

Discovery of a second species of *Minanga* Cameron 1906 (Hymenoptera, Braconidae, Sigalphinae) from French Guiana

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A second species of the rare genus *Minanga* has been discovered in Saül, French Guiana during a long term entomological survey. The identification key for all known species is updated.

Keywords: identification key, French Guiana, Neotropical, parasitoid.

Une seconde espèce du rare genre *Minanga* a été découverte à Saül, Guyane française, au cours d'un inventaire entomologique au long cours. La clé d'identification de toutes les espèces connues est mise à jour.

Mot-clés: clé d'identification, Guyane française, Néotropical, parasitoïde.

1 INTRODUCTION

The genus *Minanga* previously known from the Old World has also been recorded in New world with the recent discovery of *M. achterbergi* Sharkey 2004 in northern Mexico and *M. angelus* Sharkey & Braet 2012 in French Guiana (Sharkey, 2004; Sharkey & Braet, 2012). The species described here represents the third species in the New World. The new species belongs also in the subgenus *Anopliminanga* (Tan *et al.*, 2010). Its biology is unknown but few members of this subfamily are known as koinobiont endoparasitoids of lepidopteran larvae (Achterberg & Austin, 1992; Sharkey & Janzen, 1995). Twelve known species are distributed worldwide but are rare everywhere.

2 MATERIAL AND METHODS

The species described in this paper were collected by a modified window trap (illustrated at <http://insectafgseag.myspecies.info/node/22>) during the entomological survey of the Montagne Belvédère, Saül (French Guiana; 3°37'22"N - 53°12'57"W, alt. 326 m) by the "Société Entomologique Antilles-Guyane" (SEAG). The morphological terms used in this paper follow van Achterberg (1993). The specimen is deposited in

collections of the « Institut Royal des Sciences Naturelles de Belgique, Département d'entomologie, Bruxelles » (IRSNB).

3 RESULT

3.1 Description of *Minanga tarini* sp. nov. (Figures 1-4)

Material Examined

Holotype ♀ French Guiana, Saül, 17.i.2011, VPV [vitre point de vue = Window trap on the viewpoint], SEAG leg, [IRSNB].

Diagnosis

This is the second species of *Minanga* from French Guiana. It differs from *M. angelus* by the horns immediately posteriad the lateral ocelli (horns on the lateral edges of the occiput). It differs from *M. achterbergi* by the vertex bulging posterolaterally and the presence of large posteroventral flange on head (short in *M. achterbergi*) (**Figure 2**).

Length: 7.5 mm.

Color

Mostly black with some orange and yellow color. Black except as follows: propodeum light orange; fore tarsus yellow; metasoma orange except apex

black. Fore wing infuscate in third and yellow in basal 2/3.

Head

Antenna with 41 flagellomeres; horn posteriad lateral ocellus present; vertex bulging posterolaterally (**Figure 2**); occipital carina absent; face with a median longitudinal elevation, presence of 4 deep punctures along this elevation; gena forming a large flange posteroventrally (**Figure 2**); antennal insertions bordered by carinae laterally and medially, the lateral carina bordering the frons and ending close to the ocelli (**Figure 3**).

Mesosoma

Pronope and subpronope well-developed; notauli smooth anteriorly, finely crenulate posteriorly and reaching trans-scutal articulation (**Figure 1**); scutellar sulcus with 3 strong longitudinal carinae; posterior scutellar depression with a row of areolae; propodeum with median and lateral longitudinal carinae, and an anterior transverse carina, stub of posterior transverse carina present laterally; precoxal sulcus deep (less so anteriorly) and

smooth; posterior margin of mesopleuron with several deep depressions; ventral transverse ridge present anteriorly mid coxal insertions; tarsal claws with acute basal lobe; hind tarsus with short dense setae; hind tibial spurs with glabrous hook apically (**Figure 4**).

