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Beetles (Coleoptera) of Peru: A Survey of the Families. Scarabaeoidea

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Beetles (Coleoptera) of Peru: A Survey of the Families. Scarabaeoidea

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abstract: The 1042 species of Scarabaeoidea known to occur in Peru are listed with their taxonomic placement in families, subfamilies, and tribes.

Peru is known for high species richness, endemism, and habitat complexity, but despite this interest in Peruvian biodiversity, little is known about the beetle fauna of the country (Larsen *et al.*, 2011). The following checklist reflects our most current knowledge about the composition of the superfamily Scarabaeoidea in Peru. Compared with the neighboring country of Chile in which 247 species and 66 genera of scarabaeoid beetles are recorded (Elgueta, 2000), we record 1045 species of Peruvian scarabaeoid beetles, but we know the number will increase with additional exploration and discovery.

This checklist was assembled by compiling data from print and online catalogs, the primary literature that describes new species or reviews genera, some research collections, and personal communications from some entomologists who have personally conducted research in Peru. Clearly, there are other species of scarabaeoids that are not yet recorded from Peru because their data have never been included in the literature. Conversely, there may be a few species recorded from Peru in the older catalogs that do not actually occur in Peru because they were incorrectly identified. Moreover, disparate levels of knowledge exist between scarab groups because some have undergone considerable study while others have not.

In the lists below, an asterisk (*) indicates a species that is known only from Peru. Based upon our data, there are large numbers of scarabs endemic to Peru. This suggests that the scarab beetle fauna of Peru is amazingly rich, and that further exploration and discovery will reveal many more species. Scarab beetles are an important component of Peruvian biodiversity because they are important pollinators of plants, decomposers of waste, economically important pests, and some are valuable culturally for adornment or as a food source. Knowledge about

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Peruvian biodiversity is pivotal for conserving and managing natural resources, food security, poverty reduction, health, biosecurity, new industrial product development, and ecotourism (Smith *et al*., 2011).

Geotrupidae

Diversity in Peru: 1 subfamily, 4 genera, and 11 species.

Recognition: The body shape is oval or round, and the head is not deflexed. The antennae are 11-segmented with a 3-segmented, opposable club with all antennomeres tomentose. The eyes are completely or partially divided by a canthus. The clypeus is often with a tubercle or horn. The labrum is truncate, prominent, and produced beyond the apex of the clypeus. The mandibles are prominent and produced beyond the apex of the labrum. The pronotum is convex with a base wider than or subequal to the elytral base and with or without tubercles, ridges, horns, or sulci. The elytra are convex, with or without striae. The pygidium is concealed by the elytra (Jameson, 2002a).

Habitat: Life histories of the geotrupids are diverse, and food habits vary from saprophagous to coprophagous and mycetophagous. Adults of most species are secretive, living most of their life in burrows. Although adults do not tend larvae, adults provision food for larvae in brood burrows. Adults dig vertical burrows (15–200 cm in depth) and provision larval cells with dead leaves, cow dung, horse dung, or humus. Burrows of some species extend to a depth of 3.0 m (Jameson, 2002a).

Notes: The family Geotrupidae includes 68 genera and about 620 species (Scholtz and Browne, 1996). The subfamily Geotrupinae does not occur in South America. The following checklist of Peruvian Scarabaeidae is from Howden (1985, 2002) and Howden and Martínez (1978).

BOLBOCERATINAE

Athyreini

Athyreus bicornus Howden, 2002*
Athyreus larseni Howden, 2002*
Athyreus martinezi Howden, 1995
Athyreus pyriformis Howden and Martínez, 1978*
Athyreus tribuliformis Felsche, 1909*
Neoathyreus fallolobus Howden, 2006
Neoathyreus ornatus Howden, 1985*
Neoathyreus rufobrunneus Howden, 1985
Neoathyreus rufoventris Howden, 1985*

Bolboceratini

Bolboceras baeri Boucomont, 1902
Zefevazia peruana (Boucomont, 1902)*

Lucanidae

Diversity in Peru: 1 subfamily, 14 genera, 40 species.

