



SHORT NOTE

New records of social wasps around Brasília (Hymenoptera: Vespidae: Polistinae)

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Article History

Edited by

Gilberto M. M. Santos, UEFS, Brazil

Received 27 September 2016

Initial acceptance 20 October 2016

Final acceptance 19 November 2016

Publication date 13 January 2017

Keywords

Paper wasps, swarm founding wasps, species substitution.

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Abstract

The aim of the present work was to discover how many species inhabit the environs of Brasília. Being an approximate rectangle in the middle of the Cerrado biome, the Federal District of Brasília is a representative “quadrat” to sample the biome’s fauna.

From 1976 to 1998, social wasps were collected at various locations in the Federal District (an area of 5,822 km²) at altitudes of 900 to 1,100 m. Additional species in surrounding parts of Goiás State might also be present in the Federal District or might move there, so localities within 20 km of the State border were also surveyed. Only a standard entomological net was used to collect the wasps. The specimens are in the collections of the Universidade de Brasília and of Universidade Federal de Minas Gerais.

A total of 75 species in 18 genera have been recorded in and around Brasília. Of the 56 species of social wasps in 16 genera collected in the Federal District (Table 1), 9 are new records and some greatly extend the species ranges; some > 500 km. Some species are geographically widespread, some have restricted and some disjunct distributions. A further 19 species and 2 genera were found in neighbouring parts of Goiás State (Table 2).

The species richness of the social wasps of the Federal District is substantially higher than has been recorded elsewhere

in the region (Diniz & Kitayama, 1998; Grandinete & Noll, 2013; Elpino-Campos et al., 2007; Pereira & Antonialli-Junior, 2011). Presumably, this greater species richness recorded from the Federal District is a result of two factors. First, the region surveyed comprises various types of habitat. There are gallery forests, forest margins, dry forests, cerrados and suburban gardens. Secondly, the survey was conducted, albeit with interruptions, over a period of more than twenty years. The prolonged collecting period substantially increased the previous species count.

The present work adds nine species to the list of species known from the Federal District. Previous records are cited in four publications (Richards, 1978; Raw 1985, 1992, 1998). Two species, *M. campestris* and *M. giffordi* were new to science (Raw, 1985). A species cited as *Epipona quadrituberculata* (Gribodo, 1892) is now known to be *Epipona media* Cooper (2002).

Some species occurring in central Brazil have broad geographical distributions (Richards, 1978), but *Polistes satan*,



Table 1. List of the 56 species of social wasps recorded in and around the Federal District of Brasília.

<i>Polistes billardieri</i> (F)	<i>Brachygastra augusti</i> (de Saussure)
<i>cinerascens</i> de Saussure	<i>lecheguana</i> (Latreille)
<i>davillae</i> Richards	<i>moebiana</i> (de Saussure)
<i>erythrocephalus</i> Latreille	<i>Chartergellus communis</i> Richards
<i>ferreri</i> de Saussure	<i>Clypearia angustior</i> Ducke
<i>geminatus</i> Fox	<i>Epipona media</i> Cooper
<i>goeldii</i> (Ducke)	<i>tatua</i> (Olivier)
<i>occipitalis</i> Ducke	<i>Metapolybia cingulata</i> (F)
<i>satan</i> Bequaert	<i>Parachartergus fraternus</i> (Gribodo)
<i>subsericeus</i> de Saussure	<i>Polybia chrysothorax</i> (Lichtenstein)
<i>versicolor</i> (Olivier)	<i>dimidiata</i> (Olivier)
<i>Mischocyttarus annulatus</i> Richards	<i>emaciata</i> Ducke
<i>campestris</i> Raw	<i>fastidiosuscula</i> de Saussure
<i>cassanunga</i> (von Ihering)	<i>flavifrons</i> Smith
<i>cerberus</i> Richards	<i>ignobilis</i> (Haliday)
<i>drewseni</i> (de Saussure)	<i>jurinei</i> de Saussure
<i>giffordi</i> Raw	<i>liliacea</i> (F)
<i>goyanus</i> Zikán	<i>occidentalis</i> (Olivier)
<i>latior</i> (Fox)	<i>paulista</i> von Ihering
<i>lecointei</i> (Ducke)	<i>rejecta</i> (F)
<i>marginatus</i> (Fox)	<i>ruficeps</i> Schrottky
<i>matogrossoensis</i> Zikán	<i>scrobalis</i> Richards
<i>melanoxanthus</i> Richards	<i>sericea</i> (Olivier)
<i>rotundicollis</i> (Cameron)	<i>Protonectarina sylveirae</i> (de Saussure)
<i>Agelaia pallipes</i> (Olivier)	<i>Protopolybia exigua</i> (de Saussure)
<i>Angiopolybia pallens</i> (Lepeletier)	<i>sedula</i> (de Saussure)
<i>Apoica pallens</i> (F)	<i>Pseudopolybia vespiceps</i> (de Saussure)
<i>thoracica</i> du Buysson	<i>Synoeca surinama</i> (L)

Mischocyttarus giffordi and *M. Goyanus* seem to be restricted to the higher altitudes of Goiás and Minas Gerais States and the Federal District of Brasília.

Extensions of geographical range of several species are recorded. The closest that *Polistes goeldii* and *M. annulatus* had been recorded to Brasília is at “Base camp”, Mato Grosso, 540 km to the north-west (Richards, 1978). *Polistes occipitalis* is known from the states of Pará, Espírito Santo, Rio de Janeiro and São Paulo (op. cit.) so the closest previous known locality is at least 500 km away. Apparently, the distribution of *Epipona media* is disjunct; it has been found just 33 km south of the present Brasília record (Menezes et al., 2010). *Mischocyttarus campestris* was found recently on the Serra de Bodoquena, Mato Grosso do Sul (Auko, 2015).

After creating so many permanently green areas in the Federal District over the past decades, some species have become more common in Brasília. Despite innumerable collections from 1976 to 1986, *Clypearia angustior* was never found in the region, but in 1987 it was locally common in the residential area of Lago Sul. It is known from Pará and São Paulo States and an undetermined locality in Minas Gerais State (Richards, 1978).

Table 2. List of the 19 species of social wasps recorded in Goiás State within 20 kilometres of the Federal District of Brasília.

<i>Polistes carnifex</i> (F)	<i>Metapolybia suffusa</i> (Fox)
<i>melanosoma</i> de Saussure	<i>Parachartergus smithii</i> (de Saussure)
<i>Mischocyttarus frontalis</i> (Fox)	<i>Polybia bifasciata</i> de Saussure
<i>Agelaia flavipennis</i> (Ducke)	<i>erythrothorax</i> Richards
<i>multipicta</i> (Haliday)	<i>quadricincta</i> de Saussure
<i>vicina</i> (de Saussure)	<i>striata</i> (F)
<i>Apoica flavissima</i> Van der Vecht	<i>tinctipennis</i> Fox
<i>Chartergus artifex</i> Christ	<i>Protopolybia chartergoides</i> (Gribodo)
<i>globiventris</i> de Saussure	<i>Pseudopolybia compressa</i> (de Saussure)
<i>Charterginus fulvus</i> Fox	

Acknowledgements

The assistance of the late Professor O. W. Richards was invaluable in the identifications. The University of Brasília provided me with the facilities to conduct this survey. Dr Alain Dejean, Université de Toulouse; Dr Christopher K. Starr, University of the West Indies, Trinidad and Tobago and Dr Fernando Noll, Universidade Estadual Paulista (UNESP), São José do Rio Preto, São Paulo, provided invaluable comments on an earlier version of the manuscript.

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