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THE TYPES OF DARKLING BEETLES (COLEOPTERA: TENEBRIONIDAE) DESCRIBED BY THUNBERG (1821, 1827) IN *COLEOPTERA CAPENSIA* AND OTHER PAPERS, WITH TAXONOMIC COMMENTS

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Abstract: The types of darkling beetles described by the disciple of Carl von Linnaeus Carl Peter Thunberg (1743-1828) and preserved in the Museum of Evolution, University of Uppsala, Sweden, have been studied for the first time and the related species names have been recognized as available names or junior synonyms. The following 19 new combinations and 30 new synonyms are proposed: *Erodius afer* Thunberg, 1791 **syn. nov. =** *Physosterna porcata* (Fabricius, 1787); *Stenocara bifida* (Thunberg, 1787) **comb. nov. =** *Erodius bifidus* Thunberg, 1787 = *Stenocara gracilipes* Solier, 1835: 562 **syn. nov.**; *Stenocara crenata* (Thunberg, 1787) **comb. nov. =** *Erodius crenatus* Thunberg, 1787: 21 = *Pimelia dentata* Fabricius, 1792: 102, 16 **syn. nov.**; *Scaurus scabridus* Thunberg, 1821 a **=** *Psorodes scabridus* (Thunberg) **comb. nov.**; *Somaticus* (*Tracheloeum*) *laticollis marginatum* (Thunberg, 1787) **comb. nov.** (= *Sepidium marginatum* Thunberg, 1787 = *Somaticus laevis* Fåhraeus, 1870 **syn. nov.**); *Somaticus* (*Acromaticus*) *striatus (*Thunberg, 1787) **comb. nov. =** *Sepidium striatum* Thunberg, 1787: 48 = *Sepidium acuminatum* Quensel, 1806: 130-131 **syn. nov.**; *Phligra cristata* (De Geer, 1775) = *Sepidium lacunosum* Thunberg, 1787: 41 **syn. nov.**; *Moluris gibbosa* (Thunberg, 1787) **comb. nov. =** *Pimelia gibbosa* Thunberg, 1787, Olivier, 1789: pl. 1, fig. 5a, 5b **=** *Opatrum gibbosum* Thunberg, 1821 **syn. nov.**; *Blaps bipunctata* Thunberg 1821 = *Capidium bipunctatum* (Thunberg, 1821) **comb. nov.** = *Onchotus tardus* Solier, 1848 **syn. nov.** = *Onchotus tardus* var. *pedellus* Solier (1848) **syn. nov.**; *Blaps exarata* Thunberg, 1821a: 165 = *Blenosia exarata* (Thunberg, 1821) **comb. nov. =** *Blenosia sulcata* var. *subcostata* Mulsant & Rey, 1859: 109. **syn. nov.**; *Blaps abrupta* Thunberg, 1821a = *Zadenos* (*Euzadenos*) *abrupta* (Thunberg, 1821a) **comb. nov.** = *Zadenos* (*Euzadenos*) *lightfooti* Koch, 1956 **syn. nov.**; *Trigonopus difformis* (Thunberg, 1784) **comb. nov.** = *Tenebrio difformis* Thunberg, 1784: 6 = *Trigonopus flexipes* Koch, 1956: 459 **syn. nov.**; *Platynopus striatus* (Quensel, 1806) **syn. nov. =** *Blaps crassipes* Thunberg, 1821 a: *Bantodemus crassipes* (Thunberg, 1821 a) **comb. nov.**; *Tenebrio caffer* Thunberg, 1821a **syn. nov.;= ***Eurynotus capensis* (Fabricius, 1794)**;** *Upis capensis* Thunberg, 1821a **syn. nov.** = *Tenebrio pennsylvanicus* De Geer, 1775 = *Alobates pennsylvanicus* (De Geer, 1775); *Pimelia lacunosa* Thunberg. 1827 **syn. nov.** = *Zophius rufopictus* (Wiedmann, 1825); *Opatrum* (*Colpophorus*) *validum obscurum* Thunberg, 1821 **comb. nov.** = *Opatrum schlicki* Gebien, 1906 **syn. nov.** ; *Opatrum costatum* Thunberg, 1821 b = *Gonocephalum granulatum pusillum* (Fabricius, 1791): *Opatrum gigas* Thunberg, 1821 b = *Notocorax gigas* (Thunberg, 1821 b) **comb. nov.** = *Platynotus pandaroides* Fairmaire 1896 **syn. nov.** ; *Opatrum grossum* Thunberg, 1821 b ***nomen oblitum*** = *Alphasida (Glabrasida) costulata scabrosa* Allard, 1868 ***nom. protectum***; *Opatrum rugosum* Thunberg, 1821 b = *Litoborus rugosus* (Thunberg, 1821 b) **comb. nov.**, = *Litoborus olcesii* Fairmaire 1870 **syn. nov.**; *Opatrum porcus* Thunberg, 1821 b **syn. nov.** = *Melambius* (*Hoplarobius*) *granulosus* (Billberg, 1815); *Opatrum bicolor* Thunberg, 1821 b = *Crypticus gibbulus* (Quensel 1806); *Opatrum callosum* Thunberg, 1821 b **syn. nov. =** *Allohylax picipes* (Olivier, 1795); *Opatrum pilipes* Thunberg, 1821 b **syn. nov.** = *Phylan gibbus* (Fabricius, 1775); *Opatrum perforatum* = Thunberg, 1821 b **syn. nov. =** *Opatrinus gemellatus* (Olivier, 1795)**;** *Opatrum inmarginatum* Thunberg, 1821 b = *Lithoborus inmarginatum* (Thunberg, 1821 b) **comb. nov.** = *Lithoborus maroccanus* Escalera **syn. nov.**; *Opatrum rufipes* Thunberg, 1821 b **syn. nov.** = *Opatropis affine* (Billberg, 1815); *Opatrum lusitanicus* Thunberg, 1821 b is an undescribed *Heliopates*, which is specifically different from the types of *Heliopates lusitanicus* (Herbst, 1797) and this species is found to be specifically different from *Heliopates franzi* Español, 1955 **syn. nov.** of *Tenebrio obsoletus* Marsham, 1802 = *Heliopates obsoletus* (Marsham, 1802); *Opatrum viennense* Thunberg, 1821 b **syn. nov.** = *Gonocephalum granulatum pusillum* (Fabricius, 1791); *Opatrum gigas* Thunberg, 1821 b = *Notocorax gigas* (Thunberg, 1821b) **comb. nov.** = *Platynotus pandaroides* Fairmaire, 1896 **syn. nov.** ; *Opatrum fuscipes* Thunberg, 1821 b = *Bradymerus fuscipes* (Thunberg, 1821 b) **comb. nov.**; *Lagria brunnea* Thunberg, 1827 =.*Cylindrothorax brunneus* (Thunberg) **comb. nov.**; *Lagria flexuosa* Thunberg, 1827 **syn. nov.**; *Lagria fusca* Thunberg, 1827 = *Borboresthes flexuosus* Thunberg **comb. nov.**; *Clerus villosus* = *Lopholagria villosa* (Thunberg, 1821 a) = *Lopholagria villosa* (Fabricius, 1781). The valid current name of *Pimelia simplex* Solier, 1836, **stat. rest.** specifically different from *Pimelia gibba* 1787, 1791, 1792, 1801 = *Moluris gibba* (Fabricius, 1781) is established.
Key words: Coleoptera, Tenebrionidae, Linnaeus, Thunberg, types, Cape Province new combinations, new synonyms, Uppsala University.

Los tipos de tenebriónidos (Coleoptera: Tenebrionidae) descritos por Thunberg (1821, 1827) en *Coleoptera Capensia* y otras obras, y comentarios taxonómicos

Resumen: Los tipos de coleópteros tenebriónidos descritos por el discípulo de Carl von Linneo Carl Peter Thunberg (1743-1828) y conservados en el Museo de la Evolución, de la Universidad de Uppsala, Suecia son por primera vez estudiados y sus nombres específicos son reconocidos en ciertos casos como válidos y en otros como nuevas sinonimias. Se proponen las siguientes 30 nuevas sinonimias y 19 combinaciones nuevas: *Erodius afer* Thunberg, 1791 **syn. nov. =** *Physosterna porcata* (Fabricius, 1787); *Stenocara bifida* (Thunberg, 1787) **comb. nov. =** *Erodius bifidus* Thunberg, 1787 = *Stenocara gracilipes* Solier, 1835: 562 **syn. nov.**; *Stenocara crenata* (Thunberg, 1787) **comb. nov. =** *Erodius crenatus* Thunberg, 1787: 21 = *Pimelia dentata* Fabricius, 1792: 102, 16 **syn. nov.;** *Scaurus scabridus* Thunberg, 1821 a **=** *Psorodes scabridus* (Thunberg) **comb. nov.**; *Somaticus* (*Tracheloeum*) *laticollis marginatum* (Thunberg, 1787) **comb. nov.** (= *Sepidium marginatum* Thunberg, 1787 = *Somaticus laevis* Fåhraeus, 1870 **syn. nov.**)**;** *Somaticus* (*Acromaticus*) *striatus (*Thunberg, 1787) **comb. nov. =** *Sepidium striatum* Thunberg, 1787: 48 = *Sepidium acuminatum* Quensel, 1806: 130-131 **syn. nov.**; *Phligra cristata* (De Geer, 1775) = *Sepidium lacunosum* Thunberg, 1787: 41 **syn. nov.**; *Moluris gibbosa* (Thunberg, 1787) **comb. nov.** = *Pimelia gibbosa* Thunberg, 1787, Olivier, 1789: pl. 1, fig. 5a, 5b **=** *Opatrum gibbosum* Thunberg, 1821 **syn. nov.**; *Physosterna porcata* (Fabricius, 1787) **=** *Pimelia porcata* Fabricius, 1781= *Erodius afer* Thunberg, 1791 **syn. nov.**; *Blaps bipunctata* Thunberg, 1821 = *Capidium bipunctatum* (Thunberg, 1821) **comb. nov.** = *Onchotus tardus* Solier, 1848 **syn. nov.** = *Onchotus tardus* var. *pedellus* Solier (1848) **syn. nov.**; *Blaps exarata* Thunberg, 1821a: 165 = *Blenosia exarata* (Thunberg, 1821) **comb. nov. =** *Blenosia sulcata* var. *subcostata* Mulsant & Rey, 1859: 109. **syn. nov.**; *Trachynotus*

vittatum (Fabricius, 1781) = *Sepidium vittatum* Fabricius, 1781 = *Sepidium vittatum* Thunberg, 1791 **syn. nov.***Capidium striatula* (Thunberg, 1821a) **comb. nov.**; *Blaps striatula* Thunberg, 1821a: 166 = *Capidium hessei* Koch, 1954: 46 **syn. nov.**; *Blaps abrupta* Thunberg, 1821a = *Zadenos* (*Euzadenos*) *abrupta* (Thunberg, 1821a) **comb. nov.** = *Zadenos* (*Euzadenos*) *lightfooti* Koch, 1956 **syn. nov**.; *Trigonopus difformis* (Thunberg, 1784) **comb. nov.** = *Tenebrio difformis* Thunberg, 1784: 6 = *Trigonopus flexipes* Koch, 1956: 459 **syn. nov.**; *Platynopus striatus* (Quensel, 1806) **syn. nov. =** *Blaps crassipes* Thunberg, 1821 a: *Bantodemus crassipes* (Thunberg, 1821a) **comb. nov.**; *Tenebrio caffer* Thunberg, 1821a **syn. nov.**;**=** *Eurynotus capensis* (Fabricius, 1794)**;** *Upis capensis* Thunberg, 1821a **syn. nov.** = *Tenebrio pennsylvanicus* De Geer, 1775 = *Alobates pennsylvanicus* (De Geer, 1775); *Pimelia lacunosa* Thunberg, 1827 **syn. nov.** = *Zophius rufopictus* (Wiedmann, 1825); *Opatrum* (*Colpophorus*) *validum obscurum* Thunberg, 1821 **comb. nov.** = *Opatrum schlicki* Gebien, 1906 **syn. nov.** ; *Opatrum costatum* Thunberg, 1821 b = *Gonocephalum granulatum pusillum* (Fabricius, 1791): *Opatrum gigas* Thunberg, 1821 b = *Notocorax gigas* (Thunberg, 1821b) **comb. nov.** = *Platynotus pandaroides* Fairmaire, 1896 **syn. nov.** ; *Opatrum grossum* Thunberg, 1821 b ***nomen oblitum*** =*Alphasida (Glabrasida) costulata scabrosa* Allard, 1868 ***nom. protectum***; *Opatrum rugosum* Thunberg, 1821 b = *Litoborus rugosus* (Thunberg, 1821 b) **comb. nov.**, = *Litoborus olcesii* Fairmaire, 1870 **syn. nov**.; *Opatrum porcus* Thunberg, 1821 b **syn. nov.** = *Melambius* (*Hoplarobius*) *granulosus* (Billberg, 1815); *Opatrum bicolor* Thunberg, 1821 b = *Crypticus gibbulus* (Quensel, 1806); *Opatrum callosum* Thunberg, 1821 b **syn. nov. =** *Allohylax picipes* (Olivier, 1795); *Opatrum pilipes* Thunberg, 1821 b **syn. nov.** = *Phylan gibbus* (Fabricius, 1775); *Opatrum perforatum* = Thunberg, 1821 b **syn. nov. =** *Opatrinus gemellatus* (Olivier, 1795); *Opatrum inmarginatum* Thunberg, 1821 b = *Lithoborus inmarginatum* (Thunberg, 1821 b) **comb. nov.** = *Lithoborus maroccanus* Escalera **syn. nov.**; *Opatrum rufipes* Thunberg, 1821 b **syn. nov.** = *Opatropis affine* (Billberg, 1815); *Opatrum lusitanicus* Thunberg, 1821 b es una especie inédita, diferente de *Heliopates lusitanicus* (Herbst, 1797), que a su vez, es específicamente diferente de de *Tenebrio obsoletus* Marsham, 1802 = *Heliopates obsoletus* (Marsham, 1802) que es *Heliopates franzi* Español, 1955 **syn. nov.**. *Opatrum viennense* Thunberg, 1821 b **syn. nov.** = *Gonocephalum granulatum pusillum* (Fabricius, 1791); *Opatrum fuscipes* Thunberg, 1821 b = *Bradymerus fuscipes* (Thunberg, 1821 b) **comb. nov.**; *Lagria brunnea* Thunberg, 1827 =.*Cylindrothorax brunneus* (Thunberg) **comb. nov.**; *Lagria flexuosa* Thunberg, 1827 **syn. nov.**; *Lagria fusca* Thunberg, 1827 = *Borboresthes flexuosus* Thunberg **comb. nov.**; *Clerus villosus* = *Lopholagria villosa* (Thunberg, 1821 a) = *Lophoagria villosa* (Fabricius, 1781). Se restablece la validez de *Pimelia simplex* Solier, 1836, **stat. rest.** específicamente diferente de *Pimelia gibba* 1787, 1791, 1792, 1801 = *Moluris gibba* (Fabricius, 1781).
Palabras clave: Coleoptera, Tenebrionidae, Linneo, Thunberg, tipos, Cape Province, nuevas combinaciones, nueva sinonimia, Universidad de Uppsala.