Recognition: The head is prognathous and not deflexed. The antennae are geniculate or straight, 10-segmented, and with a 3–7 segmented club (all antennomeres unopposable and tomentose). The first antennomere is often subequal in length to the remaining antennomeres.

Habitat: Lucanids are usually associated with decaying wood and logs in coniferous and deciduous forests. Adults of some species are attracted to lights at night and some feed at sap flows from fluxing trees. The eggs are usually laid in crevices in bark or logs, and the larvae feed on decaying wood.

Notes: The stag beetle family Lucanidae includes four subfamilies, 108 genera, and around 1,500 species worldwide. In the New World, there are 41 genera and 223

species with representatives of each of the four subfamilies (Paulsen and Ratcliffe, 2005). Most New World taxa are Neotropical. The following checklist of Peruvian Lucanidae is from Paulsen (2013).

LUCANINAE

Brasilucanini

Brasilucanus acomus Ratcliffe, 1984

Chiasognathini

Sphaenognathus alticollis Möllenkamp, 1912
Sphaenognathus gaujoni (Oberthür, 1885)
Sphaenognathus giganteus Boileau, 1911
Sphaenognathus monguilloni Lacroix, 1972*
Sphaenognathus peruvianus (Waterhouse, 1869)
Sphaenognathus prionoides Buquet, 1838
Sphaenognathus xerophilus Bartolozzi and Onore, 2006*

Sclerostomini

Aegognathus aguirei Arnaud and Bomans, 2007*
Aegognathus confusus Arnaud and Bomans, 2006*
Aegognathus leuthneri leuthneri Van der Poll, 1886
Aegognathus leuthneri damasoi Arnaud and Bomans, 2006*
Aegognathus similis Arnaud and Bomans, 2006*
Aegognathus soulai Arnaud and Bomans, 2004*
Aegognathus waterhousei Leuthner, 1883*
Andinolucanus inesae Arnaud and Bomans, 2006*
Arnaudius bomansi Grossi and Bartolozzi, 2011*
Arnaudius digennaroi (Arnaud *et al.*, 2008)*
Arnaudius koikei (Arnaud *et al.*, 2007)*
Auxicerus platyceps Waterhouse, 1883*
Cantharolethrus azambrei Boileau, 1897
Cantharolethrus elongatus Lacroix, 1982*
Cantharolethrus steinheili Parry, 1875*
Incadorcus ashaninka Grossi, 2011*
Incadorcus cuzcoensis Arnaud *et al.*, 2007*
Incadorcus damasoi Arnaud and Bomans, 2006*
Incadorcus michelleae Arnaud and Bomans, 2006*
Incadorcus shaunai Arnaud *et al.*, 2007*
Incadorcus zugeri Arnaud and Bomans, 2006*
Metadorcinus beneshi (Martínez, 1953)
Metadorcinus lineatus (Deyrolle, 1864)*
Metadorcinus yamauchii Arnaud *et al.*, 2008*
Metadorcus ebeninus Deyrolle, 1864
Onorelucanus boileaui (Weinreich, 1960)*
Onorelucanus marujae (Arnaud *et al.*, 2008)*
Onorelucanus noguchii (Arnaud and Bomans, 2007)*
Pseudoscortizus incredibilis Arnaud *et al.*, 2008
Sclerostomus bartolozzii Arnaud and Bomans, 2007*
Sclerostomus damasoi Arnaud and Bomans, 2006*
Sclerostomus wendyae Arnaud and Bomans, 2006*
Scortizus prodigiosus Arnaud *et al.*, 2007*

Passalidae

Diversity in Peru: 1 subfamily, 2 tribes, 6 genera, 50 species.

Recognition: The body shape is elongate-cylindrical and depressed, and the length is 13–80 mm. Their color is black and shiny. The head is prognathous, narrower than the thorax, and often with a dorsomedian horn. The antennae have ten antennomeres including a 3 to 5-segmented club that is not opposable and not geniculate but is capable of being rolled together. The mandibles are large and project beyond the apex of the labrum, and the apex of the labrum is large, rounded, and toothed. The pronotum is broader than the head, quadrate, and the surface is smooth with a median, longitudinal groove. The elytra are elongate, parallel sided, with rounded apices and well-developed striae. The pygidium is concealed by the elytra (Schuster, 2002).

