

## SCIENTIFIC NOTE

### TWO NEW RECORDS OF TIGER BEETLES (COLEOPTERA: CARABIDAE: CICINDELINAE) FOR GUINEA–BISSAU

ARTUR R. M. SERRANO

Centro de Biologia Ambiental/Departamento de Biologia Animal  
Faculdade de Ciências da Universidade de Lisboa, R. Ernesto de Vasconcelos  
C2, PT-1749-016 Lisboa, PORTUGAL  
aserrano@fc.ul.pt

The tiger beetle fauna of Guinea-Bissau is particularly diverse, with 36 species recorded from the country, *i.e.*, ~1 species/1,062 km<sup>2</sup> (Pearson and Cassola 1992; Serrano 2007). Most tiger beetle species in Guinea-Bissau are more or less widely distributed throughout Africa from the Sahara to South Africa. However, some species seem to be more restricted in their distributions (see Serrano 2007). Until now, only one species, *Cylindera (Ifasina) gulbenkiana* Serrano, is known to be endemic to Guinea-Bissau.

Guinea-Bissau is a small (37,000 km<sup>2</sup>) west African country dominated by plains and covered by diverse ecotypes of vegetation, such as mangrove, herbaceous savannah, shrubby savannah, open dry forest, closed dry forest, and submoist forest or moist forest (Cantanhez) among others (Porter *et al.* 2004). Large areas have been cleared by human activities for agriculture, charcoal works, and, during the last decade, the cultivation of cashew trees. The fragmentation and/or destruction of forest habitats have contributed to the decline or even extinction of local populations of some tiger beetle species (Serrano 2007).

During an entomological study of three natural parks and the Madina Boé-Béli region in Guinea-Bissau in June/July 2009, we collected 23 species or subspecies of tiger beetles from which two are **new country records**: *Calomera fimbriata fimbriata* (Dejean) and *Myriochila peringueyi immaculipennis* (W. Horn). *Calomera fimbriata* was previously recorded for several African countries (Werner 2000) including neighboring Senegal and Guinea. Two females from Guinea-Bissau were collected on the edges of the Corubal River near Ché Ché, 11°55'55.36"N, 14°12'47.03"W, 43 m elevation, 2–6 July 2009, and the species occurred together with *Cylindera octoguttata* (F.) and *Myriochila melancholica* (F.).

*Myriochila peringueyi immaculipennis* was described from a single specimen from Cameroon (Horn 1905) and later recorded for Central African Republic and Sudan; it is considered “very rare in

collections” (Werner 2000). We also observed two specimens from Democratic Republic of the Congo in the Deutsches Entomologisches Institut collection. The nominal form has a broader distribution, being known from Guinea, Ivory Coast, Togo, Cameroon, Central African Republic, and Democratic Republic of the Congo (Werner 2000).

We collected several adults of *M. peringueyi immaculipennis* (Fig. 1) near Béli-Capebonde, 11°48'32.98"N, 13°53'40.35"W, 112 m elevation, 3 July 2009, 3♂♂, 2♀♀; Béli-Pataque, 11°52'31.13"N, 13°57'11.80"W, 86 m elevation, 4 July 2009, 18♂♂, 11♀♀; and Béli, 11°50'31.93"N, 13°56'21.20"W, 75 m elevation, 4–5 July 2009, 17♂♂, 7♀♀. This tiger beetle is more or less abundant on the muddy edges of temporary pools and rivulets in the herbaceous savannah, occurring together with *M. melancholica*. In some places, adults of *Prothymidia vuilletorum* (Horn), a typical tiger beetle of herbaceous savannah, occurred close to *M. peringueyi immaculipennis*, but was not observed overlapping with this species for prey-hunting. The adults of both species are cryptic with the substrate on which they live. Thousands of burrows of first instars were also present in this habitat, suggesting that they belong to these species. Because of the state of larvae present in the herbaceous savannah, we judge that adult eclosion occurs in the beginning of the rainy season (second fortnight of May/beginning of June). In the near future, molecular analyses on *M. peringueyi immaculipennis* and the nominal form probably will lead to the conclusion that the former must be elevated to species level.

Specimens of both species are deposited in the collection of the author at the Faculty of Sciences, University of Lisbon, Lisbon, Portugal.

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