

A review of the distribution of *Harposcelis paradoxus* Burmeister, 1847 (Coleoptera: Scarabaeidae: Dynastinae: Cyclocephalini) with a new country record for Peru

Harposcelis paradoxus Burmeister is a relatively rare lowland species that, for a long time, was known only from French Guiana (Blackwelder 1944; Endrödi 1966, 1985; Krajcik 2005). Males (Plate 1) are more commonly collected than females (Plate 2) and are now commonly available via the internet from commercial dealers in the insect trade. At a body length of 40 mm, this is a remarkably large species for a member of the tribe Cyclocephalini. Males are distinctive because of their long, curved protibiae and anterior trochanter with a large, anteriorly projecting tooth. The genus can be identified in keys by Endrödi (1966, 1985), Ratcliffe (1985), and Jameson *et al.* (2002).

Endrödi and Dechambre (1976) discovered Burmeister syntypes in the Museum National d'Histoire Naturelle in Paris, designated a lectotype, and redescribed *Harposcelis paradoxus*. They also clarified the correct spelling of the genus as *Harposcelis* (as originally proposed by Burmeister) and not *Harposceles* (as used by later authors). They mentioned there was a specimen in the Dechambre collection from Cali, Colombia, on the WEST side of the Andes, and we believe that this data is probably incorrect, since this species is known from only east of the Andes.

Dechambre (1979) first recorded a specimen from Suriname that was collected at Moloko-Iméné. Lachaume (1992) reported specimens from French Guiana and Ecuador, and Duranton (2011) provided several collecting records from throughout French Guiana during the dry season (April, June to December). Andreazze (2001) first reported *H. paradoxus* from the Brazilian Amazon (Parque Nacional do Jaú, Amazonas) just to the west northwest of Manaus. Andreazze and Motta (2002) found additional specimens at São Gabriel de Cachoeira on the upper Rio Negro, Amazonas, Brazil. Touroult *et al.* (2010) reported on light trap efficiency in French Guiana, and discovered that *H. paradoxus* was attracted to lights only near midnight until 4 AM, a pattern typically seen for *Dynastes hercules* (L.) in Central America. In September 1994, specimens were so common at the lights in Rondonia, Brazil that they were no longer collected (A. Reifschneider, personal communication to BCR, June 2011). Here we report *H. paradoxus* from Peru, and those records listed below for Peru constitute a NEW COUNTRY RECORD. These literature records and the specimen label data listed below now give us a more precise picture of the distribution of *H. paradoxus* (Plate 3).

Collections with Specimens

The following collections contain specimens of *H. paradoxus*. This species is represented, no doubt, in other collections as well although not commonly.

BCRC - B.C. Ratcliffe, Lincoln, NE, USA
BMNH - The Natural History Museum, London, United Kingdom
CASC - California Academy of Sciences, San Francisco, CA, USA
EPGC - Everardo José and Paschoal Coelho Grossi, Novo Friburgo, Parana, Brazil
INPA - Instituto Nacional de Pesquisas da Amazonia, Manaus, Brazil
IRSNB - Institut Royal des Sciences Naturelles de Belgique, Brussels, Belgium
JPSC - Jochen-P. Saltin, Niedernhausen/Taunus, Hessen, Germany
MPEG - Museo Paranense Emilio Goeldi, Belém, Amazonas, Brazil
REIF - A. Reifschneider, Lincoln, NE, USA
USNM - U.S. National Museum, currently at the University of Nebraska, Lincoln, NE, USA

Distribution: Brazil, Ecuador, French Guiana, Peru, Suriname.

