

## Notes on some species described in the genus *Hister* L. (Coleoptera: Histeridae). III\*

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Taxonomic and systematic status of some *Hister*-species is discussed. *Macrolister debellatus* has been synonymized with *Barbarus barbarus* and transferred to the genus *Barbarus*. Some new synonymies have been established: *Hister obesus* and *H. fossor suturifer* with *H. fossor*; *Hister latobius* with *H. colensoi* and *H. striatisternus* and *H. pharaonis* with *H. schimperi*. Lecto- and paralectotypes for some species are designated.

Key words: *Histeridae*, *Hister*; taxonomy

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### INTRODUCTION

This is a third paper presenting further efforts to explain the taxonomical and systematic position of some species hitherto classified in the genus *Hister* L. The paper is based on the materials loaned from the following institutions: The British Museum of Natural History, London (BMNH), Museum für Naturkunde der Humboldt-Universität zu Berlin (MNHUB), Muséum National d'Histoire naturelle, Paris (MNHM), Naturhistoriska Riksmuseet, Stockholm (NHRS) and Museo Civico di Storia Naturale, Trieste (MSNT). Some informations were also obtained from the author's collection (CHSM).

### ANALYTICAL PART

#### ***Barbarus debellatus* (Lewis, 1908) comb. nov.**

Described originally as "*Macrolister debellatus* (Lewis, 1908: 144-145) and compared with "*M. pilicollis* [now *Barbarus pilicollis* (Schmidt, 1889)] but detailed examination of the type-specimen clearly showed that it was identical with *Barbarus barbarus* (Bickhardt, 1919).

Thus, *Barbarus barbarus* (Bickhardt, 1919) = *Macrolister debellatus* Lewis, 1908, syn. nov. and the name "debellatus" with the generic name *Barbarus* (Mazur, 2005b: 80-81) has a priority.

\*see *Baltic Journal of Coleopterology*, 5(2): 79-86, 2005; 6(2): 111-118, 2006.

Material examined: type, sex undetermined, [Kenya], Mombasa, E. Africa, *Macrolister debellatus* Lewis, Type, G. Lewis Coll., B.M. 1926-369, *Barbarus debellatus* (Lewis, 1908), Det. S. Mazur, 2007.

### ***Hister calidus* Erichson, 1842**

There are 3 specimens from the type-series. Thus, a designation of the lecto- and paralectotypes is needed.

**Lectotypus:** a female, 1) [blue, handwritten] *calidus* N. Senegal. Mion, 2) [white, printed] 48825, 3) [red, printed] Type, 4) [white, handwritten] *striolatus* Mars., 5) [blue, printed] Hist.-Coll. (Coleoptera) Nr. 48825, *Hister calidus* N. Senegal Mion, Zool. Mus. Berlin, 6) [red, printed] Syntypus, *Hister calidus* Erichson, 1842. labeled by MNHUB 2007, 7) [white, printed] Lectotypus, 8) [white, printed] *Hister calidus* Erichson, 1842, Des. S. Mazur 2007.

**Paralectotypes:** I, a male, 1) [white, handwritten] 48825, 2) [red, printed] Type, 3) [blue, printed] Hist.-Coll. (Coleoptera) Nr. 48825, *Hister calidus* N. Senegal, Mion, Zool. Mus. Berlin, 4) [red, printed] Syntypus, *Hister calidus* Erichson, 1842, labeled by MNHUB 2007, 5) [white, printed] Paralectotypus, 6) [white, printed] *Hister calidus* Erichson, 1842, Des. S. Mazur 2007, II, sex undetermined, 1) [white, handwritten] 48825, 2) [red, printed] Type, 3) [white, handwritten] *Hister calidus* Er. Typ, 4) [blue, printed] Hist.-Coll. (Coleoptera) Nr. 48825, *Hister calidus* N. Senegal. Mion. Zool. Mus. Berlin, 5) [red, printed] Syntypus, *Hister calidus* Erichson, 1842, labeled by MNHUB 2007, 6) [white, printed] Paralectotypus, 6) [white, printed] *Hister calidus* Erichson, 1842, Des. S. Mazur 2007.

