maas' (♀, RMNH); 'Suriname\ Upper Corantijn River\ 07°36'26'S;72°40'55''W\ 21-22/XI/1996\ Motta, C.S. et alii col.' 'Luz mista mercúrio\ Luz negra BL e BLB\ Lençol' (♀, INPA); 'Suriname\ Upper Corantijn River\ 07°36'26'S;72°40'55''W\ 20-21/XI/1996\ Motta, C.S. et alii col.' 'Luz mista mercúrio\ Luz negra BL e BLB\ Lençol' (♀, INPA); '115°\ Rio Branco-AC\ Data: 04.03.99\ Albuquerque, E.S.\ Veiga, S.A.' (♀, INPA); Acre: '130°\ Rio Branco-AC\ Data: 09.07.99\ Albuquerque, E.S.\ Veiga, S.A.' (♀, INPA); 'Rio Branco-AC\ Data: 10/05/00\ Col. Naves, E.A.' (♀, INPA); 'Rio Branco-AC\ Brasil 20/04/1993\ E.F. Morato\ 'LUZ MIXTA' (♀, INPA).
Campinarana’ (1♀, INPA); ‘Brasil\ Amazonas\ PARNA do Jaug\ 19-III à 05-IV\ 2003’ ‘M.L. Oliveira & J.A. Cunha leg.; Em igapó’ (2♀, INPA); ‘Brasil\ Amazonas\ PARNA do Jaug\ 18 à 21-V-2003’ ‘M.L. Oliveira & J.A. Cunha leg.; Em igapó’ (1♀, INPA); ‘BRASIL Amazônas\ Parque Nac. do Jaug\ 17-19/nov/2005’ ‘M.L. Oliveira & E.R.\ F. Pereira leg; Floresta’ (2♀, INPA); ‘BRASIL Amazônas\ Parque Nac. do Jaug\ 17-19/nov/2005’ ‘M.L. Oliveira & E.R.\ F. Pereira leg; campinarana’ (1♀, INPA); ‘BRASIL\ Amazonas\ ESENA Juami-Japurá\ Médio Rio Juamí\ 01° 57’20.4”S/ 67°55’47.8”W’ ‘23-29 xix. 2004’ M.L. Oliveira & F.F.\ Xavier Filho leg; armailha de luz mista’ (1♀, INPA); ‘BRASIL Amazonas, Rio\ Clueiras, Lago do peixe\ Boi 14. vi.1989. F.J.A. Peralta. Arm luz mista’ (1♀, INPA); ‘BRASIL:\ Amazonas\ Manaus, Res. Ducke\ 09-22.ix.1994\ F.F. Xavier’ ‘Arm. suspensa\ Torre, 20m’ (1♀, INPA); ‘BRASIL Amazonas, Manaus, ZF-2\ 09-22.ix.1994\ J.A. Rafael & J. Vidal’ ‘Arm. suspensa\ Torre, 1.5m’ (2♀, INPA); ‘BRASIL Amazonas\ Manaus, Res. Ducke\ 07-21.xi.1994\ J.A. Rafael & J. Vidal’ ‘Arm. suspensa\ Torre, 10m’ (2♀, INPA); ‘BRASIL Amazonas, Manaus, Res. Ducke\ 07-21.xi.1994\ J.A. Rafael & J. Vidal’ ‘Arm. suspensa\ Torre, 1.5m’ (2♀, INPA); ‘BR, AM, Mun. Itacoatiara\ Faz. Aruanã\ AM-010 km 215\ 14-15/l/1991’ Motta, C.S. et al. col. ‘Luz mista mercúrio\ Luz negra Bl e BLB\ Lençol’ ‘0019558’ (1♀, INPA); ‘BRASIL – Amazonas\ Anavilhanas\ 15/XI/1989’ M.L. Oliveira’ (2♀, INPA); ‘BRASIL Amazonas\ RESERVA DUCKE\ 15-X-1981\ J.A. Rafael’ ‘armadilha\ de Malaise’ (1♀, INPA); ‘BRASIL: AMAZONAS\ RIO CASTANHA\ 29-VIII-1979’ ROBIN BEST (1♀, INPA); ‘BRASIL: Amazonas\ AM\ MANAUS\ 010\ KM 26\ RES.DUCKE\ 1-2.XI.1983\ C. BORDON\ VEGETAÇÃO’ (1♀, INPA); ‘BRASIL:AM\ R. DUCKE\ 13-X-1981\ J.A. RAFAEL’ (1♀, INPA); ‘BRASIL: AMAZONAS\ BR 174: KM 68: ZF-3\ FAZ. PORTO ALEGRE’ ‘FLORESTAL\ 19-VI-1985’ BERT.KLAIN’ (1♀, INPA); ‘BRASIL AM MANAQUIR\ LAGO JANAUACA RIO\ SOLIMÕES\ 03°24’21”S/ 60°13’99”W’ ‘12-IV-1996\ COLETA\ H. OLIVEIRA’ (1♀, INPA); ‘BRASIL AM MANAQUIR\ LAGO JANAUACA RIO\ SOLIMÕES\ 03°24’21”S/60°13’99”W’ ‘20 IV 96\ CARVALHO, K.S.’ (1♀, INPA); ‘BRASIL AM MANAQUIR\ LAGO JANAUACA RIO\ SOLIMÕES\ 03°24’21”S/ 60°13’99”W’ ‘12-IV-1996\ MOURA, J.F.L.’ (2♀, INPA); ‘BRASIL: AMAZONAS\ MANAUS\ 25.V.82\ F.U.A.’ LATORRE L.R.’ (2♀, INPA); ‘BRASIL Amazonas\ Manaus: Rio Urubu\ 9-V-1983\ F. PERALTA’ (3♀, 1♂, INPA); ‘BRASIL: Amazonas\ RIO TARUMÁ\ km\ 13 19/12/1985\ M.V.B. García’ (1♂, MEUFV); ‘BRASIL MANAUS AM\ EST-P/TARUMÁ\ km\ 13\ 19/12/1985\ M.V.B. García’ (1♂, MEUFV); ‘BRASIL MANAUS AM\ EST-P/TARUMÁ\ km\ 13 19/12/1985\ M.V. B. García’ (2♀, MEUFV); ‘BRASIL MANAUS AM\ EST-P/TARUMÁ\ km\ 13\ 19/12/1985\ M.V.B. García’ (1♂, MEUFV); ‘BRASIL: Amazonas\ BR 174 ZF 6 Km 2\ Data. 03.07.86\ Col. MVBGarcia’ (1♂, MEUFV); ‘BRASIL Am. Manaus\ I. da Marchantaria\ Rio Solimões 14/03\ M.V.B. Garcia 1991’ ‘2866’ (1♀, DZUP); ‘BENZIL ACETATO\ N°15’ ‘Manaus – AM\ BRASIL, 19/9/88\ E.F. Morato’ ‘amoena (Spinola)’ (1♀, DZUP); ‘BENZIL ACETATO\ N°5’ ‘Manaus – AM\ BRASIL, 7/10/88\ E.F. Morato’ (1♀, DZUP); ‘BRASIL: AMAZONAS\
MANAUS. P. DAS LARANJEIRAS\ 3-VI-1981\ Eq. JORGE ARIAS\ ARM. DE LUZ. 15m' (1♀, INPA); ‘57° ‘BRASIL-AM-MANAUS\ INPA. EST. ALEIXO\ -\ III-1975\ col. L.P.A.’ (1♀, INPA); ‘BRASIL Amazônicas\ AM 0 Km 31 Embrapa\ 6-II-1992\ L.P. Albuquerque\ J. Binda’ ‘Arm. Shannon\ C. Cacau\ Isc Fruta\ 6-II-92’ (1♀, INPA); ‘BR AM Pq Nac. do Jaú\ Rio Carabinani mg. dir\ 1°59S/61°32’W 11-12/IV/1994\ Motta, C. et al. col. ‘Luz mista mercúrio\ Luz negra BL e BLB\ Lençol’ (1♀, INPA); ‘BR AM Pq Nac. do Jaú\ Rio Carabinani mg. dir\ 1°59S/61°32’W 13-14/IV/1994\ Motta, C. et al. col. ‘Luz mista mercúrio\ Luz negra BL e BLB\ Lençol’ (1♀, INPA); ‘BR, AM, Pq Nac. do Jaú\ Mg.dir. baixo rio Jaú\ 24-25/X/1993\ Motta, C.; Andreazze, R\ & Vidal, J. col. ‘Luz mista mercúrio\ Luz negra BL e BLB\ Lençol’ (1♀, INPA); ‘BRASIL, Amazônicas\ Parque Nacional Jaú\ 8-16.04.2001\ 015304S,613511W’ ‘Arm. Susp. – 20m\ Florestal\ Henriques & Vidal’ (1♀, INPA); ‘BR AM MUN. ITACOTUNA\ FAZ. ARANA AM 010 km215\ 18-19/IX/1990\ Motta, C.S., FERREIRA, RLM & ANDREAZZE, R col.’ ‘ARMADILHA DE LUZ’ (1♀, INPA); ‘Rio Negro, marg.esq.\ abaixo I. Anavilhana\ AM, 20-21.IV.1967\ Exp. Perm.Amaz.’ (1♀, MZUSP); ‘Ilha do Beiju-açu\ AM 23.x.969\ EPA’ (1♀, MZUSP); ‘Brasil AM\ Marãa-R. Jarurâ\ Manguari\ 11a17.x.1988 ‘Armadilha\ 1,6m\ Suspensa’ ‘Brasil AM\ J. Dias’ (1♀, DZUP); ‘BRASIL, Amazônicas, Manaus,\ Reserva Biológica da Campina\ 12.viii.2008, 77m, 2°35’37’S 60°1'51”W\ arm. luz\ dosell\ P.C. Grossi col. (2♀, DZUP); ‘BRASIL-AM-MANAUS SITIO\ VIDA TROPICAL\ ROD. AM-010 KM 30\ 20/21.IV.96/MOURA, J.F.L.’ (1♀, INPA); ‘BRASIL Amazônicas\ Manaus, FUJA\ 25-V-1982\ F. PERALTA’ (1♀, DZUP); ‘BRASIL AM PRESIDENTE FIGUEIREDO EST. BALBINA\ KM12\ 27/28/IV.96\ REIS-SILVA, S.J.’ ‘HYMENOPTERA\ HALICHTIDAE’ (1♀, INPA); ‘Brasil, AM, Pres. Figueiredo,\ BR 174, km 180, R. Paulista\ 25-26.12.2006, Arm.\ luz\ móvel’ ‘J.A. Rafael, F. Xavier F°, Silva A., J.S. Duarte & D.M. Mendes’ (1♀, INPA); ‘BRASIL, Amazônicas\ Rio Aracá, Serrinha, 83m.a\ 00°25’09.3”N/63°\ 23’00”W\ 30/viii/2007. Isca de cheiro\ M.L. Oliveira & A.S. Filho leg.’ (3♀, INPA); ‘BRASIL, Amazônicas\ Rio Aracá, Serrinha, 83m.a\ 00°25’09.3”N/63°23’00”W\ 30/viii/2007. coleta manual\ M.L. Oliveira & A.S. Filho leg.’ (1♀, INPA); ‘BRASIL, Amazônicas,\ Presidente Figueiredo\ Est. de Balbina Km 24\ 01-12/IX/2002\ 02°\ 01’05”S, 59°49’60”W’ ‘Felipe Filho, F.F. & Barosa, U.C\ Varredura’ (1♀, INPA); ‘S. Antônio\ do Içã\ 27.8.1906\ Ducke’ ‘Brazil\ Estado do\ Amazônas’ (1♀, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA’ ‘TABATINGA\ Amazonas BRASIL\ Outubro\ 1956\ F.M. Oliveira’ (1♀, DZUP); ‘Brasil, Amazonas\ Rio Demeni-Piricó\ 08-22/\ VIII-08’ ‘00° 19’16”S 62°47’32”W\ Machado, R.J.P.\ Filho, A.S.’ (1♀, INPA); ‘BRASIL AM, Manaus, ZF\ km-14, Torre, 023521S\ 600655W, 16-19.iv.2004’ (1♀, INPA); ‘BRASIL Amazônicas\ Barcelos, viii.2008\ Rio Aracá\ 0°37’11”S, 62°\ 52’34”W’ (1♀, INPA); ‘Brasil, Amazonas\ Rio Nhamundá – ME Igaraé\ Areias-Igapô\ 18-20.V.2008\ 01°35’11”S 57°37’32”W\ F.F. Xavier F°’ (1♀, INPA); (2♀, INPA); ‘BRASIL AM, Manaus, ZF\ km-34, Base LBA\ 02°35’37”S – 60°\ 12’39”W’ ‘09-10.viii.2008, arm. luz\ nível do solo, J.A. Rafael\ & F.F. Xavier F°’ (4♀, INPA); ‘BRASIL, Amazonas\ Rio Jufarí\ Comunidade Cajú’ 25/out/2008\ 00’\ 48’10.3”S 62° 29’07.8”W M.L. Oliveira leg.’ (1♀, INPA); ‘BRASIL, Amazonas\ Rio Negro\ Arquipélago de Mariú\ 21/outubro/2008’ (2♀, INPA); ‘BRASIL, AM, Pr. Figueiredo\ Rod. 240, km-24, Ramal Sào Francisco, 29-31.x.2008’ ‘J.A. Rafael, F.F. Xavier F°, G.\ Lourido, R.J.P.\ Machado & E. Amat.\ arm. luz solo’ (1♀, INPA). Bahia: ‘BRASIL-BAHIA\ Alagoinhas-Sauípe\ Data: 3 x 1993\ Col: D.H. Smith’ ‘966’
(♀, DZUP); ‘BRASIL-BAHIA\ Alagoinhas-Sauípe\ Data: 16 x 1993\ Col: D.H. Smith’ ‘997’ (1♀, DZUP); Brasil, BA, Cachoeira, Faz.Vila Rial, 200m, 14°36’23”S 38°53’47”W 14.v.2007, J.A. Rafael & F.F. Xavier Fo’ (3♀, DZUP); ‘BRASIL: Brejões’ 25.vi.1999\ Lg. Miguel’ (1♀, DZUP); ‘Brasil, BA, Lençóis,\ Ribeirão de Baxio\ 12°35’12”S 41°22’56”W 340m, 04.vi.2007, J.A\ Rafael & F.F. Xavier Fo,\ luz’ (1♀, DZUP); ‘Brasil, BA, Lençóis,\ Rio Santo Antônio, 12°29’24”S 41° 19’46”W\ 350m, 05.vi.2007, J.A.\ Rafael & F.F. Xavier Fo,\ luz’ (1♀, DZUP); ‘Brasil, Bahia, Ituberã\ Reserva Michelin\ 13°50’S, 39°15’W\ 06/01/2006\ Equipe Ecopol Leg.’ ‘Fragmento P9 (P3)\ Reserva da Michelin-\ Ba, Eucaliptol, 09:24\ Fragmento/25m\ estrato inferior.’ (♀ UFBA); ‘Brasil, Bahia, Ituberã\ Reserva Michelin\ 13°50’S, 39°15’W\ 06/01/2006\ Equipe Ecopol Leg.’ ‘Fragmento P9 (P2)\ Reserva da Michelin-\ Ba, Salicilato, 09:05\ Fragmento/25m\ estrato inferior.’ (♀ UFBA); ‘Brasil, Bahia, Ituberã\ Reserva Michelin\ 13°50’S, 39°15’W\ 06/01/2006\ Equipe Ecopol Leg.’ ‘Fragmento P9 (P4)\ Reserva da Michelin-Ba, Salicilato, 09:51\ Fragmento 25m\ estrato superior.’ (♀ UFBA); ‘Brasil, Bahia, Ituberã\ Reserva Michelin\ 13°50’S, 39°15’W\ 06/01/2006\ Equipe Ecopol Leg.’ ‘Pancada Grande,\ Reserva da Michelin-\ Ba (P1), Salicilato\ 07:42, Mata/25m\ estrato inferior.’ (♀ UFBA); ‘Brasil, Bahia, Ituberã\ Reserva Michelin\ 13°50’S, 39°15’W\ 06/01/2006\ Equipe Ecopol Leg.’ ‘Pancada Grande,\ Reserva da Michelin-Ba (P1), Salicilato\ 07:49, Mata/25m, estrato inferior.’ (♀ UFBA); ‘Brasil, Bahia, Ituberã\ Reserva Michelin\ 13°50’S, 39°15’W\ 06/01/2006\ Equipe Ecopol Leg.’ ‘Pancada Grande (MC1),\ Reserva da\ Michelin-Ba\ Salicilato\ 08:20\ Mata/25m, estrato inferior.’ (♀ UFBA); ‘Brasil, Bahia, Ituberã\ Reserva Michelin\ 13°50’S, 39°15’W\ 06/01/2006\ Equipe Ecopol Leg.’ ‘Pancada Grande (MC3), Reserva da\ Michelin-Ba\ Salicilato\ 10:35\ Mata/25m, estrato inferior.’ (♀ UFBA); ‘Brasil, Bahia, Ituberã\ Reserva Michelin\ 13°50’S, 39°15’W\ 06/01/2006\ Equipe Ecopol Leg.’ ‘Pancada Grande (MC4), Reserva da\ Michelin-Ba\ Eucaliptol\ 08:45\ Mata/25m, estrato inferior.’ (♀ UFBA); ‘Brasil, Bahia, Ituberã\ Reserva Michelin\ 13°50’S, 39°15’W\ 27/01/2006\ Equipe Ecopol Leg.’ ‘Pancadê, Reserva da\ Michelin-Ba (P1),\ Eucaliptol, 09:05, Mata/150, estrato inferior.’ (♀ UFBA); ‘Brasil, Bahia, Ituberã\ Reserva Michelin\ 13°50’S, 39°15’W\ 27/01/2006\ Equipe Ecopol Leg.’ ‘Pancadê, Reserva da\ Michelin-Ba (P2),\ Salicilato\ 10:15,\ Mata/150, estrato inferior.’ (♀ UFBA); ‘Brasil, Bahia, Ituberã\ Reserva Michelin,\ 13°50’S 39°15’W 29/01/2006 Equipe Ecopol Leg.’ ‘Fragmento P9 (P1),\ Reserva da Michelin-\ BA, Salicilato, 08:45\ Fragmento/25m, estrato inferior.’ (♀ UFBA); ‘Brasil, Bahia, Ituberã,\ Reserva Michelin,\ 13°50’S\ 39°15’W 03/03/2006\ Equipe Ecopol\ ‘SCA1, Reserva\ Michelin-BA,\ Salicilato de metila, 9:14, Seringa’ (♀ UFBA); ‘Brasil, Bahia, Ituberã,\ Reserva Michelin,\ 13°50’S\ 39°15’W 03/03/2006\ Equipe Ecopol\ ‘SCA2, Reserva\ Michelin-BA,\ Salicilato de metila, 9:35, Seringa’ (♀ UFBA); ‘Brasil, Bahia, Ituberã,\ Reserva Michelin\ 13°50’S 39°15’W 03/03/2006\ Equipe Ecopol\ ‘V-7-Mata (P1),\ Reserva Michelin\ BA, Salicilato de Metila, 9:50, Mata’ (♀ UFBA); ‘Brasil, Bahia, Ituberã,\ Reserva Michelin\ 13°50’S\ 39°15’W 03/03/2006\ Equipe Ecopol\ ‘V-7-Mata (P1),\ Reserva Michelin\ BA, Salicilato de Metila, 9:50, Mata’ (♀ UFBA); ‘Brasil, Bahia, Ituberã,\ Reserva Michelin\ 13°50’S\ 39°15’W 03/03/2006\ Equipe Ecopol\ ‘V-7-Mata (P1),\ Reserva Michelin\ BA, Salicilato de Metila, 9:50, Mata’ (♀ UFBA); ‘Brasil, Bahia, Ituberã,\ Reserva Michelin\ 13°50’S\ 39°15’W 03/03/2006\ Equipe Ecopol\ ‘V-7-Mata (P1),\ Reserva Michelin\ BA, Salicilato de Metila, 9:50, Mata’ (♀ UFBA); ‘Brasil, Bahia, Ituberã,\ Reserva Michelin\ 13°50’S\ 39°15’W 03/03/2006\ Equipe Ecopol\...
Leg. Zafira & Daniela