Introduction

Rare papers *Museum Naturalium Academiae Upsaliensis* Thunberg (1787), *Novas Insectorum species* Thunberg (1791), *Coleoptera Capensia antennis fusiformis* Thunberg (1821 a), *Coleoptera Capensia antennis filiformis* Thunberg (1827) and *Opatrum insecti genus* Thunberg (1821 b), are some of the first contributions to the knowledge of the South African and Mediterranean Insects, describing species of darkling beetles, collected by or obtained by the disciples of Carl von Linné, Carl Peter Thunberg (1743-1828) and Daniel Solander (1733-1782).

However, the short descriptions and the local character of the cited publications, in which the descriptions of several South African and some Mediterranean darling beetles, were given, and the subsequent difficulty to recognize the type material of the studied taxa, preserved in the Museum of Zoology of the University of Uppsala, obviously were impediments to permit a correct interpretation of the South African and Mediterranean insects described by the swedish entomologist, resulting in sporadical re-descriptions and synonyms.

Moreover, during the transport of the material, some South African and Mediterranean species were mixed, confused after the maritime expeditions, and numerous species of the genus *Opatrum* Fabricius (1775), and *Opatrum* Thunberg (1821 b), were described without locality, increasing the difficulty to properly identify the species in question.

The first purpose of this paper is to present and in some cases re-describe this interesting material, which represents 30 new synonyms and 19 new combinations of valid names, replaced by junior synonyms in modern descriptions and in the current Catalogues (Gebien, 1910, 1937, Löbl & Smetana, 2008).

The second purpose of this paper is to retrace the fate and identify some of the South African insects collected by Carl Peter Thunberg and probably communicated to Daniel Solander, under the legendary Captain James Cook´s first expedition (1771) and squarated among Joseph Banks, Dru Drury and William Hunter, to be studied and described by Fabricius, Olivier and Thunberg. Some species, (marqued with * or with two asteriscs **), described by Fabricius and redescribed by Thunberg, are represented both in the collection Joseph Banks and in the collection William Hunter (HUMG), in the University of Glasgow, respectively. The material is otherwise interesting, because it can be used to establish hitherto undocumented relationships among collectors and entomologists from the end of the XVIII and the beginning of the XIX centuries, who obviously spent a lot of money and time purchasing exotic insects to describe and enjoy.

Material and methods

The species of diverse genera found in the historical collections of C. P. Thunberg, Uppsala University, have been identified, compared with other types deposed in historical collections, pricipally have been examined all cited taxa described by Baron De Geer, Johan Christian Fabricius, Immanuel Fåhraeus and Haag Rutenberg. The author has beneficied of the support of diverse SYNTHESYS program, permitting the examen of important historical collections, preserved in the Museums of Natural History of Paris, London and The Academy of Sciences of Polony, Warsawa.

Several genera and species of historical collections conserving species described by Fabricius, have been revised. Specially relevant for the comparative examen of taxa described by Fabricius and Thunberg, is the material preserved in the collection Joseph Banks, housed in the Natural History Museum, London and in the collection of William Hunter, the scotish surgeon building the Hunterian Museum of Zoology, housed in the University of Glasgow. The lost types of taxa described by Mulsant and Rey (1854) have been supplied by presumptive syntypes, preserved in the collections of the french entomologists Claudius Rey and

Francisque Guillebeau (housed in the Centre de Conservation et Etude des Collections, Lyon). The syntypes of some rare and controversed species of *Heliopates* Dejean, 1834, have been compared with types or authoritatively determined specimens from the collection Hans Gebien (Coll. G. Frey), the collection Edmund Reitter (Deutsche Entomologische Institut) and the historical collections of the Museums of London, Paris, Berlin, Basel and Stockholm. Several South African species studied by Carlo Koch, are preserved in the Museums, abbreviated in the text.

The knowledge of the Tenebrionidae Southern of Sahara is in progress, after several studies, given principally by the great specialist Carlo Koch. Relevant revisions to study the historical material collected by Thunberg are Koch (1945, 1948) (Adesmiini), (1955 a, 1955 b, 1956 1958) (Molurini), (1962, 1963), Zophosini (Penrith, 1977), Iwan (1995, 2000, 2002) (Platynotini, Opatrini), Penrith (1975, 1979) (Adesmiini) and Penrith & Endrödy Younga (1994) (Cryptochilini) and Endrödy Younga (2000) (Gonopina) and Ferrer (1991, 1993, 1995, 2000, 2004) (Opatrini).

Identifications have been established after examen of the genitalia of selected specimens, which was found to be identical to the historical types of Thunberg, examining specimens authoritatively determined by Carlo Koch, Zoltan Kaszab, Paul Ardoin and Francisco Español, preserved in the Swedish Museum of Natural History, Stockholm or other museums and in the collection of the author, Haninge, Sweden. Modern references are given for each revised taxa, to facilitate the identification of the commented species.

List of museums and collections

CAS Collection Arturo Serrano, Lisboa, Portugal.
CCEC Centre de Conservation et d´Etude des Collections, Lyon
CJB Collection Joseph Banks, The Natural History Museum, London, England
CJF Colecction of the author, Haninge, Sweden.
DEI Deutsches Entomologisches Institut, Münchenberg, Germany.
MNCN Museo Nacional de Ciencias Naturales, Madrid, Spain.
MNHN, Muséum national d´Histoire naturelle, Paris, France.
MZB, Museo de Zoología de Barcelona, Spain.
NHM, The Natural History Museum, London, United Kingdom.
NHRS The Swedish Museum of Natural History, Stockholm, Sweden.
NMB Naturhistorisches Museum, Basel, Switzerland.
UUZM: Museum of Zoology of the University of Uppsala, Sweden.

Evaluation of types of darkling beetles of Thunberg collection in Uppsala University

First was necessary to establish the status and validity of the names of darkling beetles described by C. P. Thunberg (loc. cit.), registrered by Wallin & Wallin (1989, 2001) in the Catalogue of the types preserved in the Museum of Zoology of the University of Uppsala (UUZM). Names which can not be treated as *nomina oblita*, was evaluated for possible nomen protectum, according the International Code of Zoological Nomenclature 1999: 28.

Two conditions are required to reject forgotten names (*nomina oblita*) published before 1899:

1) If the senior synonym or homonym has not been used as a valid name after 1899 Art. 23.9.1.1 and 2) Íf the junior synonym or homonym has been used for a particular taxon, as its presumed valid name, in at least 25 works, published by at least 10 authors in the last 50 years and encompassing a span of no less than 10 years Art.: 23.9.1.2.

In most of the cases, the first but not the second condition was meet. The principle of Reversal of Precedence can not be applied and some names of Thunberg (loc. cit.) have to be conserved according the Principle of Priority (Art. 23.2).

1. Museum Naturalium Academiae Upsaliensis Thunberg, 1787.

Cryptochile echinata* (Fabricius, 1781)
Pimelia echinata Fabricius, 1781: 317
***Erodius horridus* Thunberg, 1787: 14 syn. nov.**
Pimelia echinata Olivier, 1795: 37
Pimelia echinata Olivier Herbst, 1799: 9
Cryptochile echinata F. Haag, 1872: 278
Cryptochile echinata F. Péringuey 1899: 249
Cryptochile echinata F. Péringuey, 1904: 226
Cryptochile echinata F. Gebien, 1910: 115
Cryptochile echinata F. Gebien, 1937: 192
Cryptochile echinata F. Penrith & Endrödy Younga, 1994: 117

***Erodius horridus* Thunberg, 1787. Type 6824 (UUZM).**

***Cryptochile tomentosa* (Herbst, 1799)**
***Erodius punctatus* Thunberg, 1787: 15 (spec. composita and nom. preocc.)**
Erodius punctatus Thunberg, 1791: 123
Pimelia tomentosa Herbst, 1799: 105
Pimelia costata Fabricius, 1801: 132
Pimelia costata F. var. *pusilla* Herbst, 1799: 107
Cryptochile costata (F.) var *vicina* Solier, 1840: 252, t. 10, fig. 6-8
Cryptochile distinctum Solier, 1840: 254
Cryptochile distinctum Solier Haag, 1872: 284
Cryptochile costata (F.) Haag, 1872: 286
Cryptochile curta (F.) Haag, 1872: 287
Cryptochile vicinum Solier, 1840: 286
Cryptochile vicinum Solier Haag, 1870: 286
Cryptochile tomentosa (Herbst) Gebien, 1910: 116
Cryptochile tomentosa (Herbst) Gebien, 1937: 192
Cryptochile tomentosa (Herbst) Penrith & Endrödy Younga, 1994: 112-113

***Erodius punctatus* Thunberg, 1787, b. Types 6792, 6796, 6826 (UUZM).**
Four additional different species of *Criptochile* pinned with the label "punctatus" were noted as respective varieties a, b, c, d:

Var. a
***Cryptochile assimilis* Solier, 1840: 263 (UUZM)**
Cryptochile assimile Haag, 1872: 298
Cryptochile assimile Haag Gebien, 1910: 115
Cryptochile assimile Haag Gebien, 1937: 192
Cryptochile assimile Haag Penrith & Endrödy Younga, 1994: 89

Var. b
***Cryptochile grisea* Penrith & Endrödy Younga, 1994: 78-79, 128, f. 68 (UUZM)**

Var. c
***Cryptochile bipunctata* Haag, 1872: 285 (UUZM)**
Cryptochile bipunctata Haag Gebien, 1937: 192
Cryptochile undata Haag, 1872: 288

Cryptochile undata Haag Gebien, 1910: 116
Cryptochile undata Haag Gebien, 1937: 192
Cryptochile bipunctata Haag Penrith & Endrödy Younga, 1994: 103

Var. d
***Cryptochile grossa* Erichson, 1843: 242 (UUZM)**
Cryptochile grossa Erichson Haag, 1872: 290
Cryptochile grossa Erichson Gebien, 1910: 115
Cryptochile grossa Erichson Gebien, 1937: 192
Cryptochile grossa Erichson Penrith & Endrödy Younga, 1994: 122

***Pimelia subglobosa* (Pallas, 1781)**
Tenebrio subglobosus Pallas, 1781: 50, C, f. 16 a, b
***Erodius tuberculatus* Thunberg, 1787: 16 syn. nov.**
Pimelia tuberculata (Thunberg) Schönherr, 1806, 1(1): 134
Pimelia subglobosa (Pallas) Solier, 1836: 179
Pimelia subglobosa (Pallas) Gebien, 1910: 224
Pimelia subglobosa (Pallas) Solier Gebien, 1937: 838
Pimelia subglobosa subglobosa (Pallas) Kwieton, 1982: 9

***Erodius tuberculatus* Thunberg, 1787. Type 6814 (UUZM).**
This is a commun East Mediterranean *Pimelia* species. The name *Pimelia subglobosa* (Pallas, 1781), have priority.