Additionally, one type-specimen of *Hister striolatus* Marseul, 1854, synonymous with *H. calidus*, was also examined:

**Syntypus:** a male, *striolatus* Mars\*, Senegal. Mars, Hist.-Coll. (Coleoptera), Nr 48825, *Hister*

*striolatus* Marseul, Senegal, Zool. Mus. Berlin, Syntypus, *Hister striolatus* Marseul, 1854, labeled by MNHUB.

The figures of the edeagus and 8th segment were presented previously (Mazur, 2005, figs. 9-10).

### ***Hister divisifrons* Schmidt, 1895**

There is a need to designate the lecto- and paralectotypes from the type-series preserved at the MNHUB. To a better recognition, however, the figures of the male genital structure are given (Figs. 1 - 6).

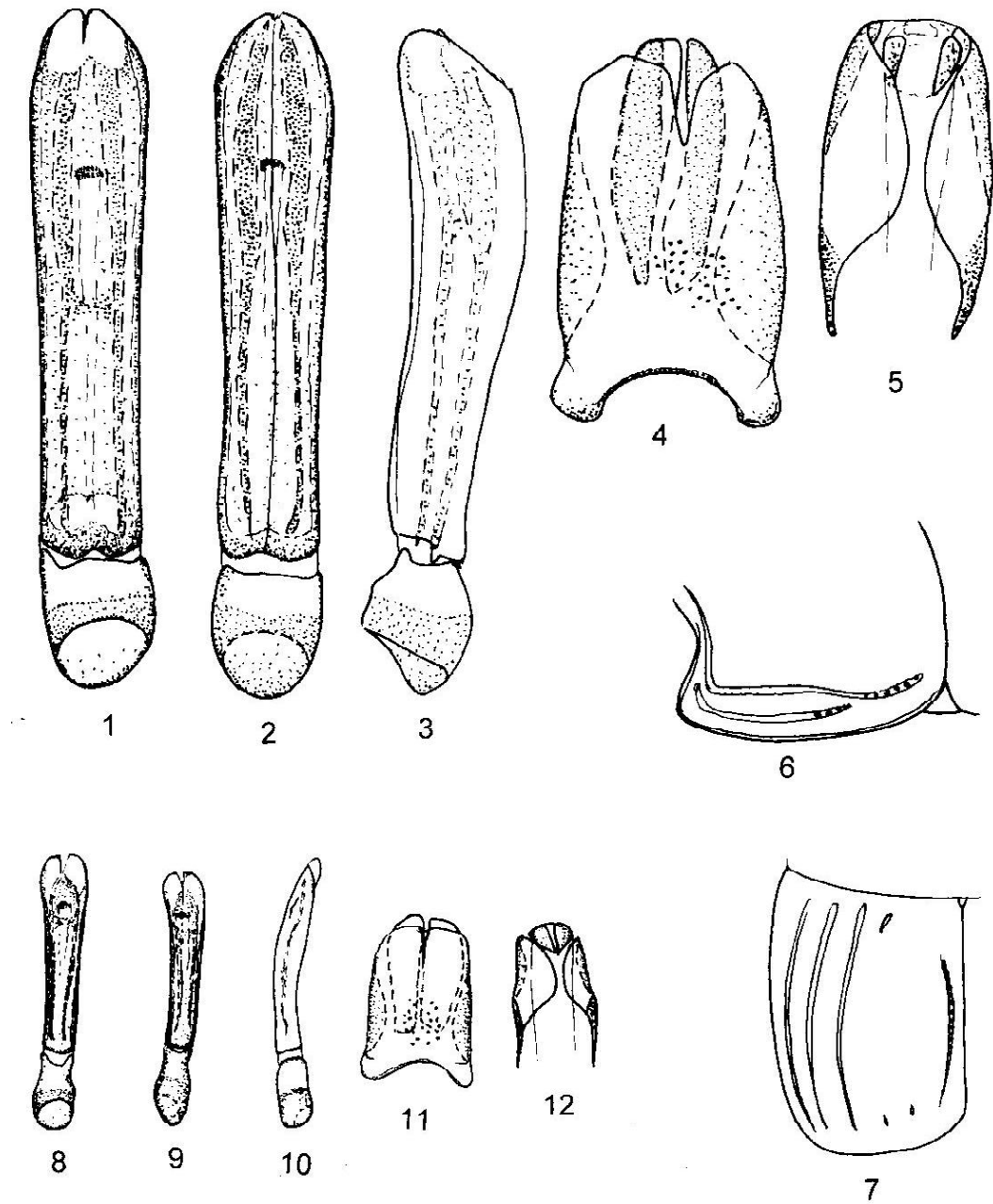
**Lectotypus:** a female, 1) [white, printed] Ceylon, Heuser 91, 2) [orange, printed] Type, 3) [white, handwritten] *divisifrons* m. n. sp., 4) [white, printed] coll. J. Schmidt, 5) [red, printed] Syntypus, *Hister divisifrons* Schmidt, 1895, labeled by MNHUB 2007, 6) [white, printed] Lectotypus, 7) [white, printed] Des. S. Mazur 2007.

