

## Scientific Note

**A melanic form of *Homothermon praemorsus* (Burmeister)  
(Coleoptera: Scarabaeidae: Rutelinae) from Paraguay**

Una forma melánica de *Homothermon praemorsus* (Burmeister)  
(Coleoptera: Scarabaeidae: Rutelinae) del Paraguay

Sergio D. Ríos<sup>1,2\*</sup>, Bolívar R. Garcete-Barrett<sup>1,3</sup> and Carlos A. Aguilar Julio<sup>1</sup>

<sup>1</sup>Museo Nacional de Historia Natural del Paraguay, Km 10 y 1/2, Sucursal 1 Campus U.N.A., 2169 CDP, Central XI, San Lorenzo, Paraguay. E-mail: sergiod40@gmail.com

<sup>2</sup>Departamento de Arqueología y Paleontología, Secretaría Nacional de Cultura, Asunción, Paraguay.

<sup>3</sup>Facultad de Ciencias Exactas y Naturales, Universidad Nacional de Asunción, Casilla de Correo 1039, Campus U.N.A., 2160 CDP, Central XI, San Lorenzo, Paraguay.

\*Corresponding author

ZooBank: urn:lsid:zoobank.org:pub: A19BF962-AB3B-4C4B-B1A7-11BD01ADFD4C  
<https://doi.org/10.35249/rche.45.4.19.16>

**Abstract.** A melanic specimen of *Homothermon praemorsus* (Burmeister) (Coleoptera: Scarabaeidae: Rutelinae) is reported. Is also the first record of the genus from Paraguay.

**Key words:** Beetle, melanism, Concepción.

**Resumen.** Se reporta un ejemplar melánico de *Homothermon praemorsus* (Burmeister) (Coleoptera: Scarabaeidae: Rutelinae). Es además el primer registro del género en Paraguay.

**Palabras clave:** Escarabajo, melanismo, Concepción.

---

*Homothermon* Ohaus (Scarabaeidae: Rutelinae: Rutelini), is a small genus of neotropical shining leaf chafers, which was treated by Soula (2008) into his concept of subtribe Pelidnotina, a group more recently treated as being artificial amongst the Rutelini (Moore and Jameson 2013).

The four species presently recognized in this genus inhabit southern Brazil and north-eastern Argentina: *H. serrano* Ohaus, 1898 (from Misiones, Argentina), *H. bugre* Ohaus, 1898 (recorded from Misiones, Argentina and Santa Catarina, Brazil), *H. praemorsus* (Burmeister, 1851) and *H. drumonti* (Soula, 2008) (both known just from São Paulo in Brazil). Here we report the genus *Homothermon* for the first time in Paraguay, based on what we consider a melanic form of *H. praemorsus* (Burmeister), consequently the known distribution of the species is also substantially extended.

***Homothermon praemorsus* (Burmeister)**

= *Odontognathus praemorsus* Burmeister, 1855: 521.

= *Homothermon paulista* Ohaus, 1898: 61.

**Examined material.** 1 male from: Paraguay, Concepción, Zanja Morotí, 22°47'30"S, 57°16'16"W, 10.X.2006, C. Aguilar leg. (MNHNPy).

---

Received 27 October 2019 / Accepted 7 November 2019 / Published online 20 November 2019

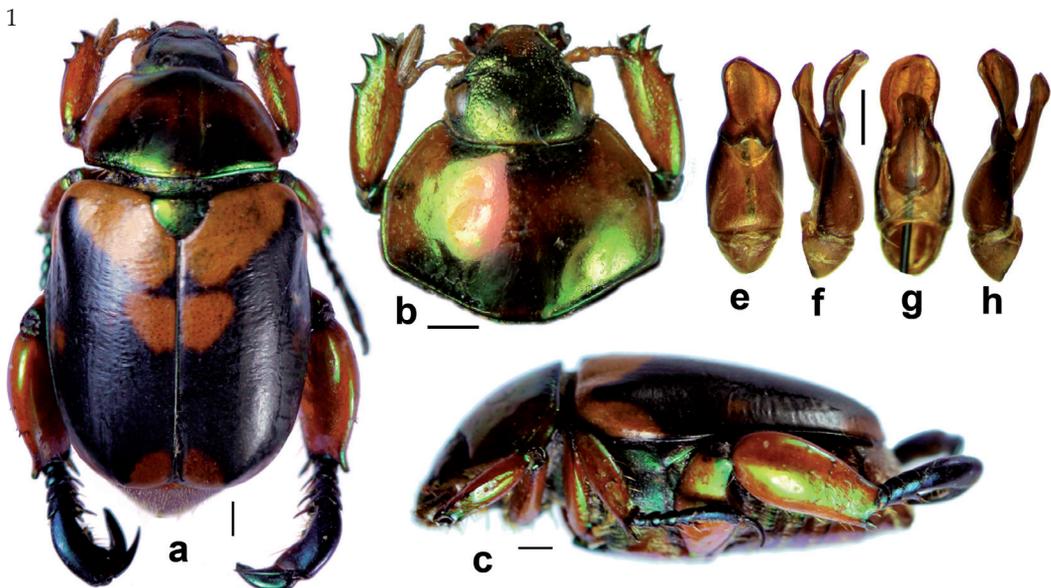
Responsible Editor: José Mondaca E.