***Physosterna torulosa* (Pallas, 1781)**
Tenebrio torulosusus Pallas, 1781: 51, t. C, f. 17
***Erodius globosus* Thunberg, 1787: 17 syn. nov.**
Erodius muricatus Fabricius, 1798: 42
Pimelia ovata Olivier, 1795: 3, 59, p. 18, t 3, f. 30
Pimelia muricata Herbst, 1799: 77, t. 22, f. 7:
Adesmia ovata Solier, 1845: 545
Adesmia ovata Allard, 1885: 156, 168
Adesmia (*Physosterna*) *torulosa* (Pallas) Gebien, 1910: 88
Physosterna torulosa (Pallas) Gebien, 1937: 655
Physosterna torulosa (Pallas) Penrith, 1979: 32, 83, 91, Fig. d

***Erodius globosus* Thunberg, 1787. Types 6809-6813 (UUZM)**

***Stenocara longipes* (Fabricius, 1775)**
Pimelia longipes Fabricius, 1775: 251
***Erodius echinatus* Thunberg, 1787: 18 syn. nov.**
Adesmia longipes (F.) Klug, 1830: 24, t. 12, f. 11
Adesmia longipes (F.) Allard, 1885: 160, 176
Adesmia longipes (F.) Gebien, 1910: 86
Stenocara longipes (F.) Gebien, 1937: 659
Stenocara longipes (F.) Penrith, 1979: 50

***Erodius echinatus* Thunberg, 1787. Types 6788, 6789, 6819 (UUZM).**

Stenodesia serrata* (Fabricius, 1781) (Fig. 1)
Pimelia serrata Fabricius, 1781: 317
***Erodius glomeratus* Thunberg 1787: 19 syn. nov.**
Pimelia serrata Herbst, 1799: 120
Stenocara cavifrons Solier, 1835: 568, t. 15, f. 10
Stenocaraa serrata (F.) Haag, 1875: 38
Stenocara serrata (F.) Allard, 1885: 203
Stenocara serrata (F.) Gebien, 1910: 90
Stenocara serrata (F.) Gebien, 1937: 660
Stenodesia serrata (F.) Penrith, 1979: 72, 76

***Erodius glomeratus* Thunberg. Types 6790, 6791, 6820 (UUZM).**

***Stenocara bifida* (Thunberg, 1787) comb. nov.**
***Erodius bifidus* Thunberg, 1787: 41**
Stenocara gracilipes Solier, 1835: 562 **syn. nov.**
Stenocara gracilipes Solier Haag, 1873: 26
Stenocara gracilipes Solier Allard, 1885: 199
Stenocara gracilipes Solier Gebien, 1910: 89
Stenocara gracilipes Solier Gebien, 1937: 659
Stenocara gracilipes Solier Penrith, 1979: 50, 55

***Erodius bifidus* Thunberg, 1787. Type 6816 (UUZM).**

***Stenocara crenata* (Thunberg, 1787) comb. nov.)**
***Erodius crenatus* Thunberg, 1787: 41**
Pimelia dentata Fabricius, 1792: 102, 16 **syn. nov.**
Pimelia dentata F.) Herbst, 1799: 112, t. 124, f. 10
Adesmia dentata (F.) Haag, 1873: 31
Adesmia dentata (F.) Allard, 1885: 201
Adesmia dentata (F.) Gebien, 1910. 89
Stenocara dentata (F.) Gebien, 1937: 660
Stenocara dentata (F.) Penrith, 1979: 50, 52

***Erodius crenatus* Thunberg. Types 6803. 6817 (UUZM).**

***Brinckia oblonga* (Thunberg, 1787) comb. nov. (Fig. 2)**
***Sepidium oblongum* Thunberg, 1787: 37**

***Sepidium oblongum* Thunberg, 1787. Type 7017 (UUZM)**
This is another species of the genus *Brinckia* Koch (1962), unrecognized in previous revisions. The genus, new for South Africa, is hitherto only known from Namibia, belongs to the Molurini, subtribe Hypomelina Louw (1979). This species has a facies similar to *Brinckia serratina* Koch (1962) but the lateral sides of pronotum are simple, not serrate, and the elytra appear covered of irregular longitudinal rugosity.

***Phanerotomea notata* (Thunberg, 1787) comb. nov. (Fig. 3)**
Sepidium notatum Thunberg, 1787: 48
Psammodes elongatus Haag, 1871: 59
Psammodes elongatus Haag Gebien, 1910: 157
Psammodes elongatus Haag Gebien, 1937: 767

***Sepidium notatum* Thunberg, 1787. Type 7021 (UUZM).**

***Somaticus* (*Tracheloeum*) *marginatum* (Thunberg, 1787) comb. nov. (Fig. 4)**
Sepidium marginatum Thunberg, 1787: 39
Trachynotus laevis Fåhraeus, 1870: 26 **syn. nov.**
Trachynotus glaber Fåhraeus Haag, 1871: 26
Trachynotus glaber Fåhraeus Gebien, 1910: 164
Trachynotus glaber Fåhraeus Gebien, 1937: 775
Somaticus (*Tracheloeum*) *laticollis laevis* Fåhraeus Koch, 1955 a: 53

***Sepidium marginatum* Thunberg, 1787. Type 70013 (UUZM).**
Omitted by Gebien (1910, 1937) and Koch (1955), this new combination is proposed after comparative examen of respective types (*Sepidium marginatum* Thunberg, Type 70013 (UUZM) and three female syntypes from "Caffraria/J. Wahlberg (leg.), (NHRS).

Remarks: The name *Trachynotus* Latreille, 1829: 14 was same year employed for a genus of *Hymenoptera* by Gravenhorst, 1829, changed by homonymy in *Oclerus* **nom. nov.** by Gistel, 1846 pro *Trachynotus* Gravenhorst, 1829. The name *Trachynotus* have been unvalidly used in Zoology, several times. However, *Trachynotus* Latreille, 1829 is a valid name in Coleoptera, Tenebrionidae (cf. Bouchard et al., 2006). Wherever, Koch (1955 a) transferred this species from the genus *Trachynotus* to *Somaticus* Hope, 1840, subgenus *Tracheloeum* Hope, 1840.

***Somaticus* (*Acromaticus*) *striatus* (Thunberg, 1787) comb. nov. (Fig. 5)**
Sepidium striatum Thunberg, 1787: 48
Sepidium acuminatum Quensel, 1806: 130-131 **syn. nov.**

Trachynotus acuminatus (Quensel) Solier, 1843: 317, 324
Trachynotus acuminatus (Quensel) Haag, 1875: 7, 14
Trachynotus acuminatus (Quensel) Gebien, 1910: 163
Trachynotus acuminatus (Quensel) Gebien, 1937: 273
Somaticus (*Acromaticus*) *acuminatus* (Quensel) Koch, 1955 a: 149-150, pl. 18, f. 1
Not *Psammodes striatus* (Fabricius, 1775: 251) Gebien, 1937: 758
Not *Tenebrio gibbus* De Geer, 1775: 51, t. 13, f. 8
= *Phanerotomea laevigata* (Olivier, 1795, 59, p. 5, t, 4, f. 4)

***Sepidium striatum* Thunberg, 1787. Type 7014 (UUZM).**

The species, *Somaticus striatus* (Thunberg, 1787) **comb nov**. is misinterpreted by Gebien (1937), as a synonym of the very commun south African species *Psammodes striatus* (Fabricius, 1775). However, the species described by Thunberg (1787), belongs to the genus *Somaticus* Hope (1840), after Koch (1955), not to *Psammodes* Kirby (1818) and have been redescribed by Quensel (1806), as correctly demonstrated by Koch (1955 a).

Moreover, Gebien (1937: 758) considered this species as identical to *Tenebrio gibbus* De Geer, 1775. However, the three syntypes of De Geer, preserved in the Swedish Museum of Natural History, are not cospecific with the types of Thunberg, which belongs to the genus *Phanerotomea* Koch (1958). They are in fact, a South African species belonging to *Psammodes* Kirby, 1818, and the intricate synonymy will be treated separately.

All the synononymies subsequently established by Gebien (l937) for *Somaticus striatus* (Thunberg) must be rejected, because the names cited by Gebien (loc. cit.), designe a *Psammodes* species, after a very old and intricate confusion of this South African genus with *Tenebrio gigas* Linné (1767) and *Tenebrio gages* Linné (1767) by Sulzer (1776) and Herbst (1784) (cf. Ferrer and Siliansky 2007). The synonymy according Gebien, 1937, of *Psammodes striatus* (Fabricius, 1775) previously confused with *Somaticus striatus* (Thunberg) is hereby established as following:

***Psammodes striata* (Fabricius, 1775)**
***Pimelia striata* Fabricius, 1775: 251**
Tenebrio gigas (L.) Sulzer, 1776: 64, t.7, f. 9
(Not *Tenebrio gigas* Linné, 1767) **nom. preocc.**
Tenebrio (*Pimelia) gigas* Herbst, 1784: 176.
Tenebrio gages (L.) Herbst, loc. cit.: pl. 27, f. 5 (not *Tenebrio gages* Linné, 1767)
Not *Tenebrio glandiformis* Pallas, 1781, p. 45, t. C, f. 11 a,b
Tenebrio gibbus Wulf, 1786: 18, t. 2, f. 16 a,b
Pimelia striata Olivier, 1789. 69, 4, pl. 1, fig. 11
Pimelia unicolor Fabricius, 1781: 316*
= var. *unicolor* Herbst, 1799: 45, t. 120, f. 2
Psammodes striata (F.) Laporte, 1840: 198
= *Physodera gibba* Solier, 1843 : 278
= var. *coelatus* Solier, 1843: 276
= var. *coelatus* Haag, 1871: 82,84
= var. *gravidus* Solier: l. c. 281
= var. *gravidus* Haag l. c. 82, 85
= var. *nigrocostatus* Haag, 1871: 82, 85
= var. s*olieri* Gebien (nom. nov.), 1910: 161
= *Psammodes gibba* Solier Haag, 1871: 81
var. *unicolor* Fabricius Solier, 1843: 276, t. 3, f. 17-24.
var. *unicolor* Haag, 1871: 82
Not *Psammodes gibba* (attributed to De Geer) Gebien, 1937: 758

***Phligra cristata* (De Geer, 1778)**
***Sepidium lacunosum* Thunberg, 1787: 41 syn. nov.**
Tenebrio cristatus De Geer, 1778: 653, t. 48, f. 22-23
Brachycerus cristatus Fabricius, 1798: Suppl.: 161
Cyrtoderes cristatus (De Geer) Solier, 1843: 244
Phligra cristata (De Geer) Haag, 1871: 35
Phligra cristata (De Geer) Gebien, 1910: 149
Phligra cristata (De Geer) Gebien, 1937: 754
Phligra cristata (De Geer) Koch, 1955 a: 40, fig. 52, 46, pl. 3, 2 a, b, c

***Sepidium lacunosum* Thunberg, 1787. Types 7015, 14591 (UUZM).**

Remarks: The year cited by Gebien (1937) "Suppl. 1775" for *Phligra cristata* (Fabricius) is erroneous, beause this species, described by De Geer 1775, was trasferred to the genus *Brachycerus* by Fabricius in 1798, not 1775.

***Platyope leucogramma* (Pallas, 1773)**
Pimelia leucogramma Pallas, 1773: 2: App.: 719
Pimelia lineata Fabricius, 1781: 319*
Sepidium lineatum Thunberg, 1787: 4
Pimelia lineata Fabricius, 1787: 109
Pimelia lineata Olivier, 1789: 22, pl. 2, fig. 20
Platyope leucogramma (Pallas) Gebien, 1910: 187
Platyope leucogramma (Pallas) Gebien, 1937: 805

***Sepidium lineatum* Thunberg, 1791**
(Type not located by Wallin 1989: 11, UUZM)

Sepidum lineatum Thunberg, 1791 is found to be identical to *Pimelia lineata* Fabricius, 1781: 319* and to *Pimelia lineata* Olivier, 1789: 22, pl. 2, fig. 20. However, the type was not located by Wallin (1989 and 2001).

A single specimen of this Siberian species is preserved in the Thumberg collection and agrees with the description and figure given by Olivier (1789). Highly probably this specimen is the holotype of *Sepidium lineatum* Thunberg, previously considered lost.

***Helops rossii* Germar 1817: nom. protectum**
***Tenebrio violaceus* Thunberg, 1817, nomen oblitum**
***Tenebrio violaceus* Thunberg, 1787: 43**
Helops rossii Germar 1817: 191
Helops rossii Germar Gebien, 1910: 552

***Tenebrio violaceus* Thunberg, 1817.**

The type, not located according Wallin (1989 and 2001) is not found. (UUZM).

***Tenebrio asper* Thunberg, 1787**
Tenebrio asper Thunberg, 1787: 44

***Tenebrio asper* Thunberg, 1787**

The type, not located according Wallin (1989 and 2001) is not found (UUZM).

***Tenebrio plumosus* Thunberg, 1787**
***Tenebrio plumosus* Thunberg, 1787: 45**
Gonopus (*Stenogonopus*) *plumosus* (Thunberg) Ferrer, 2001: 47-48

***Tenebrio plumosus* Thunberg, 1787. Type 15 (UUZM).**

Akis bacarozzo (Schrank, 1786)
Carabus bacarozzo Schrank, 1786: 22
***Pimelia punctata* Thunberg, 1787: 46**

***Pimelia punctata* Thunberg, 1787 (UUZM).**

The type of *Pimelia punctata* Thunberg, 1787 was not found according Wallin and Wallin, 1989 and 2001.

This species was transferred to the genus *Akis* Herbst, 1799 and correspond to the type serie 6914, 6997, 6998 and 6999. The specimens of Thunberg collection are similar to *Akis bacarozzo* (Schrank 1786), described from Roma, Italy, a species

previously considered a synonym of the variety *tuberculata* Kraatz (1867), described from Corse, characterized by unordered tubercules on elytra. The aedeagus is different. Both forms occur together in Corse and have been specifically separed as two sympatric taxa (cf. Löbl & Smetana, 2008 and Ferrer *et al*., 2008).

***Moluris gibba* (Pallas, 1781)**
= *Tenebrio gibbus* Pallas, 1781: 46, t. C, f. 12, not De Geer, 1775: 51, pl. 13, fig. 8
Pimelia gibba Fabricius, 1787: 207**
***Pimelia planata* Thunberg, 1787 : 47 syn. nov.**
Pimelia gibba Fabricius 1791: 110, 117
Pimelia gibba Fabricius 1792: 100
Pimelia gibba Fabricius 1801: 128
Pimelia gibba Olivier, 1795: 59, p. 4, t. 1. f. 11
Moluris gibba (Pallas) Gebien, 1910: 153
Moluris gibba (Pallas) Gebien, 1937: 758
Pimelia gibba Fabricius Staig 1940: 101; fig. pl. 49
Not *Pimelia gibba* (Fabricius) Gebien, 1906: 123
= *Melanostola gibba* attributed to Fabricius, 1792 = *Pimelia simplex* Solier, 1836: 123
Not *Pimelia gibba* (attributed to Fabricius, 1792) Zimsen, 1964: 42 (1 specimen from Kiel)
Not *Pimelia gibba* attributed to Fabricius, 1792, Löbl & Smetana, 2008: 160

***Pimelia planata* Thunberg, 1787, Type 7029 (UUZM).**
Tenebrio gibbus Pallas, 1781 is different to the three syntypes of *Tenebrio gibbus* De Geer, 1775, preserved in Stockholm (NHRS) and is *Pimelia gibba* Fabricius, 1787, a species belonging to the South African genus *Moluris* Latreille, 1804, identical to the type preserved in the William Hunter collection, of the Museum of Zoology of Glasgow, Scotland. *Tenebrio gibbus* De Geer 1775, is another Molurini species and belongs to genus *Phanerotomea* Koch (1950). The specimen from Kiel, preserved in the Museum of Zoology, Copenhague, examined by Gebien, 1906, cited by Zimsen, 1964 is not the type and cannot agree with the original description: elytris linea elevata abbreviata". Fabricius (1791, 1792, 1801) repeated the first description, indicating "India, Mus. Hunter". The provenance is erroneous. The citation of Löbl & Smetana, 2008 treating *Pimelia simplex*, from North Africa, as a junior synonyme of *Pimelia gibba* Fabricius, 1781, is a misinterpretation after Gebien, 1906. The valid current name of Pimelia simplex Solier, 1836 *stat. rest.* is hereby restablished.

