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## Checklist of the Aphodiini of Mexico, Central and South America (Coleoptera: Scarabaeidae: Aphodiinae)

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**Abstract.** This preliminary checklist of Aphodiini south of the United States is prepared to provide published data for a future web-based checklist of all New World Aphodiinae. All species names are used in combination with their currently accepted generic name, creating many new combinations. A few genus-species combinations are discussed. New synonymies based on recent studies of type specimens are made: *Aphodius azteca* Harold = *Aphodius multimaculosus* Hinton; *Aphodius ornatus* Schmidt = *Aphodius magnopunctatus* Hinton; *Aphodius caracaensis* Petrovitz = *Aphodius brasiliicola* Balthasar; *Aphodius guatemalensis* Bates = *Aphodius striatipennis* Petrovitz; *Aphodius kuntzeni* Schmidt = *Aphodius amplinotum* Gordon and Howden = *Aphodius michiliensis* Deloya; *Aphodius bimaculosus* Schmidt = *Aphodius xalapensis* Galante et al.; *Aphodius caracanus* Balthasar = *Aphodius martinsi* Petrovitz; *Aphodius volxemi* Harold = *Aphodius squamifer* Petrovitz.

## Introduction

Much research has been accomplished on New World Aphodiinae in recent years. Nomenclatorial changes have been proposed, new genera described, and progress made with the Eupariini (primarily by Z. T. Stebnicka in numerous papers), the Psammodiini (Gordon and Pittino 1992), and North American Aphodiini (Gordon and Skelley 2007). Other recent works include a review of Aphodiinae from southern South America (Smith and Skelley 2007), a review of *Liothorax* Motschulsky (M. Dellacasa et al. 2007c), a revision of *Cephalocyclus* M. Dellacasa et al. (M. Dellacasa et al. 2007a), and numerous other generic level works by M. Dellacasa, Gordon, and G. Dellacasa.

Giovanni Dellacasa et al. (2001) raised all subgenera of Aphodiini to genus level, but did not include a species list of new generic combinations or current placements for all species. Subsequently, many types have been studied, resulting in necessary changes in generic placement and previously unpublished synonymies.

One aspect of an NSF-PEET project headed by M. L. Jameson and B. C. Ratcliffe, University of Nebraska State Museum, is to produce a web-based checklist and key to genera for all New World scarabs with P. Skelley organizing the Aphodiinae section. This web-based work is not the place to propose new combinations or make nomenclatural changes. The checklist below has been prepared to

more accurately place Aphodiini of Mexico, Central and South America, and to clear up minor nomenclatorial problems.

This list is not meant to solve all presently known taxonomic concerns; it is not a full catalog and no new taxa are proposed. The primary purpose of this list is to update and validate generic combinations for species occurring in the region. Some taxa are questionably members of the New World fauna, or are tentatively placed within a genus. In the latter case, an “(s.l.)” [= *sensu lato*] is utilized to indicate the generic placement is questionable and under research.

## List of Aphodiini of Mexico, Central and South America

### Subtribe Aphodiina

#### *Acanthaphodius* Schmidt, 1909c

*Acanthaphodius bruchi* Schmidt, 1909c: 67, Argentina, Chile.

#### *Agoliinus* Schmidt, 1913

*Agoliinus cruentatus* (LeConte, 1878: 456) [*Aphodius*], Mexico, USA.

= *Aphodius snowi* Brown, 1929: 209.

*Agoliinus plutonicus* (Fall, 1907: 245) [*Aphodius*], Mexico (Sonora), USA.

#### *Agrilinus* Mulsant and Rey, 1870

*Agrilinus* (s.l.) *azteca* (Harold, 1863: 381) [*Aphodius*], Guatemala, Mexico.

= *Aphodius multimaculosus* Hinton, 1934a: 190, **new synonymy** (from type).

*Agrilinus* (s.l.) *chiapasensis* (Galante et al., 2003: 306) [*Aphodius*] El Salvador, Mexico, **new combination.**

*Agrilinus* (s.l.) *ornatus* (Schmidt, 1911b: 14) [*Aphodius*], Mexico, **new combination.**

= *Aphodius magnopunctatus* Hinton, 1934a: 191, **new synonymy** (from type).