Armadilha luminosa

Estrato inferior (1♀, UFBA); Brasil, Bahia, Ituberá, Reserva Particular Michelin 13°50’S, 39°15’W 05/03/2006. Equipe Ecopol ‘Ponto 9, Reserva da Michelin-BA, Salicilato de metila, 08:30. Seringa/25m. Estrato inferior’ (♀, UFBA); Brasil, Bahia, Ituberá, Reserva Particular Michelin 13°50’S, 39°15’W 05/03/2006. Equipe Ecopol ‘Pacangê, Reserva da Michelin-BA. Salicilato de metila, 10:05, Mata/25m. Estrato inferior’ (♀, UFBA); Brasil, Bahia, Ituberá, Reserva Michelin 13°50’S, 39°15’W 17/11/2007. João, Zafira & Daniela Leg. ‘Fragmento do Corte Alto (P1) Reserva Michelin-BA, Armadilha luminosa’ (♀, UFBA); Brasil, Bahia, Ituberá, Reserva Michelin 13°50’S, 39°15’W 17/11/2007. João, Zafira & Daniela Leg. ‘Mata da Pancada Grande (P1) Reserva Michelin-BA, Armadilha luminosa’ (♀, UFBA); Brasil, Bahia, Ituberá, Reserva Michelin 13°50’S, 39°15’W 17/11/2007. João, Zafira & Daniela Leg. ‘Mata da Sede, Reserva Michelin-BA, Armadilha luminosa’ (♀, UFBA); Brasil, Bahia, Ituberá, Reserva Michelin 13°50’S, 39°15’W 17/11/2007. João, Zafira & Daniela Leg. ‘Borda de Mata, Reserva Michelin-BA, Armadilha luminosa’ (♀, UFBA); Brasil, Bahia, Ituberá, Reserva Michelin 13°50’S, 39°15’W 17/11/2007. João, Zafira & Daniela Leg. ‘Mata do Guigó (P1) Reserva Michelin-BA, Armadilha luminosa’ (♀, UFBA); Brasil, Bahia, Ituberá, Reserva Michelin 13°50’S, 39°15’W 17/11/2007. João, Zafira & Daniela Leg. ‘Mata do Guigó (P2) Reserva Michelin-BA, Armadilha luminosa’ (♀, UFBA); Brasil, Bahia, Ituberá, Reserva Michelin 17.XI.2007. Leg. João, Zafira, Daniela (♀, UFBA); Brasil, Bahia, Salvador Paralela, 12°58’S, 38°26’W 22/03/2000. Batista, M.A. Leg ‘Bahia, Salvador Paralela (P2) Ess:2; 5:00h, armadilha luminosa’ (♀, UFBA); Brasil, Bahia, Salvador Paralela, 12°58’S, 38°26’W 22/03/2000. Batista, M.A. Leg ‘Bahia, Salvador Paralela (P3) Ess:4; 5:00h, armadilha luminosa’ (♀, UFBA); Brasil, Bahia, Salvador Paralela, 12°58’S, 38°26’W 22/03/2000. Batista, M.A. Leg ‘Bahia, Salvador Paralela (P2) Ess:4; 5:00h, armadilha luminosa’ (♀, UFBA); Brasil, Bahia, Salvador Paralela, 12°58’S, 38°26’W 22/03/2000. Batista, M.A. Leg ‘Bahia, Salvador Paralela (P3) Ess:5; 5:00h, armadilha luminosa’ (♀, UFBA); Brasil, Bahia, Salvador Paralela, 12°58’S, 38°26’W 22/03/2000. Batista, M.A. Leg ‘Bahia, Salvador Paralela (P1) Ess:3; 5:00h, armadilha luminosa’ (♀, UFBA); Brasil, Bahia, Salvador Paralela, 12°58’S, 38°26’W 22/03/2000. Batista, M.A. Leg ‘Bahia, Salvador Paralela (P2) Ess:5; 5:00h, armadilha luminosa’ (♀, UFBA); Brasil, Bahia, Salvador Paralela, 12°58’S, 38°26’W 22/03/2000. Batista, M.A. Leg ‘Bahia, Salvador Paralela (P3) Ess:3; 5:00h, armadilha luminosa’ (♀, UFBA); Brasil, Bahia, Salvador Paralela, 12°58’S, 38°26’W 22/03/2000. Batista, M.A. Leg ‘Bahia, Salvador Paralela (P1) Ess:3; 5:00h, armadilha luminosa’ (♀, UFBA); Brasil, Bahia, Salvador Paralela, 12°58’S, 38°26’W 22/03/2000. Batista, M.A. Leg ‘Bahia, Salvador Paralela (P2) Ess:5; 5:00h, armadilha luminosa’
Batista, M.A. "Leg" 'Bahia, Salvador\ Paralela (P1) Ess:5\ armadilha luminosa' (1♀, UFBA); ‘Brasil, Bahia, Salvador\ Paralela,\ 12°55’S,38°23’W\ 30/05/2000\ Batista, M.A. "Leg" ‘Bahia, Salvador\ Paralela (P2) Ess:2\ armadilha luminosa’ (1♀, UFBA); ‘Brasil, Bahia, Salvador\ Paralela,\ 12°58’S,38°26’W\ 30/05/2000\ Batista, M.A. "Leg" ‘Bahia, Salvador\ Paralela,\ 12°57’S,38°25’W\ 30/05/2000\ Batista, M. A. "Leg" ‘Bahia, Salvador\ Paralela (P2) Ess:3\ 5:00h, armadilha luminosa’ (2♀, UFBA); ‘Brasil, Bahia, Salvador\ Paralela,\ 12°58’S,38°26’W\ 30/05/2000\ Batista, M.A. "Leg" ‘Bahia, Salvador\ Paralela (P1) Ess:4\ 5:00h, armadilha luminosa’ (2♀, UFBA); ‘Brasil, Bahia, Salvador\ Paralela\ 12°57’S,38°25’W\ 30/05/2000\ Batista, M. A. "Leg" ‘Bahia, Salvador\ Paralela (P2) Ess:5\ 5:00h, armadilha luminosa’ (1♀, UFBA); ‘Brasil, Bahia, Salvador\ Paralela,\ 12°58’S,38°26’W\ 30/05/2000\ Batista, M.A. "Leg" ‘Bahia, Salvador\ Paralela (P1) Ess:3\ 5:00h, armadilha luminosa’ (2♀, UFBA); ‘Brasil, Bahia, Salvador\ Paralela,\ 12°55’S,38°23’W\ 30/05/2000\ Batista, M. A. "Leg" ‘Bahia, Salvador\ Paralela (P3) Ess:5\ armadilha luminosa’ (1♀, UFBA); ‘Brasil, Bahia, Salvador\ Paralela\ 12°57’S,38°25’W\ 25/06/2000\ Batista, M.A. "Leg" ‘Bahia, Salvador\ Paralela (P3) Ess:4\ armadilha luminosa’ (2♀, UFBA); ‘Brasil, Bahia, Salvador\ Paralela\ 12°57’S,38°25’W\ 25/06/2000\ Batista, M. A. "Leg" ‘Bahia, Salvador\ Paralela (P2) Ess:5\ armadilha luminosa’ (1♀, UFBA); ‘Brasil, Bahia, Salvador\ Paralela\ 12°55’S,38°23’W\ 25/06/2000\ Batista, M.A. "Leg" ‘Bahia, Salvador\ Paralela (P3) Ess:4\ 17:30, armadilha luminosa’ (1♀, UFBA); ‘Brasil, Bahia, Salvador\ Paralela\ 12°58’S,38°26’W\ 26/06/2000\ Batista, M.A. "Leg" ‘Bahia, Salvador\ Paralela (P1) Ess:5\ armadilha luminosa’ (6♀, UFBA); ‘Brasil, Bahia, Salvador\ Paralela\ 12°58’S,38°26’W\ 31/08/2000\ Batista, M. A. "Leg" ‘Bahia, Salvador\ Paralela (P1) Ess:3\ armadilha luminosa’ (10♀, UFBA); ‘Brasil, Bahia, Salvador\ Paralela,\ 12°57’S,38°25’W\ 31/08/2000\ Batista, M.A. "Leg" ‘Bahia, Salvador\ Paralela (P2) Ess:2\ armadilha luminosa’ (6♀, UFBA); ‘Brasil, Bahia, Salvador\ Paralela\ 12°55’S,38°26’W\ 31/08/00\ Batista, M.A. "Leg" ‘Bahia, Salvador\ Paralela (P1) Ess:5\ armadilha luminosa’ (13♀, UFBA); ‘Brasil, Bahia, Salvador\ Paralela\ 12°58’S,38°26’W\ 31/08/2000\ Batista, M.A. "Leg" ‘Bahia, Salvador\ Paralela (P2) Ess:3\ armadilha luminosa’ (5♂, UFBA); ‘Brasil, Bahia, Salvador\ Paralela,\ 12°57’S,38°25’W\ 31/08/2000\ Batista, M.A. "Leg" ‘Bahia, Salvador\ Paralela (P2) Ess:4\ armadilha luminosa’ (1♀, UFBA); ‘Brasil, Bahia, Salvador\ Paralela\ 12°58’S,38°26’W\ 31/08/2000\ Batista, M.A. "Leg" ‘Bahia, Salvador\ Paralela (P1) Ess:3\ armadilha luminosa’ (5♀, UFBA); ‘Brasil, Bahia, Salvador\ Paralela\ 12°58’S,38°26’W\ 31/08/00\ Batista, M.A. "Leg" ‘Bahia, Salvador\ Paralela (P2) Ess:3\ armadilha luminosa’ (4♀, UFBA); ‘Brasil, Bahia, Salvador\ Paralela\ 12°58’S,38°26’W\ 31/08/2000\ Batista, M.A. "Leg" ‘Bahia, Salvador\ Paralela (P2) Ess:5\ armadilha luminosa’ (1♀, UFBA); ‘Brasil, Bahia, Salvador\ Paralela\ 12°58’S,38°26’W\ 10/10/2000\ Batista, M.A. "Leg" ‘Bahia, Salvador\ Paralela (P1) Ess:5\ armadilha luminosa’ (13♀, UFBA);
Brasil, Bahia, Salvador\ Paralela \ 12°58'S; 38°26'W \ 10/10/2000 \ Batista, M.A. Leg' 'Bahia, Salvador\ Paralela (P2) Ess:3\ armadilha luminosa' (♀, UFBA); 'Brasil, Bahia, Salvador\ Paralela \ 12°58'S; 38°26'W \ 10/10/2000 \ Batista, M.A. Leg' 'Bahia, Salvador\ Paralela (P2) Ess:5\ armadilha luminosa' (♀, UFBA); 'Brasil, Bahia, Salvador\ Paralela \ 12°58'S; 38°26'W \ 10/10/2000 \ Batista, M.A. Leg' 'Bahia, Salvador\ Paralela (P1) Ess:3\ armadilha luminosa' (♀, UFBA); 'Brasil, Bahia, Salvador\ Paralela \ 12°58'S; 38°26'W \ 31/08/2000 \ Batista, M.A. Leg' 'Bahia, Salvador\ Paralela (P2) Ess:3\ armadilha luminosa' (♀, UFBA); 'Brasil, Bahia, Salvador\ Paralela \ 12°58'S; 38°26'W \ 31/08/2000 \ Batista, M.A. Leg' 'Bahia, Salvador\ Paralela (P3) Ess:5\ Armadilha Luminosa' (♀, UFBA); 'Brasil, Bahia, Salvador\ Paralela \ 12°55'S 38°23'W \ 30 11/2000 \ Batista, M.A. Leg' 'Bahia, Salvador\ Paralela (P3) Ess:5\ 5:00h, armadilha\ luminosa' 'UFBA\ 04230' (♀, UFBA); 'Brasil, Bahia, Salvador\ Paralela \ 12°58'S; 38°26'W \ 30/11/2000 \ Batista, M.A. Leg' 'Bahia, Salvador\ Paralela (P1) Ess:3\ Armadilha Luminosa' (♀, UFBA); 'Brasil, Bahia, Salvador\ Paralela \ 12°58'S; 38°23'W \ 31 07/2000 \ Batista, M.A. Leg' 'Bahia, Salvador\ Paralela (P2) Ess:5\ armadilha luminosa' (♀, UFBA); 'Brasil, Bahia, Salvador\ Paralela \ 12°58'S; 38°26'W \ 31/07/2000 \ Batista, M.A. Leg' 'Bahia, Salvador\ Paralela (P1) Ess:5\ 5:00h, armadilha\ luminosa' (♀, UFBA); 'Brasil, Bahia, Salvador\ Paralela \ 12°58'S; 38°23'W \ 30 11/2000 \ Batista, M.A. Leg' 'Bahia, Salvador\ Paralela (P2) Ess:5\ armadilha luminosa' (♀, UFBA); 'Brasil, Bahia, Salvador\ Paralela \ 12°58'S; 38°26'W \ 31/07/2000 \ Batista, M.A. Leg' 'Bahia, Salvador\ Paralela (P1) Ess:3\ 5:00h, armadilha\ luminosa' (♀, UFBA); 'Brasil, Bahia, Salvador\ Paralela \ 12°55'S; 38°23'W \ 30 07/2000 \ Batista, M.A. Leg' 'Bahia, Salvador\ Paralela (P2) Ess:4\ Armadilha Luminosa' (♀, UFBA); 'Brasil, Bahia, Salvador\ Paralela \ 12°58'S; 38°26'W \ 31/07/2000 \ Batista, M.A. Leg' 'Bahia, Salvador\ Paralela (P2) Ess:4\ Armadilha Luminosa' (♀, UFBA); 'Brasil, Bahia, Salvador\ Paralela \ 12°58'S; 38°26'W \ 31 08/2000 \ Batista, M.A. Leg' 'Bahia, Salvador\ Paralela (P1) Ess:5\ armadilha luminosa' 'UFBA\ 04242' (♀, UFBA); 'Brasil.BA\ Salvador\ Ondina\ D.H. Smith\ 7.v.1986 \ '1026' (♀, DZUP); 'Brasil. BA\ Salvador\ Ondina\ D.H. Smith\ 3.iv.1986 \ '1036' (♀, DZUP); 'Brasil.BA\ Salvador\ Ondina\ D.H. Smith\ 11.iv.1986 \ '1029' (♀, DZUP); 'Brasil.BA\ Salvador\ Ondina\ D.H. Smith\ 5.v.1986 \ '1024' (♀, DZUP); 'Brasil.BA\ Salvador\ Ondina\ D.H. Smith\ 5.v.1986 \ '1018' (♀, DZUP); 'Brasil.BA\ Salvador\ Ondina\ D.H. Smith\ 7.v.1986 \ '1021' (♀, DZUP); 'Brasil.BA\ Salvador\ Ondina\ D.H. Smith\ 8.v.1986 \ '1020' (♀, DZUP); 'Brasil. BA\ Salvador\ Ondina\ D.H. Smith\ 7.vi.1986 \ '1019' (♀, DZUP); 'Brasil.BA\ Salvador\ Ondina\ D.H. Smith\ 7.vi.1986 \ '1018' (♀, DZUP); 'Brasil.BA\ Salvador\ Ondina\ D.H. Smith\ 22.vi.1986 \ '1025' (♀, DZUP); 'BRASIL, BA\ Ondina\ A. Raw coll\ 18. II.1984' (♀, DZUP); 'BRASIL, BA\ Ondina\ A. Raw coll\ A. Raw coll\ 4.8.85' (♀, DZUP); 'Ondina Sal\ 19.I.1985\ Luz U.V.' (♀, DZUP); 'Ondina Sal\ 23.I.1985\ Luz U.V.' (♀, DZUP); 'Ondina Sal\ 27.I.1985\ Luz U.V.' (♀, DZUP); 'Ondina Sal\ 29. I.1985\ Luz U.V.' (♀, DZUP); 'Ondina Sal\ 06.II.1985\ Luz U.V.' (♀, DZUP); 'Ondina Sal\ 07.III.1985\ Luz U.V.' (♀, DZUP); 'Ondina Sal\ 10.II.1985\ Luz U.V.' (♀, DZUP); 'Ondina Sal\ 10.II.1985\ Luz U.V.' (♀, DZUP).