Moluris gibbosa (Thunberg, 1787) **comb. nov.**
***Pimelia gibbosa* Thunberg, 1787: 4**
Pimelia gibbosa Olivier, 1789: pl. 1, fig. 5a, 5b
***Opatrum gibbosum* Thunberg, 1821: 53 syn. nov.**
Moluris gibbosa Solier, 1843: 291
Moluris gibbosa Haag Rutenberg 1871: 57
Moluris gibbosa (Olivier) Gebien, 1910: 153
Moluris gibbosa (Olivier) Gebien, 1937: 758

***Pimelia gibbosa* Thunberg, 1787. Type 7024 (UUZM).**
Moluris gibbosa is a very distinctive species with strongly sculpted elytra, the striation forming six subcrenular costae. Gebien (1937) attribute himself this species to Olivier, 1789, although the author is Thunberg, as noted by Olivier self in 1789.
Thunberg, 1821 b, have transferred this species to the genus *Opatrum* Fabricius (1775*)*: *Opatrum gibbosum* Thunberg, 1821: 53 **syn. nov.**

***Psammodes pilosus* (Thunberg)**
Pimelia pilosa Thunberg, 1787: 49, f. 40
Pimelia pilosa Thunberg, 1791: 118
Psammodes pilosa (Thunberg) Solier, 1840: 286
Psammodes pilosa (Thunberg) Haag, 1871: 194
Psammodes pilosus (Thunberg) Gebien, 1910: 158
Psammodes pilosus (Thunberg) Gebien, 1937: 763

***Pimelia pilosa*Thunberg, 1787. Type 7030**

2. Novas Insectorum species Thunberg, 1791

Physosterna porcata* (Fabricius, 1787)
Pimelia porcata Fabricius, 1781: 317
***Erodius afer* Thunberg, 1791: 121-122 syn. nov.**
Pimelia porcata Fabricius, 1801: 131
Pimelia porcata Fabricius Herbst, 1799: 88
Pimelia porcata F. Blair,1914: 483
Adesmia porcata (F.) Gebien, 1910: 87
Physosterna morbillosa var *porcata* (F.) Gebien, 1937: 660
Physosterna porcata (Solier, 1837) Penrith, 1979: 31, 32

This species is wrongly atributted to Solier (1837), by Penrith (1979), however, the author is Fabricius (1781). The type is preserved in the Collection Banks (NHM).

***Erodius afer* Thunberg, 1791. Type 6801, 6802, 6825 (UUZM).**

Zophosis* (s. str.) *testudinaria* (Fabricius, 1787)
Erodius testudinarius Fabricius, 1787. 1: 215
Erodius testudineus Thunberg, 1791: 121
Erodius testudinarius Fabricius Olivier, 1795: 63, 4, t.1, f. 1 a,b
Erodius testudinarius Fabricius Herbst, 1799: 173, t. 127, f. 11
Zophosis muricata Solier, 1834: 620 (Non Fabricius)
Zophosis testudinaria (Fabricius) Blair,1914: 483
Zophosis testudinaria (Fabricius) Gebien, 1910: 41
Zophosis testudinaria (Fabricius) Gebien, 1937: 556
Zophosis testudinaria (Fabricius) Penrith, 1977, 26, p. 27-28, fig. 16, fig. 17 a, b.

The name *Erodius testudineus* Thunberg, 1791 is probably a lapsus for *testudinarius*. (The type not found. UUZM).

***Erodius lineatus* Thunberg, 1791: 121-122**
Erodius lineatus Thunberg, 1791. Mus. Cat. 4. 48, f. 16

No specimen, labeled *Erodius lineatus* have been located in collection Thunberg (UUZM, NHRS). Probably, because this species is identical to *Sepidium lineatum* Thunberg, 1791, already referred to *Platyope leucogramma* (Pallas, 1773).

***Erodius punctatus* Thunberg, 1791: 123 syn. nov.**
(See *Erodius punctatus* Thunberg, 1787, under *Cryptochile punctata* (Thunberg, 1778).

Trachynotus reticulatus* (De Geer, 1778)*
Tenebrio reticulatus De Geer, 1778: 651, t. 48, fig. 19
Sepidium reticulatum (Fabricius, 1781: 315)*
***Sepidium reticulatum* Thunberg, 1791 syn. nov. (pars, spec. composita, syntype 7016)**
Sepidium reticulatum (Olivier, 1795: 3: 61, p.6 t.1, f. 4ª, t, 2, f.2)
Sepidium reticulatum Thunberg, 1791: 23
Sepidium reticulatum (Herbst, 1799: 145, t, 126, fig. 2)
Trachynotus reticulatus (Laporte de Castelnau, 1840: 197)
Trachynotus reticulatus Solier, 1843, 2: 320
Trachynotus reticulatus (Laporte de Castelnau) Haag, 1873: 36)
Trachynotus reticulatus (Laporte de Castelnau) Gebien, 1910: 164
Trachynotus reticulatus (Laporte de Castelnau) Gebien, 1937: 774
Trachynotus reticulatus (Laporte de Castelnau) Koch, 1955 a: 46, pl. 5, fig. 3

***Sepidium reticulatum* Thunberg. Type 7016 (UUZM).**

The type of *Tenebrio reticulatus* De Geer (1775) is preserved in the Swedish Museum of Natural History, Stockholm (NHRS). Two different species are labeled as syntypes of *Sepidium reticulatum* Thunberg. The first specimen (type 7016) is a distintive and large species, covered with argenteous pubescence between the foveate and strongly irregular sculpture of the elytra. The other species, syntypes 14592-14594 belongs to *Sepidium rugosus* (Fabricius, 1781) and is smaller and similarly sculpted, but covered with brownish, to golden pubescence. The head and thorax of the first syntype specimen are lost.

Somaticus rugosus* (Fabricius, 1781) (Fig. 6)*

Sepidium rugosus (Fabricius) 1781: 315
***Sepidium reticulatum* Thunberg, 1791 (pars) spec. comp. (syntypes 14592-14594)**
Sepidium rugosus Herbst, 1799: 149: t, 126, f. 5
Trachynotus rugosus Solier, 1843: 314
Trachynotus rugosus Solier Haag, 1871: 8
Trachynotus rugosus (Solier) Gebien, 1910: 165
Trachynotus rugosus (Solier) Gebien, 1937: 773
Somaticus rugosus rugosus (Fabricius) Koch, 1955 a: 50, 76

Koch (1955 a), establish three geographical subspecies of *Somaticus rugosus*, considering the nominal form the race found in the southern part of the Southern Cape Province, because at the time of Fabricius, most of the insects, described from "Cap Bon sp." (Cape of Good Hope) com from this area.

***Sepidium reticulatum* Thunberg, 1791. Types 14592-14594 (UUZM).**

Trachynotus vittatum* (Fabricius, 1781)

Sepidium vittatum Fabricius, 1781, 1: 127
***Sepidium vittatum* Thunberg, 1791: 24 syn. nov.**
Sepidium vittatum Fabricius Olivier, 1795, 3, 61, p. 7, t, 1, f. 5
Trachynotus vittatus (F.) Gebien, 1910: 165
Trachynotus vittatus (F.) Gebien, 1937: 774
Trachynotus vittatus (Fabricius) Koch, 1955 a: 46, pl. 7, fig. 8. (male)
Trachynotus plicatus Solier (1843: 325, Wiedmann, 1823) Koch, 1955 a: 46, pl. 7. fig. 9 (female)

***Sepidium vittatum* Thunberg, 1791. Type 7018 and 14590 (UUZM).**

The sexual dimorphism of this species (cf. Koch, 1955 a: 46, pl. 7. fig. 8 and 9) is remarcable.

3. Coleoptera Capensia antennis fusiformibus Thunberg, 1821a

This paper is the third part of a work published in four parts, describing diverse families of Coleoptera, separated after the shape of the antenna.

In this part, Thunberg (1821 a), described some new species of darkling beetles, placed in the old genus *Tenebrio* Linné (1758), and in the genera *Scaurus*, *Blaps*, *Platynotus*, *Sepidium* and *Erodius* sensu Fabricius (1775). Additionally Thunberg (1814), described the genus *Gnatocerus* by monotypy, to accomodate a new species from the Cape of Good Hope: *Gnatocerus ruber* type 7450. Unfortunately the type of *Gnatocerus ruber* type 7045, Thunberg, described from Cape, has been lost, loaned 1959 to G. Surtaes, London and never returned (Dr. Hans Meylon, UUZM, comm. personal in litteris).

***Psorodes scabridus* (Thunberg) comb. nov. (Fig. 7)**

Scaurus scabridus Thunberg, 1821a: 8

***Scaurus scabridus* Thunberg, 1821 a. Type 6922 (UUZM).**

The genus *Psorodes* has been recently revised by Ardoin (1962). This species recall the shape of *Oplocheirus affer* Fhåraeus (1870: 311), but *Psorodes scabridus* is smaller and more slender.

***Capidium bipunctatum* (Thunberg, 1821 a) comb. nov.**

Blaps bipunctata Thunberg, 1821a: 165
Onchotus tardus Solier, 1848: 21 **syn. nov.**
Onchotus tardus var. *pedellus* Solier, 1848: 21 **syn. nov.**
Onchotus tardus Gebien, 1910: 271
Onchotus tardus Gebien, 1938: 393
Capidium tardum (Solier) Koch, 1954: 46

***Blaps bipunctata* Thunberg, 1821 a. Type 6335 (UUZM).**

The proposed synonymy is obvious using the revision of Koch, 1954.

***Blenosia exarata* (Thunberg, 1821) comb. nov.**

Blaps exarata Thunberg, 1821a: 165
Blenosia sulcata var. *subcostata* Mulsant & Rey, 1859: 109. **syn. nov.**
Blenosia sulcata Laporte de Castelnau Gebien, 1910: 307
Blenosia sulcata Gebien, 1938: 395
Blenosia subcostata (Mulsant & Rey, 1859) Koch, 1963: 50
Non *Blaps exarata* Quensel 1806: 147, tab. 2, fig. 8. = *Blaps abrupta* Thunberg, 1821 a 167

***Blaps exarata* Thunberg, 1821 a. Type 6543 (UUZM).**

***Capidium striatula* (Thunberg, 1821a) comb. nov.**

Blaps striatula Thunberg, 1821a: 166
Capidium hessei Koch, 1954: 46 **syn. nov.**

***Blaps striatula* Thunberg, 1821a. Type 6349 (UUZM).**

***Bantodemus crassipes* (Thunberg) comb. nov. (Fig. 8, 26, 27)**

***Blaps crassipes* Thunberg, 1821a: 167**
Platynotus striatus Quensel 1806: 142: 2, f. 6) **syn. nov.**
Trigonopus striatus (Quensel 1806) Gebien, 1910: 272
Non Blaps striata Fabricius, 1781: 322*
= *Platynotus striatus* (Fabricius, 1781) Gebien, 1910: 273
= *Platynotus striatus* (Fabricius) Gebien, 1938: 412
= *Platynotus striatus* (Fabricius) Kaszab, 1975: 291, 292, fig. 1 A,B, 3D, 4B. pl. 1, fig. 7.

***Blaps crassipes* Thunberg, 1821a. Type 6327 (UUZM).**
***Platynotus striatus* Quensel types 1957 a,b,c,d coll. Gyllenhal (UUZM).**

Blaps crassipes Thunberg belongs to the African genus *Bantodemus* Koch (1955) sensu Iwan & Banaszkiewicz (2006), and it is an unknown representative closely related to other species of this genus, with strongly dilated and spinose protibia (fig. 26, 27).

Blaps striata Fabricius (1781) is an Indian *Platynotus*. The South African species described by Quensel (1806) as *Platynotus striatus* (Quensel 1806) type 1957 a**,** exhibits strongly protibiae (fig. 26, 27) and anterior femora strongly dilated and similar to other taxa of *Bantodemus* Koch (1955 b, Iwan, 2006), which is a natural group of species before treated as *Trigonopus* Mulsant & Rey, 1853, sensu Koch (1956), without relationship wirh the oriental genus *Platynotus* Fabricius (1801), very well characterized by several distinctive characters (Kaszab, 1975). Gebien (1910, 1938) cited *Trigonopus striatus* (Quensel, 1806). The name *Platynotus striatus* Quensel **syn. nov.** is a **nom. preocc.** is not disponible by homonymy, the name *Bantodemus crassipes* (Thunberg, 1821 a) **comb. nov.** is prioritary.

***Zadenos* (*Euzadenos*) *exarata* (Quensel, 1806) comb. nov. (Fig. 9)**
Blaps exarata Quensel 1806: 147, tab. 2, fig. 8.
***Blaps abrupta* Thunberg, 1821a: 167 syn. nov.**
Non *Blaps exarata* Thunberg, 1821a: 165
= *Blenosia exarata* (Thunberg, 1821a) **comb. nov.**
Zadenos (*Euzadenos*) *lightfooti* Koch, 1956: 301 **syn. nov.**

***Blaps abrupta* Thunberg, 1821 a. Type 6326 (UUZM)**

***Trigonopus difformis* (Thunberg, 1784) comb. nov.**
Tenebrio difformis Thunberg, 1784: 6
Carabus difformis (Thunberg, 1787: 72)
Blaps difformis (Thunberg, 1821a: 168)
Trigonopus flexipes Koch, 1956: 459 **syn. nov.**

***Blaps difformis* (Thunberg, 1784) Type 6550 (UUZM).**

***Stenogonopus plumosus* (Thunberg, 1821 a)**
Tenebrio plumosus Thunberg, 1787: 48, f. 17.
Blaps plumosa (Thunberg, 1821a: 168)
Gonopus plumosus (Thunberg) Solier, 1848: 230, 234.
Gonopus plumosus (Thunberg) Gebien, 1910
Stenogonopus plumipes (lapsus) (Thunberg) Gebien, 1920: 2, 91
Stenogonopus plumosus Gebien, 1938: 392
Stenogonopus plumosus (Thunberg) Endrödy Younga 2000: 3-4
Gonopus (*Stenogonopus*) *plumosus* (Thunberg) Ferrer, 2001: 47-48
Stenogonopus plumosus (Thunberg) Iwan, 2002: 601

***Blaps plumosa* (Thunberg, 1821a). Type 15 (UUZM).**
The original label *Tenebrio plumosus* have been replaced by Thunberg himself with the posterior identification, *Blaps plumosa* transferring this species to the genus *Blaps* Fabricius (1775).