#### *Aphodius* Illiger, 1798

*Aphodius fimetarius* (Linnaeus, 1758: 348) [*Scarabaeus*], Canada, Mexico, USA.

[See M. Dellacasa and G. Dellacasa (2006: 113) for a full synonymy.]

#### *Blackburneus* Schmidt, 1913

*Blackburneus argentinensis* (Schmidt, 1909e: 101) [*Aphodius*], Argentina, Uruguay, **new combination.**

*Blackburneus caracaensis* (Petrovitz, 1970: 228) [*Aphodius*], Argentina, Bolivia, Brazil, Venezuela, **new combination.**

= *Aphodius brasiliicola* Balthasar, 1971: 60, **new synonymy** (from type).

*Blackburneus charmionus* (Bates, 1887: 89) [*Aphodius*], Costa Rica, El Salvador, Mexico.

*Blackburneus diminutus* (Bates, 1887: 89) [*Aphodius*], El Salvador, Guatemala.

*Blackburneus erythrinus* (Bates, 1887: 89) [*Aphodius*], Panama.

*Blackburneus furcatus* (Schmidt, 1909a: 10) [*Aphodius*], Brazil.

*Blackburneus guatemalensis* (Bates, 1887: 88) [*Aphodius*], Mexico to Panama.

= *Aphodius striatipennis* Petrovitz, 1962: 111, **new synonymy** (from type).

*Blackburneus indio* (Petrovitz, 1973: 143) [*Aphodius*], Bolivia?, Brazil, **new combination.**

*Blackburneus laxepunctatus* (Schmidt, 1910: 356) [*Aphodius*], Argentina, Brazil, French Guyana, Paraguay, Peru, Suriname, Venezuela, **new combination.**

*Blackburneus richteri* (Schmidt, 1911a: 21) [*Aphodius*], Argentina, Bolivia, **new combination.**

*Blackburneus* (s.l.) *rubeolus* (Palisot de Beauvois, 1805: 90) [*Scarabaeus*], Canada, Mexico, USA.

= *Aphodius copronomys* Melsheimer, 1844: 136.

*Blackburneus saylorea* (Robinson, 1940: 147) [*Aphodius*], Mexico?, USA.

*Blackburneus* (s.l.) *saylori* (Hinton, 1934a: 192) [*Aphodius*], Mexico, **new combination.**

*Blackburneus xanthus* (Bates, 1887: 90) [*Aphodius*], Panama.

**Calamosternus** Motschulsky, 1859

- Calamosternus colimaensis* (Hinton, 1934b: 200) [*Aphodius*], Mexico.  
= *Aphodius nubilus* Hinton, 1934a: 188 (not *Aphodius nubilus* Panzer, 1798).  
*Calamosternus granarius* (Linnaeus, 1767: 547) [*Scarabaeus*], cosmopolitan.  
[See M. Dellacasa and G. Dellacasa (2006: 116) for a full synonymy.]