**Paralectotypes:** I, a male, 1) [white, printed] Ceylon, Heuser 91, 2) [orange, printed] Type, 3) [white, printed] coll. J. Schmidt, 4) [red, printed] Syntypus, *Hister divisifrons* Schmidt, 1895, labeled by MNHUB 2007, 5) [white, printed] Paralectotypus, 6) [white, printed] Des. S. Mazur 2007; II, sex undetermined, as labeled as the paralectotype I.

**Other materials:** [Sri-Lanka] Ceylon, XII.1881 - IV.1882, 1 ex., leg. G. Lewis; Ceylon, C. Prov. Kandy, 26-30.vi - 1983, 1 B&, leg. Ole Mehl, Sri Lanka, 5 km, Southern-eastern Belihulu Oya, 9-10.XII.1993, 1 ex. [CHSM].

### ***Hister fossor* Erichson, 1834 and *H. obesus* Fahraeus, 1851**

As it is commonly used (Bickhardt, 1919: 83), *H. fossor* may be separated from *H. obesus* by very short and indistinct sutural stria and by longer outer pronotal stria. These characters, however,



Figs. 1 - 12. 1-6. *Hister divisifrons*, 6-12. *H. fossor*: 1-3, 8-10: edeagus, 1, 8 - ventrally, 2, 9 - dorsally, 3, 10 - laterally, 4, 11 - 8th segment, 5, 12 - 9th and 10th tergites, 6 - pronotal side (f. "suturifer"), 7 - left elytron (f. "suturifer").

are variable (Figs. 6, 7) as well as the presence of four complete dorsal striae. The detailed examination of the type-specimens of both these species and *Hister fossor suturifer* showed that all these taxons represented one species and the differences previously noted are in a normal individual variation. There also are any differences in the male genital structure (Figs. 8 - 12).

So, *Hister obesus* Fahraeus, 1851 = *H. fossor* Erichson, 1834, syn. nov. and *Hister fossor suturifer* Müller, 1942 = *H. fossor* Erichson, syn. nov.

*Hister fossor* has been described on a base of type series, so a designation of the lecto- and paralectotypes is needed.

**Lectotype:** a female, 1) [green, handwritten] fossor Dej, Seneg.[al]. Dej, 2) [blue, printed] 48903, 3) [red, printed] Type, 4) [blue, printed] Hist.-Coll. (Coleoptera) Nr. 48903 *Hister fossor* Dej.\*, Senegal, Dejean, Zool. Mus. Berlin, 5) [red, printed] Syntypus, *Hister fossor* Erichson, 1834, labeled by MNHUB 2007, 6) [White, printed] Lectotypus.

**Paralectotypes:** I, a female, 1) [red, printed] Type, 2) [blue, printed] Hist.-Coll. (Coleoptera) Nr. 48903, *Hister fossor* Dej, Senegal, Dejean, Zool. Mus. Berlin, 3) [red, printed] Syntypus, *Hister fossor* Erichson, 1834 labeled by MNHUB 2007, 4) [white, printed] Paralectotypus, II, @&, as labeled as the paralectotype I, III, B&, as labeled as the paralectotype I, IV, B&, as labeled as the paralectotype I.