***Eurynotus capensis* (Fabricius, 1794)**
Helops capensis Fabricius, 1794: 440
***Tenebrio caffer* Thunberg, 1821a: 163 syn. nov.**
Eurynotus capensis (Fabricius) Gebien, 1910: 275
Eurynotus capensis (Fabricius) Gebien, 1938: 414
Eurynotus (s. str.) *capensis* (F.) Koch: 1953: 283-284

***Tenebrio caffer* Thunberg, 1821a. Type 6840 (UUZM).**

***Alobates pennyslvanicus* (De Geer, 1775)**
Tenebrio pennsylvanicus De Geer, 1775, 5: 52, t. 13, fig. 10
***Upis capensis* Thunberg, 1821a: 1 syn. nov.**
Nyctobates pennsylvanicus (De Geer) Horn 1870: 333
Alobates pennsylvanicus (De Geer) Gebien, 1910: 444
Alobates pennsylvanicus (De Geer) Gebien, 1941: 345
Alobates pennyslvanicus (De Geer) Ferrer, 2006: 235

***Upis capensis* Thunberg, 1821 a. Type 6620 (UUZM).**
The type have been compared with the Holotype of *Tenebrio pennsylvanicus* De Geer, 1775 (NHRS) (= *Alobates pennsylvanicus* (De Geer, 1775) Ferrer, 2006).

4. Coleoptera Capensia antennis fusiformibus 1821

Lopholagria villosa* (Fabricius, 1781)
Lagria villosa Fabricius, 1781: 160*
Clerus villosus Thunberg, 1821a: 175 **(pars: species composita)**
Not *Lopholagria villosa* (Thunberg) 1821: 175 Borchmann, 1916: 97
Not *Lagria amoena* Fåhraeus, 1870: 329, Borchmann, 1916: 97
Not *Lagria amoena* Fåhraeus Borchmnn: 1936
Lopholagria villosa (Thunberg) 1821 Merkl, 2004: 293-294

***Clerus villosus* Thunberg, 1821 a**
Syntypes 6649-6652 and Type var. 3: 6653 (UUZM).
Thunberg, (1821 a : 175), described *Clerus villosus* on the basis of five specimens which are regarded as syntypes by Merkl (2004), who designated a lectotype (6653) and four paralectotypes (6649-6652).

I have examined the types of Thunberg (UUZM) and the types of *Lagria amoena* Fåhraeus (1870: 329) preserved in the Swedish Museum of Natural History (NHRS), and the synonym stablished by Borchmann (1936), is not correct, although the validity of the African species and of other taxa belonging to the genus *Lagria* Fabricus, 1775, can not be established before the genus is revised.

According to Merkl (2004), the specimen type 6653 designes the lectotype of *Clerus villosus* Thunberg correspond to the variety 3 of Thunberg, 1821 a: "var 3:o thorace fulvo villoso", which has the pronotum with a deep medial impression filled with dense golden pubescence, a diagnostic feature of *Lopholagria* Borchmann, 1916: 97.

The designation of the Lectotype based in a specimen which not agree with the original description, defined as (unnamed) variety "var. 3", by Thunberg, is not valid, because the variety described by Thunberg, is an unnamed species, which not agree with the original description of *Clerus villosus*. This variety was described under the name *Lagria amoena* by Fåhraeus, 1870 and placed in another genus, *Lopholagria* by Borchmann, 1916.

The presumptive synonymy between *Clerus villosus* Thunberg and *Lagria amoena* Fåhraeus is an error of Borchmann, 1936. Obviously Borchmann never examine the four syntypes, collected by Wahlberg in "Caffraria" and preserved in the Swedish Museum of Natural History.

Lagria amoena Fåhraeus, 1870, is the type species of the genus *Lopholagria* Borchmann, 1916, and the current name combination is *Lopholagria amoena* (Fåhraeus, 1870). *Clerus villosus* Thunberg, 1821 a is a *species composita*, consisting in two different taxa: The specimens Types 6649-6652 belongs to *Lagria villosa* Fabricius, 1781. The syntype 6653 *Clerius villosus* var. 3, Thunberg 1821 a, belongs to another genus and is *Lopholagria amoena* (Fåhraeus, 1870). Designation of Lectotype is unnecessary, because all the specimens are nummered.

5. Coleoptera Capensia antennis filiformibus 1827

In this paper Thunberg (1827), redescribed some of Fabricius species as well as four species new to science, which he placed in the genus *Pimelia* Fabricius (1775).

Some other species *Pimelia striata* Fabricius, 1775, *Pimelia pilosa* Thunberg, 1787, and *Pimelia scabra*, cited in this paper, belongs today to the genus *Psammodes* Kirby, 1818. *Pimelia lacunosa* is a rare representative of the tribu Nodotelini Koch (1950). The name is a junior synonym of *Zophius rufopictus* (Wiedmann, 1825).

***Psorodes papillosa* (Thunberg) comb. nov. (Fig. 10)**
Pimelia papillosa Thunberg, 1827: 32

***Pimelia papillosa* Thunberg types 7002, 7026 (UUZM).**
The South African genus *Psorodes* proposed by Solier (1848), has been revised by Ardoin (1962). Although *Psorodes papillosa* can not be satisfactory identified using the provided key to *Psorodes* and related genera.

Another specimen of this very rare species is preserved without labels of determination in the W. Hunter collection, Glasgow University.

REDESCRIPTION of *Psorodes papillosa* (Thunberg) comb. nov. Epistome deeply emarginate in semi-circle, pronotum subglobular, as broad as long, the maximum of width at middle; sides regularly rounded from base to anterior margin, without conspicuous angles, which in lateral view are subobtuse and finely marqued. Anterior board and base broadly semi-circular and finely margined; tegument sparsely covered of flattened tubercules.

Elytra ovally and regularly rounded, about 1.5 times as long as broad, the maximum of width at middle, depressed discally, tegument strongly tuberculate, the tubercules disposed in four rows well separated by two traceable lines of smaller granular tubercules. Tegument dull, concealed by terrose particles and sparsely yellowish pubescent. Epipleura strongly sculpted by two rows of granular punctures. Legs and antenna slender, covered of short, setose, yellow-brownish pubescence, consisting of reclined setae.

Psammodes scaber* (Fabricius, 1775)
Pimelia scabra Fabricius, 1775: 251
Pimelia rufipes Thunberg, 1827 a: 39
Not *Psammodes rufipes* Harold, 1878: 106, **nom. preocc.**
Pimelia scabra Fabricius Olivier, 1795: 59, 7, t, 2, f. 14
Pimelia scabra Fabricius Herbst, 1799: 46, t. 120
Piesomera scaber Solier, 1843: 289, t, 3, f. 25-29
Psammodes scaber Solier Gebien, 1910: 160
Psammodes scaber Solier Gebien, 1937: 765

***Pimelia rufipes* Thunberg, 1827. Type 7028 (UUZM).**

***Phanerotomea* sp. cf. *laevigata* (Fig. 11)**
Pimelia laevigata Olivier, 1795: 15, t. 4, f. 4
***Pimelia tomentosa* Thunberg, 1827: 3 syn. nov.**
Piesomera laevigata (Ol.) Solier, 1843: 287
Psammodes laevigatus (Ol.) Haag, 1871: 59.
Psammodes laevigatus (Ol.) Gebien, 1910: 157
Psammodes laevigatus (Ol.) Gebien, 1937: 767

***Pimelia tomentosa* Thunberg, 1927. Types 7002-7006 (UUZM).**
Pimelia laevigata is a species of *Phanerotomea* Koch, 1958, probably allready described by Olivier and correspond to the figure given by Olivier, 1795, 15, t. 4. f. 4. However the specimens are in very poor state and the genus *Phanerotomea* need a revision.

***Zophius rufopictus* (Wiedmann, 1823) (Fig. 12)**
***Pimelia lacunosa* Thunberg. 1827: 33. Type 6968 syn. nov.**
Helops rufopictus Wiedmann, 1823: 40
Zophius rufopictus (Wiedmann, 1823) Gebien, 1910: 525
Zophius rufopictus (Wiedmann, 1823) Gebien, 1942: 757

***Pimelia lacunosa* Thunberg. 1827. Type 6968 (UUZM).**
The specimen of Thunberg is a male, from Cape of God Hope, cospecific with the female, type of *Zophius rufopictus* (Wiedmann, 1823), preserved in London (NHM).

***Cytlindrothorax brunneus* (Thunberg, 1827) comb. nov. (Fig. 13)**
***Lagria brunnea* Thunberg, 1827: 7**
***Lagria fusca* Thunberg, 1827: 8 syn. nov.**

***Lagria brunnea* Thunberg, 1827. Type 5284, 5285, 15483 (UUZM).**
***Lagria fusca* Thunberg Type 5286 (UUZM).**

Lagria brunnea Thunberg, 1827 is a species of *Cylindrothorax,* a genus of Alleculini, created by Solier (1844), to receive a species from Cape province, which he described under the name *Cylindrothorax pilosus.* Tho establish the status of this species needs a revision of this genus.

The specimen labelled *Lagria fusca*, type 5286, is in poor state, the abdomen empty, devored by *Anthrenus*. It is identical to the precited species.

***Borboresthes flexuosus* (Thunberg, 1827) comb. nov. (Fig. 14)**
Lagria flexuosa Thunberg 1827: 9

***Lagria flexuosa* Thunberg, 1827. Types 5287, 15484 (UUZM).**
This strongly depigmented, brownish and yellow-patched species, with strongly pectinate tarsi must be placed in the tribu Allecullini. The specimen is very similar to the representatives of the Indo-malaysian genus *Borboresthes* Fairmaire (1897) and Borchmann (1910) and to the monotypic genus *Brachycula* Fairmaire (1897) from Madagascar, but it is perhaps a different genus.

6. Opatrum Insecti genus Thunberg, 1821 b

This work is the first tentative almost to separate diverse taxa belonging to very different genera of darkling beetles, using the elytral sculpture, described as unsculptured or polished, tuberculate, rugose, costate or striate. All the 17 taxa described by Thunberg (1821 b) have been placed in other genera, but most species can be considered as Opatrini, except *Opatrum grossum* which is a species placed in Asidini.

***Opatrum (Colpophorus) validum obscurum* Thunberg comb. nov.**
Opatrum porcatum Fabricius, 1792 p. 18 (pars)
Not *Opatrum porcatum* Fabricius, p. 1792 16 (pars)
***Opatrum obscurum* Thunberg, 1821b: 51**
Opatrum porcatum (F.) Mulsant & Rey, 1859: 107
Opatrum porcatum (F.) Mulsant & Rey, 1859: 45
Opatrum porcatum (F.) Reitter, 1904: 149
Opatrum porcatum (F.) Seidlitz, 1894: 426
Opatrum schlicki Gebien, 1906: 213 **syn. nov.**
Opatrum schlicki Gebien, 1910: 330
Opatrum schlicki Gebien, 1939: 453

***Opatrum obscurum* Thunberg, 1821 b. Type 6304 (UUZM).**
Opatrum porcatum Fabricius, is a *species composita* consisting in four synrypes. The first syntype, from "Barbaria" (Dom. Vahl, ZMC); corresponding better to the original description and belongs to *Opatrum porcatum* (cf. Gebien,1906). The type of *Opatrum schlicki* Gebien (1906), is another syntype of *Opatrum porcatum* Fabricius (Zimsen, 1964: p. 39, ZMC). Althoug this syntype is identical to the Type 6304 of *Opatrum obscurum* Thunberg, 1821 b, the name proposed by Gebien, (1906): *Opatrum schlicki* **syn. nov.** become unvalid by synonymy: *Opatrum* (*Colpohorus*) *validum obscurum* Thunberg, 1821 b. **comb. nov.**

Opatrum schlicki Gebien (1906) is treated by Löbl & Smetana (2008), as a geographical race of *Opatrum validum* Rottenberg, 1871, inhabiting Morocco, Algerie, Tunisie and Pantelleria. I have examined North African material from coll. Gebien (NMB) and from other museums, housing important collections (NHRS, MNHN). The synonymy of *Opatrum obscurum* Thunberg1821 b, is supported by authoritative determinations by Zoltán Kaszab, H. Kulzer and P. Ardoin of specimens from precited localities.

***Gonocephalum granulatum pusillum* (Fabricius, 1791)**
Opatrum pusillum Fabricius, 1791: 91
***Opatrum costatum* Thunberg, 1821 b : 51 syn. nov.**
Gonocephalum pusillum (F.) Gebien, 1910: 324-325
Gonocephalum pusillum (F.) Gebien, 1939: 444
Gonocephalum granulatum pusillum (F.) Ferrer, 1993: 85, 86

***Opatrum costatum*Thunberg, 1821 b. Type 6296 (UUZM).**
The holotype of *Opatrum pusillum* Fabricius is in poor state (ZMC), missing head and pronotum. Hovever the elytra are suffisant to recognize the East European subspecies.