**Cephalocyclus** M. Dellacasa, Gordon and G. Dellacasa, 1998

- Cephalocyclus bordati* M. Dellacasa, G. Dellacasa and Gordon, 2007a: 94, Mexico.  
*Cephalocyclus carmenae* M. Dellacasa, G. Dellacasa and Gordon, 2007a: 95, Mexico.  
*Cephalocyclus cartagoensis* M. Dellacasa, G. Dellacasa and Gordon, 2007a: 95, Costa Rica.  
*Cephalocyclus costaricensis* M. Dellacasa, G. Dellacasa and Gordon, 2007a: 97, Costa Rica.  
*Cephalocyclus durangoensis* (Bates, 1887: 91) [*Aphodius*], Mexico.  
= *Aphodius pugil* Balthasar, 1946: 55.  
*Cephalocyclus fuliginosus* (Harold, 1863: 330) [*Aphodius*], Guatemala, Mexico.  
*Cephalocyclus gravidus* (Harold, 1863: 330) [*Aphodius*], Mexico.  
*Cephalocyclus halffteri* M. Dellacasa, G. Dellacasa and Gordon, 2007a: 105, Mexico.  
*Cephalocyclus hogeii* (Bates, 1887: 90) [*Aphodius*], Guatemala, Mexico, USA?  
= *Aphodius transversus* Robinson, 1940: 145.  
*Cephalocyclus howdenorum* M. Dellacasa, G. Dellacasa and Gordon, 2007a: 109, Mexico.  
*Cephalocyclus lagoi* M. Dellacasa, G. Dellacasa and Gordon, 2007a: 110, Mexico.  
*Cephalocyclus luridiventris* (Harold, 1862: 385) [*Aphodius*], Mexico.  
*Cephalocyclus mexicanus* (Harold, 1862: 380) [*Aphodius*], Guatemala, Mexico.  
= *Aphodius omiltemius* Bates, 1889: 392.  
*Cephalocyclus ordonezi* M. Dellacasa, G. Dellacasa and Gordon, 2007a: 116, Mexico.  
*Cephalocyclus potosinus* M. Dellacasa, G. Dellacasa and Gordon, 2007a: 117, Mexico.  
*Cephalocyclus pullatus* (Schmidt, 1913: 123) [*Aphodius*], Mexico.  
*Cephalocyclus puncticeps* (Harold, 1862: 380) [*Aphodius*], Mexico.  
*Cephalocyclus rockefelleri* M. Dellacasa, G. Dellacasa and Gordon, 2007a: 119, Mexico.  
*Cephalocyclus stebnickae* Deloya and Ibáñez-Bernal, 2000: 320, Mexico.  
*Cephalocyclus villosipes* (Harold, 1862: 384) [*Aphodius*], Mexico.

**Cinacanthus** Schmidt, 1913

- Cinacanthus crenicollis* (Fall, 1932: 189) [*Aphodius*], [Mexico?], USA.  
= *Aphodius spermophili* Gordon, 1973: 436.  
*Cinacanthus militaris* (LeConte, 1858: 65) [*Aphodius*], Mexico, USA.

**Coelotrachelus** Schmidt, 1913

- Coelotrachelus burgosi* (Deloya and McCarty, 1992: 2) [*Aphodius*], Mexico, **new combination**.  
*Coelotrachelus kuntzeni* (Schmidt, 1913: 140) [*Aphodius*], Mexico.  
= *Aphodius amplinotum* Gordon and Howden, 1973: 436, **new synonymy** (from type).  
= *Aphodius michiliensis* Deloya, 1991: 200, **new synonymy** (from type).  
*Coelotrachelus rudis* (LeConte, 1878: 458) [*Aphodius*], Mexico, USA.  
= *Aphodius fenyesei* Van Dyke, 1947: 159.  
*Coelotrachelus symbius* (Gordon and Howden, 1973: 438) [*Aphodius*], Mexico, **new combination**.  
*Coelotrachelus venustus* (Schmidt, 1911a: 28) [*Aphodius*], Mexico, **new combination**.

**Cryptoscatomaseter** Gordon and Skelley, 2007

- Cryptoscatomaseter durangoi* (Gordon and Howden, 1973: 440) [*Aphodius*], Mexico, **new combination**.  
*Cryptoscatomaseter epulus* (Gordon and Howden, 1973: 440) [*Aphodius*], Mexico, **new combination**.

**Dellacasiellus** Gordon and Skelley, 2007

- Dellacasiellus claudus* (Fall, 1932: 188) [*Aphodius*], Mexico, USA.

*Dellacasiellus concavus* (Say, 1823: 214) [*Aphodius*], Mexico, USA.

= *Aphodius cressoni* Robinson, 1946: 51.

*Dellacasiellus fucosus* (Schmidt, 1916: 97) [*Aphodius*], Mexico, USA.

= *Aphodius rubidus* LeConte, 1857: 41 (not *Aphodius rubidus* Olivier, 1789).

*Dellacasiellus kirni* (Cartwright, 1944: 131) [*Aphodius*], Mexico, USA.

*Dellacasiellus pseudofucosus* Gordon and Skelley, 2007: 497, Mexico, USA.

*Dellacasiellus ruficlarus* (Fall, 1932: 189) [*Aphodius*], Mexico, USA.