Habitat: Passalid adults live in well-decayed logs and stumps with their larvae in subsocial family groups. All stages are found in galleries of wood that are excavated by the adults. Eggs are usually placed together in a nest of frass. Adults and larvae communicate by stridulating and can produce different calls. Adults care for larvae and prepare food by chewing it and presumably mixing it with saliva (Schuster, 2002). One species (*Ptichopus angulatus* [L.]) inhabits the waste chamber in nests of leaf cutter ants, *Atta* species.

Notes: Most New World taxa occur in the Neotropics. Hincks and Dibb (1935) cited passalid species from Peru, and Van Doesburg (1942) provided a checklist of Peruvian Passalidae.

PASSALINAE

Passalini

Passalus abortivus Percheron, 1835
Passalus aduncus Erichson, 1847
Passalus anguliferus Percheron, 1835
Passalus arrowi Hincks, 1934
Passalus barrus Boucher and Reyes-Castillo, 1991
Passalus caelatus Erichson, 1847
Passalus coniferus Eschscholtz, 1829
Passalus convexus Dalman, 1817
Passalus elfriedae Lüderwaldt, 1931
Passalus episcopus (Kuwert, 1898)*
Passalus huebneri (Kuwert, 1898)*
Passalus inca (Zang, 1905)*
Passalus interruptus (L., 1758)
Passalus interstitialis Eschscholtz, 1829
Passalus latifrons Percheron, 1841
Passalus occipitalis Eschscholtz, 1829
Passalus peruvianus (Kuwert, 1898)
Passalus plicatus Percheron, 1835
Passalus prominens Gravely, 1918*
Passalus pubicostatus (Kuwert, 1898)
Passalus pugionatus Burmeister, 1847
Passalus pugionifer (Kuwert, 1891)*
Passalus punctiger Le Peletier and Servillle, 1825
Passalus rhodocanthopoides (Kuwert, 1891)
Passalus rotundatus Hincks, 1940*
Passalus rusticus Percheron, 1835
Passalus schneideri (Kuwert, 1898)*
Passalus spinifer Percheron, 1835
Passalus zangi Hincks, 1934
Paxillus camerani (Rosmini, 1902)
Paxillus.forsteri Lüderwaldt, 1927
Paxillus leachi MacLeay, 1819
Spasalus crenatus (MacLeay, 1819)
Spasalus kaupi Boucher, 2004*

Proculini

Popilius amazonicus Gravely, 1918*
Popilius marginatus (Percheron, 1835)
Verres furcilabris (Eschscholtz, 1829)
Veturius amazonicus Boucher, 2006
Veturius arawak Boucher, 2006
Veturius cephalotes (Le Peletier and Serville, 1825)
Veturius ecuadoris Kuwert, 1898
Veturius guntheri Kuwert, 1898 [= *peruvianus* of Arrow]
Veturius inca Boucher, 2006
Veturius libericornis Kuwert 1891
Veturius sinuosus (Drapiez, 1820)
Veturius spinipes (Zang, 1905)
Veturius standfussi Kuwert, 1891
Veturius tarsipes Boucher, 2006*
Veturius unicornis Gravely, 1918
Veturius yahua Boucher, 2006

Trogidae

Diversity in Peru: 1 subfamily, 2 genera, 10 species.

Recognition: Adult trogids are recognized by their warty, brown to gray to black, dirt-encrusted appearance and flat abdominal sternites.

Habitat: Adults and larvae are among the last scavengers that visit the dry remains of dead animals, where they feed on feathers, fur, and skin. They also feed on organic matter found in the nests of mammals and birds.

Notes: The world fauna consists of 4 genera and 300 species (Scholtz, 1982). The following checklist of Peruvian trogids is from Scholtz (1982).

TROGINAE

Omorgus howelli (Howden and Vaurie, 1957)
Omorgus suberosus (Fabricius, 1775)
Omorgus persuberosus (Vaurie, 1962)
Polynoncus aeger (Guérin-Méneville, 1844)*
Polynoncus aricensis (Gutiérrez, 1950)
Polynoncus brevicollis (Eschscholtz, 1822)
Polynoncus bullatus (Curtis, 1845)
Polynoncus ecuadorensis (Vaurie, 1962)
Polynoncus gordoni (Steiner, 1981)*
Polynoncus gemmingeri (Harold, 1872)
Polynoncus peruanus (Erichson, 1847)
Polynoncus sallei (Harold, 1872)

Ochodaeidae

Diversity in Peru: 1 subfamily, 1 genus, 1 species.