***Notocorax gigas* (Thunberg, 1821 b) comb. nov.**
Opatrum gigas Thunberg, 1821b: 51
Platynotus pandaroides Fairmaire 1896: 13 **syn. nov.**
Platynotus pandaroides Fairmaire Gebien, 1910: 273
Platynotus pandaroides Fairmaire Gebien
Platydendarus pandaroides (Fairmaire 1896) Kaszab 1975: 314, tab. 3, f. 24

The genus *Platydendarus* Kaszab, 1975: 312 is a junior synonym of *Notocorax* Dejean, 1834: 191, according Löbl & Smetana (2008: 290).

***Opatrum gigas* Thunberg, 1821 b. Type 6303 (UUZM).**

***Alphasida (Glabrasida) costulata scabrosa* Allard, 1868 (Fig. 15)**
Opatrum grossum Thunberg, 1821 b : 51 **nom. oblitum**
Asida scabrosa Allard, 1868: 270 **nom. protectum.**
Asida scabrosa Allard Gebien, 1910: 136
Alphasida (Glabrasida) costulata scabrosa Allard Gebien, 1937: 724

***Opatrum grossum* Thunberg, 1821 b. Type 6300 (UUZM).**
Opatrum grossum belonging to the genus *Alphasida* (*Glabrasida*) will be a primary homonymy of *Asida grossa* Solier, 1836: 453, which belongs to *Alphasida* (*Glabrasida*) and was treated as a junior synonym of *Asida grossa* Solier = *Alphasida (Glabrasida) sicula* Solier, 1836: 454 in Gebien (1910), but is now considered as a valid species (Löbl & Smetana, 2008). However, according the Priciple of priority, the name *Asida sicula* has been employed before, described in the anterior page and it is formerly prioritary.

Wherever, *Alphasida* (*Glabrasida*) *sicula* Solier (1837) **nomen protectum,** has been several times recognized and cited in the European literature and can not be changed with *grossa* Solier, 1836 (Non *grossa* Thunberg **nom. oblitum)**, according the recommendations of the Art. 23.9 of the International Code of Zoological Nomenclature.

***Litoborus rugosus* (Thunberg, 1821 b) comb. nov.**
Opatrum rugosum Thunberg, 1821b : 52
Phylax olcesii Fairmaire, 1870: 392 **syn. nov.**
Litoborus olcesii Reitter, 1904: 113
Litoborus olcesii (Fairmaire) Gebien, 1910: 310
Litoborus olcesii (Fairmaire) Gebien, 1939: 451
Litoborus olcesii (Fairmaire) Antoine, 1930: 201, fig. 38, 40

***Opatrum rugosum* Thunberg, 1821b. Type 6271 (UUZM).**

***Hoplarion* (*Hoplarobius*) *granulosus* (Billberg, 1815)**
Opatrum granulosum Billberg, 1815: 280
***Opatrum porcus* Thunberg, 1821b: 52 syn. nov.**
Micrositus granulosus (Billberg) Gebien, 1910: 311
Micrositus granulosus (Billberg) Gebien, 1939: 452
Melambius (*Hoplarobius*) *granulosus* (Billberg) Ferrer, 1991: 281-282
Hoplarion (*Hoplarobius*) *granulosus* (Billberg) Löbl & Smetana, 2008: 285:

***Opatrum porcus* Thunberg, 1821 b. Type 6270 (UUZM).**

***Crypticus gibbulus* (Quensel 1806)**
Helops gibbulus Quensel 1806: 163
***Opatrum bicolor* Thunberg, 1821 b: 52 syn. nov.**
Crypticus (s. str.) *gibbulus* (Quensel) Español, 1950: 117, fig. 1 a, b; p. 147

***Opatrum bicolor* Thunberg, 1821 b. Type 6287 (UUZM).**
A widely distributed superspecies (Mayr, 1836), composed of several different undescribed taxa inhabiting The Iberian Peninsula, Morokko, Algeria and Tunisia. Recorded from France, Italy, Malta and in Cyprus, Jordan and Syria (Löbl & Smetana).

The wings and aedeagus are different, comparing spanish material with specimens from Ceuta, North Africa, a fact allready indicated by Español (1950). Differences have been observed evenso with comparative examen of males from Ajaccio (Corse) and several specimens, found gregariously in decomposed carrion (*Sus scrofa* L.) in Alcalá de Henares, province of Madrid (Aida Gómez leg. 2006, CJF). Morphological variations clearly indicating differences requiring to be systematically studied and evaluated.

***Allophylax picipes* (Olivier 1811)**
Opatrum picipes Olivier 1811: 500
***Opatrum callosum* Thunberg, 1821b: 52 syn. nov.**
Phylax picipes (Olivier) Gebien, 1910: 309 et auct.
Allophylax picipes (Olivier) Gebien, 1939: 449

***Opatrum callosum* Thunberg, 1821b. Type 6274 (UUZM).**

***Phylan gibbus* (Fabricius, 1775)**
Opatrum gibbum Fabricius, 1775: 76
Tenebrio pilipes, Herbst, 1799: 260, t. 112, f. f. 3
***Opatrum pilipes* Thunberg, 1821b: 52 syn. nov.**
Phylan gibbus (Fabricius) Gebien, 1910: 285-286
Phylan gibbus (Fabricius) Gebien, 1938: 423

***Opatrum pilipes* Thunberg, 1821b. Type 6275**
This synonym have been overlocked by all precedent authors inclusively Gebien, (1910) and it is omitted in the recent Catalogue (Löbl & Smetana, 2008). *Phylan gibbus* is a superspecies confused with *Phylan paludicola* (Chevrolat, 1869) in the Iberian Peninsule.

***Opatrum gibbosum* Thunberg, 1821b: 53 syn. nov.**
***Pimelia gibbosa* Thunberg, (1787). Type 7024 (UUZM)**.

***Opatrum gibbosum* Thunberg, 1821b.** Type not found (UUZM, NHRS).
This species is omited in the catalogue of Wallin & Wallin, 2001: 57, which only listed *Pimelia gibbosa* Thunberg, which is identical to the precited *Moluris gibbosa* (Thunberg, 1787. **comb. nov.)**. The type correspond highly probably, to the specimen of *Pimelia gibbosa* Thunberg, (1787). Type 7024 (UUZM).

***Blapstinus gemellatus* (Olivier, 1795) comb. nov. (Fig. 16)**
Blaps gemellata Olivier, 1795: 60, p. 9, t. 1. f. 8)
Blaps gemellata Olivier Schonherr, 1806: 147
***Opatrum perforatum* Thunberg, 1821b: 53 syn. nov.**
Opatrinus perforatus Dejean 1821: 66
Opatrum perforatum Sahlberg 1823: 15-16
Not *Opatrum clathratum* Fabricius, 1792: 90
Not *Diastolinus clathratus* (F.) Mulsant et Rey 1859: 138
Not *Opatrinus gemellatus* (attributed to Olivier, 1795) Gebien, 1910: 277
Not *Opatrinus clathratus* (atributed to Olivier, 1791: 499). Gebien loc. cit.: 277.
Not *Opatrinus gemellatus* (atributed to Olivier, 1795) Gebien, 1939: 415
Not *Opatrinus gemellatus* (atributed to Olivier, 1795) Iwan, 1995: 16-17

***Opatrum perforatum* Thunberg, 1821b. Types 6281-6283 (UUZM).**

Opatrinus gemellatus has been treated as a synonymy of the widely distributed *Opatrinus clathratus* (Olivier, 1791) by Gebien (1910). However, this is a misinterpretation of *Blaps gemmellata* Olivier (see Iwan, 1994). Moreover, *Blaps gemmellata* Olivier, cited by Schönherr (1806), is treated by Iwan (1995: 16-17), after Gebien (loc. cit.), as a presumptive synonym of *Opatrum clathratum* Fabricius (1792), unfortunately without type examination. Iwan (loc. cit.), indicate the possible unknown depository of the type of Olivier in the collection Chevrolat, in the National Museum of Natural History, Paris (MNHN). The collection Chevrolat was adquised by the Schönherr family and it is housed at the Swedish Museum of Natural History, in which I found a serie of four specimes from South Carolina, labelled *Opatrinus gemellatus* Ol., collected by Gustav Wilhelm Bellfrage. Belfrage was born in 1834, so the material can not be considered as typical, but the specimens are identical to the types of *Opatrum perforatum* Thunberg (1821 b). Otherwise several specimens of this species, from Baron Dejean are preserved in the collection Leonhard Gyllenhal in Uppsala (UUZM) and in the collection C. J. Schönherr in Stockholm (NHRS).

Some material from the swedish colony St Barthelemy, preserved in the coll. Schönherr (NHRS), was cited by Sahlberg (1823).

Both species, *Opatrinus clathratus* (Fabricius, 1792) and *Blapstinus gemellatus* (Olivier, 1795) are clearly different and belongs to two different genera. The genus *Opatrinus* Dejean 1821, is erroneously attributed to Latreille, 1829 in the Catalogue of Gebien (1937). The genus *Opatrinus* has been recently revised by Iwan (1994), but this species belongs to the genus *Blapstinus* Latreille (1829: 219) not to *Opatrinus*.

A redescription of *Blapstinus gemellatus* (Olivier, 1994) **comb. nov.** seems to be necessary to separe both species-

REDESCRIPTION of *Opatrum perforatum* Thunberg, 1821b

Long: 7.9 mm; Maximum of width: 3.8 mm.

Glabrous, black, with brown antennal and buccal appendages.

Tegument of the head finely and sparsely punctured, glabrous, smoothly alutaceous. Antenna reaching the base of pronotum, the 3th joint about two times as long as broad, 4th a little longer than broad, the 5-8 sub-equal, glabrous, the pubescence increassing from the 5th short, eparse and yellowish, the club large and brownish, covered of red-yellowish pubescence.

Similar in facies to *Opatrinus clathratus* but, duller, smaller and more depressed dorsally. Head moderately oblong, epistome broadly opened in semi-circle, labrum finely punctate; eyes well separated frontally by a distance equal to 6 times the diameter of an eye measured dorsally. Clypeo-genal zones subotusely rounded at each side.

Pronotum moderately transverse, the maximum of width at middle, anterior angles nearly rights, produced anteriorly, posterior angles subobtuse, anterior margin interrupted at middle, sides finely margined and slowly rounded anteriorly, becoming subparallel posteriorly. Base strongly bisinuate at each side and with conspicuous margins. Tegument dull, unpunctured. Sides finelly bordered, base with a small impression at each side before the posterior angles.

Elytra about 1.5 times as long as broad, sides regularly and weekly rounded acuminated apically, shoulders obtusely prononced, lateral carina invisible dorsally except humerally. Scutellum small, convex and transverse. Tegument covered of strongly incised lineate foveate rows, impressed by a nearly continuous line, intervals covexe and non punctuated.

Aedeagus: strongly dilated and truncate apically.

Males with the protibia strongly dentate at the inferior side and the abdomen strongly depressed at middle.

The genus *Blapstinus* Latreille (1829: 219), need a revision, but no species of this genus has been recorded from St. Barthélemy. This species is therefore, a new record for this old Swedish colony.

***Litoborus inmarginatus* (Thunberg, 1821 b) comb. nov.**

Opatrum inmarginatum Thunberg, 1821 b: 53
Litoborus maroccanus Escalera, 1914: 329
Litoborus maroccanus Escalera Gebien, 1938: 508
Litoborus maroccanus Escalera Antoine, 1930: 188, fig. 23, 24

***Opatrum inmarginatum* Thunberg, 1821 b. Type 6284 (UUZM).**

***Gonocephalum (Opatropis) affinis* (Billberg, 1815)**

Opatrum affine Billberg, 1815: 275
***Opatrum rufipes* Thunberg, 1821 b: 54 syn. nov.**
Opatrum hispida Brullé, 1838: 68
Opatropis hispida (Brullé) Gebien, 1910: 331
Opatropis hispida (Brullé) Gebien, 1939: 456
Gonocephalum (*Opatropis*) *affinis* (Billberg) Ferrer, 1991: 122-123

***Opatrum rufipes* Thunberg, 1821 b. Type 6289**

The type of *Opatrum rufipes* Thunberg, 1821 b: 54, **syn. nov** is a female of the nearly panafrican species *Gonocephalum (Opatropis) affinis* (Billberg) Ferrer, 1991, 1993. *Gonocephalum* Solier, 1834 is a genus recently revised (Ferrer, 1993, 1995, 2000).

The locality *in litteris* of the label of the type specimen is "China".

The accidental introduction of this species in China is plausible. Otherwise it is a confusion of localities.

***Gonocephalum depressum* (Fabricius, 1798)**

Opatrum depressum Fabricius, 1798: 41
Opatrum depressum Fabricius, 1801: 116
***Opatrum cinereum* Thunberg, 1821b : 54 syn. nov.**
Gonocephalum depressum (F.) Kaszab, 1952: 448, 635, 681

***Opatrum cinereum* Thunberg, 1821b. Types 6289, 15352 (UUZM).**

***Bradymerus fuscipes* (Thunberg, 1821) comb. nov (Fig. 17)**

Opatrum fuscipes Thunberg, 1821 b : 54

***Opatrum fuscipes* Thunberg, 1821b. Type 6286 (UUZM).**

Opatrum fuscipes Thunberg is another unknown species of the genus *Bradymerus* Perroud, 1894, recalling the facies of *Gonocephalum* Solier, 1834. The type collected in the Province of Cape, placed under the label Cap, is a female, to place systematically in the genus *Bradymerus*, near the widely distributed *B. incostatus* Gebien, 1914, from Sunda islands and West Malaysia. The oriental representatives have been recently revised by Schawaller (2006).

ORIGINAL DESCRIPTION:

Simile O. rufipedi, supra cinereo fuscum, subtus nigrum. Capite clypeus integer rotundatus. Thorax convexus marginatus. Elytra convexa, striata. Pedes imprimis femora rufi.

REDESCRIPTION:

Shiny, brown, with redish-orange antennas and buccal appendages, finely, sparsely and shortly pubescent dorsally. Antennas missing apical joints left 9-11, right 4-11 respectively. Epistome subtruncate. Clypeo-genal-zones moderately raised frontally. Eyes well separated at front by a distance equivalent to 4 times the diameter of an eye, measured dorsally.