= *Aphodius subcarinatus* Robinson, 1946: 50.

### **Diapterna** Horn, 1887

*Diapterna dugesi* (Bates, 1887: 83) [*Aphodius*], Mexico.

### **Drepanocanthoides** Schmidt, 1913

*Drepanocanthoides (s.l.) larreae* (Horn, 1887: 41) [*Aphodius*] Mexico, USA.

= *Aphodius bifrons* Bates, 1887: 90.

### **Ferrerianus** M. Dellacasa, G. Dellacasa, and Gordon 2007b

*Ferrerianus biimpressus* (Schmidt, 1909d: 177) [*Aphodius*], Paraguay.

### **Flaviellus** Gordon and Skelley, 2007

*Flaviellus perfimbriatus* (Gordon, 1977b: 278) [*Aphodius*], Mexico, USA.

*Flaviellus (s.l.) subtruncatus* (LeConte, 1878: 457) [*Aphodius*], [Mexico?], USA.

= *Aphodius rehni* Robinson, 1938: 109.

### **Geomyphilus** Gordon and Skelley, 2007

*Geomyphilus (s.l.) barrerai* (Islas, 1956: 493) [*Aphodius*], Mexico, **new combination.**

*Geomyphilus (s.l.) coronadoi* (Islas, 1956: 495) [*Aphodius*], Mexico, **new combination.**

*Geomyphilus (s.l.) macgregori* (Islas, 1955: 223) [*Aphodius*], Mexico, **new combination.**

*Geomyphilus (s.l.) pierai* (Lobo and Deloya, 1996: 44) [*Aphodius*], Mexico, **new combination.**

### **Gonaphodiellus** Schmidt, 1913

*Gonaphodiellus (s.l.) acutecernans* (Balthasar, 1960b: 57) [*Aphodius*], Bolivia, **new combination.**

*Gonaphodiellus (s.l.) ataenioides* (Hinton, 1938: 123) [*Aphodius*], Panama, **new combination.**

*Gonaphodiellus bimaculosus* (Schmidt, 1909b: 19) [*Aphodius*], Mexico, **new combination.**

= *Aphodius xalapensis* Galante et al., 2003: 304, **new synonymy** (from description).

*Gonaphodiellus (s.l.) caracanus* (Balthasar, 1970: 250) [*Aphodius*], Brazil, **new combination.**

= *Aphodius martinsi* Petrovitz, 1970: 227, **new synonymy** (from type).

*Gonaphodiellus (s.l.) castanescens* (Petrovitz, 1973: 145) [*Aphodius*], Brazil, Peru, **new combination.**

*Gonaphodiellus (s.l.) chapini* (Hinton, 1934a: 189) [*Aphodius*], Panama, **new combination.**

*Gonaphodiellus (s.l.) columbicus* (Harold, 1880: 36) [*Aphodius*], Colombia, Panama, Venezuela, **new combination.**

*Gonaphodiellus ecuadoriensis* (Petrovitz, 1961b: 444) [*Aphodius*], Ecuador.

*Gonaphodiellus (s.l.) forsterianus* (Balthasar, 1960a: 2) [*Aphodius*], Bolivia, Costa Rica, **new combination.**

*Gonaphodiellus hoffmanni* (Islas, 1946: 451) [*Aphodius*], Mexico, **new combination.**

*Gonaphodiellus nigrinus* (Schmidt, 1916: 115) [*Aphodius*], Peru, **new combination, new status.**  
[Described as variety of *A. pacatus* Harold, 1880.]

*Gonaphodiellus opisthius* (Bates, 1887: 92) [*Aphodius*], Costa Rica?, Guatemala, Mexico.

*Gonaphodiellus pacatus* (Harold, 1880: 37) [*Aphodius*], Colombia, Panama.

*Gonaphodiellus sexguttatus* (Schmidt, 1916: 114) [*Aphodius*], Colombia, Costa Rica, **new combination.**

*Gonaphodiellus (s.l.) sincerus* (Petrovitz, 1973: 142) [*Aphodius*], Brazil, **new combination.**

*Gonaphodiellus (s.l.) volxemi* (Harold, 1876: 93) [*Aphodius*], Brazil, **new combination.**

= *Aphodius squamifer* Petrovitz, 1970: 225, **new synonymy** (from type).