Records: BRAZIL: Amazonas: Tapurucuara, Rio Negro, II-1963 (1 female) (MPEG); Maués, Rio Abacaxis, Campina Pacamiri, V-2008 (3 males) (EPGC); Parque Nacional do Jaú, Rio Carabinani, 01°59'S 61°32'W, IV-1994 (1 male) (EPGC); Presidente Figueiredo, Estrada de Balbina, Km 24, 02°01'05"S, 49°49'60"W, IX-2002 (1 male) (EPGC); São Gabriel de Cachoeira, IV-1993 (4 males) (Andreazze and Motta 2002); Tapurucuara: Rio Negro, II-1963 (1 female) (BCRC); Manaus, ZF-2, Km-14, 0235215-600655W, X-2004 (1 specimen), XI-2004 (2 specimens) (INPA); Manaus, Fazenda Porto Alegre (Reserva 3114), 2°23'00"S/59°56'35"W, VIII-1996 (2 specimens) (INPA); Manaus, Rio Abacaxis, Campina Pacamiri, 04°35'49"S, 58°13'14"W, V-2008 (1 specimen) (INPA); Fazenda Esteio ZF-3 km (60 km. N. Manaus), IX-1984 (1 specimen) (INPA); Reserva Ducke, AM 010 Km 26, X-2000 (1 specimen) (INPA); Novo Aripuanã, Reserca Sokagakkay-Gouveia, V-1999 (1 specimen) (INPA); Presidente Figueiredo, Estrada de Balbina Km 24, Comunidade São Francisco, 02°01'05",

59°49'59"W, VIII-2005 (2 specimens), X-2003 (1 specimen) (INPA); Presidente. Figueiredo, Estrada de Balbina, Km 12, Igarapé Santuário, 02°03'36"S, 59°55'35" W, IX-2003 (3 specimens) (INPA); Querari, Pelotão, 1°5'N, 69°51'W, IV-1993 (1 specimen), V-1993 (1 specimen) (INPA); Parque Nacional do Jaú, Mg. dir. baixo Rio Jaú, 1°97'S, 61°45'W, no date (1 specimen), X-1993 (1 specimen) (INPA); Parque Nacional do Jaú, Rio Carabinani mg. dir. 1°59'S, 61°32'W, IV-1994 (1 specimen), IV-1995 (1 specimen) (INPA); Pacaraima, 4°47'04"N, 61°07'56", VII-1996 (1 specimen) (INPA); Mun. Barcelos, Rio Unini, 01°45'53"S, 62°05'10"W, VI-1996 (2 specimens) (INPA). **Rondonia:** Porto Velho, IV-1979 (1 male) (BCRC); Ariquemes (62 km. S), Fazenda Rancho Grande, X-1993 (4 males) (BCRC); Ariquemes (62 km. S), Fazenda Rancho Grande, IX-1994 (1 male, 3 females; part of a much larger series) (REIF). **ECUADOR: Sucumbios:** near Lago Agrio, X-1983 (1 male) (BCRC). **FRENCH GUIANA: Cayenne:** Approuague (Duranton 2011); Belizon (25 km near Regina), VIII-2005 (1 male) (JPSC; Duranton 2011); Fourgassié (Duranton 2011); Kourou (RN 1. pk 84) (Duranton 2011); Kaw, III-1995 (2 males) (EPGC); Kaw Mountain (Duranton 2011); Kaw Nature Reserve, (Cayenne Region), IX-2003 (1 male) (JPSC); Laurens (Duranton 2011); Montagne de Chevaux (Touroult *et al.* 2010); Montagne de la Trinité, X-2008 (1 female) (EPGC); Oyapok, ex. coll. Le Moul't (1 male) (IRSNB); Patagai forest (Duranton 2011); Roura: Route de l'Est, Km 41, X-1991 (3 males) (IRSNB); Route de Regina, PK 35, XI-1986 (1 male) (JPSC); Route Saint Georges to Regina (Duranton 2011); Saint Georges de l'Oyapock, XI-2001 (8 males) (EPGC; Duranton 2011); Sapokai (Duranton 2011); Tortue mountain (Duranton 2011); Yiyi forest (Duranton 2011). **St.-Laurent du Maroni:** road to Paul Isnard (Duranton 2011); road to Petit Saut (Duranton 2011); St.-Jean, 1907 (2 males) (IRSNB); St.-Laurent, VIII-1975 (1 male) (BCRC); Route St.-Laurent to Mana (Duranton 2011). **NO DATA:** (1 specimen) (BMNH). **PERU (NEW COUNTRY RECORDS): Loreto:** Iquitos, II-2007 (1 male) (JPSC); Iquitos, XI-2010 (2 males) (JPSC); Iquitos, XII-2006 (1 female) (JPSC); Research Station, Mishana, Rio Nanay (25 km SW Iquitos), I-1980 (1 male) (USNM). **Madre de Dios:** Manu National Park, X-1980 (1 male) (BCRC); Rio Tambopata Reserve (30 miles SW Puerto Maldonado), XI-1979 (5 males) (USNM); Manu National Park, VIII-1980–XI-1981 (4 males) (CASC). **Ucayali:** Contamana, X-2006 (2 males) (JPSC); Pucallpa, X-2007 (1 female) (JPSC). **SURINAME: Brokopondo:** Brownsberg Nature Park, IX–X-2000 (1 male) (IRSNB). **(?):** Moloko-Iméné (Dechambre 1979).