Recognition: Ochodaeids are elongate and convex. Their color is testaceous, brown, reddish brown, brown, black, or occasionally bicolorous. The head is not deflexed. The antennae have 9 or 10 antennomeres, with a 3-segmented, opposable club, and all antennomeres are tomentose. The clypeus is simple or tuberculate on the anterior margin. The labrum is produced beyond the apex of the clypeus, often bilobed and emarginate, and prominent. The prominent mandibles are produced beyond the apex of the labrum. The pronotum is convex, subquadrate, mostly punctate and setose and without tubercles, ridges, horns, or sulci. The mesotibia at the apex has at least one apical spur pectinate. The elytra are convex, with or without striae, often punctate, or granulate and setose, but some are smooth. The pygidium is exposed or concealed by the elytra (Carlson, 2002).

Habitat: Ochodaeidae are most often collected at lights, sometimes in large numbers. Adults of a few species are active during the day. Many species prefer sandy areas. Adults may spend the day in subterranean burrows, where they may feed on fungi. Little is known about the biology of Ochodaeidae. There are few observations of adult or larval habits except that adults of most species are nocturnal and are attracted to lights (Carlson, 2002).

Notes: The family Ochodaeidae includes 10 genera and about 80 species worldwide (Carlson and Paulsen, 2012).

OCHODAEINAE
Parochodaeus bituberculatus (Erichson, 1847)*

Hybosoridae

Diversity in Peru: 3 subfamilies, 11 genera, 33 species.

Recognition: Hybosorids are light brown to black and glossy. The head is not deflexed. The antennae are 10-segmented with a 3-segmented, opposable club with the last 2 antennomeres tomentose. The first antennomere of the club is hollowed to receive antennomeres 2 and 3. The clypeus generally lacks a tubercle or horn. The prominent labrum is truncate and produced beyond the apex of the clypeus. The large mandibles project beyond the apex of the labrum and have the external edge rounded with the apices pointed.

Habitat: Little life history information is known for hybosorids. Adults feed on both invertebrate and vertebrate carrion in the early stages of decomposition. Some species are found in dung, and others are attracted to lights at night (Jameson, 2002b). Ceratocanthines are commonly found in clusters of dead leaves and can be collected using a beating sheet.

Notes: The family Hybosoridae worldwide contains 4 subfamilies, 35 genera, and about 220 species (Ocampo, 2006; Ocampo and Ballerio, 2006). Species are widely distributed in the tropics. The classification below is from Ocampo and Ballerio (2006).

ANAIDINAE
Anaides onofrii Ocampo, 2006
Anaides rugosus Robinson, 1948*
Chaetodus allsoppi Martínez, 1988*
Chaetodus asuai Martínez, 1956

Chaetodus mimi Ocampo, 2006*
Chaetodus smithi Ocampo, 2006*
Chaetodus tricarinatus Ocampo, 2006
Hybochaetodus disruptus Ocampo, 2006*
Hybochaetodus erugocarinatus Ocampo, 2006*
Hybochaetodus flaco Ocampo, 2002*
Hybochaetodus obscurus Arrow, 1909*

CERATOCANTHINAE
Anopsiostes punctatus Paulian, 1982
Astaenomoechus americanus (Boucomont, 1936)
Astaenomoechus criberrimus Paulian, 1982*
Ceratocanthoides undatus (Petrovitz, 1973)
Ceratocanthus clypealis (Lansberge, 1887)*
Ceratocanthus inca Paulian, 1982*
Ceratocanthus mathani Paulian, 1982*
Ceratocanthus perpunctatus Paulian, 1982*
Ceratocanthus politus (Erichson, 1843)
Ceratocanthus punctulatus Lansberge, 1887*
Ceratocanthus seriatus (Erichson, 1843)
Ceratocanthus suturalis (Lansberge, 1887)
Germarostes antiquus (Erichson, 1843)
Germarostes aphodioides (Illiger, 1800)
Germarostes carltoni Howden and Gill, 2005*
Germarostes geayi Paulian, 1982*
Germarostes macleayi (Perty, 1830)
Germarostes semituberculatus (Germar, 1843)
Germarostes sulcipennis Harold, 1875*
Trachycrusus lescheni Howden and Gill, 1995*
Trachycrusus striatulus Howden and Gill, 1995*