branca' (1♀, DZUP); ‘Ondina Sal.\ 12.II.1985\ Luz U.V.’ (1♀, DZUP); ‘Ondina Sal.\ 13.II.1985\ Luz U.V.’ (1♀, DZUP); ‘Ondina Sal.\ 15.II.1985\ Luz U.V.’ (1♀, DZUP); ‘Ondina Sal.\ 21.II.1985\ Luz U.V.’ (1♂, DZUP); ‘Ondina Sal.\ 25.II.1985\ Luz U.V.’ (2♂, DZUP); ‘Ondina Sal.\ 10.III.1985\ Luz U.V.’ (1♂, DZUP); ‘Ondina Sal.\ 16.II.1985\ Luz U.V.’ (1♀, DZUP); ‘Ondina Sal.\ 17.II.1985\ Luz U.V.’ (1♀, DZUP); ‘Ondina Sal.\ 21.II.1985\ Luz U.V.’ (3♂, DZUP); ‘Ondina Sal.\ 25.II.1985\ Luz U.V.’ (1♂, DZUP); ‘Ondina Sal.\ 4.III.1985\ Luz U.V.’ (1♀, DZUP); ‘Ondina Sal.\ 6.III.1985\ Luz U.V.’ (1♂, DZUP); ‘Ondina Sal.\ 9.III.1985\ Luz U.V.’ (2♂, DZUP); ‘Ondina Sal.\ 10.III.1985\ Luz U.V.’ (1♂, DZUP); ‘Ondina Sal.\ 20.III.1985\ Luz branca’ (1♂, DZUP); ‘Ondina Sal.\ 23.III.1985\ Luz U.V.’ (2♂,1♂, DZUP); ‘Ondina Sal.\ 25.III.1985\ Luz U.V.’ (2♂,1♂, DZUP); ‘Ondina Sal.\ 26.III.1985\ Luz U.V.’ (4♀, DZUP); ‘Ondina Sal.\ 27.III.1985\ Luz U.V.’ (13♀,1♀, DZUP); ‘Ondina Sal.\ 27.III.1985\ Luz U.V.’ (1♂, DZUP); ‘Ondina Sal.\ 28.III.1985\ Luz U.V.’ (3♀, 1♂, DZUP); ‘Ondina Sal.\ 29.II.1985\ Luz U.V.’ (1♀, DZUP); ‘Ondina Sal.\ 30.III.1985\ Luz U.V.’ (1♀, DZUP); ‘Ondina Sal.\ 01.IV.1985\ Luz branca’ (3♀, DZUP); ‘Ondina Sal.\ 01.IV.1985\ Luz U.V.’ (2♂, DZUP); ‘Ondina Sal.\ 02.IV.1985\ Luz branca’ (1♀, DZUP); ‘Ondina Sal.\ 02.IV.1985\ Luz U.V.’ (6♂, DZUP); ‘Ondina Sal.\ 04.IV.1985\ Luz U.V.’ (5♀, DZUP); ‘Ondina Sal.\ 05.IV.1985\ Luz branca’ (1♂, DZUP); ‘Ondina Sal.\ 05.IV.1985\ Luz U.V.’ (1♂,2♂, DZUP); ‘Ondina Sal.\ 07.IV.1985\ Luz U.V.’ (2♂, DZUP); ‘Ondina Sal.\ 08.IV.1985\ Luz branca’ (1♀, DZUP); ‘Ondina Sal.\ 08.IV.1985\ Luz U.V.’ (1♀,1♀, DZUP); ‘Ondina Sal.\ 11.IV.1985\ Luz U.V.’ (1♀,2♂, DZUP); ‘Ondina Sal.\ 12.IV.1985\ Luz U.V.’ (7♀,1♂, DZUP); ‘Ondina Sal.\ 13.IV.1985\ Luz U.V.’ (2♂,1♂, DZUP); ‘Ondina Sal.\ 15.IV.1985\ Luz branca’ (4♀, 1♂, DZUP); ‘Ondina Sal.\ 16.IV.1985\ Luz U.V.’ (1♂, DZUP); ‘Ondina Sal.\ 22.IV.1985\ Luz U.V.’ (1♀, DZUP); ‘Ondina Sal.\ 24.IV.1985\ Luz U.V.’ (1♀, DZUP); ‘ONDINA SALVADOR BA\ 7-X-1980\ R.A. Soeiro’ (1♀, DZUP); ‘ONDINA SALVADOR BA\ 9-X-1980\ R.A. Soeiro’ (1♀, DZUP); ‘Salvador, Ba\ Brasil\ 5. V.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz branca’ (1♂, DZUP); ‘Salvador, Ba\ Brasil\ 11.V.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz branca’ (1♂, DZUP); ‘Salvador, Ba\ Brasil\ 17.V.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz branca’ (1♂, DZUP); ‘Salvador, Ba\ Brasil\ 25.V.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz branca’ (1♀, DZUP); ‘Salvador, Ba\ Brasil\ 25.V.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz branca’ (2♀, DZUP); ‘Salvador, Ba\ Brasil\ 25.V.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz branca’ (2♀, DZUP); ‘Salvador, Ba\ Brasil\ 4.VI.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz U.V.’ (1♀, DZUP); ‘Salvador, Ba\ Brasil\ 10.VI.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz U.V.’ (1♀, DZUP); ‘Salvador, Ba\ Brasil\ 11.VI.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz branca’ (1♀, DZUP); ‘Salvador, Ba\ Brasil\ 12.VI.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz branca’ (1♀, DZUP); ‘Salvador, Ba\ Brasil\ 13.VI.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz branca’ (2♀, DZUP); ‘Salvador, Ba\ Brasil\ 16.VI.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz U.V.’ (1♀, DZUP); ‘Salvador, Ba\ Brasil\ 16.VI.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz branca’ (1♂, DZUP); ‘Salvador, Ba\ Brasil\ 16.VI.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz branca’ (1♂, DZUP); ‘Salvador, Ba\ Brasil\ 17.VI.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz branca’ (1♀, DZUP); ‘Salvador, Ba\ Brasil\ 26.VI.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz branca’ (2♀, DZUP); ‘Salvador, Ba\ Brasil\ 27.VI.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz U.V.’ (1♀, DZUP); ‘Salvador, Ba\ Brasil\ 29.VI.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz U.V.’ (1♀, DZUP); ‘Salvador, Ba\ Brasil\ 1.VII.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz branca’ (1♂, DZUP); ‘Salvador, Ba\ Brasil\ 2.VII.1985\ D.H. Smith’ ‘Armadilha\ Luminosa\ Luz branca’ (1♀, DZUP).
U.V.’ (1♀, DZUP); ‘Salvador, Bahia, Brasil, 5.VII.1985, D.H. Smith’ ‘Armadilha Luminosa, Luz U.V.’ (2♀, DZUP); ‘Salvador, Bahia, Brasil, 6.VII.1985, D.H. Smith’ ‘Armadilha Luminosa, Luz U.V.’ (1♀, DZUP); ‘Salvador, Bahia, Brasil, 7.VII.1985, D.H. Smith’ ‘Armadilha Luminosa, Luz U.V.’ (1♀, DZUP); ‘Salvador, Bahia, Brasil, 9.VII.1985, D.H. Smith’ ‘Armadilha Luminosa, Luz U.V.’ (1♀, DZUP); ‘Salvador, Bahia, Brasil, 10.VII.1985, D.H. Smith’ ‘Armadilha Luminosa, Luz branca’ (1♂, DZUP); ‘Salvador, Bahia, Brasil, 12.VII.1985, D.H. Smith’ ‘Armadilha Luminosa, Luz U.V.’ (1♀, DZUP); ‘Salvador, Bahia, Brasil, 12.VII.1985, D.H. Smith’ ‘Armadilha Luminosa, Luz branca’ (1♀, DZUP); ‘Salvador, Bahia, Brasil, 14.VII.1985, D.H. Smith’ ‘Armadilha Luminosa, Luz U.V.’ (2♀, DZUP); ‘Salvador, Bahia, Brasil, 27.IV.1985, D.H. Smith’ ‘Armadilha Luminosa, Luz U.V.’ (1♀, DZUP); ‘Salvador, Bahia, Brasil, 29.IV.1985, D.H. Smith’ ‘Armadilha Luminosa, Luz U.V.’ (1♀, DZUP); ‘Salvador, Bahia, Brasil, 3.V.1985, D.H. Smith’ ‘Armadilha Luminosa, Luz U.V.’ (1♀, DZUP); ‘Salvador, Bahia, Brasil, 3.V.1985, D.H. Smith’ ‘Armadilha Luminosa, Luz branca’ (1♂, DZUP); ‘Salvador, Bahia, Brasil, 11.V.1985, D.H. Smith’ ‘Armadilha Luminosa, Luz branca’ (1♀, DZUP); ‘Brasília, DF, Brasil, 1000 m, 18.xi.1984, V.O. Becker’ col.15°35’S 47°42’W (2♀, 1♂, DZUP); ‘BRASIL:DF’, brasilia, 1000 m, 15.IX.1984, V.O. Becker col.(1♀, DZUP). Espírito Santo: Brasil, Espírito Santo, Conceição da Barra, xi.1985, C. Elias leg. (3♀, DZUP). Goiás: ‘Faz. Nova Orlandia, Jataí, Goiás, Brasil, 1964, Martins, Morgante & Silva. (2♀, MZUP); ‘Brasília, Goiás, Chapada dos Veadeiros, Vale Dourado, 14°11’S 47°37’W, 1100m, 31.iii.2003, 6h, Melo, Aguiar, Marchi e Gonçalves, em Lamiaceae’ (1♀, DZUP); ‘Brasília, Goiás, Chapada dos Veadeiros, Vale Dourado, 14°11’S 47°37’W, 1100m, 01.iv.2003, 6h, Melo, Aguiar, Marchi e Gonçalves’ (2♀, DZUP). Mato Grosso: ‘Alto Araguaia, MT, Córrego da Vaca, 04.03.2010, 1♀, A. Santos leg. ‘44095 UFPE’, Acetato de Metila, Megalopta sp.6, A14988, AT Carvalho det.2010’ (1♀, DZMG); ‘BR-29 RIO JURUENA, M. Grosso, Brasil, XI-1960, M. Alvarenga leg’ (1♀, DZUP); ‘Mato Grosso, Barra das Garças, 18-4-1978, coll. A. Raw’ (1♂, DZUP); ‘Brasil, MT, Chap. dos Guimarães Colégio Agr. Buriti, 13 a 17-II-1986, Col. I.S. Gorayeb, Armadilha, 1,6m, Suspensa’ (1♀, DZUP); ‘BRASIL: Mato Grosso, Reserva Humboldt, 10°11’S 59°48’W, VII-13-1977, B.C. Ratcliffe’ (1♀, DZUP); ‘DPT’ZOOL UF-PARANÁ Jacaré-P.N. Xingu, M. Grosso – BRASIL 25/30/11/1965, M. Alvarenga leg’ (1♂, DZUP); ‘Brasil, Mato Grosso, 18 km W de Nova Mutum, Faz. Buriti, 12.I.2000, HF Mendes’ (1♀, DZUP); ‘MT, Aripuanã, Resv. Humboldt, março 1977, Brasil Pará, WL Overall, Megalopta sp. Det Camargo. 82’ (1♀, MPEG). Mato Grosso do Sul: ‘M. Grosso, Bataguacu, Rabello, 7-x-1954 (1♀, MZUP); ‘Brasilia, Mato Grosso do Sul, Bonito, Fazenda Pinhateguiras, 3.iii.2009, 20°52’S 56°35’W, 479m, Luz, J.C. Gaona, leg.’ (1♀, DZUP); ‘BRASIL, Mato Grosso do Sul, Bonito, Serra da Bodoquena, Fazenda Pinhateguiras, 4.iii.2009, 20°48’S 56°37’23’W, 535m, Luz, J.C. Gaona, leg.’ (1♀, DZUP). Maranhão: ‘22-X-2001 SERRA DO PENITENTE, BALSAS, MA, 600m, C. Mielke leg’ (1♀, DZUP); ‘Brasil, Maranhão, Serra do Penitente, 01-02.xi.2002, C. Mielke’ (5♀, 1♂, DZUP); ‘DPT’ZOOL UF-PARANÁ ‘Imperatriz-MA, I-1973, Exc. Depto. Zool.’ (1♂, DZUP); ‘Brasil, MA, Caxias, Inhamam, 535m, 04°54’39’S, 43°25’16’W, 18. v.2007, J. Rafael, F. Xavier Fo & F. Oliveira, luz’ (1♂, DZUP); ‘Brasil, MA, Caxias, Olho d’água, 100m, 04°39’32’S, 43°03’51’W, 19.v.2007, J.A. Rafael, F. Xavier Fo & F. Oliveira, luz’ (1♀, DZUP).