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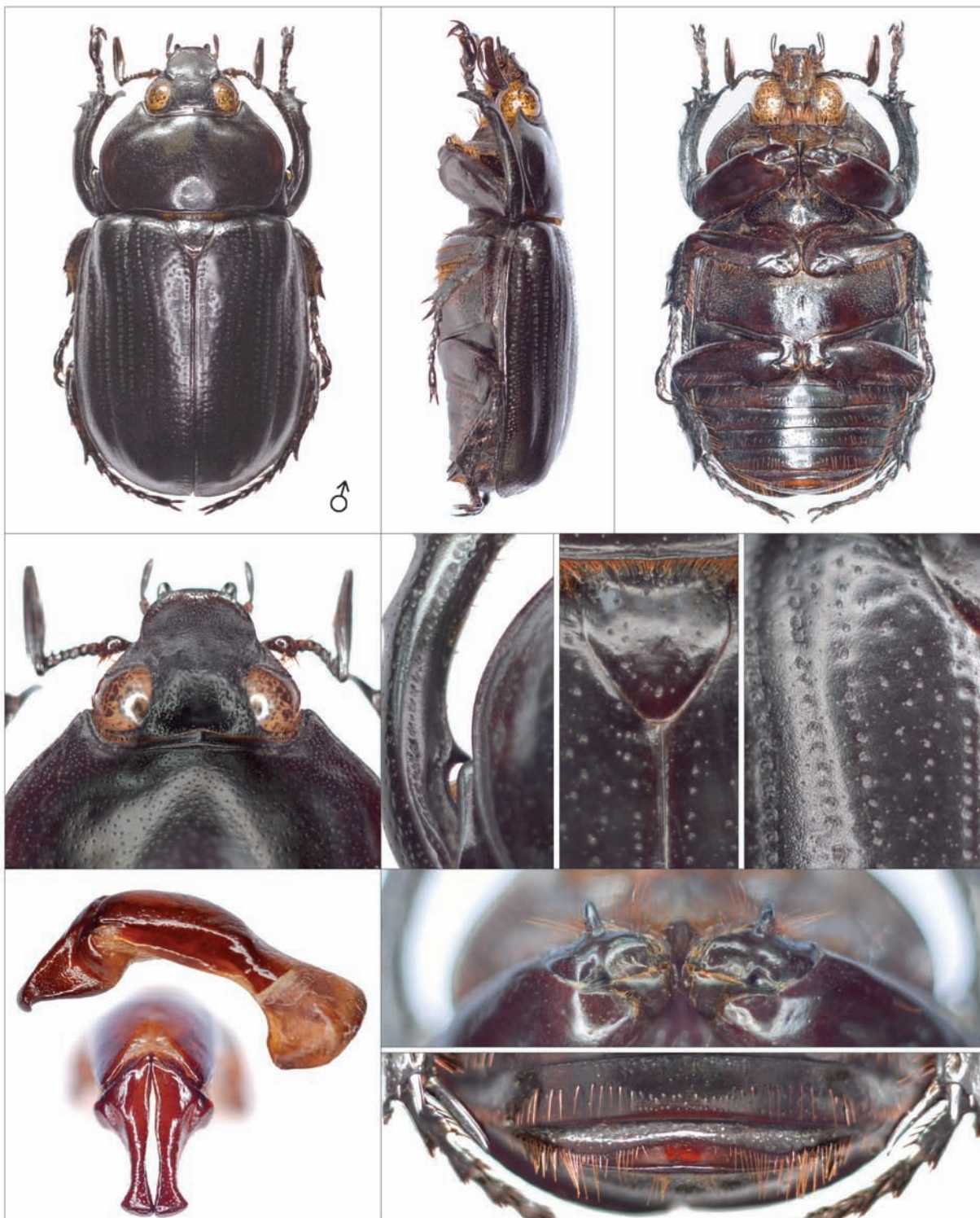
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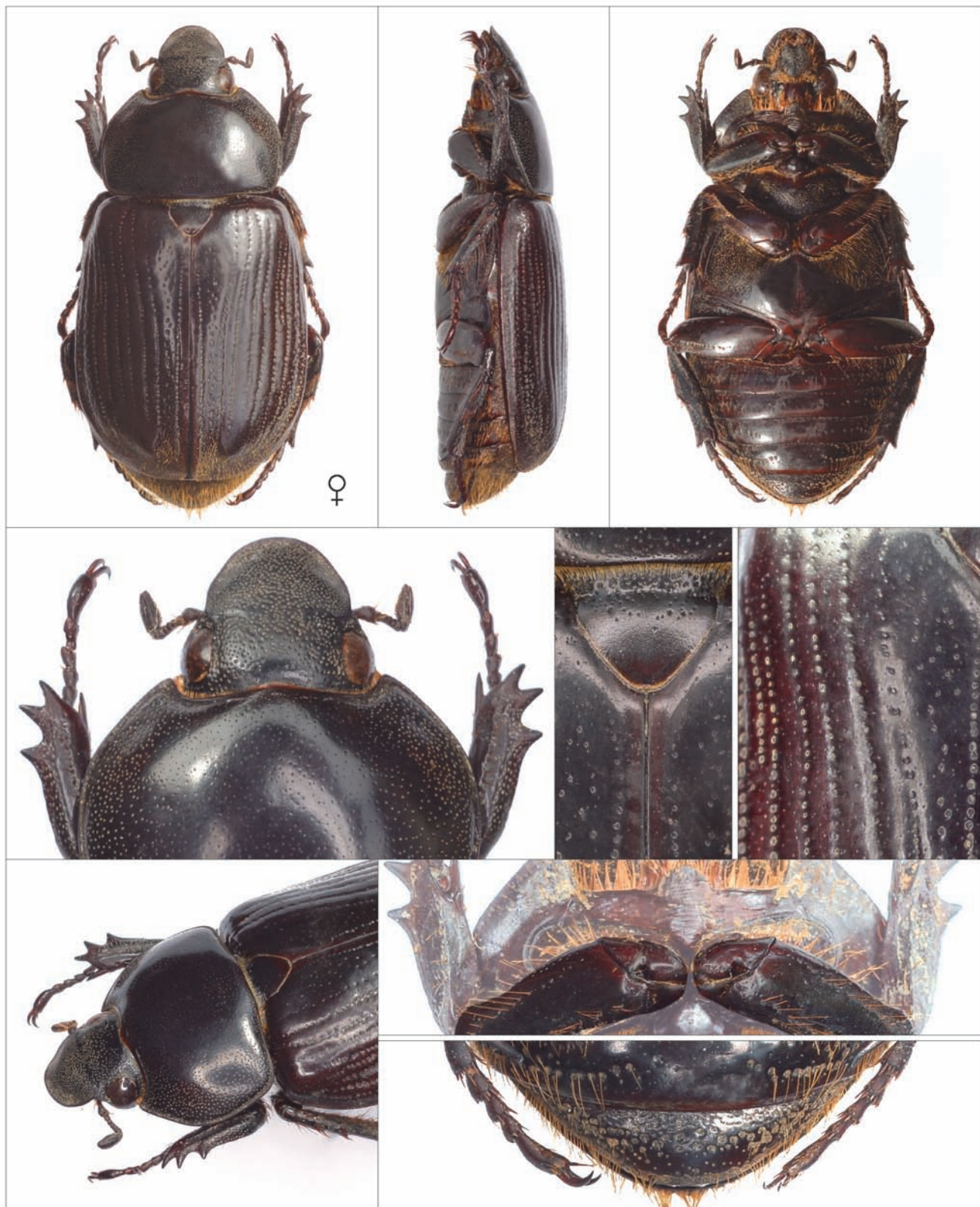
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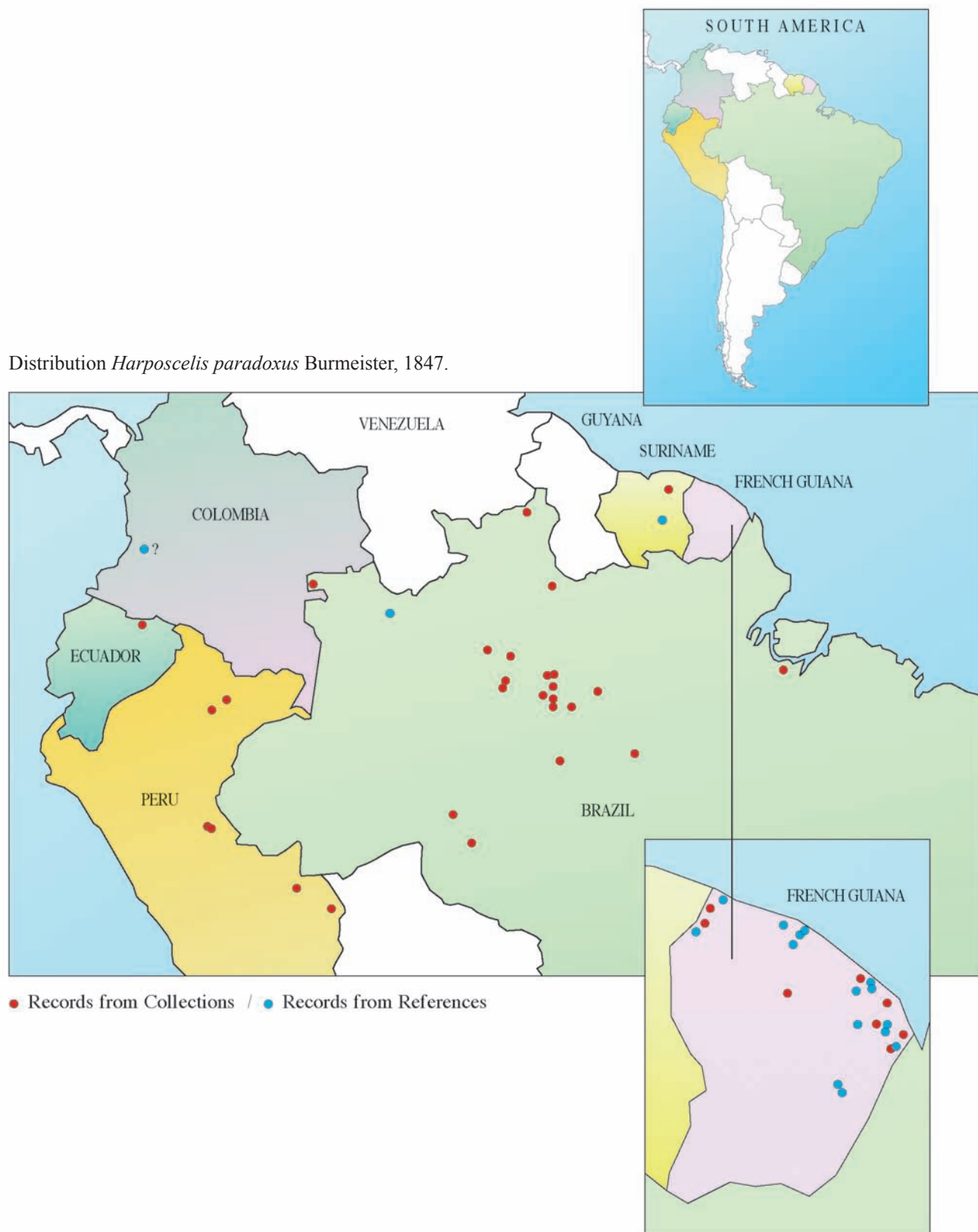


Harposcelis paradoxus Burmeister, 1847. Peru, Loreto, Iquitos, XI-2010. Male, length 38 mm.



Harposcelis paradoxus Burmeister, 1847. Peru, Loreto, Iquitos, XII-2006. Female, length 34 mm.

Distribution *Harposcelis paradoxus* Burmeister, 1847.



Erratum

The species figured in plate page 150 is NOT *Harposcelis paradoxus* Burmeister, 18447 (female), this is *Surutu dytiscoides* Martinez 1955 (female).

Surutu and *Harposcelis* females are nearly identical except *Harposcelis* has a slightly tumid clypeus, the mandibles usually show in front of the clypeus, and the pronotum has a bead along its basal margin.

All other details are still valid.