Pronotum subtrapezoidal, proportionally short, two times broader as long, the maximum of width basally, anterior margin strongly subsinuate at each side, roundly convex at middle, with strongly produced, acute anterior angles; sides conspicuously margined and finely serrate, progressivelly divergent from the anterior board to the base, discally convex; base subsinuate with right posterior angles, finely bordered except at middle. Tegument covered of granular, foveate, irregular sculpture, consisting in circles bearing setiferous granules.

Elytra as broad basally as the base of pronotum, much broader at middle, about two times as long as broad and ovally rounded apically. deeply striate of strongly sculpted rows of oblong punctures between the strongly convex intervals, which are as broad as the rows of punctures. Shoulders obtuse, lateral margin unexposed dorsally, Tegument shiny. Ventral face shiny, glabrous, sculpted as the dorsal side.

***Opatrum lusitanicum* Thunberg, 1821b: 54 (Fig. 18)**
***Heliopates* n. sp. aff. *Heliopates agrestis* Mulsant & Rey, 1854**
Non *Tenebrio lusitanicus* Herbst, 1797: 7: 244, t. 3, f. 4.

***Opatrum lusitanicum* Thunberg, 1821b. Types 6308, 14558, 14559, 14560 (UUZM).**

Opatrum lusitanicum Thunberg, 1821 b belongs to genus *Heliopates* Dejean, 1834. This genus is taxonomically in poor state after several errors in recent papers (Español 1955 and Español y Viñolas, 1990) and need a revision.

This species is an unnamed, practically unknown species of *Heliopates*, specifically different from the syntypes of *Heliopates lusitanicus* (Herbst, 1797, MNHUB) (and from the types of all previously described taxa of this genus, examined under the present study). Both species are represented in series from diverse localities of Portugal, preserved in the coll. G. Frey (NMB), and shall be *re*described in the current revision of this genus. This unnamed species is much larger, but similar in shape to *Heliopates agrestis* Mulsant & Rey, 1854. I have examined four syntypes *Heliopates agrestis* from the collection Claude Rey (CCEC, Lyon) and several specimens from Museo Nacional de Ciencias Naturales (MNCN), Madrid and from the coll. Chevrolat, housed in the Museum of the University of Glasgow (HUMG).

***Heliopates lusitanicus* (Herbst, 1797) (Fig. 19, 20, 23, 24, 26)**
Tenebrio lusitanicus Herbst, 1797: 7: 244, t. 3, f. 4.
Tenebrio lusitanicus Herbst Schönherr, 1806: 153
Heliophilus lusitanicus (Herbst) Mulsant et Rey, 1854: 54
Heliopathes lusitanicus (Herbst) Gebien, 1910: 284
Heliopathes lusitanicus (Herbst) Gebien, 1938: 424
Not *Heliopathes franzi* Español 1955: 97
Not *Heliopathes franzi* Esp. Español y Viñolas, 1990: 44
Heliopates lusitanicus (Herbst) Löbl & Smetana, 2008: 280

Depository of type: *Tenebrio lusitanicus* Herbst, 1797: Historical Collection, Portugal, ex coll. Graf v. Hofmansegg, coll. Herbst. In Museum für Naturkunde der Hunboldt Universität zu Berlin, (MNHUB).

Heliopates lusitanicus Herbst. 10 syntypes: 4 males and 6 females: *lusitanicus N. Tenebrio lus*. Ht**Ten. Abbreviat*. Ol. *Ten. punctatus* Fab.? Lusit./45850 (MNHUB); Lisboa (HUMG).

Male, coll. Paykull/Mus. Payk. (NHRS); pareja, Lusit. Schönherr (NHRS); 4, Lusit. Rosenschöld (NHRS).

Portugal. Coll. Schramm (MNCN); Lisboa, coll. Pérez Arcas (MNCN); Peguerinis, Barras/ *Heliopathes perroudi* Muls. (MNCN); Coimbra, Strausser/*parcefoveatus* det. Schuster (2, NMB); Portugal, coll. Schraumm (MNCN); Portugal: Cruz Quebrada, 16.IX.1963, T. Branco leg. /CJF); Vila Real, 25.IV.1976, A. Zuzarte leg/*Heliopathes* sp. Español det (CJF).

Madrid: Abrigo de Somosierra (MNCN); Avila: Sierra de Gredos (MNCN); Granada: Sierra Nevada, coll. Kraatz/*montiv*. Samml. Adr. Schuster (NMB). Sines, Baixo Alentejo, 6.II-23.IV.1978, (4, CAS); idem: Portocorvo (2, CAS); Aljezur, Algarve, 27.II.1980 (1, CAS); Azenhas do Mar, Estremadura, 18.VI.1978 (6, CAS, 2, 2008/0612, 2008/0613 in MZB); Peniche, 25.IV.1982 (3, CAS).

The asterisc* in the original label of the historical specimen *Tenebrio lusitanicus*,* indicated that the specimen is the type of Herbst (Fig. 19) (Dr. Bernd Jaeger (MNHUB), comm. per. in litteris).

Schönherr (1806) cited *Heliophilus lusitanicus*, and in the own volume, legated to the Entomological Society of Stockholm, preserved in the Swedish Museum (NRMS), he wrote "v" (= vidit) before *Tenebrio lusitanicus* Herbst. Following this species is correctly determined in the collection Schönherr.

In the recent Catalogue of Tenebrionidae, Löbl & Smetana (2008), this species is erroneously treated as a senior synonymy of *Heliopates franzi* Español (1955) **syn. nov.**, which in fact is a new synonymy of *Tenebrio obsoletus* Marsham (1802).

Heliopates lusitanicus (Fig. 19, 20, 23, 24), is larger and proportionally shorter than *Heliopates franzi*, which is clearly separed from *H. lusitanicus*, by conspicuously smaller, elongate shape, elytra with humeral carina, corresponding to the 7th stria, and rugosely sculpted intervals, not unconspicuously sculpted tegument, except some feebly and sparcely disposed transversal rides, as in *H. lusitanicus*. Broadly dilated protarsi and different shape of aedeagus ulteriorly support specific difference (Fig. 20, 21, 22, 25).

Geographical distribution:
Reitter (1904) cited *H. lusitanicus* from Portugal. De La Fuente (1935) from Galicia, Asturias, Lérida, Castellón and Albacete. Español & Viñolas (1990), from North Portugal and from the provinces of Orense, Lugo, León, Zamora, Salamanca and Asturias. Although this geographical distribution is the results of previous mixtification of a conglomerate of taxa, only records of Portugal, Granada, Madrid, Avila are hitherto confirmed.

***Heliopates obsoletus* (Marsham 1802) stat. rest. (Fig. 20, 21, 22, 25, 27)**
Tenebrio obsoletus Marsham 1802: 475
= *Heliopathes franzi* Español, 1955: 97 **syn. nov.**
Heliopathes franzi Español y Viñolas, 1990: 44
NON *Heliopates obsoletus* (Marsham) Löbl & Smetana, 2008: 280

Depository of type: *Tenebrio obsoletus* Marsham, 1802, unknown.
Heliopathes franzi Español, 1955: Museo de Zoología de Barcelona (MZB).

Material examined: *Tenebrio obsoletus*/Hispania/9827/ex coll. Koltze (D.E.I). Portugal: *Heliophilus obsoletus*/Lusit. Rosens. (= Rosenschöld (NHRS); 15 syntypes: *Heliopathes franzi* Esp. Ung. Pena Trevinca, H. Franz leg. F. Español det. (1, CJF) (Fig. 18); idem/*Heliopates franzi* Españ. H. Franz det. (10 syntypes, NMB); idem, 4 synthypes (labeled as paratypes), D.E.I.

Orense: A. Kricheldorff (2, MNHUB); Portugal: Cruz Quebrada, 16.IX.1963, T. Branco leg. (CJF); Portugal: Setúbal, coll. Pérez Arcas/*H. lusitanicus* Herbst (MNCN); Lisboa/ *H. lusitanicus* Hbst. (MNCN).

The Insect collection of T. Marsham, was adquised by James Francis Stephen (1792-1852). The collection of Orthoptera, Neuroptera, Diptera and Lepidoptera, legated by Stephens was adquised by British Museum, but the fate of the Coleoptera re-

main unknown (Horn et al. 1991). I was unable to locate a presumptive type of *Tenebrio obsoletus* Marsham, in The Natural History Museum, 2003. The collector was unknown and the *Habitat* is replaced by : –. The original description can not be applied to *Heliopates lusitanicus* (Herbst) because Marsham (1802) wrote: "*elytris striatis obsoletus rugosis*". *H. lusitanicus* (Fig. 15), exhibits extremely fine striae, and lack tegumental rugosity, except some sparce, vestigial and irregular transverse elevations on some intervals. Obsolescent or vestigial rugosity is a character only found in *Heliopates franzi* Español (fig. 18), (after a current revision of all species of this genus, based in comparative examen of the types of 48 taxa belonging to *Heliopates*). This elytral rugosity, consisting in finely incised punctures and transversal micro ridges (fig. 20) is an unique character, not found in other species of this genus, except in *Heliopates franzi.*

Reitter (1904) and Gebien (1910) omitted *H. obsoletus* (Marsham, 1802), but Gebien (1938: 305) degraded this species to junior synonyme of *H. lusitanicus* (Herbst). However, all specimens determined by Hans Gebien as "*Heliopates lusitanicus*" (G. Frey collection, NMB, Reitter coll. in D.E.I and in the historical collection, MNHUB), in fact are without exception, *Heliopates franzi*. The proposed synonymy of Hans Gebien, concern *Tenebrio obsoletus* Marsham and *Heliopates franzi*, not *Tenebrio obsoletus* and *Tenebrio lusitanicus* Herbst, unknown by Hans Gebien (1938).

If the lost type of Marsham (probably lacking pertinent labels), have been examined by Hans Gebien, maybe have been considered as a pure synonyme of the species which Gebien (1938) attributed to *Tenebrio lusitanicus* Herbst. Several others specimens, labeled as "Heliopates lusitanicus" by Hans Gebien (*in litteris*), inducing in error all posterior authors and will be redescribed by Español (1955) under the name *H. franzi*. Several conspicuous differences (shape of aedeagus fig. 22, cf. 23 and protarsi fig. 24, cf. 25), support the separation of both taxa.

Wherever, another specimen preserved in Munchenberg, D.E.I., from "Hispania", labeled "*H. obsoletus* Marsh", belongs to *Heliopates franzi*. The specimen from Koltze (D.E.I) is identical to another male, preserved in the collection of the Swedish Museum of Natural History, determined "*H. obsoletus*", from Lusitania, ex coll. Rosenschöld (NRMS).

Marsham described *Tenebrio obsoletus* four years before the publication of Synonymia Insectorum by Schönherr (1806).

It is obvious that Schönherr known *Tenebrio lusitanicus* Herbst, because the precited specimens from the coll. Paykull (NRMS) are correctly determined. Moreower, Marsham was in touch with Schönherr and sent to him two reprints from the Transactions of the Linnean Society of London, Marsham, 1810 (preserved in the Library of the Entomological Society of Sweden, NRMS), concerning the discovery of an imago of *Buprestis splendens* F., emerging in january 1810 in a desk of wood sent to Joseph Banks, in London 1789(!).

To identify this remarcable insect, previously decribed by "Kina" by Fabricius, Marsham (1810), use *Fauna Suecica* Paykull (1801) and *Insecta Suecica* Gyllenhal (1808), and com to the conclusion that the specimen was identical to *Buprestis splendida* Paykull, inhabiting in Sweden. It is hard to believe that this identification was performed without exchange of material, (Interchanges of scientific material with the Royal post was free for Schönherr, which was a member of the Royal Academy).

Munk af Rosenschöld (1811-1868) was a swedish entomologist, collecting beetles and other insects in Portugal, specially in Lissabon in the year 1840 (Dal, 1996. p. 207). The *Heliopates* species from Portugal, collected by Rosenschöld and identified by Schönherr (in litteris) as *Tenebrio obsoletus*, (redescribed 1955 under the name *Heliopates franzi)* must have been determined with comparaison to the type of Marsham.

Otherwise, it is very hard to believe that two historical specimens from two different collections, have been correctly identified as "obsoletus" Marsham, without comparative examen of the type of this rare and controversed species. An extraordinary coincidence, determining taxa, in an extremely homogenous and difficcult genus, composed of 49 taxa (Löbl & Smetana, 2005). The proposed subjetive synonymy is reasonable and supported by a strong chaine of historical circunstances.

I consider unnecessary the designation of a neotype of *Tenebrio obsoletus*, because the type of T. Marsham probably exist, somewhere and because the taxonomy of both taxa, hitherto confused, is resolved in this paper.

GEOGRAPHICAL DISTRIBUTION:
Spain: province of Orense, Portugal.

***Gonocephalum granulatum pusillum* (Fabricius, 1791)**
Opatrum pusillum Fabricius1791: 91
***Opatrum viennense* Thunberg, 1821 b: 54 syn. nov.**
Gonocephalum granulatum pusillum (Fabricius1791) Ferrer, 1993
Opatrum viennense Duftschmid, 1812: 293
= *Gonocephalum granulatum pusillum* (Fabricius1791: 91) Ferrer, 1993 : 85, 86, 1995: 43
Non *Opatrum viennense* Küster, 1849, 19: 53.
= *Opatrum pygmaeum* Steven, 1829: 98
= *Gonocephalum pygmaeum* (Steven) Gebien, 1910: 325
= *Gonocephalum pygmaeum* (Steven) Gebien, 1939: 443
= *Gonocephalum pygmaeum* (Steven) Ferrer, 1993 : 70, 74, 1995: 1.

***Opatrum viennense* Thunberg, 1821. Types 6297-6298 (UUZM).**
The holotype of *Opatrum pusillum* Fabricius1791 (ZMUC) is in poor state, head and pronotum are lost. However, the peculiar sculpture of elytra is very characteristic, permitting to recognize the subspecies inhabitting the East European region (Ferrer, 1993).