Xavier Fo & F.L. Oliveira, luz’ (1♀, DZUP). Minas Gerais: 5-8-XII-2002. PETI, SÃO GONÇALO RIO ABAIXO, MG, 560m\ | MIELKE LEG’ (1♀, DZUP); ‘P.F. E.R.D. MG\ LOCAL:\ DATA:13-15/XII/1977’ ‘Pe’ (1♂, DZUP); ‘P.F.E.R.D. MG\ LOCAL:\ DATA:13-17/XII/1977’ ‘Pe’ (1♀, DZUP); ‘BRASIL, MG, Berizal, Faz.\ Veredão, 14-XII-2007 850m\ Luz 15°39’53”S 41°39’56”W\ Grossi, Rafael & Parizotto’ (2♀, DZUP); ‘Brasil, Minas Gerais, 13 Km, NE de Ipanema, Fazenda\ Montes Claros, 400m\ 29.-30.ii.2003 Mielke & Casagande, armadilha\ luminosa’ (1♀,2♂, DZUP). Pará: ‘Aveiro,\ PA 29-30.x.1970\ Exp.Perm.Amaz.’ (1♀, MZUSP); ‘Brasil Pará \ Acará\ Ilha de Combuú 30.VIII.1989’ ‘Brasil Pará \ R.B Neto’ (1♀, MPEG); ‘Brasil Pará \ Acará\ Ilha de Combuú 31.VIII.1989’ ‘Brasil Pará \ R.B Neto’ (2♀, MPEG); ‘Brasil Pará \ Alenquer\ 2 julho 1979’ ‘Brasil Pará \ W França’ (14♀, 9♂, MPEG); ‘Brasil Pará \ Alenquer\ 2 julho 1979’ ‘Brasil Pará \ P Tadeu’ (4♀, 21♂, MPEG); ‘Brasil Pará \ Alenquer\ 3 julho 1979’ ‘Brasil Pará \ P Tadeu’ (5♂, MPEG); ‘Brasil Pará \ Alenquer\ 3 julho 1979’ ‘Brasil Pará \ W França’ (3♂, MPEG); ‘Brasil Pará \ Alenquer\ 4 julho 1979’ ‘Brasil Pará \ W França’ (2♂, MPEG); ‘Brasil Pará \ Alenquer\ 5 julho 1979’ ‘Brasil Pará \ P Tadeu’ (1♀, MPEG); ‘PA:BR-14 km 93° Belém-Brasília\ Ago-out.1959\ Exp.Dep.Zool.’ (1♀, MZUP); ‘bôca do Cuminá-Miri\ Oriximiná, PA\ 19-26.I.1968\ Exp. \ Perm. Amaz.’ (1♂, MZUSP); ‘BRASIL\ Pará Belém\ Floresta APEG\ 27-XI a 2-II-83’ ‘L.S. Gorayeb\ Armadilha 1,6m Suspensa’ (1♀, INPA); ‘BRASIL, PA, Belo Monte,\ Rio Xingu, Rodovia\ Transamazônica 03°05’52”S – 51°41’31”W\ 07.iv.2008, armadilha luz J.A. Rafael & F.F. Xavier Fº’ (2♀, INPA); ‘BRASIL, PA, Belterra\ FLONA Tapajós, 100m\ 02°36’15”S – 54°56’35”W’ 15-16.v.2008, arm. luz J.A. Rafael & F.F. Xavier Fº’ (1♂, INPA); ‘Brasil Pará \ Bujaru\ 25.III-1978’ ‘Brasil Pará \ N De Souza’ (1♀,1♂, MPEG); ‘Brasil Pará \ Bujaru\ 26.III-1978’ ‘Brasil Pará \ M F Torres’ (1♂, MPEG); ‘Cach. do Itacé\ 7.8.’ ‘Brasil, PA/AP\ Rio Jari, 1961\ Dr. W. Egler’ ‘Megalopta sp\ Det. Camargo. 82’ (1♀, MPEG); ‘CACHIMBO\ Pará BRASIL\ X-1959\ M. Alvarenga’ (1♀, MPEG); ‘BRASIL:PA\ Capitão Poço\ 19-22.xi.1984\ V.O. Becker\ col’ (15♀,1♂, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA’ ‘CACHIMBO\ Pará BRASIL\ VI.1955\ F.M. Oliveira’ (1♂, MPEG); ‘Brasil Pará \ I. DO COMBU\ 25-X-1989\ R.B. NETO’ ‘Hymenoptera: Acoprita\ Aculeata: Apoidea\ Halictidae\ Incorporação 7.VI.1999’ (1♀, MPEG); ‘Brasil Pará \ Maracana\ Ilha do Marcol\ 11a13.I.1993’ ‘Brasil Pará \ J. Dias’ (1♂, MPEG); ‘BRASIL, PA, Medicilândia\ Rod. Transamazônica 03°26’45”S – 52°56’12”W’ 09.iv.2008, arm. luz J.A. Rafael & F.F. Xavier Fº’ (1♀,1♂, INPA); ‘BRASIL:PA-Melgaço\ Caxiuana-ECFP\ 26-VIII-1995\ R.M. Valente\ col.’ ‘Isca humana\ Torre 22m’ ‘Hymenoptera: Apocrita\ Aculeata: Apoidea\ Halictidae\ Incorporação 17.VII.2002’ (1♀, MPEG); ‘Peixe-Boi\ 20.211964’ ‘Brasil, PA\ W. França Col.’ ‘Megalopta sp\ Det. Camargo. 82’ (1♂, MPEG); ‘Brasil Pará \ Primavera\ Boa Vista\ Ilha Aropiranga’ \ 22.XI.1992’ ‘Armadilha\ de Luz’ (1♂, MPEG); ‘BRASIL:Pará Rio\ Poana a direita\ Subindo 6-\ X-85º Eq. Comander’ (1♀, INPA); ‘BRASIL:Pará Rio Trombetas\ \ Est.\ da Fumaca\ 02-X-85º Eq. Comander’ (1♀, INPA); ‘Brasil Pará \ São João de Pirabas\ Japerica\ 16a18.XII.1992’ ‘Brasil Pará \ J. Dias’ ‘Armadilha\ Malaise’ (1♀, MPEG); ‘Brasil Pará \ São João de Pirabas\ Japerica\ Ilha Conceição\ 20.XII.1992’ ‘Brasil Pará \ J. Dias’ ‘Armadilha\ de Luz’ (4♀, 1♂, MPEG); ‘Brasil Pará \ São João de Pirabas\ Japerica\ 18.XII.1992’ ‘Brasil Pará \ J. Dias’ (1♂, MPEG); ‘Brasil Pará \ Serra Norte\ N°1 MATA\ 25a28.x.1985’ ‘Armadilha\ 1,6m Suspensa’ ‘Brasil Pará \ J. Dias’ ‘MPEG-HYM\ 11005602’ (1♀, MPEG); ‘Brasil Pará \ Serra Norte\ 659
Armadilha \ Luminosa\' (1♀, 1♂ DZUP). \textit{BRASIL: Rondônia} \ Ji-Paraná\ 14-18-III-1983\ equipe J.R. Arias (1♀, INPA); \textit{BRASIL: RO} \ Porto Velho, 180m\ 24-30. iv.1989\ V.O. Becker (1♀, DZUP); \textit{BRASIL: RO} \ Porto Velho, 180m\ 2-12.v.1989\ V.O. Becker (3♀, DZUP); \textit{Brasil, Rondônia} Ouro Preto do Oeste\ LINHA 212 LOTE 36 GLEBA 21-B 1a3.IX.1986 \textit{Armadilha} \ 1,6m \ Suspensa \ \textit{Brasil, Rondônia F. F. Ramos} (1♀, DZUP); \textit{2534} \ 'T. Fed. Rondônia' Em 11/9/63 Col. Eduardo (1♀, INPA); \textit{T. Guaporé} C. Sâmuel Rio Jamary(155.911 Park) \textit{argoides} (Vach.) \ 'verso: M.N. Parisi C.W.T. M... 28-58  \textit{Plaqueta} \ preespiracular' (1♀, DZUP); \textit{Roraima:} Brasil, Roraima, Amapari,\ \textit{Tepequém}, Trilha Igarapé\ da Anta 03°47’00.5”N 61°45’49.8”W 603m 15-abr-09\ 16:00 Grigio, Jr.O Eugenol’ \textit{MIRR} 11899 (1♀, MIRR); Br. Roraima, Amapari,\ \textit{Tepequém}, Trilha Igarapé\ da Anta 03°46’19,7”N  61°45’21,6”W 649m 14-\ mai-09 11:00 Grigio, Jr.O Salicilato’ \textit{MIRR} 12679 (1♀, MIRR); \textit{IDEM} \ ‘MIRR 12680 (1♀, MIRR); \textit{IDEM} \ ‘MIRR 12681 (1♀, MIRR); \textit{IDEM} \ ‘MIRR 12682 ‘IDEM’ \ ‘MIRR 12683’ (1♀, MIRR); \textit{IDEM} \ ‘MIRR 12684’ (1♀, MIRR);’ \textit{IDEM} \ ‘MIRR 12688’ (1♀, MIRR);’ \textit{IDEM} \ ‘MIRR 12691’ (1♀, MIRR);’ \textit{IDEM} \ ‘MIRR 12692’ (1♀, MIRR);’ \textit{IDEM} \ ‘MIRR 12693’ (1♀, MIRR);’ \textit{IDEM} \ ‘MIRR 12694’ (1♀, MIRR);’ \textit{IDEM} \ ‘MIRR 12696’ (1♀, MIRR);’ \textit{MIRR} 12697 (1♀, MIRR);’ \textit{IDEM} \ ‘MIRR 12698’ (1♀, MIRR);’ \textit{IDEM} \ ‘MIRR 12699’ (1♀, MIRR);’ \textit{IDEM} \ ‘MIRR 12700’ (1♀, MIRR);’ \textit{MIRR} 12701 (1♀, MIRR); Brasil, Roraima, Amapari,\ \textit{Tepequém}, Trilha Igarapé\ da Anta 03°46’06.8”N 61°45’33,7”W ‘625m 14-mai-09 10:00 Grigio, Jr. O\ Eugenol’ \textit{MIRR} 12522 (1♀, MIRR); Br. Roraima, Amapari,\ \textit{Tepequém}, Trilha Igarapé\ da Anta 03°46’06.8”N 61°45’33,7”W ‘625m 29-set-09 14:40 Silva J.S.R, da Silva Em\ isca \textit{Armada}
 \textit{1,6m} \ Suspensa \ ‘573m 02-out-09 Gama\ Neto, J. L. Em Pensilvânia’ \textit{MIRR} 13295 (1♀, MIRR); \textit{IDEM} \ ‘MIRR 133004 (1♀, MIRR);’ \textit{IDEM} \ ‘MIRR 13305’ (1♀, MIRR); Brasil, Roraima, Amapari,\ \textit{Tepequém}, Trilha Igarapé do Melo\ 03°47’41,4”N ‘61°44’43,0”W ‘573m 02-out-09 Gama\ Neto, J. L. Em Pensilvânia’ \textit{MIRR} 13295 (1♀, MIRR); \textit{IDEM} \ ‘MIRR 133004 (1♀, MIRR);’ \textit{IDEM} \ ‘MIRR 13305’ (1♀, MIRR); Brasil, Roraima, Amapari,\ \textit{Tepequém}, Trilha Igarapé do Melo\ 03°47’41,4”N ‘61°44’43,0”W ‘573m 14-mai-09 09:00 Grigio, Jr. O Salicilato’ \textit{MIRR} 12458 (1♀, MIRR); Brasil, Roraima, Amapari,\ \textit{Tepequém}, Mata Margem\ da Estrada 03°44’51,0”N ‘61°43’36,4”W 612m 16-\ abr-09 7:30h Grigio, Jr. O Salicilato’ \textit{MIRR} 12369 (1♂, MIRR); Brasil, Roraima, Pacaraima,\ Ramal do\ Miang 04°29’37”N 61°04’35”W 770m ‘10-jul-08 Silva, S.J.R. da Silva Em\ isca aromática’ \textit{MIRR} 10295 (1♀, MIRR);’ \textit{IDEM} \ ‘MIRR 10300-10302’ (3♀, MIRR); Brasil, Roraima\ \textit{Tepequém} Pousada SESC 03°45’18”N ‘61°42’59”W ‘637 m 14/viii/2009 M.L. Oliveira, O\ Mielke & M.\ Casagrande leg.’ (1♀, INPA); Brasil, RR, Guaporé\ 12°16’05”S 60°42’30”W 23.IV.2006 LUlZA J.A. Rafael leg. (2♀, CPDP); \textit{Vista Alegre\ Rio Branco\ Amazonas\ 5.IX.14 ‘idalia\ Sm\ Det. J.S. Moure 19’ \ (verso:Br. M. N. Hist.\ C.W.T. \17a 1276)’ (1♀, DZUP); Brasil: Roraima\ Ilha\ de Maracá, 16-17.iii.1988 ‘C. Motta e a\ Luz mista (10,2♂, INPA); Brasil: Roraima\ Rio Uraricoera\ Ilha de Maracá\ 02-13-v-1987 ‘Eq. J.A. Rafael\ Arm.de Malaise’ (1♀, INPA); Brasil: Roraima\ Rio Uraricoera\ Ilha de Maracá\ 18-29-vii-1987 ‘J.A. Rafael\ L.S. Aquino\ J.F. Vida\ Elías Binda’ ‘Armadilha\ de Luz’ (1♀, INPA); Brasil: Roraima\ Rio Uraricoera\ Ilha de Maracá\ 21-30-xi-1987 J.A. Rafael e\ equipe (1♀, INPA); Brasil: Roraima\ Rio Uraricoera\ Ilha de Maracá\ 02-13-v-1987 ‘J.A. Rafael\ J.E.B. Brasil\ L.S. Aquino’
'Armêndilha de Malaise' (♀, I♂, INPA). Sergipe: ‘BIOTA-FAPESP\ Brasil:SE, Santa Luzia do Itanhy\ Crasto, 11°22’43.9’S 37°25’03.0’W\ Varredura, amosta 19\ 01. viii.2001\ MT Tavares e eq. col.’ ‘BIOTA Abellhas’ 0012 sp2(1♂, MZUSP). São Paulo: ‘Brasil, São Paulo\ 10km a NW de Sete\ Barras, 40m, 24°22’22’S 47°58’W, 24. xii.2004-8.i.2005, arm. malaise’ (1♀, DZUP); ‘Brasil, São Paulo\ 35km a NE de Miracatu\ 550m, 12.x.2005\ Mielke & Casagrande’ (1♀, DZUP); ‘Brasil, São Paulo\ 43km a NE do Miracatu,8-9.x.2005, O. Mielke’ (3♀, DZUP); ‘Brasil, São Paulo, 10 km a NW de Sete\ Barras, 40m, 24°22’22’S 47°58’W, 26.iii.2005\ armadilha luminosa’ (1♂, DZUP); ‘Caraguatuba-SP\ (Res. Flor.-40m.)\ 22.V.- I.VI.1962\ Exp. Dep. Zool.’ ‘Ninho’ (2♀, DZUP); ‘Cerrado-Est.Ecol.Jatai-SP\ BR 20.x.1992 no\ 2300\ h:18:39, Mateus,S. Leg\ Fora area’ (1♀, DZUP); ‘Faz. Itaquêrê,\ Nova\ Europa, SP\ 14-VIII.1963\ K. Lenko col.’ ‘A Luz’ (1♀, MZUSP); ‘Ilha Bela\ I.S. Sebastião\ SP \ v.1981\ Brandão col.’ (1♂, MZUSP). Tocantins: ‘BRASIL, TO, Pindorama,\ Rio Balsas, 340m\ 11°01’04”S – 47°29’08”W\ 28.iii.2008, armadilha luz\ J.A. Rafael & F.F. Xavier Fº’ (1♀, INPA); ‘BRASIL, TO, Pindorama,\ Rio Balsas, 340m\ 11°01’04”S – 47°29’08”W\ 29.iii.2008, armadilha luz\ J.A. Rafael & F. F. Xavier Fº’ (1♀, INPA). GUYANA: ‘Museum\ Leiden\ BRITISH GUYANA\ Mackenzie\ 17-19.III.1966\ J. Geijskes’ (1♀, RMNH). NICARAGUA: Masaya: ‘NICA: Managua:\ Ticuantepe: Casa Blanca\ 30-IV-1-V-2001\ col. J.M. Maes, J.\ Sunyer & B. Hernandez’ (1♀, DZUP). PERU: Loreto: ‘Peru, LO\ A&E Tours, frog\ valley\ Rio Tahuayo\ 27vi01\ Mario Caglegari ♂’; Ex light trap’\ col. CR col’ (1♂, CRC). SURINAME: Brokopondo: ‘Museum\ Leiden\ SURINAM\ Brokopondo\ VI.1964\ M. Boeseman’ (1♀, RMNH). Paramaribo: ‘Suriname\ Paramaribo\ Ma\ Retraite\20-23.1964\ D.C. Geijskes’ ‘MALAISE TRAP’ (2♀, RMNH). Sipaliwini: ‘Museum\ Leiden\ SURINAM\ Sipaliwini\ 20-11.1968\ G.P. Mees’ (1♀, RMNH); ‘Suriname\ Upper Corantijn River\ Coeroeni\ 19 June 1963\ J.G.\ Wessels Boer’ ‘AIRSTRIP’ ‘at light’ (1♀, RMNH); ‘Suriname\ Upper Corantijn River\ Coeroeni\ 21 aug 1969’ ‘Leg. D.C. Geijskes’ (1♀, RMNH); ‘Suriname\ Republiciek\ 8-12 oct\ 1963\ D.C. Geijskes’ ‘ MALAISE TRAP’ (1♀, RMNH). TRINIDAD AND TOBAGO: Tunapuna/Piarco: ‘TRINIDAD\ Curepe (CIBC)\ 14-21.iv.1987\ Mal.\ trap RMNH\ N.v.Buren’ (1♂, RMNH). VENEZUELA: Miranda: Curupao.