*Homothermon praemorsus* (Burmeister, 1855) was described from material in Germar's collection coming from "Nord-Brasilien", without further specification of locality. This leaves open the possibility of the species being distributed much further northward from the state of São Paulo or, based on the fact that each name is based on the opposite sex, and that they look somewhat different, the possibility of *H. praemorsus* and *H. paulista* being different species, both possibilities still unconfirmed. Otherwise, the species is said to be known with certainty just from São Paulo (Ohaus 1898; Soula 2008; Moore *et al.* 2017).

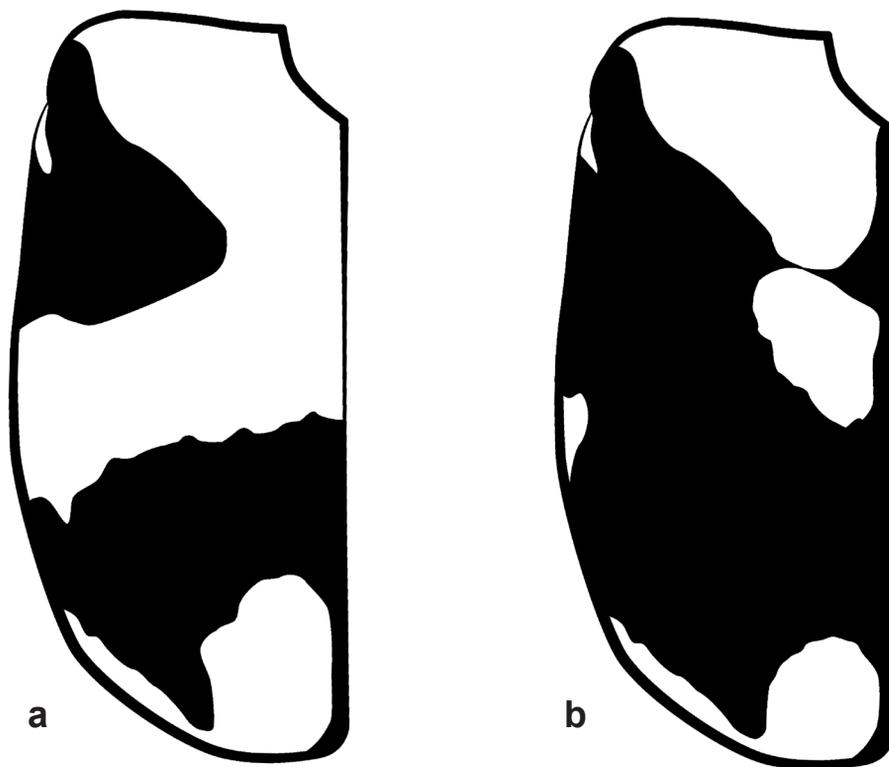
Ohaus (1898) indicated the species as very variable in color, but without further details than mentioning that the male is darker than the female. Soula (2008) also reinforced the sense of wide variation appealing to the sexual dimorphism, shown by illustrating a female syntype of *O. praemorsus* with a male syntype of *H. paulista* (see Moore *et al.* 2017 for a discussion on "Type Specimens and Lectotype Designation"). Based on Soula's illustrations, the female has a wholly black head and a largely black pronotum with testaceous lateral margins, and the elytron is largely yellow and with just a posterior rotated F-like thin black pattern; the male (also illustrated by Moore *et al.* 2017), in contrast, bears a testaceous mark covering the anterior half of the head, the pronotum is largely testaceous with just some minor posterior darker suffusion and the elytron has a broader posterior black marking as well as an additional anterior duck-head shaped black marking with its "beak" pointing obliquely to the humeri.