**Haroldiellus** Gordon and Skelley, 2007

*Haroldiellus lansbergei* (Harold, 1874: 179) [*Aphodius*], Mexico.

*Haroldiellus sallei* (Harold, 1863: 336) [*Aphodius*], Caribbean, Central America to USA, West Indies.

= *Aphodius freyi* Balthasar, 1941b: 164.

**Imelda** M. Dellacasa, Gordon and G. Dellacasa, 2002

*Imelda constricticollis* (Bates, 1889: 392), [*Aphodius*], Mexico.

**Jalisco** M. Dellacasa, Gordon and G. Dellacasa, 2004b

*Jalisco plumipes* M. Dellacasa, Gordon and G. Dellacasa, 2004b: 70, Mexico.

**Labarrus** Mulsant and Rey, 1870

*Labarrus lividus* (Olivier, 1789: 86) [*Scarabaeus*], [Mexico?], Panama, USA, nearly cosmopolitan.

[See M. Dellacasa and G. Dellacasa (2006: 124) for a full synonymy.]

*Labarrus parnaguaensis* (Petrovitz, 1961a: 108) [*Aphodius*], Argentina, Brazil, Paraguay, **new combination**.

*Labarrus pseudolividus* (Balthasar, 1941a: 148) [*Aphodius*], widespread in New World.

**Liothorax** Motschulsky, 1859

*Liothorax alternatus* (Horn, 1870: 129) [*Aphodius*] Canada, [Mexico?], USA.

= *Aphodius inermis* Robinson, 1940: 147.

= *Aphodius moclipsi* Hatch, 1971: 457.

*Liothorax innexus* (Say, 1835: 177) [*Aphodius*], Mexico.

= *Aphodius flavocinctus* Harold, 1860: 614.

*Liothorax levatus* (Schmidt, 1907b: 568) [*Aphodius*], Mexico.

= *Aphodius nigroclavus* Hinton, 1934a: 188.

**Melinopterus** Mulsant, 1842

*Melinopterus (s.l.) consentaneus* (LeConte, 1850: 225) [*Aphodius*], Canada, [Mexico?], USA.

*Melinopterus prodromus* (Brahm, 1790: 3) [*Scarabaeus*], Palearctic, introduced Guatemala and USA.

[See M. Dellacasa and G. Dellacasa (2006: 127) for a full synonymy.]

**Mendidius** Harold, 1868

*Mendidius (s.l.) aculeatus* (Robinson, 1940: 143) [*Aphodius*], Mexico, USA.

**Neodiapterna** G. Dellacasa, 1986

*Neodiapterna erichsoni* (Harold, 1861: 104) [*Aphodius*], Argentina, Brazil, Paraguay.

*Neodiapterna tognoni* (G. Dellacasa and M. Dellacasa, 1997: 1) [*Aphodius*], Bolivia, **new combination**.

**Neotrichonotulus** M. Dellacasa, Gordon and G. Dellacasa, 2004a

*Neotrichonotulus inurbanus* (Gordon and Howden, 1973: 442) [*Aphodius*], Mexico, USA.

*Neotrichonotulus perotensis* (Deloya and Lobo, 1996: 50) [*Aphodius*], Mexico.

*Neotrichonotulus urangai* (Islas, 1955: 225) [*Aphodius*], Mexico.

**Nialaphodius** Kolbe, 1908

*Nialaphodius nigrita* (Fabricius, 1801: 73) [*Aphodius*], worldwide in tropics and subtropics.

[See M. Dellacasa and G. Dellacasa (2006: 130) for a full synonymy.]

**Orodealisoides** Schmidt, 1913

*Orodealisoides reflexus* (Schmidt, 1910: 357) [*Aphodius*], Argentina.

*Orodealisoides rugosiceps* (Harold, 1859: 213) [*Aphodius*], Chile, Peru.