Megalopta chaperi

BRAZIL. Roraima: ‘BRASIL: Roraima, Ilha\ de Maracã,16-17.iii.1988. C. Motta et.\ al.\ Luz mista’ (2♀, INPA); ‘BRASIL: \ Roraima, Ilha\ de Maracã, 20-21.iii.1988. C.\ Motta et. al.\ Luz mista’ (2♀, 2♂, INPA); ‘BRASIL – Roraima: Rio\ Uraricoera\ Ilha de Maracã\ 02-13.v.1987\ ‘J.A. Rafael\ J.E.B. Brasili\ L.S. Aquino’ ‘Armêndilha de\ Malaise’ (1♂, INPA); ‘Brasil, Roraima, Amajari\ Tepequém\ Trilha Igarapé da\ Anta\ 03°46’19.7’’N ‘61°45’21.6’’W 649m 14-\ mai-09\ 11:00 Grigio, Jr.O ‘Salicliato’ ‘MIRR 12677’ (1♀, MIRR); ‘BR RR\ Uiramutã, Rio\ Wailã\ 043750/600946\ 28.iii.2008, armadilha luz J.A. Rafael & F. F. Xavier Fº’. 

Megalopta guimaraesi

BRAZIL: Bahia: ‘Brasil, Bahia, Camacã,\ Serra Bonita, 800m,\ 15°23’S 39°34’W,\ =14.i.207, G. Melo,\ atraídas por luz,4-5:00’ (4♀, DZUP); ‘25-30-I-2007 RIO\ DE\ CONTAS, BAHIA\ 900m, MIELKE & CASAGRANDE LEG.’ (1♀, DZUP).
Distrito Federal: ‘BRASIL: DF\ Brasília, 1000m\ 15.IX.1984\ V.O. Becker col.’ (♀, DZUP); ‘15°35'S\ 47°42'W\ Planaltina, DF, \ BRASIL – 1000m\ 18.IX.1984\ V.O. Becker col.’ (♀, DZUP); ‘Coleção\ EMBRAPA-CPAC\ N°10536\ ‘15°35'S\ 47°42'W\ Planaltina, DF, \ BRASIL – 1000m\ 25.IX.1985\ V.O. Becker col.’ (♀, DZUP); ‘Coleção\ EMBRAPA-CPAC\ N°10537\ ‘15°35'S\ 47°42'W\ Planaltina, DF, \ BRASIL – 1000m\ 25.IX.1985\ V.O. Becker col.’ (♀, DZUP).

Goiás: ‘BRASIL, Goiás, Chapada dos Veadeiros, Vale Dorado,\ 14°11’S\ 43°03’W, 1200m, 31. iii.2003, 6h, Melo, Aguiar, Marchi e Gonçalves\ em Lamiaceae’ (♀, DZUP); ‘BRASIL, Goiás, Chapada dos Veadeiros, Vale Dorado,\ 14°00’S\ 47°37’W, 1100m, 01.iv.2003, 6h, Melo, Aguiar, Marchi e Gonçalves’ (♀, DZUP); ‘Formosa, Goiás, BRASIL – 800m\ 22.IX.1984\ V.O. Becker col.’ (♀, DZUP); ‘Faz. Nova Orlândia\ Jataí, Goiás-Brasil\ X.1962\ Exp. Dep. Zool.’ ‘À luz’ (♀, MZUSP); ‘Faz. Nova Orlândia\ Jataí, Go-Brasil\ I.964- Martins, Morgane & Silva.’ ‘À luz’ (♀, MZUSP). Maranhão: ‘BRASIL (MA), Caxias\ Balneário Shalom\ Armadilha Luminosa, 27-28.ii.2004, F. Limeira \ -de-Oliveira et al cols.’ (♀, INPA); ‘BRASIL (MA), Acaílândia\ Faz. Itabaiana, Arm. Luís\ de Queiroz, 14-15.iv.\2001, J.T. Câmara. (♀, INPA); ‘22-X-2001 SERRA DO PENITENTE, BALSAS \ MA, 500m\ C. MIELKE LEG.’ (♀, DZUP); ‘BRASIL, Maranhão,\ Serra do Penitente, 01-02.xi.2002, C. Mielke’ (♀, DZUP); ‘BRASIL, MA, Caxias,\ Olho d’água, 100m,\4°39’32’S\ 43°03’51’W,\ 19.V.2007, J.A. Rafael, F. F. Xavier Fo. & F.L. Oliveira, luz’ (♀, DZUP). Mato Grosso: ‘Alto Araguaia MT\ Ribeirão Claro\ Brasil 04.03.2010\ A.T. Carvalho, leg.’ ‘61671UFPE’ ‘Luz\ Acetado de Metila’ ‘Megalopota sp.9\ A1501\ AT Carvalho det. 2010’ (♀, DZMG). Mato Grosso do Sul: ‘BRASIL-MS\ COSTA RICA 17-XII-93\ S.IDE- COL.’ (♀, DZUP).

Minas Gerais: ‘BRASIL, Minas Gerais,\ Corinto, 16-31.xii.1979, C\ Elias leg’ (♀, DZUP); ‘Entomofauna do\ Pq. E. Rio Doce\ 12758-37184\ ‘Marliéri MG\ BRASIL 20/10/1980\ Monteiro & Mascarenhas’ (♀, DZMG); ‘Entomofauna do\ Pq. E. Rio Doce\ 12758-37245\ ‘Marliéri MG\ BRASIL 20/10/1980\ Monteiro & Mascarenhas’ (♀, DZMG); ‘Entomofauna do\ Pq. E. Rio Doce\ 12758-37246\ ‘Marliéri MG\ BRASIL 20/10/1980\ Monteiro & Mascarenhas’ (♀, DZMG); ‘Entomofauna do\ Pq. E. Rio Doce\ 12758-37247\ ‘Marliéri MG\ BRASIL 20/10/1980\ Monteiro & Mascarenhas’ (♀, DZMG); ‘Abelhas Noturnas\ EPDA de Peti\ 11964-35500\ ‘S. Gonçalo R. Abaixo MG\ BRASIL 23/02/2005\ R.B. Martins’ (♀, DZMG); ‘Viçosa, MG, Brasil\ Data 8/10/1988\ P.S. Fiuza F.’ ‘Córrego do Paraíso\ Mata da Prefeitura\ Armadilha UV’ (♀, MEUFV). Parana: ‘BRASIL, Paraná, Campo\ Mourão, Reserva Lagoa Azul, 24°05’27’S\ 52°19’55’W,\ 09.x.2010, C.M. Maia\ Armadilha luminosa’ (♀, DZUP).

Rio de Janeiro: ‘COLEÇÃO\ CAMPOS SEABRA\ ‘FLORESTA DA TIJUCA\ D. Federal BRASIL\ 22./1958\ C.A. Campos Seabra’ (♀, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA\ ‘FLORESTA DA TIJUCA\ D. Federal BRASIL\ 9.II.1958\ C.A. Campos Seabra’ (♀, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA’ ‘FLORESTA DA TIJUCA\ D. Federal BRASIL\ 15.III.1958\ C.A. Campos Seabra’ (♀, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA’ ‘FLORESTA DA TIJUCA\ D. Federal BRASIL\ 17 Março 1958\ C.A. Campos Seabra’ (♀, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA\ ‘FLORESTA DA TIJUCA\ D. Federal BRASIL\ 28 Dezembro 1958\ Luz\ C.A. Campos Seabra’ (♀, DZUP).
**Megalopta cuprea**

**BOLIVIA:** ‘Bolivia\ Mapiri \ 1900’ ‘M. cuprea\ 1909 Friese det.’ (♀, DZUP). **La Paz:** ‘17.645’ ‘Megalopta idalia\ ♀ 904 Friese det.’ ‘17.645 – Bolivia\ Mapiri, 1900\ Col. Desconhecido’ (♀, MZUSP).

**BRAZIL:** ‘Acre:’ 'Brazi\ Acre\ Acrelândia\ 10°04’ ‘Megalopta idalia\ ♀, DZUP). ‘Col.: Gorayeb, Pena, Henriques, Edmar’ ‘COLETA\ NOTURNA’ (♀, MPEG); ‘Brazi\ Acre\ Acrelândia\ 10°04’ ‘Megalopta idalia\ ♀, MZUSP).

**BRASIL. ACRE. RIO\ BRANCO. BOSQUE** DATA: 09/VI/1995 \ M.L. OLIVEIRA’ (♀, INPA). **Amapá:** ‘Brazi\ Amapá\ Amapari\ TUCANO-2’ 9.XI.1993 ‘Brazi\ AP\ N. Bittencourt’ ‘Armadilha de Luz’ (♀, MPEG). **Amazonas:** ‘BRASIL, Amazonas,\ Caruari, 5°05’15”S\ 67°10’03” Vi.2005’ Luz mista/mercúrio ‘A. Henriques &\ Vavier-Filho leg.’ (♀, 1♂, INPA); ‘BRASIL, Amazonas,\ Rio Jau, Meriti\ Mun. Novo Airão’ ‘04-10.iv.1994’ J.A. Rafael ‘Megalopta spp.’ det. G. Melo 1996’ (♀, INPA); ‘BRA, Amazonas, Novo\ Aripuanã, lago Xadá\ 05°15’39”S 60°42’32”W\ iv.2005’ ‘Em luz mista e BLB’ F. Xavier, F. Godoi & A. Lourido Leg.’ (1♀, INPA); ‘BRASIL, AM, Tabatinga, 30/ix-93\ 03°56’62”S, 61°21’02”W ‘Félix Filho, F.F.& Barbosa, U.C.’ ‘Arm. de Luz Mist’ (3♀, INPA); ‘BRASIL, Amazonas, Rio\ Nhambúá, Ig. Areias, 17.645 – Bolivia\ Mapiri, 1900\ Col. Desconhecido’ (♀, MZUSP).
barco’ (♀, INPA); ‘BRASIL, Amazonas\ Barcelos, viii.2008\ Rio Aracá\ Cuqui\ 0° 12’07’S 63°11’24’W ’Luz suspensa 20m\A. Filho & R. Machado’ (1♀, INPA); ‘BRASIL, AM, Barcelos\ Igarapé Erere/ Coruja\ 00°06’16’N – 63°51’0’’W ’18-25. vi.2008. F.F. Xavier\ Fº. Arm. Luz’ (♀, INPA); ‘BRASIL, Amazonas,\ Campo da Catuquira,´\ ca 240 km S Manaus\ Mata-04°55.184’S\ 61°06.619W’ ‘21/VII/2007, em isca\ Expedição GEOMA’ H.F. Guariento leg.’ (♀, INPA); ‘BRASIL, Amazonas,\ Campo da Catuquira,´\ ca 240 km S Manaus’ ‘Mata-04°55.184’S\ 61°06.619W/19/\ VII/2007, em isca\ Expedição GEOMA’ H.F. Guariento leg.’ (♀, INPA); ‘BRASIL, Amazonas,\ Carauari, 5°05’31’’S 67°10’03’, vii.2005\ Luz mista/mercúrio’ ‘A. Henriques &\ Xavier-Filho leg.’ (2♀, INPA); ‘BRASIL, AM, Fonte Boa\ 023227S-660408W\ 27.ix.2005, arm.luz\ F.F. Xavier Fº’ (♀, INPA); ‘BRASIL, Amazonas\ Fonte Boa\ Estr. do\ Mamopina, Km,3’ ‘02°32’27’’S 66°04’08’W\ 05-30 IX 2005\ J.A. Rafael &\ F.F. Xavier-Filho\ Em luz’ (1♀, INPA); ‘BRASIL, Amazonas\ ESENA\ Juami-Japurã\ 02°19’09’’S\ 68°25’16’W’ ‘04-17 agosto 2005\ L.S. Aquino leg.’ (♀, INPA); ‘BRASIL, Amazonas\ ESENA\ Juami-Japurã\ 02°45’19.76’’S\ 67°36’50.29’W’ ‘04-17 agosto 2005\ L.S. Aquino leg.’ (♀, INPA); ‘BRASIL, Amazonas\ Juami-Japurã\ Médio Rio Juami\ 01°57’20.4’’S\ 67°55’47.8’’W’ 23-29 2004\ M.L. Oliveira &\ F.F. Xavier Filho leg.\ armadilha luz mista’ (♀, INPA); ‘BRasil. Amazonas\ Fonte Boa\ Estr. do\ Mamopina, Km 3’ ‘02°32’27’’S 66°04’08’W\ 05-30 IX 2005\ J.A. Rafael &\ F.F. Xavier-Filho\ Em luz’ (1♀,1♂, INPA); ‘BRASIL, AM, Fonte Boa\ 023227S – 660408W\ 27.ix.2005, arm.luz\ F.F. Xavier Fº’ (♀, INPA); ‘BRASIL, AM, Itacoatiara\ Madareira MIL, 024510S\ 583911W, 29-30. xi.2005’ ‘arm. luminosa móvel, J.A. Rafael, R.J.P. Machado &\ A. Silva Fº’ (♀, INPA); ‘Igarapé Belém\ Rio Solimões, AM\ 7-30.IV.1966\ Malkin col.’ (♀, MZUP); ‘BRasil: Amazonas\ Igarapé Irã\ 0°10’S, 68°15’O 31.v.1977’ ‘col. Jorge Arias’ (1♀, INPA); ‘BRASIL-AM-ITACOATIARA\ EST. AM010 KM 232\ FAZENDA ARUANÁ\ 2.IX-1977\ L.P.A. E. RUFINO’ (1♀, INPA); ‘BRasil, Amazonas\ Itapiranga, 300 Km de\ Manaus, Armadilha\ luminosa, 03-06.x.2010\ D. Grisales &\ M. Guedes’ (2♀,1♂, DZUP); ‘BRASIL: Amazonas\ Igarapé Irã\ 0°10’S, 68°15’O 31-v-1977’ ‘col. Jorge Arias’ (1♀, INPA); ‘BRASIL, Amazonas\ Lábrea, BR 230 Km 12\ Res. Malheiros\ Km 91 07°19’10’’S 64°40’07’’W\ 13/VI-07/VII 2006\ F.F. Xavier-Filho leg.’ (1♀, INPA); ‘BRA, Amazonas, Manaus\ Reserve Ducke\ AM010,Km26\ 02°55’51’’S 59°58’59’’W\ 14.iii.2003 R.contromológico\ Floresta’ (♀, INPA); ‘Bra, Amazonas, Manaus, Res. Ducke, AM 10, Km26\ 02°55’51’’S 59°\ 58’29’’W\ 11.iii.2003’ ‘Lençol ilumnado\ Clareira\ S.B. Faveri leg’ ‘ORD: HYMENOPTERA\ FAM:HALICTIDAE’ (1♀, INPA); ‘BRasil-Am. Manaus\ Res. Ducke-Br\ 010 – km.260\ Data: 08/V/77\ cl. E. Rufino’ (♀, INPA); ‘BRASIL AM\ MANAUS\ Torre da ZF- 245m\ 2°35’20’’S/60°06’55’’W\ 06-07/I/1997\ Motta, C.S. &\ Vidal, J. col.’ ‘Luz mista mercúrio\ Lençol’ ‘0019545’(♀, INPA); ‘BRASIL-\ MANAUS Am\ Est-P\ TARUMÁ Km 13 19/12/1985\ M.V.B. Garcia’ (1♀, MEUFV); ‘BRASIL, AM, Manaus\ ZF-2, km 34, Campina\ 02°35’37’’N\ 60° 12’39’’W’ 11.vii.2008, Arm. Luminosa\ J.A. Rafael & F.F. Xavier\ Filho col.’ (♀, DZUP); ‘BRASIL-AM-MANAUS\ RESERVA DUCKE\ 24-X-1976 col.’ (1♀, INPA); ‘BRASIL, Amazonas Manaus\ Reserve Sokagakka\ Lençol Luz mista\ 22. iv.2004\ G. Lourido leg. ‘Hymenoptera\ Halictidae\ Det. G.M. Lourido, 2004’ ‘62’ (1♀, INPA); ‘BRA, Amazonas, Manaus\ Reserve dos Japoneses\ Sokagakka\ 22. vi.2004’ ‘Ordem: Hymenoptera\ Família: Halictidae\ Landeiro V.L. leg’ ‘41’ (♀, INPA); ‘BRA, Amazonas, Novo\ Aripuanã lago Xadâ’ 05°15’39’’S 60°42’32’’W"
iv.2005’ ‘Em luz mista e BLB\ F. Xavier, F. Godoi\ & A. Lourido Leg.’ (1♀, INPA); ‘BRASIL, Amazonas, Manaus; Reserva Biológica de Campina\ 11.viii.2008, 77m, 2°35’27”S\ 60°1’51”W luz P.C. Grossi’ (1♀, 1♂, DZUP); ‘BRASIL – AMAZONAS\ MANAUS – FUA 23/11/82\ MORAIS, J.W.’ (1♀, INPA); ‘BRASIL, Amazonas; Manaus, Res. Ducke\ 07-21.xi.1994\ J.A. Rafael & J. Vidal’ ‘Arm. suspensa\ Torre, 30m’ (1♀, INPA); ‘BRASIL-AMAZONAS\ MANAUS-RES. DUCKE 11/1995\ M. J.G. HOLYIN’ (2♀, INPA); ‘BRASIL Amazonas\ Manaus:FUA 25-1982\ F. PERALTA’ (11♀, 3♂, INPA); ‘BRASIL MANAUS AM\ EST-P/TARUMÁ Km\ 13 19/12/1985\ M.V.B. GARCIA’, (1♀) (MEUFV); ‘BRASIL: AMAZONAS\ MANAUS: R. DUCKE 18-1 I-1982\ J.A. RAFAEL’ ‘COPA DE ARV’ (1♀, INPA); ‘BRASIL, AM, Manaus\ ZF-2, km-34, Campina\ 02°35’37”N 60°12’39”W’ ‘11.vii.2008, Arm. luminosa,’ J.A. Rafael & F.F. Xavier Filho col. (1♀, INPA); ‘Brasil, AM, Manaus, Km 50, Ramal da vovô.\ 18-20.viii.2006, Arm. lençol luz\ vista,’ Xaver Fº, F.F.; Lourido,G.M.; Mendes, D.M.M.; Leite, K.C.A.’ (1♀, INPA); ‘BRASIL-AMAZONAS\ MANAUS 24-1111-1982 \ F.U.A. Latorre L.R.’ (1♀, INPA) ‘BRASIL AM, Manaus, ZF\-2 km-34, Base LBA\ 02°35’37”S – 60°12’39”W’ ‘09-10.viii.2008, arm. luz\ nível do solo, J.A. Rafael\ & F.F. Xavier Fº’ (1♀, INPA); ‘1007’ ‘MANAUS-AM\ PDBFF 29/11/89\ M.L. OLIVEIRA’ (1♀, MEUFV); ‘Brasil. Amazonas\ Reserva Ducke\ Am 010 Km26’ ‘07-18 Dez. 2005\ M.L. Oliveira\ & E.R.F. Pereira’ ‘LO-4\ 2500m’ (1♀, INPA); ‘Manaus – AM\ PDBFF 29/11/89\ M.L. Oliveira’ ‘1009’ (1♀, MEUFV); ‘BRASIL: Amazonas\ BR 174 ZF3 Km 41\ 57°43”W 28°24”S\ Data.11-05-87\ Col. M.V.B. Garcia’ (1♀, MEUFV); ‘BRASIL, AM, Manaus\ ZF2\ km-14, Torre,023521S\ 600655W, 19-22.\ iii.2004\ luz mista/ BL, BLB, lençol’ ‘40mt alt. J.A. Rafael,\ C.S. Motta, F.F. Xavier\ Fº, A. Silva Fº, J.T. Câmara’ (1♀, INPA); ‘BRASIL: AMAZONAS\ MANAUS: P.\ DAS LARANJEIRAS\ 02. VI-1981\ Eq. JORGE ARIAS\ ARM. 02 LUZ. 15’ (1♀, INPA); ‘BRASIL, AM, Manaus, ZF-2\ km-14, Torre, 023521S\ 600655W, 18-21.\ ii.2004\ luz mista/ BL, BLB, lençol’ ‘40 mt alt. J.A. Rafael,\ C.S. Motta, F.F. Xavier\ Fº & A. Silva Fº, S. Trovisco (1♀, INPA); ‘1088’ ‘MANAUS-AM\ PDBFF 07/12/89\ M.L. OLIVEIRA’ (1♀, MEUFV); ‘Manaus – AM\ PDBFF 23/1/90\ M.L. Oliveira’ ‘1515’ (1♀, MEUFV); ‘Manaus – AM\ PDBFF 25/11/90\ M.L. Oliveira’ ‘2071’ (1♀, MEUFV); ‘BRASIL: Amazonas\ RESERVA DUCKE\ 14-1-1978\ O.\ RODRIGUES, A. SOARES’ (1♀, DZUP); ‘BRASIL, Amazonas, Manaus, 2km\ 34, Base LBA,\ 09.vi.2008, 100m, 2°35’33’’S\ 60°12’52’’W arm. luz\ dossel P.C. Grossi\ col.’ (1♀, DZUP); ‘BRASIL-AMAZONAS\ MANAUS 25-5-82 \ F.U.A. Latorre L.R.’ (1♀, INPA); ‘BRASIL: Amazonas\ Manaus R. Ducke\ 2-22/II/1993\ MOTTA, C.S. & ALENCAR, C\ col.\ (LM-LENÇOL)\ CANTINA’ (1♀, INPA); ‘BRASIL: Amazonas\ 26 km Ne Manaus\ Reserva Ducke\ 03-XI-1988’ J.A. Rafael\ Arm. Suspensa\ 30 metros’ (1♀, INPA); ‘BRASIL, AM, Manaus, ZF-2\ km-14, Torre, 023521S\ 600655W, 15-18.\ vi.2004\ lençol: luz mista e BLB’ ‘40 mts alt. J.A. Rafael,\ C.S. Motta, R. Godoi, S. Trovisco & A. Silva Fº’ (1♀, INPA); ‘Amazonas\ BR 174 ZF3 Km 41\ 59°43’’W, 2°24’’S\ Data.11-05-87\ Col. M.V.B. GARCIA’ (1♀, MEUFV); ‘EUGENOL\ Nº14’ ‘Manaus – AM\ BRASIL, 10/12/88\ E.F. Morato’ ‘fornix’ (1♀, DZUP). ‘BRASIL – AMAZ\ Manaus, R. Ducke\ 5.v.77 – Dellome’ (1♀, INPA); ‘BRASIL AM MANAUS\ Torre da ZF-2/45m\ 2°35’20’’S/0°06’55’’W\ 06-07/II/1997\ Motta,C.S. & Vidal, J. col’ ‘Luz mista mercúrio\ Lençol’ ‘0019543’ (1♀, INPA); ‘BRASIL– AM– MANAUS\ RESERVA– DUCKE 24-X-1976\ col?’ (1♀, INPA); ‘Brasil. Amazonas\ Reserva Ducke\ Am 010 Km 26’ ‘07-18 Dez. 2005\ M.L.
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Oliveira & E.R.F. Pereira’ ‘LO-5\ 2500m’ (1♀, INPA); ‘Brasil Amazonas\ AM 010-Km 45\ 26.IV.1982\ E.L. Oliveira’ (1♀, INPA); ‘Brasil. Amazonas\ Reserva Ducke\ Am 010 Km26’ ‘07-18 Dez. 2005\ M.L. Oliveira & E.R.F. Pereira’ ‘LO-8\ 500m’ (2♀, INPA); ‘Brasil. Amazonas\ Reserva Ducke\ Am 010 Km26’ ‘07-18 Dez. 2005\ M.L. Oliveira & E.R.F. Pereira’ ‘LO-8\ 1500m’ (1♀, INPA); ‘SALICILATO DE\ METIL\ L new’ N°20\ ‘Manaus-AM\ BRASIL, 6/10/88\ E.F. Morato’ ‘Megalopta fornix’ ?’ (1♀, DZUP); ‘Brasil, AM, Manaus\ Reserva do Cuieiras\ S/51°45\ 8°S; 61°49’– 59°52’W\ 07-18 Dez. 2005\ M.L. Oliveira & E.R.F. Pereira’ ‘LO-8\ 1500m’ (1♀, INPA); ‘AMAZONAS\ MÉDIO PURUS\ 14-VA-1979\ J.T.S CAMPBELL