Burmeister (1855) indicated a length of 6" – about 13 mm (" = *Preußen linien*, with 1 *linie* = 2.179 mm according to Wikipedia Contributors (2017)) – in the original description of *O. praemorsus*. Ohaus (1898) gave an interval between 13-14 mm in the description of *H. paulista*. Curiously, Soula (2008), who examined the types of both names, indicated a length of 9-11 mm, surely a lapsus from our point of view.

Our specimen is a male, 13.8 mm long (Fig. 1), and fits very well in general and genital morphology with the male syntype figured by Soula (2008) and Moore *et al.* (2017), but differing in the extent of the dark areas of the body as follows: head more largely black, with just an apical testaceous spot on the clypeus; pronotum testaceous at the sides and black in the middle anterior and posterior areas, with both colors intermixing in the very



**Figure 1.** Paraguayan specimen of *Homothermon praemorsus*. a. Dorsal view. b. Detail of head and pronotum. c. Lateral view. e-f. Aedeagus in anterior, left lateral, posterior and right lateral views. Scale: 1 mm.



**Figure 2.** Schematic drawing of the left elytra showing the variation of black coloration. a. Lectotype of *H. paulista* (synonym of *H. praemorsus*) and b. Paraguayan specimen.

middle of the sclerite; anterior black elytral marking producing a thin line toward the interelital suture, where it becomes a suffuse spot; posterior black elytral marking even broader than in the syntype of *H. paulista*, so that it becomes united to the anterior marking through a very broad diametral bridge; venter of the body largely black-suffused.

The genital and further morphological structures do not seem to differ substantially between our specimen and the above mentioned syntype (Fig. 2), and the color differences look more like a matter of grade, rather than a matter of type, with a larger extent of black areas that make us to consider the Paraguayan specimen as a melanic form of *Homothermon praemorsus* (Burmeister) (Fig. 1).

By now is impossible to say if the Paraguayan *Homothermon* represents a sample of a melanic population or just part of a wide intermixed variation all along the geographical range of the species. Both the species and the genus constitute new geographical records for the country and effectively extend the known geographical range of *Homothermon praemorsus* (Burmeister) from São Paulo in Brazil to the cerrado of north-eastern Paraguay.

### Acknowledgements

We thank Frederick Bauer for his help interpreting the German texts in the original descriptions by Burmeister and Ohaus. This contribution was made partially with the financial support of the PRONII program of the Consejo Nacional de Ciencia y Tecnología (CONACYT).

### Literature Cited

- Burmeister, H. (1855)** Handbuch der Entomologie, Vol. 4, Part. 2 (Coleoptera Lamellicornia, Phyllophaga chaenochela). T.C.F. Enslin, Berlin.
- Moore, M.R. and Jameson, M.L. (2013)** Taxonomic and nomenclatureal changes in the pelidnotine scarabs (Coleoptera: Scarabaeidae: Rutelinae: Rutelini). *The Coleopterists Bulletin*, 67: 377-387.
- Moore, M.R., Jameson, M.L., Garner, B.H., Audibert, C., Smith, A.B.T. and Seidel, M. (2017)** Synopsis of the pelidnotine scarabs (Coleoptera, Scarabaeidae, Rutelinae, Rutelini) and annotated catalog of the species and subspecies. *ZooKeys*, 666: 1-349.
- Ohaus, F. (1898)** Ruteliden der neuen Welt. *Stettiner Entomologische Zeitung*, 59: 42-63.
- Soula, M. (2008)** Les Coléoptères du Nouveau Monde. Volume 2: Rutelini 2. Révision des Pelidnotina 2. Révision des genres: *Parhoplognathus*, *Chipita* n. gen., *Heteropelidnota*, *Homothermon*, *Hoplopelidnota*, *Mesomerodon*, *Mecopelidnota*, *Patatra* n. gen. (Coleoptera: Scarabaeidae, Rutelinae, Rutelini). Besoiro: Supplément au Bulletin de liaison de l'Association Entomologique pour la Connaissance de la Faune Tropicale.AECFT, Saintry, France.
- Wikipedia Contributors (2017)** Alte Maße und Gewichte (deutschsprachiger Raum). Wikipedia, Die freie Enzyklopädie: [https://de.wikipedia.org/w/index.php?title=Alte\\_Ma%C3%9F\\_e\\_und\\_Gewichte\\_\(deutschsprachiger\\_Raum\)&oldid=165068466](https://de.wikipedia.org/w/index.php?title=Alte_Ma%C3%9F_e_und_Gewichte_(deutschsprachiger_Raum)&oldid=165068466) (Accessed: June 20th 2017).