**Oscarinus** Gordon and Skelley, 2007

- Oscarinus bottimeri* (Cartwright, 1957: 56) [*Aphodius*], Mexico (Nuevo Leon), USA.  
*Oscarinus crassuloides* (Fall, 1907: 243) [*Aphodius*], Mexico, USA.  
*Oscarinus indutilis* (Harold, 1874: 178) [*Aphodius*], Guatemala, Mexico, **new combination**.  
*Oscarinus spiniclypeus* (Hinton, 1934a: 190) [*Aphodius*], Mexico.

**Otophorus** Mulsant, 1842

- Otophorus haemorrhoidalis* (Linnaeus, 1758: 348) [*Scarabaeus*], Palearctic, Nearctic (introduced).  
 [See M. Dellacasa and G. Dellacasa (2006: 132) for a full synonymy.]

**Oxyomus** Dejean, 1833

- Oxyomus setosopunctatus* Schmidt, 1911b: 15, Mexico.

**Paranimbus** Schmidt, 1913

- Paranimbus longitarsis* (Harold, 1860: 615) [*Aphodius*], Bolivia, **new combination**.  
*Paranimbus penai* (Petrovitz, 1970: 229) [*Aphodius*], Ecuador, **new combination**.  
*Paranimbus peruanus* (Erichson, 1834: 237) [*Aphodius*], Bolivia, Peru.  
*Paranimbus zoiai* (G. Dellacasa, 1990: 426) [*Aphodius*], Argentina, Chile, **new combination**.

**Pardalosus** Gordon and Skelley, 2007

- Pardalosus pardalis* (LeConte, 1857: 41) [*Aphodius*], Canada, [Mexico?], USA.  
*Pardalosus pseudopardalis* Gordon and Skelley, 2007: 380, Mexico, USA.  
*Pardalosus (s.l.) pumilio* (Schmidt, 1907a: 201) [*Aphodius*], Mexico, USA.  
 = *Aphodius pumilus* Horn, 1887: 50 (not *Aphodius pumilus* Quedenfeldt, 1884).  
*Pardalosus (s.l.) serval* (Say, 1835: 177) [*Aphodius*], [Mexico?], USA.  
 = *Aphodius steinheili* Harold, 1869: 100.  
 = *Aphodius serval pennsylvanicus* Robinson, 1940: 141.

**Pharaphodius** Reitter, 1892

- Pharaphodius (s.l.) oleosus* (Harold, 1871: 260) [*Aphodius*], Mexico.

**Planolinellus** M. Dellacasa and G. Dellacasa, 2005

- Planolinellus vittatus* (Say, 1825: 191) [*Aphodius*], Canada, Mexico, Old World, USA.  
 [See M. Dellacasa and G. Dellacasa (2006: 136) for a full synonymy.]

**Planolinoidea** M. Dellacasa and G. Dellacasa, 2005

- Planolinoidea duplex* (LeConte, 1878: 454) [*Aphodius*], Canada, [Mexico?], USA.  
*Planolinoidea neotomae* (Fall, 1907: 243) [*Aphodius*], Mexico, USA.

**Planolinus** Mulsant and Rey, 1870

- Planolinus tenellus* (Say, 1823: 213) [*Aphodius*] Canada, [Mexico?], USA.

**Pleuraphodius** Schmidt, 1913

- Pleuraphodius vespuccii* (Petrovitz, 1972: 162) [*Aphodius*], Brazil, **new combination**.

**Podotenus** Schmidt, 1913

- Podotenus gracilipes* (Harold, 1867: 279) [*Aphodius*], Chile, Western Australia.

**Pseudagolius** Schmidt, 1913

- Pseudagolius (s.l.) bicolor* (Say, 1823: 212) [*Aphodius*], [Mexico?], USA.  
 = *Aphodius comanchi* Robinson, 1940: 146.  
*Pseudagolius caballeroi* (Islas, 1946: 453) [*Aphodius*], Mexico, **new combination**.  
*Pseudagolius coloradensis* (Horn, 1870: 130) [*Aphodius*], Canada, Mexico, USA.  
 = *Aphodius flohri* Bates, 1887: 86.



*Pseudagolius warneri* Gordon and Skelley, 2007: 315, Mexico, USA.