Historical Epilogue

Some of the darkling Beetles described by C. P. Thunberg are identical to some south African species darkling beetles described previously by Fabricius (marked by an asterisk * in the text). The type specimens of Fabricius are preserved in the Banks Collection (CJB), housed at the Natural History Museum, London: *Cryptochile echinata* (Fabricius, 1781), *Stenocara serrata* (Fabricius, 1781), *Physosterna porcata* (Fabricius, 1787), *Psammodes lineata* (Fabricius, 1781), *Psammodes unicolor* (Fabricius, 1781), *Moluris gibba* (Fabricius, 1787), *Sepidium reticulatum* Fabricius, 1781 (=*Trachynotus reticulatus* (De Geer, 1775), *Trachynotus rugosus* (Fabricius, 1781), *Trachynotus vittatus* (Fabricius, 1787), *Zophosis testudinaria* (Fabricius, 1787) and *Lagria villosa* Fabricius, 1781.

Some species (marked with two asterisks **), are represented by types both in the collection of Joseph Banks and in the William Hunter collection (HUMG), at the University of Glasgow: The type of *Moluris gibba* (Fabricius, 1787), and *Trachynotus reticulatus* (De Geer, 1775), *Trachynotus rugosus* (Fabricius, 1781), *Trachynotus vittatus* (Fabricius, 1787), the type specimens have the historical labels *Sepidium reticulatum* Fabr., *Sepidium rugosum* Fabr,. and *Sepidium vittatum* Fabr., with numbers corresponding to the pages of the original descriptions.

All precited species of *Moluris* and *Trachynotus* are very rare, uncommun.

Entomological relationship and exchange of insects between Joseph Banks, Dru Drury and William Hunter, posteriorly described by Fabricius, have been previously documented (Ferrer et al. 2004, 2005). This paper present historical indices of an hitherto unknown possible personal communication from Carl Peter Thunberg to Joseph Banks, of a lot of Coleoptera Tenebrionidae, collected by the disciple of Linné in the Cape Province.

This communication of South African material probably was performed under the first expedition of the Fregate Endeavour, under leadership of Captain James Cook, returning to England, via the Cape of Good Hope in July, 1771 (Aughton, 1999).

Otherwise, it would be an extraordinary coincidence that three very rare and locate species of *Trachynotus* have been simultaneouly obtained at the same time, by three different collectors, Thunberg, Banks and Hunter.

During my studies of South African material, in the last 25 years, I have never seen a single specimen of the precited species of *Trachynotus*, among approximately 30.000 specimens of Tenebrionidae from Cape Province, examined, which involved several museums and private collections.

Another particularity is the deliberate redescription of several Fabricius species where Thunberg used the same specific name or in some cases changing the genus. The redescription of a nominal species, changing the name for anoter "most adequate", have been practised by De Geer (1775), renaming *Chrysomela hirta* (Linné, 1758) in *Tenebrio villosus*. Thunberg perhaps deliberately treated the names of species described by Fabricius as own, reivindicating the authorsip.

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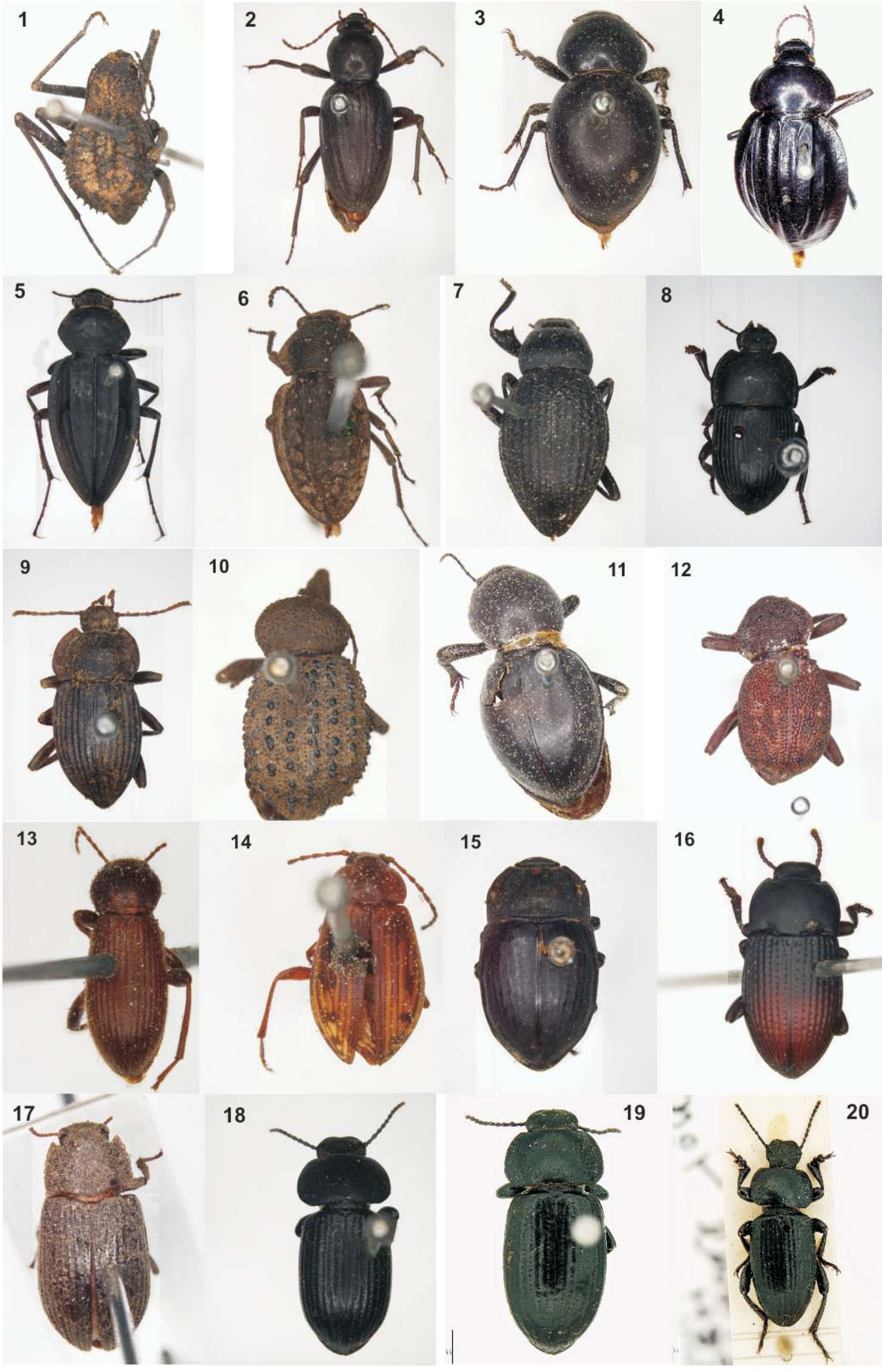
►

Fig. 1. *Stenocara serrata* (F.) (*Erodius glomeratus* Thunberg **syn. nov.)**
Fig. 2. *Brinckia oblonga* (Thunberg) **comb. nov.**
Fig. 3. *Phanerotomea notata* (Thunberg) **comb. nov.**
Fig. 4. *Somaticus* (*Tracheloeum*) *marginatum* (Thunberg,) **comb. nov.** = *Trachynotus laticollis laevis* (Fåhraeus) **syn. nov.**
Fig. 5. *Somaticus striatus* (Thunberg) **comb. nov.**
Fig. 6. *Trachynotus rugosus* (F.) = *Sepidium reticulatum* Thunberg
Fig. 7. *Psorodes scabridus* (Thunberg) **comb. nov.** = *Scaurus scabridus* Thunberg
Fig. 8. *Bantodemus crassipes* (Thunberg) **comb. nov.**
Fig. 9. *Zadenos* (*Euzadenos*) *exarata* (Thunberg) **comb. nov.**
Fig. 10. *Psorodes papillosa* (Thunberg) **comb. nov.** = *Pimelia papillosa* Thunberg
Fig. 11. *Phanerotomea* **sp. cf.** *Phanerotomea. laevigata* (Olivier)
Fig. 12. *Zophius rufopictus* (Wiedmann) = *Pimelia lacunosa* Thunberg **syn. nov.**
Fig. 13. *Cylindrothorax brunneus* (Thunberg) **comb. nov.** = *Lagria brunnea* Thnberg
Fig. 14. *Borboresthes flexuosus* (Thunberg) **comb. nov.** = *Lagria flexuosa* Thunberg
Fig. 15. *Alphasida* (*Glabrasida*) *costulata scabrosa* Allard = *Opatrum grossum* Thunberg **syn. nov.**
Fig. 16. *Blapstinus gemellatus* (Olivier) **comb. nov.** = *Opatrum perforatum* Thunberg **syn. nov.**
Fig. 17. *Bradymerus fuscipes* (Thunberg) **comb. nov.** = *Opatrum fuscipes* Thunberg
Fig. 18. (Undescribed *Heliopates* sp.) *Opatrum lusitanicus* Thunberg.
Fig. 19. *Heliopates lusitanicus* (Herbst) Type (MNHUB).
Fig. 20. *Heliopates obsoletus* (Marsham) = *H. franzi* Español, paratype (CJF).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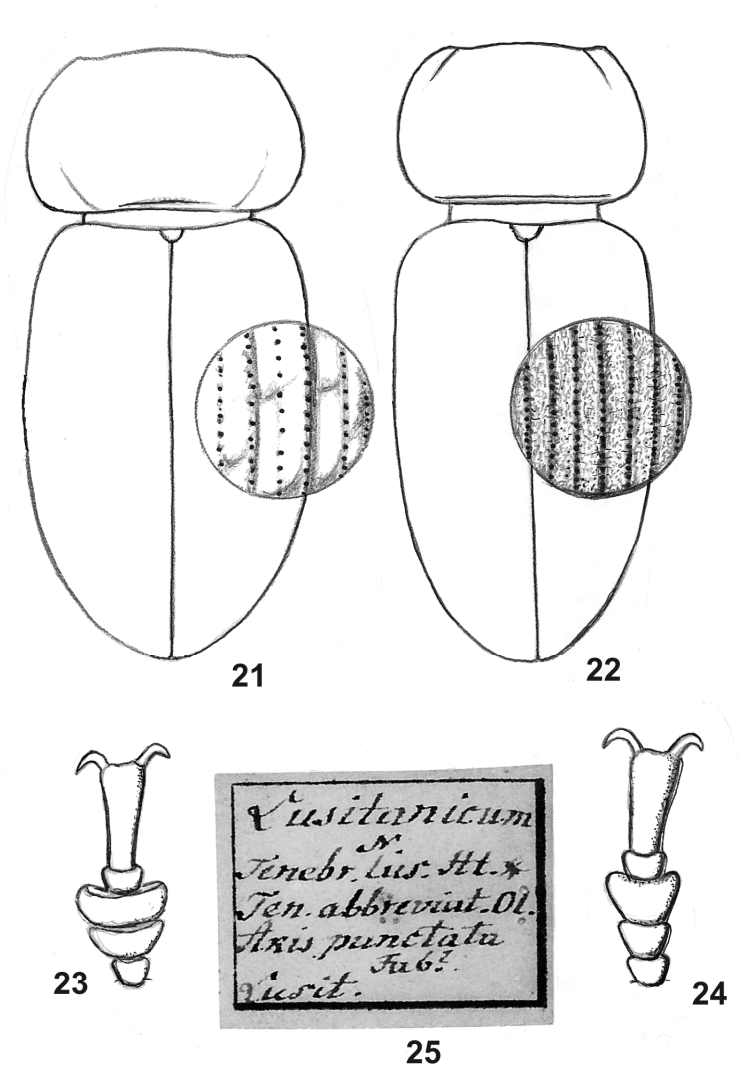

Fig. 21. Habitus and sculpture of *Heliopates lusitanicus* (Herbst)
Fig. 22. idem of *Heliopates obsoletus* (Marsham) = *H. franzi* Español, paratype
Fig. 23. Type label of *Tenebrio lusitanicus* Herbst.
Fig. 24. Protarsi of male of *Heliopates lusitanicus* Herbst.
Fig. 25. Protarsi of male *Heliopates obsoletus* Marsham,

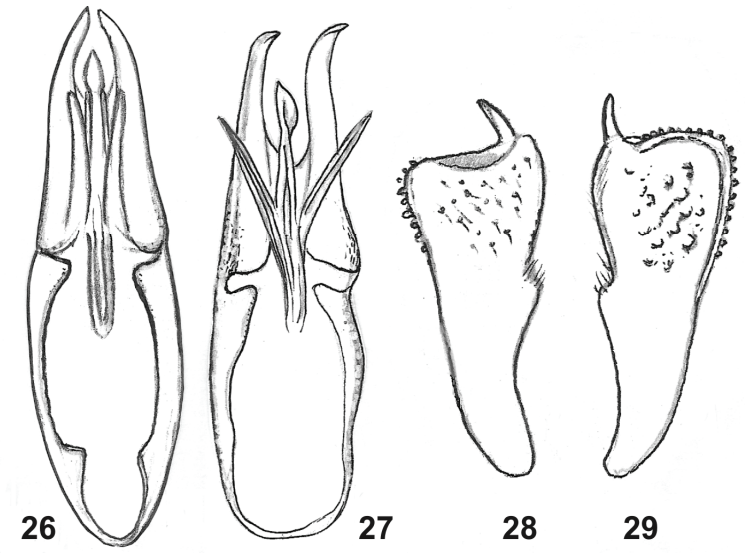

Fig. 26. Aedeagus of *Heliopates lusitanicus* (Herbst)
Fig. 27. idem of *Heliopates obsoletus* (Marsham) = *H. franzi* Español, paratype.
Fig. 28. *Bantodemus crassipes* (Thunberg) **comb. nov.** Dorsal view of the protibia of *Bantodemus crassipes* (Thunberg) **comb. nov.**
Fig. 29. ídem. Ventral view.

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