#### **Other materials studied.**

#### ***Hister obesus* Fahraeus, 1851**

**Holotype:** a male, [R.S.A] "Caffraria", J. Vahlb., 7219E91 [NHRS].

#### ***Hister fossor suturifer* Müller, 1942**

**Type:** a male, [Somali] A Di Ogaden, Urandab, Loni, 5.1936, Typus, *H. fossor* ssp. *suturifer* m, det. G. Müller, 1942 [MSNT].

**Cotypus,** sex undetermined, [Somali] Ogaden A Di, Urandab, Loni, 5.1936 [MSNT].

**Other materials:** Kenya, Thika, 4.1946, Menegheti [MSNT].

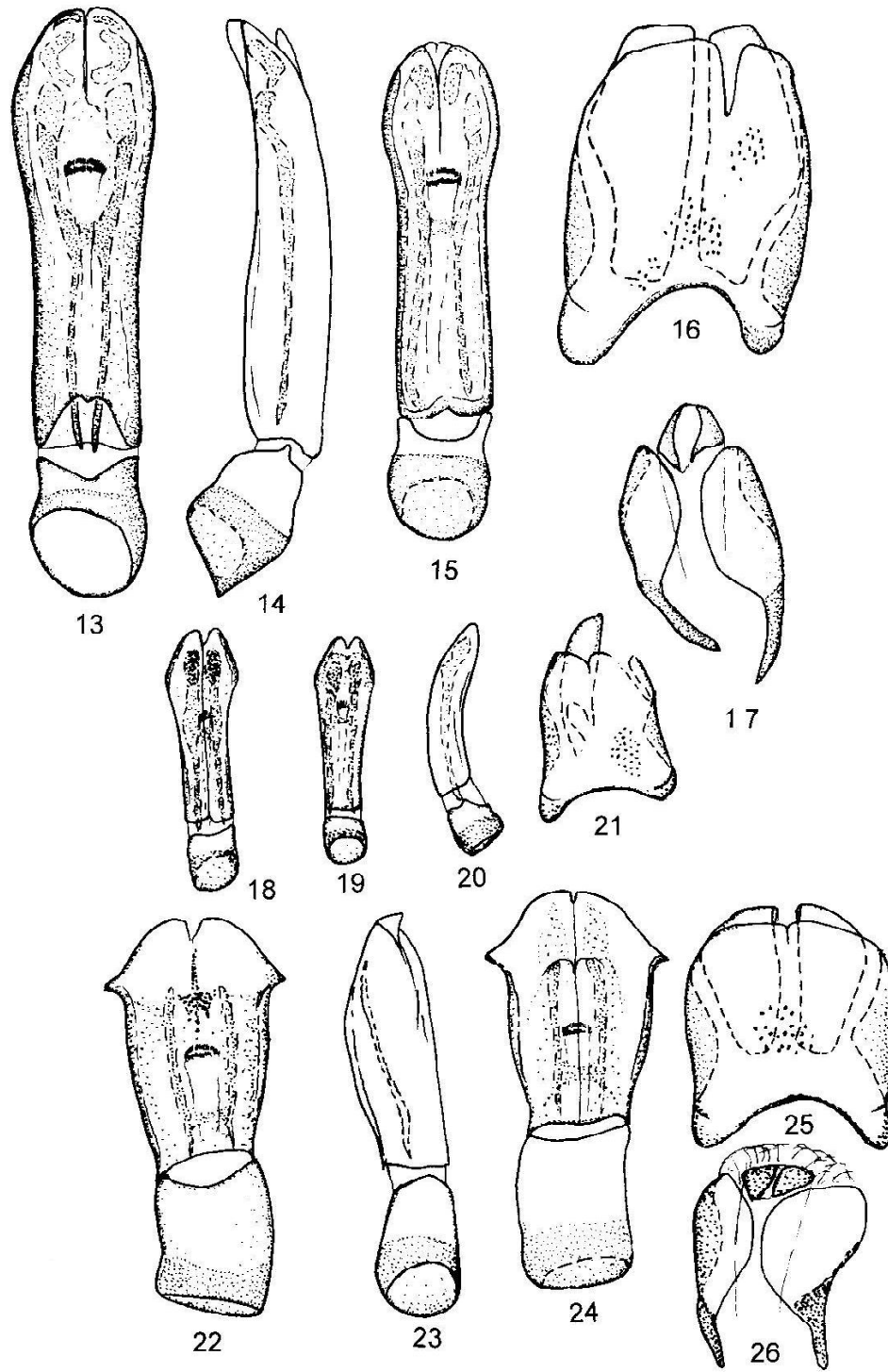
#### ***Hister latobius* Marseul, 1854 and its synonymies**