***Pseudogonaphodiellus*** M. Dellacasa, Gordon and G. Dellacasa, 2007d

*Pseudogonaphodiellus zdzislawae* M. Dellacasa, Gordon and G. Dellacasa, 2007d: 140, Mexico.

***Pseudopodotenus*** G. Dellacasa, 1992

*Pseudopodotenus fulviventris* (Fairmaire and Germain, 1860: 268) [*Aphodius*], Chile.

***Rugaphodius*** Gordon and Skelley, 2007

*Rugaphodius rugatus* (Schmidt, 1907a: 202) [*Aphodius*], Mexico, USA.

= *Aphodius rugifrons* Horn 1871: 295 (not *Aphodius rugifrons* Aubé, 1850).

***Schaefferellus*** Gordon and Skelley, 2007

*Schaefferellus arizonensis* (Schaeffer, 1907: 61) [*Aphodius*], Mexico, USA.

***Stenotothorax*** Schmidt, 1913

*Stenotothorax sparsus* (LeConte, 1878: 458) [*Aphodius*], Mexico, USA.

= *Aphodius blaisdelli* Fall, 1905: 129.

= *Aphodius sparsus sheldoni* Barrett, 1932: 172.

***Symphodon*** Schmidt, 1913

*Symphodon anomalum* (Harold, 1874: 185) [*Aphodius*], Chile.

***Tetraclipeoides*** Schmidt, 1913

*Tetraclipeoides (s.l.) aemulus* (Horn, 1887: 38) [*Aphodius*], Mexico, USA.

= *Aphodius fortuneus* Fall, 1932: 187.

*Tetraclipeoides dentiger* (LeConte, 1858: 65) [*Aphodius*], Mexico, USA.

*Tetraclipeoides (s.l.) giulianii* (Gordon, 1977a: 232) [*Aphodius*], Mexico, USA.

*Tetraclipeoides (s.l.) quadridentatus* Harold, 1861: 107 [*Aphodius*], Cuba, **new combination.**

***Trichaphodiellus*** Schmidt, 1913

*Trichaphodiellus brasiliensis* (Laporte, 1840: 85) [*Aphodius*], Bolivia, Brazil, Colombia, Ecuador, [Mexico?], Peru, Venezuela.

= *Aphodius excellens* Endrödi, 1964: 187.

***Trichaphodius*** Schmidt, 1913

*Trichaphodius quadripartitus* (Petrovitz, 1973: 146) [*Aphodius*], Brazil, **new combination.**

***Trichonotuloides*** Balthasar, 1945

*Trichonotuloides glyptus* (Bates, 1887: 86) [*Aphodius*], Mexico.

*Trichonotuloides latecrenatus* (Bates, 1887: 86) [*Aphodius*], Guatemala.

= *Aphodius fossulatipennis* Balthasar, 1945: 44.

***Xenoheptaulacus*** Hinton, 1934c

*Xenoheptaulacus tricostatus* (Harold, 1869: 101) [*Oxyomus*], Colombia, Panama, Venezuela.

= *Xenoheptaulacus carinator* Hinton, 1934c: 614.

***Xeropsamobeus*** Saylor, 1937

*Xeropsamobeus (s.l.) asellus* (Schmidt, 1907a: 210) [*Aphodius*], Mexico (Durango), USA.

= *Aphodius nanus* Horn, 1887: 55 (not *Aphodius nanus* Fairmaire, 1860).

*Xeropsamobeus desertus* (Van Dyke, 1918: 10) [*Psammodyus*], Mexico, USA.

*Xeropsamobeus (s.l.) scabriceps* (LeConte, 1878: 457) [*Aphodius*], Mexico, USA.

### Subtribe Didactyliina

#### *Aidophus* Balthasar, 1963

*Aidophus cabrali* (Petrovitz, 1973: 148) [*Didactylia*], Brazil.

*Aidophus coheni* Stebnicka and Skelley, 2005: 40, Ecuador.

*Aidophus flaveolus* (Harold, 1867: 280) [*Aphodius*], Argentina, Chile, Mexico?

*Aidophus flechtmani* Stebnicka and M. Dellacasa, 2001: 202 (in M. Dellacasa et al., 2001), Brazil.