Metasoma

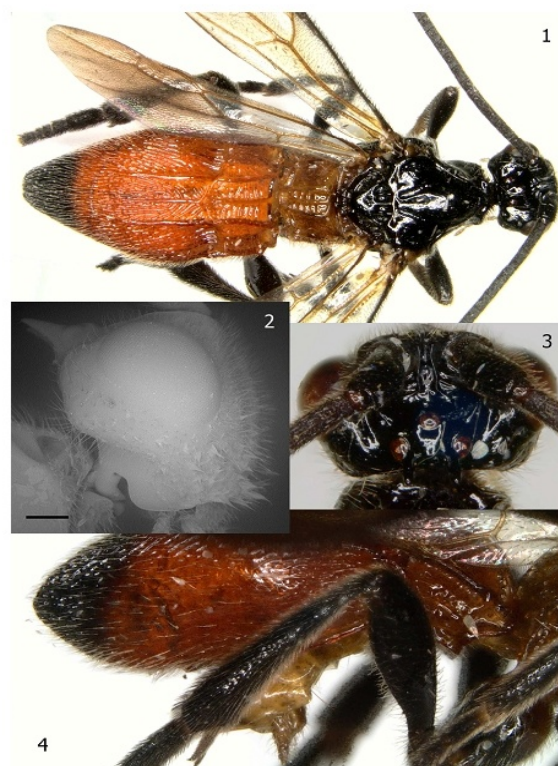
Lateral longitudinal carinae of terga 1 and 2 both narrowing posteriorly; all visible terga (3) mostly rugose, 3rd tergum less rugose posterolaterally (**Figure 1**); ventral side of carapace rounded apically (**Figure 4**); ovipositor short (withdrawn under carapace).

Etymology

Named “*tarini*” in honour of José Tarin, who lived in Saül and where he died in unknown circumstances.

Distribution

Neotropical (French Guiana).



Figures 1-4. *Minanga tarini* sp. nov.: **1** Habitus, dorsal. **2** Head, lateral. **3** Head, dorsal. **4** Metasoma, lateral.

3.2 Identification key of the worldwide species of *Minanga* (modified from the key of Tan *et al.*, 2010)

1.
 - Posterior margin of carapace without flange, dentation or depression (**subgenus *Anopliminanga***, Mexico, South America and China) ...2
 - Posterior margin of carapace lamelliform and dentate (**subgenus *Minanga*** s. str., Afrotropical) ...5
2.
 - Occipital carina absent; tergites II and III of carapace tapering to blunt apical point. 3
 - Occipital carina present laterally; apex of carapace broadened posteriorly, tergite II and III reticulate-rugose; basal submedian carina short (0.3x median length of tergite II). (China) ...***M. brevicarinata*** Tan & Chen, 2010
3.
 - Vertex rounded posterolaterally (usual for *Minanga*) (Northern Mexico) ...***M. achterbergi*** Sharkey
 - Vertex bulging posterolaterally (French Guiana) ...4
4.
 - Spines vertical and positioned immediately posteriad lateral ocelli (usual position for *Minanga*) (Northern Mexico) ...***M. tarini* sp. nov.** Braet
 - Spines horizontal and positioned on lateral edges of occiput (French Guyana) ...***M. angelus*** Sharkey & Braet
5.
 - Wings dark, uniformly infuscate ...6
 - Wings partly or entirely pale ...9
6.
 - Head black; mesonotum smooth ...7
 - Head completely or partly reddish orange; mesonotum punctate ...8
7.
 - Postpectal carina distinct and complete; mesosoma black entirely. (Uganda) ...***M. phoebea*** Quicke, 2008
 - Postpectal carina indistinct; mesosoma mostly reddish orange. (South Africa) ...***M. serrata*** Cameron, 1906

8.
 - Head reddish brown completely; face not transversely rugose; antenna 35 segmented. (Democratic Republic of Congo) ...***M. oryx*** de Saeger, 1948
 - Head black medially and reddish brown laterally; face transversely rugose; antenna 43-44 segmented. (Madagascar) ...***M. seyrigi*** Granger, 1946
9.
 - Head and mesosoma black, metasoma orange; legs mostly yellow; apical margin of carapace not bilobed; median lobe of mesonotum with median furrow. (South Africa) ...***M. flavipes*** Cameron, 1910
 - Color of body not as above; apical margin of carapace bilobed; median lobe of mesonotum without median furrow ...10
10.
 - Apex of hind tibia and tarsi black. (Kenya, Tanzania) ...***M. capra*** (Enderlein, 1905)
 - Legs completely reddish brown or tips of tarsi brown ...11
11.
 - Apex of carapace excavate; color of mesonotum uniform; tips of tarsi brown. (Democratic Republic of Congo) ...***M. taura*** (Brues, 1926)
 - Apex of carapace unexcavated; mesonotum reddish brown medially, black laterally; legs entirely reddish brown. (South Africa) ...***M. bimaculata*** Cameron, 1911

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