Marseul (1854: 174, 177) placed it originally into the "2nd Division" (Labre entire ou trilobé) in opposition to the "1st Division" (Labre large, excavé, échancré). Nevertheless, Lewis (1904: 145) transferred this species to his newly created genus *Macrolister* (= *Pactolinus* Motschulsky) as "...having ... a labrum transverse and emarginate" and this treatment was followed by other coleopterologists, including Bickhardt (1919: 48). It was the author (Mazur, 2004: 166) redefining the genus *Pactolinus* transferred it again to *Hister* L.

G. Lewis described another two species closely related to *H. latobius*: *H. colensoi* Lewis, 1897 and *Macrolister striatisternus* Lewis, 1905 [transferred to *Hister* L. by the author (Mazur, 2004: 166)]. All these three species may be characterized by a triangularly concave labrum (the reason for which Lewis classified them among *Macrolister*) and by a presence of three complete dorsal striae. The other characters being used to separate these species are variable and inconstant: presence or absence sutural stria, bistriate prosternum or density of pygidial punctation.

The detailed examination showed, however, that all these species represented at most various populations of the same species, especially the genital structure of the male (Figs. 13 - 17) being identical.

It fully gives a reason that *H. latobius*, *H. colensoi* and *H. striatisternus* are the same species. The



Figs. 13 - 26. 13-17. *Hister latobius*, 18-21. *H. lentulus*, 22-26. *H. opacus*, 13-15, 18-20, 22-24 - edeagus, 13, 19, 22 - ventrally, 15, 18, 24 - dorsally, 14, 20, 23 - laterally, 16, 21, 25 - 8th segment, 17, 26 - 9th and 10th tergites.

degree of intensity and size of pygidial punctation as well as the presence or absence of sutural stria are normal individual variability.

Summarizing, we can say that *Hister latobius* comprises various populations called, among others, “latobius”, “colensoi” and “striatisternus” with full transition from complete to strongly reduced or absent sutural and prosternal striae and from coarsely punctured to nearly smooth pygidial segments.

The list of synonymies of *Hister latobius* is, therefore, as follows:

*Hister latobius* Marseul, 1854

*Hister colensoi* Lewis, 1897 - syn. nov

*Hister striatisternus* (Lewis, 1905) - syn. nov.

#### Material examined:

##### *Hister latobius* Marseul, 1854

**Type:** a male, [R.S.A.] Cap. de Bonne - Esp., *Hister latobius* m, Type, Museum Paris, Coll. de Marseul, 2842-90.

##### *Hister colensoi* Lewis, 1897

**Type:** a male, [R.S.A.] Ulundi, Natal 9.96, *Hister Colensoi* Lewis, Type, G. Lewis Coll. B.M. 1926-369.

##### *Macrolister striatisternus* Lewis, 1905

**Type:** a male, Angola, Bihe, [note]: “mesosternal stria different to robusticollis”, *Macrolister striatisternus* Lewis, Type, G. Lewis Coll. B.M. 1926-369.

**Other materials:** S. Angola, Bimbe, 2350 m, Si da Bandeira Distr., IX.1956, 1 ex., leg. C. Koch; [R.S.A.] ZW/Eastern Highlands, Chinanimani Eland Sanct, 10/1995, 1 ex., leg. M. Kaiser; Südafrika, Kwazulu-Natal, Weenen NR, 4.XII.2001, leg. P. Schüle; S. Afr., Transvaal, Wateberg, 1 ex., leg. N. Persson; RSA: Mpumalanga, Roossenkall, 23.XI.2002, 1 ex., leg.

P. Schüle; RSA: Cape Prov., Dievlung nr. Avontuur, 16-19.XII.[19]81, fynbos car. tp., 800 m, 1 ex., leg. S&J. Peck; Afrique du Sud, Transvaal, 24.XI.1981, Waterfall Bo, 1 B&, leg. J. Klapperich [CHSM].