Brasil, Amazonas\ Pq. Nac. Jaú, Ig. Miratuca\ 1°57’– 59°52’W\ 23-27.xi.2009\ D. Storck-Tonon Leg.’ (1♀, INPA); ‘BRA, AM, Manaus\ PDBFF – Colosso\ 02°23’58”S – 59°52’20”W\ 23-27.xi.2009\ D. Storck-Tonon Leg.’ (1♀, INPA); ‘BRA, AM, Manaus\ PDBFF – Colosso\ 02°23’58”S – 59°52’20”W\ 23-27.vi.2010\ D. Storck-Tonon Leg.’ (7♀, INPA); ‘BRA, AM, Manaus\ PDBFF – Colosso\ 02°23’58”S – 59°52’20”W\ 08-10.vii.2010\ D. Storck-Tonon Leg.’ (1♀, INPA); ‘BRASIL, AM, Manaus,\ Reserva Ducke,\ AM 010 km 26\ 2°55’54”S; 59°58’29”W\ 10-14.iii.2009\ Lençol Branco\ T. Mahlmann Leg.’ (1♀, INPA); ‘Igarapé Belem\ Rio Solimões, AM\ 7-30.IV.1966\ Malkin col.’ (3♀, INPA); ‘BRASIL: AMAZONAS\ MEDIO PURUS\ 14-VA-1979\ J.T.S CAMPBELL’ (1♀, INPA); ‘Brasil, AM, Pres. Figueiredo,\ Est. Balbina, Ramal do 13\ 27-28.1.2006, Arm. luz móvel,’ ‘J.A. Rafael, F. Xavier P’, Silva A.\ J.S. Duarte & D.M. Mendes’ (1♀, INPA); ‘BRASIL, Amazonas\ Parque Nac. do Jaú\ 17-19/nov/2005\ M.L. Oliveira & E.R.F. Pereira leg.’ campinarana’ (1♀, INPA); ‘Brasilí Cunha\ PARNA do Jaú\ 19-III à 05-IV\ 2003’ ‘M.L. Oliveira \& J.A. Cunha leg.’ Campinarana’ (1♀, INPA); ‘Brasilí Amazonas\ PAN A do Jaú\ 22 a 28-VI\ 2003’ ‘M.L. Oliveira \& J.A. Cunha leg.’ Em roçado’ (1♀, INPA); ‘BR, AM, Pq. Nac. do Jaú Mg. dir. baixo rio Jaú\ 197°S/61°45’W\ 18-19/X/1993\ Motta, C.; Andreazze, R. \& Vidal, J. col.’ ‘luz mista mercúrio\ Luz negra BL e BLB\ Lençol’ (1♀, INPA); ‘BR, AM, Pq. Nac. do Jaú Mg. dir. baixo rio Jaú\ 197°S/61°45’W\ 26-27/X/1993\ Motta, C.; Andreazze, R. \& Vidal, J. col.’ ‘luz mista mercúrio, luz negra\ BL e BLB’ (1♀, INPA); ‘BR, AM, Pq. Nac. do Jaú Mg. dir. baixo rio Jaú\ 197°S/61°45’W\ 27-28/X/1993\ Motta, C.; Andreazze, R. \& Vidal, J. col.’ (1,2♀,1♂, INPA); ‘BRASIL, Amazonas, Pq\ Nac.Jaú. Rio Carabinanii\ 0159S-6132W. 07-17.iv.1994. C. Motta e outros’ (12♀, 2♂, INPA); ‘BRASIL-AM\ 9-V-1976\ I.S. Gorayeb’ ‘INPA’ (1♀, INPA); ‘Brasil, Amazonas, Pq\ Nac. Jaú, Ig. Miratuca\ 15º7°8’S; 61°49’19”W’ ‘14-29. vii.1993\ Andreazze, R., Costa, W. \& Aquino, L. col.’ ‘lencol c/luz mista\ mercúrio, luz negra\ BL e BLB’ (2♀,1♂, INPA); ‘BR, AM, Pq. Nac. do Jaú Mg. dir., baixo rio Jaú\ 197°S/51°45’W\ 27-28/ X/ 1993\ Motta, C.; Andreazze, R. \& Vidal, J. col.’ (1♀, 1♂, INPA); ‘BRASIL, Amazonas, Pq\ Nac. Jaú R. Carabinanii\ 0159S-6132W. 07-17.iv.1994. C. Motta e outros’ (4♀,1♂, INPA); ‘BR, AM, Pq. Nac. do Jaú R. Carabinanii mg. dir. \ 15º59’S/61°32”W\ 14-15/IV/1994\ Motta, C. et al. col.’ (1♂, INPA); ‘BR-AM Rio Carabinanii\ 28-29/IV/1995 Motta e al. col.’ ‘Luz mista mercúrio\ Luz negra BL e BLB\ Lençol’ ‘0019562’(1♀, INPA); ‘BRasil\ Amazonas\ PARNA do Jaú\ 19-III à 05-IV\ 2003’ ‘M.L. Oliveira \& J.A. Cunha
Leg. Campinarana (♀, INPA); ‘Brasil\ Amazonas\ PARNA do Jaú\ 18 a 21-V-2003’
M.L. Oliveira & J.A. Cunha leg.\ Campina’ (♀, INPA); ‘BR AM Pq Nac. do Jaú\ Rio Carabinani mg. dir. 1°59’S/61°32’W\ 11-12/IV/1994’ Motta, C. et al. col. ‘Luz vistamercúrio\ Luz negra BL e BLB\ Lençol’ (♀, INPA); ‘BRASIL, Amazonas, Pq\ Nac. Jaú, R. Carabinani. 0159S-6132W, 07-17.iv. 1994, C. Motta and outros’ (♀, INPA); ‘BRASIL, Amazonas, Pq\ Nac. Jaú, Ig. Miratucu\ 1°57’S\ 61°49’W’
14-29.vii.1993 Andreazze, R; Costa, W & Aquino, L. col. ‘Lençol c/ luz vista mercúrio, luz negra\ BL e BLB’ (♀, INPA); ‘BRASIL, AM, Resex Unini\ Rio Unini, Lago 03 Bocas, 0134°56’S, 62°58’28’W\ 14-22.vii.2004’ ‘Luz mista de mercúrio+BLB (lençol)’ A. Silva F. & L. Aquino.’ (7♀, INPA); ‘BRASIL, Amazonas\ Resex Unini\ Rio Unini\ Lg. Galomãna\ Terra Firme\ 01°37’S, 62°59’W’
13-28.vii.2004 M.L. Oliveira, L. Aquino & A. Silva-Filho leg.\ luz mista e BLB’ (♀, INPA); ‘boca do Rio Purus’ mar. esq., AM\ 2-5.IV.1967’ Exp. Perim. Amaz.’ (1♂, MZUSP); ‘BRASIL AM\ Rio Carabinani\ Terra Firme\ Em voo’ ‘02°00’38.2°S\ 61°32’21.2°W’ 18-28 out 2004\ L. Aquino leg. (1♀, INPA); ‘Brasil\ Amazonas\ PARNA do Jaú\ 19-III a 05-IV\ 2003’ ‘M.L. Oliveira & J.A. Cunha leg.\ Campinarana’ (♀, INPA); ‘Brasil, AM\ PARNA do Jaú\ 10-24 Nov 2003’ ‘M. L. Oliveira & J.A. Cunha leg.\ Vila\ Serigalzinho’ (1♀, INPA); ‘Humaitá AM Braz\ N.B.M Brantjes 70050104\ 20.XI.1977’ ‘Megalopta\ Det. 1979\ N.B.M Brantjes’ (1♀, RMNH); ‘Humaitá AM Braz\ N.B.M Brantjes\ 70050103\ 20.XI.1977’ ‘Megalopta\ Det. 1979\ N.B.M Brantjes’ (1♀, RMNH); ‘Humaitá AM Braz\ N.B.M Brantjes\ 70050104\ 20.XI.1977’ ‘Megalopta\ Det. 1979\ N.B.M Brantjes’ (1♀, RMNH); ‘Humaitá AM Braz\ N.B.M Brantjes\ 70050105\ 20.XI.1977’ ‘Megalopta\ Det. 1979\ N.B.M Brantjes’ (1♀, RMNH); ‘Humaitá AM Braz\ N.B.M Brantjes\ 70050106\ 20.XI.1977’ ‘Megalopta\ Det. 1979\ N.B.M Brantjes’ (1♀, RMNH); ‘Humaitá AM Braz\ N.B.M Brantjes\ 70050107\ 20.XI.1977’ ‘Megalopta\ Det. 1979\ N.B.M Brantjes’ (1♀, RMNH); ‘Humaitá AM Braz\ N.B.M Brantjes\ 70050106\ 20.XI.1977’ ‘Megalopta\ Det. 1979\ N.B.M Brantjes’ (1♀, RMNH); ‘Humaitá AM Braz\ N.B.M Brantjes\ 70050108\ 20.XI.1977’ ‘Megalopta\ Det. 1979\ N.B.M Brantjes’ (1♀, RMNH); ‘Humaitá AM Braz\ N.B.M Brantjes\ 70050109\ 20.XI.1977’ ‘Megalopta\ Det. 1979\ N.B.M Brantjes’ (1♀, RMNH); ‘Bahia:’ ‘17.647’ ‘17.647 – Brasil, Belmonte, Bahia\ Col. Desconhecido’ ‘100.447’ (1♀, MZUSP); ‘Brasil, Bahia, Camacã\ Serra Bonita, 800m, 15°23’S 39°34’W, 12.i.2007, G. Melo\ atraídas por luz, 20:00-23:00’ (1♂, DZUP); ‘Brasil, Bahia, Camacã\ Serra Bonita, 800m, 15°23’S 39°34’W, 13.i.2007, G. Melo\ atraídas por luz, 4-5:00’ (2♀, DZUP); ‘Brasil, Bahia, Camacã\ Serra Bonita, 800m, 15°23’S 39°34’W, 14.i.2007, G. Melo\ atraídas por luz, 4-5:00’ (2♀, 2♂, DZUP); ‘Brasil, BA, Lençois\ Ribeirão de Baixo, 12°35’12’S 41°22’56’W, 340m, 04.vi.2007, J.A. Rafael & F.F. Xavier Fo., luz’ (1♂, DZUP); ‘Brasil, BA, Lençois\ Ribeirão de Baixo, 12°35’12’S 41°22’56’W, 340m, 05.vi.2007, J. Rafael & F. Xavier Fo., luz’ (6♀, 2♂, DZUP); ‘Brasil, BA, Santa\ Terezinha, Serra Jibóia, 12°51’13’S 39°28’32’W, 800m, 08.vii.2007, J.A. Rafael & F. Xavier Fo., luz’ (1♂, DZUP); ‘MZUEFS, Brasil, Bahia\ Mucugiê, Projeto\ Sempre Viva\ 30/VI/2008’ Lg. Franco, Emanuella L. ‘PLANTA: C. wurdackii’ HORA: 5:55’ ‘MESTRADO\ FRANCO, E.L.\ 072’ ‘MZUEFS\ #39585’ (1♀, DZUP). Espírito Santo: ‘Brasil, Espírito Santo\ Guarapari, Praia de\ Setiba, 1-8.i.1996, 40°26’W 20°38’S\ Restinga, G A R Melo\ Armadilha Malaise’ (1♀, DZUP); ‘Brasil, ES, Linhares\ 19.XI.1990’ (1♀, CPDP); ‘22-24-I-2003 COLÔNIA\ TIROL, SANTA LEOPO LDINA\ ES, 600m, MIELKE & CASAGRANDE LEG.’ (2♂, DZUP); ‘Santa Leopoldina-ES\ Colônia Tirol-Brasil\ 22-24/I/2003\ Mielke e Casagrande leg’
CARATINGA, CARATINGA, MG, 400m