*Aidophus impressus* (Petrovitz, 1970: 230) [*Didactylia*], Brazil.

*Aidophus infuscatopennis* (Schmidt, 1909a: 12) [*Aphodius*], Argentina, Bolivia, Brazil, Peru, Paraguay, Uruguay.

= *Aphodius* (*Aidophus*) *paraguayanus* Balthasar, 1963: 279.

*Aidophus kolbei* (Schmidt, 1911a: 36) [*Didactylia*], Bolivia, Uruguay.

*Aidophus notatus* (Harold, 1859: 211) [*Aphodius*], Colombia, Guyana, Mexico, Panama, Venezuela, USA?

*Aidophus panamensis* (Harold, 1859: 212) [*Aphodius*], Panama, Venezuela?

*Aidophus pellax* (Balthasar, 1960a: 1) [*Aphodius*], Bolivia.

### Subtribe Proctophanina

#### *Australaphodius* Balthasar, 1942

*Australaphodius frenchi* (Blackburn, 1892: 35) [*Aphodius*], Australia, Chile, Mexico, New Zealand, South Africa, USA.

= *Aphodius ambiguus* Boheman, 1858: 51 (not *Aphodius bimaculatus* “var” *ambiguus* Mulsant, 1842).

= *Aphodius brevitarsis* Peringuey, 1901: 388 (not *Aphodius brevitarsis* Reitter, 1894).

= *Aphodius tarsalis* Schmidt, 1907a: 201.

= *Aphodius* (*Australaphodius*) *melbournicus* Balthasar, 1942: 203.

### Discussion

*Aphodius barrerai*, *Aphodius coronadoi*, and *Aphodius pierai* (all from Mexico) were placed in *Platyderides* Schmidt by various authors. *Platyderides* is an Old World genus with no New World members (G. Dellacasa and Gordon 1988, Gordon and Skelley 2007). Thus, all New World taxa previously assigned to ‘*Platyderides*’ need to be placed in some other genus to conform to current concepts. At present, these species (plus *Aphodius mcgregori*) seem most similar to members of *Geomyphilus*, and are tentatively placed in the genus pending further study.

*Aphodius vespucii* (from Brazil) was most recently placed in the subgenus *Pleuraphodius* in the catalog of M. Dellacasa (1988). *Pleuraphodius* is now considered to be restricted to the Old World (G. Dellacasa et al. 2001). However, the name appears to be based on a mislabeled specimen and should probably be removed from the list of New World taxa.

*Aphodius quadridentatus* (from Cuba), has been placed in the subgenus *Tetraclipeoides* only because it has four clypeal teeth. This character is known to be variable across and within genera, and the concept of *Tetraclipeoides* is now narrowly restricted (Gordon and Skelley 2007). *Aphodius quadridentatus* is tentatively retained in *Tetraclipeoides* pending study of the type.

*Aphodius quadripartitus* (from Brazil) was most recently placed in the subgenus *Trichaphodius* in the catalog of M. Dellacasa (1988). *Trichaphodius* appears to be restricted to the Old World (G. Dellacasa et al. 2001). However, the species name may be based on a mislabeled specimen and is tentatively retained in *Trichaphodius* pending study of the type.

Mexican records for the North American taxa *Flaviellus subtruncatus*, *Liothorax alternatus*, *Melinopterus consentaneus*, *Pardalonus pardalis*, *Pardalonus serval*, *Planolinoides duplex*, *Planolinus tenellus*, and *Pseudagolius bicolor* are all questionable. These records may be based on misidentifications, mislabeling, or an old concept of the species. See Gordon and Skelley (2007) for discussion of their distributions. *Trichaphodiellus brasiliensis* is primarily a South American species, making the Mexican record for this species questionable.

*Labarrus lividus* has been found around the world, and is reported from many countries in the New World. However, recent study reveals the vast majority of New World specimens to be *L. pseudolividus*, and some *L. parnaguaensis*. Presently, there are a few confirmed collections of *L. lividus* in the New World from the United States and Panama. See Petrovitz (1961a), M. Dellacasa et al. (2002), and Gordon and Skelley (2007) for discussion of this genus and keys to species.

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