##### *Hister lentulus* Erichson, 1834

Three specimens have been originally designated as “Type” preserved now at the Museum für Naturkunde [MNHUB] in Berlin.

Lecto- and paralectotypes are designated below. Lectotype: a male, 1) [blue, handwritten] *lentulus* Er., Pr[omont] b. sp. Kr[eps], 2) [white, printed] 48902, 3) [red, printed] Type, 4) [blue, printed] Hist.-Coll. (Coleoptera) Nr. 48092, *Hister lentulus* Er.\* Promont b. sp. Krebs, Zool. Mus. Berlin, 5) [red, printed] Syntypus, *Hister lentulus* Erichson, 1834, labeled by MNHUB 2007, 6) [white, printed] Lectotypus, 7) [white, printed] Des. S. Mazur 2007.

Paralectotypes: I, sex undetermined, 1) [white, handwritten] 48092, 2) [orange, printed] Type, 3) [white, handwritten] *Hister lentulus* Er. Typ, 4) [blue, printed] Hist.-Coll. (Coleoptera) Nr. 48092, *Hister lentulus* Er.\*, Promont b. sp. Krebs, Zool. Mus. Berlin, 5) [red, printed] Syntypus, *Hister lentulus* Erichson, 1834, labeled by MNHUB 2007, 6) [white, printed] Paralectotypus, 7) [white, printed] Des. S. Mazur 2007; II) as labeled as the paralectotype II.

The syntypus of *Hister herero* Bickhardt, 1910, synonymous with *H. lentulus*, has been also studied.

**Syntypus:** sex undetermined, [Namibia] Gobabis, D.S.W. Afrika, Ex. coll. F. Schneider [MNHUB]. Additionally, the male genital structure is figured (Figs. 18 - 21).

##### *Hister opacus* Schmidt, 1889

Described on a base of 4 specimens, so there is a need to designate the lecto- and paralectotypes.

To a better recognition the figures of the male genital structure are also given (Figs. 22 - 26).

**Lectotype:** a male, 1) [white, handwritten] India orient., 2) [orange, printed] Type, 3) [white with yellowish margin, handwritten] *opacus* Schmidt, 4) [white, printed] coll. J. Schmidt, 5) [red, printed] Syntypus, *Hister opacus* Schmidt, 1889, labeled by MNHUB 2007, 6) [white, printed] Lectotypus, 7) [white, printed] Des. S. Mazur 2007.

**Paralectotypes:** I) sex undetermined, 1) [white, handwritten] India orient., 2) [orange, printed] Type, 3) [red, printed] Syntypus, *Hister opacus* Schmidt, 1889, 4) [white, printed] Paralectotypus, 5) [white, printed] Des. S. Mazur 2007; II - III) sex undetermined, as labeled as the paralectotype I.

**Other materials:**

India, Madras, Coimbatore, 1400 ft, VII.1971, 1 ex., leg. S. Nathan [CHSM].

***Hister pharaonis* Schmidt, 1889 and *H. schimperi* Desbordes, 1917**

When describing Desbordes (1917: 184) compared *H. schimperi* with *H. foveifrons* Desbordes, 1917 but a detailed examination of the type-specimens enabled to ascertain its identity with *Hister pharaonis* Schmidt, syn. nov.

Described on a base of two type-specimens so a designation of the lecto- and paralectotypes is needed.

**Lectotype:** a male, 1) [green, printed] Museum Paris [Ethiopia, Tigray] Tigré, Schimper 1850, 2) [green, round] 43050, 3) [red, printed] Type [handwritten] no 2, 4) [white] *Schimperi* n. sp. [handwritten], H. Desbordes desc., 5) [white, printed] Lectotypus, 6) [white] *Hister pharaonis* Schm., Det. S. Mazur 2007.

**Paralectotype:** a female, 1-2: as labeled as the lectotype, 3) [red, printed] Type [handwritten] no 1, 4) [white] *Hister Schimperi* n. sp. [handwritten], H. Desbordes desc. 1916 [printed], 5) [white,

printed] Paralectotypus, 6) [white] *Hister pharaonis* Schm., Det. S. Mazur 2007.

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