MIELKE & CASAGRANDE LEG.

Goiás: BRASIL, GO, Alto Paraíso\ Chapadas dos Veadeiros\ Rio São Miguel, 820m ‘14°11’34”S – 47°48’22”W\ 26.iii.2008, arm. luz\ J.A. Rafael, F.F. Xavier F’\ (1♀, INPA); ‘13078-38789’ ‘Caldas Novas GO\ BRASIL 17/10/2006’ S.C. Augusto’ (1♀, DZMG); ‘BRASIL, GO, CaldasNovas, PE Serra de\ Caldas Novas, 700-1000m’ ‘17°46’13”S – 48°39’22”W\ 22-23.iii.2008 arm. luz\ J.A. Rafael, F.F. Xavier F’\ (1♀, INPA); ‘BRASIL:GO: Colinas do Sul\ Serra da Mesa 2-15 xii\ 1995\ 14°01’S, 48°12’Silvestre, Dietz & Campaner-cerrado’ (1♀, MZUP); ‘Faz. Cachoerinha\ Jataí, Goiás-Brasil\ X:1962’ ‘Ninho N°2\ Karol Lenko’ (1♀, DZUP).

Faz. Cachoerinha\ Jataí, Goiás-Brasil\ X:1962’ ‘Ninho N°2’ (1♀, DZUP). Mato Grosso: ‘MT Aripuanã\ Resv. Humboldt\ março 1977’ ‘Brasil Mato Grosso\ WL Overall Col’ ‘Megalopta cf. amoena\ (Spinola)\ det. Camargo-82.’ (2♀, MPEG); ‘Brasil, MT, 6 km a W de Chapada dos Guimarães, 770m \ 15.452°S 55.806°W,\ 8. ix.2012, Cavichioli, Melo, Rosa & Santos’ ‘Armadilha Luminosa’ (3♀, 1♂ DZUP); ‘BRASIL, MT, Nova Lacerda, Cascata Uirapuru 142452S – 592723W\ 28.iv.2006 J.A. Rafael & F.F. Xavier F’, arm. luz\ (1♀, INPA); ‘Brasil, Mato Grosso, 18 km W de Nova Mutum, Faz. Buriti\ 12.1.2000, HF Mendes’ (1♀, DZUP). ‘BRASIL\ MT\ Nova Mutum 05.1.2000\ H.F. Mendes leg.’ (1♀, LEBIC). ‘PARECIS\ M. Grosso Brasil\ XI-1960’ M. Alvarenga leg’ (2♀, DZUP); ‘BR-29 RIO JURUENA\ M. Grosso Brasil\ XI-1960\ M. Alvarenga leg’ (2♀, DZUP); ‘Chapada dos\ Guimarães (Buriti)\ MT BRASIL X.1972\ G.R. Kloss & F. Van’ (1♀, DZUP); ‘Brasil, Mato Grosso, 18 km W de Nova Mutum, Faz. Buriti\ 12.1.2000, HF Mendes’ (1♀, DZUP); ‘Brasil, MT Chap. dos Guimarães\ Colégio Agr. Buriti\ 13 a\ 17-III-1986\ Col I.S. Gorayeb’ ‘Armadilha\ 1,6m Suspensa\ (1♀, MPEG); ‘BRASIL, MT, Nova Lacerda, Cascata Uirapuru 142452S – 592723W\ 28.iii.2008 J.A. Rafael\ & F.F. Xavier F’, arm. luz\ (1♀, INPA); ‘Nova Xavantina\ MT BR\ CUNX – bacaba luz\ 29/II/97’ ‘Boreira RL’ (1♀, RPSP); ‘Utiariti\ Rio Papagiao, Mt\ 27.X.1966\ Lenko & Pereira’ (1♀, DZUP); ‘Nova Mutum\ MT\ 29/7/00\ LUZ\ Smateus leg’ (1♀, RPSP); ‘BC1-R14,\ Ribeirão Cascalheira\ MT, Br, 12°49’14”S, 51°46’30”W\ 21/VIII/1997, F.B. Noll Leg.’ (1♂, RPSP); ‘Nova Xavantina\ MT BR\ CUNX – bacaba luz\ 1/1/97’ ‘Boreira RL’ (1♂, RPSP). Maranhão: ‘Buriticupuc\ MT\ 13/II/96’ Pereira & Pinto\ leg’ (3♀, 635° ‘Horário: 7-8\ N° Pl: 7!’ ‘47’ (1♀, INPA). ‘Igarapé\ Gurupi-Uma\ Aldeia Aracu, Ma\ 50 Km E de Canindé\ V.1968 Malkin ol.’ (3♀, 1♂, MZUSP). Minas Gerais: ‘Brasil, Minas Gerais, 13 km, NE de Ipanema, Fazenda\ Montes Claros, 400m, 29-iii-30.iii.2003 Mielke & Casagrande, armadilha\ luminosa’ (1♀, 5♂, DZUP); ‘BRASIL: MG\ Nova Lima 850m\ 1-10.iii.1985\ V.O. Becker col’ (1♂, DZUP); ‘5-8-XII-2002\ PETI, SÃO GONÇALO DO RIO\ ABAIXO, MG, 560 m\ MIELKE, LEG.’ (1♂, DZUP); ‘29-3-iii-2003 ESTAÇÃO BIOLÓGICA DE\ CARATINGA, MG, 400m MIELKE & CASAGRANDA\ LEG.’ (1♀, DZUP). Pará: ‘Brasil Pará\ Alenquer\ 2 julho 1979’ ‘Brasil Pará\ W França’ (1♀, MPEG); ‘BRASIL, PA, Belterra\ FLONA Tapajós, 100m\ 02°36’15”S – 54° 56’35”W\ 15-16.iii.2008, arm. luz\ J.A. Rafael, F.F. Xavier F’\ (1♀, INPA); ‘BRASIL:PA\ Belém, 20m\ 10-15.xi.1984\ V.O. Becker col’ (1♂, DZUP); ‘Brasil Pará\ Benevides\ Est. Neopolis\ Sítio D. Docâ\ VII.1991’ ‘Brasil Pará\ W Overal’ (1♀, MPEG); ‘Brasil Pará\ Benevides\ MORELÂNDIA\ 27-29.VI-1988’ ‘Brasil Pará\ F.F. Ramos’ ‘Armadilha\ 1,6m Suspensa’ (1♀, MPEG); ‘Brasil Pará\ BENEVIDES\ 15-III-1990’ ‘Brasil Pará\ W Overal’ (1♀, MPEG); ‘Pará Bujaru\ 24-III-1978’ ‘Brasil Pará\ N. de Souza’ (1♀, MPEG); ‘Pará Bujaru\ 24-III-1978’ ‘Brasil Pará\ P. Nolasco’
‘Pará Bujaru’ 25-III-1978  ‘Brasil Pará\ P. Nolasco’ (3♀, MPEG);  ‘Pará Bujaru’ 15-IX-1978  ‘Brasil Pará\ R.B. Neto’ (1, MPEG);  ‘Brasil-PA-Melgaço\ Caxiuanã ECFPn\ 26-VIII-1995\ R.M. Valente’ ‘Em inflorescência masculina de\ Attalea maripa’ ‘Hymenoptera\ Apocrita\ Aculeatae\ Apoidea\ Apicoidea\ Incorp: 17/ VII/2002’ (1♀, MPEG);  ‘Pará Bujaru’ 24-III-1978  ‘Brasil Pará\ W. França’ (7♀, DZUP);  ‘Pará Cachimbo\ 16-22-VI-1995’ (1♂, MZUSP);  ‘Canindé\ Rio Gurupi, Pará\ IV.1963 Malkin\ & Pinheiro\ col.’ (1♂, MZUSP);  ‘Coraci – 15 km. NW\ Canindé, Rio Gurupi\ Pará\ IV.1963\ B. Malkin\ col.’ (1♀, MZUSP);  ‘Brasil Pará\ Bujaru’ 15-IX-1978  ‘Brasil Pará\ R.B. Neto’ (5♀, MPEG);  ‘BRASIL: PA\ Capitão Poço\ 19-22.xi.1984\ V.O. Becker\ col.’ (2♂, 1♀, DZUP);  ‘Brasil Pará\ Serra Norte\ SERRARIA\ COL. NOTURNA\ 19-X-1984’ ‘MPEG HYM\ 11005582’ (1♀, MPEG);  ‘Brasil Pará\ Serra Norte\ MANGÂNES\ COL. NOTURNA\ 24-X-1984’ ‘Brasil Pará\ R.B. Neto’ ‘MPEG HYM\ 11005590’ (1♀, MPEG);  ‘Brasil Pará\ Serra Norte\ CALDEIRÃO\ COL. NOTURNA\ 24-X-1984’ ‘Brasil Pará\ F.F. Ramos’ ‘MPEG HYM\ 11005607’ (1♀, MPEG);  ‘Brasil Pará\ Serra Norte\ CALDEIRÃO\ COL. NOTURNA\ 25-IX-1985’ ‘Brasil Pará\ F.F. Ramos’ ‘MPEG HYM\ 11005606’ (1♂, MPEG);  ‘Brasil Pará\ Serra Norte\ CALDEIRÃO\ COL. NOTURNA\ 25-IX-1985’ ‘Brasil Pará\ F.F. Ramos’ ‘MPEG HYM\ 11005606’ (1♀, MPEG);  ‘Brasil Pará\ Serra Norte\ CALDEIRÃO\ COL. NOTURNA\ 25-IX-1985’ ‘Brasil Pará\ W. França’ ‘MPEG HYM\ 11005604’ (1♀, MPEG);  ‘Brasil Pará\ Serra Norte\ CALDEIRÃO\ COL. NOTURNA\ 25-IX-1985’ ‘Brasil Pará\ R. B. Neto’ ‘MPEG HYM\ 11005603’ (1♀, MPEG);  ‘Brasil Pará\ Serra Norte\ CALDEIRÃO\ COL. NOTURNA\ 25-IX-1985’ ‘Brasil Pará\ F. F. Ramos’ ‘MPEG HYM\ 11005605’ (1♀, MPEG);  ‘Brasil Pará\ Serra Norte\ PARAUAPEBAS\ COL. NOTURNA\ 7-XI-1985’ ‘Brasil Pará\ W. França’ ‘MPEG HYM\ 11005609’ (1♀, MPEG);  ‘Brasil Pará\ Serra Norte\ CALDEIRÃO\ C/LUZ\ 27-X-1984’ (1♀, MPEG);  ‘Brasil Pará\ Serra Norte\ PARAUAPEBAS\ COL. NOTURNA\ 7-XI-1985’ ‘Brasil Pará\ W. França’ ‘MPEG HYM\ 11005608’ (1♀, MPEG);  ‘Brasil Pará\ Serra Norte\ MANGANÉS\ COL. NOTURNA\ 06.IX.1985’ ‘Brasil Pará\ Márcio Zanutto’ ‘MPEG HYM\ 11005599’ (1♀, MPEG);  ‘São M do Guama\ 24-3-1964’ ‘Brasil PA\ W. França\ Col.’ ‘Megalopta\ cf. amoena’ (Spinola) det. Camargo-82.’ (1♀, MPEG);  ‘Brasil Pará\ Tucuruí\ Rio Tocantins\ IL. TOCANTIS\ 06-VII-1984’ ‘Brasil Pará\ Col. B. Mascarenhas’ (1♀, MPEG);  ‘Brasil Pará\ Ourém\ Patuataue\/Faz. Gavião Rea\l\ 30.IV a 3.v.1992\/Arm. Luz\ Col. B. Mascarenhas e eq’ (1♀, MPEG);  ‘Brasil Pará\ Ourém\ Patuataue\ 21.VIII.1992’ ‘Brasil Pará\ B. Mascarenhas’ ‘Armadilha\ de Luz’ (1♂, MPEG).  ‘BRASIL:PA\ Capitão Poço\ 19-22.xi.1984\ V.O. Becker\ col’ (1♂, DZUP);  ‘Brasil Pará\ Ourém\ Patuataue\/Faz. Gavião Rea\l\ 30.IV A 3.v.1992\/Arm. Luz\ Col. B. Mascarenhas e eq.’ (1♂, MPEG);  ‘Peixe Boi\ E.F. de\ Bragança’ ‘Braziil\ Estado do\ Pará’ (1♀, DZUP);  ‘Brasil Pará\ Serra Norte\ Fofoca\ Col. NOTURNA\ 18-IX-1985’ ‘Brasil Pará\ J. Dias’ ‘MPEG HYM\ 11005597’ (1♀, MPEG);  ‘Brasil Pará\ Serra Norte\ SERRARIA\ COL. NOTURNA\ 19-X-1984’ ‘MPEG HYM\ 11005584’ (1♀, MPEG);  ‘Brasil Pará\ Serra Norte\ CALDEIRÃO\ 14.IX.1983’ ‘Brasil Pará\ F.F. Ramos’ ‘MPEG HYM\ 11005594’ (1♂, MPEG);  ‘Brasil Pará\ Serra Norte\ CALDEIRÃO\ C/LUZ\ 27-X-1984’ ‘MPEG HYM\ 11005593\ Halictidae\ Megalopta\ M.C. Almeida\ det. 1985’ (1♀, MPEG);  ‘Brasil Pará\ Serra Norte\ CALDEIRÃO\ C/LUZ\ 27-X-1984’ ‘MPEG HYM\ 11005586’ (1♀, MPEG);  ‘Brasil Pará\ Serra Norte\ SERRARIA\ COL. NOTURNA\ 19-X-1984’ ‘MPEG HYM\ 11005578’ (1♀, MPEG);  ‘Brasil Pará\ Serra Norte\
Armadilha Luminosa \textit{Creaço \& Martins cols} (1\textvar{♀}, MPEG); Brasil Pará \textit{R B Neto} (1\textvar{♂}, MPEG); BRASIL, Pará, Tucuruí Ig. Água Fria, 03502S-494704W, 02.xii.2001 \textit{J.A. Rafael \& J. Vidal Arm. Malaise} (1\textvar{♀}, INPA); Brasil Pará Tucuruí \textit{Rio Tocantins SAÚDE} 5a7-VI-1984 ‘Armadilha Malaise’ (1\textvar{♂}, MPEG); Brasil Pará Tucuruí \textit{Rio Tocantins} IL. TOCANTIS \textit{06-VIII-1984} Brazil Pará Col. B. Mascarenhas (2\textvar{♀}, MPEG); Brasil Pará Tucuruí \textit{Rio Tocantins} BAGAGEM 27-VI-1984 ‘Brasil Pará W.L. Overal’ (1\textvar{♀}, MPEG); ‘BRASIL:PA:\ UTINGA, 30.IX.1965 P. Waldir col.’ (1\textvar{♂}, MZUSP); BRASIL: Pará, Urua, 65 km SW Itaituba on BR230 X-12-15-1977 B.C. Ratcliffe (1\textvar{♀}, INPA). \textit{Paraiba}: Brasil, PB, Mamanguape\ Res. Guariba, Cabeça do Boi 21-22/11/1992 Armadilha Luminosa \textit{Creaço \& Martins cols} (1\textvar{♀}, UFPB). \textit{Paraná}: Brasil, Parana, Antonina, \textit{Reserva Morro da Mina}, 25°22’2’’S 49°47’’W, 29.i.2009, Armadilha\ Shannon\ M.L.P. Guedes (3\textvar{♀}, DZUP); Brasil, Parana, Antonina, Reserve Morro da Mina, 25°22’2’’S 49°47’’W, 28.iii.2009, Armadilha Shannon, 02:30h M.L.P. Guedes (1\textvar{♂}, DZUP); Brasil, Parana, Antonina, Reserve Morro da Mina, 25°22’2’’S 49°47’’W, 12.v.2009, Ninho 1 L.M. Santos (1\textvar{♀}, DZUP); Brasil, Parana, Antonina, Reserve Morro da Mina, 25°22’2’’S 49°47’’W, 12.v.2009, Ninho 1 L.M. Santos (1\textvar{♂}, DZUP); Brasil, Parana, Antonina, Reserve Morro da Mina, 25°22’2’’S 49°47’’W, 12.v.2009, luzi L.M. Santos (1\textvar{♂}, DZUP); 30-VIII-2000, RIO\ MÃE CATIRRA, 200m MORRETES,PR\ O. MIELKE LEG.’ (2\textvar{♂}, DZUP); 31-I-1998\ Castelhanos, S. José dos Pinhais, PR. 700m. C. Mielke’ (2\textvar{♀}, DZUP); ‘PARQUE EST. MARUMBI\ EST. GRATIOSA-PR\ REC. BELA VISTA\ 19/I/94\ PINTO JR, A.R. COL.’ (1\textvar{♀}, DZUP); Brasil, Parana, Guaratuba Estrada dos Castelhanos, 25.XI.2009, L.M. Santos.’ (1\textvar{♂,2 ♂}, DZUP). \textit{Pernambuco}: CARUARU, PE\ Brejo dos Cavalo\ Brasil, 25.9.1999\ C. Schlindwein leg.’ 769 UFPE\ Luz Negra, L114 ‘Megalopta sp.2 A1036 \textvar{♀ Moure det. 2000} (1\textvar{♂}, UFPE); Brasil,PE, Jaqueira,\ RPPN Frei Caneca, 08°43’15’’S 35°50’27’’W, 600m, 28.v.2007, J.A.\ Rafael \& F.F. Xavier Fo\ luz’ (2\textvar{♀}, DZUP). \textit{Rio de Janeiro} ‘Angrastra\ Est.Rio (Vento: VIII-1945\ L.Trav. F.)’ (3\textvar{♂,1 ♀}, DZUP); ‘BRASIL: RJ\ Arraial do Cabo\ 50m 29.i.1985 V.O. Becker col’ (2\textvar{♀,2 ♀}, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA’ ‘FLORESTA da TIJUCA\ D. Federal BRASIL’ Esquilos\ 6 janeiro 1957\ C.A. Campos Seabra\ LUZ’ (1\textvar{♀}, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA’ ‘FLORESTA da TIJUCA\ D. Federal BRASIL\ Esquilos-Luz\ 3 Fevereiro 1957\ C.A. Campos Seabra’(3\textvar{♀}, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA’ ‘FLORESTA da TIJUCA\ D. Federal BRASIL\ 27.VIII.1957\ C.A. Campos Seabra’(1\textvar{♀}, DZUP); ‘FLORESTA da TIJUCA\ D. Federal BRASIL\ XI. 1957\ M. Alvarenga’(1\textvar{♀}, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA’ ‘FLORESTA da TIJUCA\ D. Federal BRASIL\ 16.I.1958\ C. A. Campos Seabra’(1\textvar{♀}, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA’ ‘FLORESTA da TIJUCA\ D. Federal BRASIL\ 28 Dezembro 1958\ C.A. Seabra\ LUZ’(1\textvar{♂}, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA’ ‘FLORESTA da TIJUCA\ D. Federal BRASIL\ 2 Março 1959\ C.A. Campos Seabra\ LUZ’ (1\textvar{♂}, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA’ ‘FLORESTA da TIJUCA\ D. Federal BRASIL\ 11 Fevereiro 1960\ C.A. Seabra\ Luz’ (1\textvar{♀}, DZUP); ‘DPT° ZOOL\ UF-PARANÁ’ ‘FLORESTA TIJUCA-RJ\ BRASIL 17/I/61\ F.M. Oliveira leg.’ (1\textvar{♀},
DZUP); ‘D. Federal\ I. Governador\ II-956\ F. Perreira’ (1♀, MZUSP); ‘BRASIL: RJ\ Maricá, 5m\ 12-15.1.1985\ V.O. Becker’ ‘sp.’ (4♂, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA’ ‘REPRESSA RIO GRANDE\ Guanabara Brasil\ IX.1960\ F.M. Oliveira’ (2♀, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA’ ‘REPRESSA RIO GRANDE\ Guanabara Brasil\ 17-X-1960\ F.M. Oliveira’ (1♀, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA’ ‘REPRESSA RIO GRANDE\ Guanabara Brasil\ 18-XI-1960\ F.M. Oliveira’ (1♂, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA’ ‘REPRESSA RIO GRANDE\ Guanabara Brasil\ Dezembro 1960\ F.M. Oliveira’ (6♂, 1♂, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA’ ‘REPRESSA RIO GRANDE\ Guanabara Brasil\ II-1961\ F.M. Oliveira’ (1♂, DZUP); ‘Iatiaia\ R. Janeiro, Brasil\ abril 1961\ F.M. Oliveira’ (6♂, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA’ ‘Iatiaia\ GB\ Brasil IV 61\ F. OLIVEIRA’ (1♂, DZUP); ‘DPTº ZOOL\ UF-PARANÁ’ ‘P.N. ITAIAIA-RJ\ BRASIL-8/9/1967\ M. Alvarenga leg’ (1♀, DZUP); ‘J.F. Zikan\ ITATIAIA, 700m\ Est. do Rio. Brasil\ 8.II.1946’ (1♂, INPA); ‘D’J.F. Zikan\ ITATIAIA, 700m\ 5.VI.1941\ E. Rio-Brasil.’ (1♀, DZUP); ‘J.F. Zikan\ ITATIAIA, 700m\ E. Rio-Brazil; 26-II-1929\ Unha de boi’ (1♀, DZUP); ‘Est. do Rio\ Angra dos Reis\ 28.IX.1951\ L. Trav. Fº COL’ (1♀, DZUP); ‘Est. do Rio\ Angra dos Reis\ 28.IX.1951\ L.Trav. Fº COL’ (1♀, DZUP); ‘BRASIL, RJ, Macaé PN\ Jambatiba, 01.v.2007, 3 m\ 221640S – 414135W, J.A. Rafael & F.F. Xavier Fº, luz’ (1♂, DZUP); ‘COLEÇÃO\ CAMPOS SEABRA’ ‘Guaratiba\ D. Fed. Brasil\ Outubro 1958\ Aristoteles Silva’ (1♂, DZUP); ‘18-21/I/1996\ CEDAE, 550m, CACHOEIRA DE MACACU, RJ\ O. C. MIELKE & MIERS leg.’ (4♀, 1♂, DZUP); ‘Serra dos Orgãos\ 11.1940 Parko’ (1♂, DZUP). **Rondônia:** ‘BRASIL:RO\ Aripuana\ 180m 13-16.4.1989\ V.O. Becker’ (5♂, DZUP); ‘BRASIL:RO\ Aripuana\ 180m 13-16.4.1989\ V.O. Becker’ (1♀, DZUP); ‘BRASIL, RO, Guajará-Mirim, R. Pacaás Novos\ 111113S\ –645121W, Luz\ 07.1999, U. Barbosa’ (1♀, INPA); ‘BRASIL, RO, Itapuí\ do Oeste, Flona\ do Jamari, 110m\ 9.260°S 62.913°W\ 4.V.2012, Cavichioli\ Melo, Rosa & Santos’ ‘Armadilha\ Luminosa’ (4♀, 2♂, DZUP); ‘BRASIL, RO, Itapuí\ do Oeste, Flona\ do Jamari, 90m\ 9.146°S 63.012°W\ 5.IX.2012, Cavichioli\ Melo, Rosa & Santos’ ‘Armadilha\ Luminosa’ (4♀, 2♂, DZUP). ‘BRASIL: Rondônia\ Ouro Preto do Oeste\ 9-III-1985\ equipe J.R. Arias\ CDC\ 1m’ ‘10’ (1♀, INPA); ‘BRASIL: RO\ Porto Velho, 180m\ 24-30.4.1989\ V.O. Becker col’ (2♀, DZUP); ‘BRASIL: RO\ Porto Velho, 180m\ 2-12.1989\ V.O. Becker’ (2♀, DZUP); ‘BRASIL:RO\ Porto Velho, 180m\ 2-12.1989\ V.O. Becker’ (1♀, DZUP); ‘BRASIL, RO, Vilhenia\ 124655S – 602218W\ 25.4.2006, J.A. Rafael & F.F. Xavier Fº, arm. luz’ (1♀, 1♂, INPA); ‘BRASIL: Rondônia\ Vilhenia\ 27 VII-1983\ Binda Leonete’ ‘ARM. MALAISE\ C. AbERTO’ ‘Polo Noroeste’ (2♀, INPA); ‘Rio Jamary\ 4 15-944 Parko’ (1♀, DZUP); ‘T. Guaporê\ C. Samuel\ Rio Jamary\ 4-5-944 Parko’ (2♂, DZUP); ‘Guaporê\ Porto-Velho’ ‘verso: XII-1944\ A. Parko’ (1♀, DZUP); ‘Rondônia\ Vilhenia\ 27 VII-1983\ Binda Leonete’ ‘ARM. MALAISE\ C. AbERTO’ ‘Polo Noroeste’ (1♂, INPA); ‘BRASIL, RO, Vilhenia\ 124655S – 602218W\ 25.4.2008, J.A. Rafael & F.F. Xavier Fº, arm. luz’; ‘V. Rondônia (378 Km S de P. Velho) Rondônia\ 25 I-9.11.1961 – Brasil\ Perreira e A. Machado’ (1♀, MZUSP). **Roraima:** ‘Brasil, Roraima, Amajari\ Tepequém, Igarapé da Lua\ 03°-47’00.5”N 61°44’52.6”W’ ‘615m 02-juil-09 Gama\Neto, J.L. Em Pensilvânia’ ‘MIRR
‘SATIPO-PERU\ 750 Mr\ febr. 1949’ (1♀, RMNH); ‘SATIPO-PERU\ 750 Mr\ 1.1949’ (2♀, RMNH); ‘SATIPO-PERU\ 750 Mr\ 12.1948’ (1♀, RMNH); ‘SATIPO-PERU\ 750 Mr\ 12.11.1938\ Coll J. Lindemans’ (1♀, RMNH). Loreto: ‘PERU, LO, Maynas\ Albergue AE tours\ S4 18.68 W73 13.91\ v01 Mario Callegari\ DZUP’ ‘Megalopta’ ‘col. CR col’ (1♂, CRC); ‘PERU, LO\A&E Tours, frog valley\ Rio Tahuayo\ 27vi01 Mario Callegari’ ‘Ex. light trap’ ‘col. CR col’ (1♀, CRC); ‘Santa Sofia, Rio Utoquia, LO, PERU\ 29-31.viii.74\ G. Lamas’ ‘Megalopta’ det. J.G. Rozen’ (1♀, MUSM); ‘Peru, LO, Maynas, Alpahuayo-Mishana\ KM 28 – Ex light trap\ 12vii01 Mario Callegari’ ‘Megalopta’ ‘col. CR col’ (1♀, CRC). Madre de Dios: ‘Peru, Madre de Dios\ 6 km a NE de Mazuko,\ 13.048°S\ 70.346°W\ 380m, 18.viii.2012\ Cavichioli, Melo, Rosa\ & Santos’ ‘Armadilha\ Luminosa’ (7♀, 2♂ DZUP); ‘Peru, Madre de Dios\ Manu, 9 km a SW de\ Mazuko, 364m, 13.181°S\ 70.384°W\ 19.viii.2012, Cavichioli, Melo, Rosa\ & Santos’ ‘Armadilha\ Luminosa’ (3♀, 5♂ DZUP); ‘Peru, Madre de Dios,\ Manu, 9 km a SW de\ Mazuko, 364m, 13.181°S,\ 70.384°W, 19.viii.2012\ R. Cavichioli’ ‘Armadilha\ Luminosa’ (4♀, DZUP); ‘Peru, Madre de Dios,\ 5km SW de St. Rosa,\ 12.967°S\ 70.332°W, 404m, 21.viii.2012\ R. Cavichioli’ ‘Armadilha\ Luminosa’ (8♀, 1♂ DZUP); ‘PERU, MD, Tamboata\ Jungle Lodge, 225 masl\ S12 49.456 N69 24, 163\ 9-20x01, C Rasmussen leg’ ‘col. CR col’ (1♂, CRC); ‘PERU, MD, Boca Rio\ La Torre 300m\ 27.xi.79\ G. Lamas’ (1♀, MUSM); ‘Tambopata\ 23.jun.84’ (1♀, MUSM); ‘PERU, MD, 15 Km\ E\ Pto, Maldonado\ 200m\ 4/2/90\ M. MEDINA’ (1♀, MUSM). Pasco: ‘PERU, PA,\ Oxpampa.\ PN\ Yanachaga Chemillen,\ Puerto de Huampal\ 10°10’.71’ / 75° 34°25.6° / 1001m 06-09.xi.2010; C. Caramaza y J. Peralta’ (1♀, MUSM); ‘PERU: DPTO. Pasco\ Paujil (P.N. Yanachaga)\ 20.IX.93 (500mt.)\ Pedro Hocking’ ‘Megalopta’ (1♀, MUSM); ‘PERU: Dpto Pasco\ Sta. Rosa (R. Palcazu)\ 5.XI.89 (500mt)\ Pedro Hocking’ (1♀, MUSM); ‘PERU: Dpto Pasco\ Sta. Rosa (R. Palcazu)\ 28.IX.92 (500mt)\ Pedro Hocking’ (1♀, MUSM); ‘Puno: ‘Peru, Puno,\ Carabaya, 11 km ao S de Mazuko,\ 13.206°S\ 70.368°W,\ 450m, 19.viii.2012\ Melo, Rosa\ & Santos’ ‘Armadilha\ Luminosa’ (2♀, 4♂ DZUP). San Martin: ‘PERU, SM, Tarapoto\ Yuirimaguas, km 20, ‘BIODIVERSIDAD’\ 0634/7620 950 masl\ IV-VI.2002 C. Rasmussen’ ‘Megalopta sp’ ‘col. CR col’ (1♀, CRC); ‘Ijarigi\ 320m\ Rio Pachitea\ 1.III.68\ Col. R. Garcia’ ‘Megalopta’ (1♀, MUSM). SURINAME: Brokopondo: ‘Suriname\ Brokopondo\ March 1964\ M. Boeseman (1♀, RMNH). Nickerie: ‘Museum Leiden\ W. Suriname Exp\ Maratakka River\ Awarre-savanna\ 26.II-3.III.1971\ D.C. Geijskes’ (1♀, RMNH). Paramaribo: ‘Suriname\ Paramaribo\ Ma Retraite\ Swamp forest\ 18-20 Jan. 1964\ D.C. Geijskes’ ‘MALAISE-TRAP’ (1♀, RMNH); ‘Suriname\ Paramaribo\ Ma Retraite, Swamp forest\ 20-23 mar. 1964\ D.C. Geijskes’ ‘MALAISE-TRAP’ (1♀, RMNH). Saramaca: ‘Suriname, Coppename River\ Voltz Mountain\ 13-15 July 1963\ P.H.v. Doesburg Jr. (1♀, RMNH). Sipaliwini: ‘Suriname Coopename\ Bakhuis Mts camp\ 3\ 24 Febr 1965\ P.A. Florschütz\ & P.J.M. Maas’ at light’ (1♀, RMNH). VENEZUELA: Amazonas: ‘VENEZUELA, Amaz. Pro. Ayacucho\ 25 IV 1967\ R. L. Dressler’ (1♀, DZUP).