HYBOSORINAE
Coilodes punctipennis Arrow, 1909

Scarabaeidae

Diversity in Peru: 10 subfamilies, 194 genera, and 898 species.

Recognition: Scarabs are 2.0–160.0 mm in length with variable shape and color, with or without metallic reflections, and with or without vestiture. The antennae have 10 antennomeres (some 7–12) with a 3 to 5-segmented, opposable club; the club has the apical antennomeres nearly glabrous (Melolonthinae, Dynastinae, Rutelinae, Cetoniinae) or with all antennomeres tomentose (Aphodiinae, Scarabaeinae). The clypeus is with or without a tubercle or horn. The labrum is distinct in most taxa, and produced beyond the apex of the clypeus or not. The mandibles are variable, produced beyond the apex of the labrum or not. The pronotum is variable, with or without horns or tubercles. The elytra are convex or flattened and with or without striae. The pygidium is concealed by the elytra (Aphodiinae, Scarabaeinae) or exposed (Scarabaeinae, Melolonthinae, Dynastinae, Rutelinae, Cetoniinae). The scutellum is exposed or not, and its shape is triangular or parabolic. The legs have transverse or conical coxae; the protibiae are tridentate, bidentate, or serrate on the outer margin; the meso- and metatibia at the apex have 1 or 2 spurs; the tarsi are 5-5-5, and the anterior tarsi are absent in some Scarabaeinae; the tarsal claws are variable, equal in size or not, and simple or toothed. The abdomen has 6 free sternites; the 7 functional abdominal spiracles are situated in the pleural membrane (Aphodiinae, Scarabaeinae) or in the sternites and tergites (Melolonthinae, Dynastinae, Rutelinae, and Cetoniinae).

Habitat: Scarab beetles occupy many habitats ranging from deserts to tropical rainforests and have diverse life histories. Depending on the group, adults feed on foliage, dung, flowers, or sap while the larvae are phytophagous, coprophagous, or detritivorous. Some are diurnal, while many are nocturnal in their activity patterns.

Notes: Members of the subfamily **Aphodiinae**, known as the aphodiine dung beetles, are primarily dung and detritus feeders. All of the species are small, rarely exceeding 12 mm in length. Worldwide, the subfamily contains 12 tribes,

approximately 280 genera, and 3,200 species with 9 tribes, 128 genera and 816 species in the New World (Skelley, 2008). In Peru, there are 24 genera and 63 species (Skelley, 2008).

The subfamily **Scarabaeinae** is commonly referred to as dung beetles. Most species feed on mammal dung, but others specialize upon the dung of other vertebrates and invertebrates as well as on carrion, mushrooms, rotting fruit, and other decomposing plant material. The world fauna includes over 5,000 described species in 234 genera, with about 1,800 species just in the genus *Onthophagus* (Gill, 2005). The tribal classification below follows that of Hanski and Cambefort (1991). Peru is incredibly rich in dung beetles, and over 150 species are recorded from a single lowland forest site in Madre de Dios (Los Amigos, Peru) (Trond Larsen, personal communication to BCR, February 2014). Larsen and Génier (2008a, b) provided color guides for identifying dung beetles at two different biological stations in Peru. Peru has 40 genera and 278 species, but many more will be recognized in the future, especially in the genera *Ateuchus, Canthidium*, *Dichotomius*, and *Uroxys*. In comparison, neighboring Brazil includes 49 genera and 618 species (Vaz-de-Mello, 2000).

The **Melolonthinae**, often called May beetles, June beetles, or leaf chafers, are cosmopolitan in distribution and one of the largest and most diverse subfamilies of Scarabaeidae. There are approximately 750 genera and over 11,000 species worldwide, with about 90 genera in the New World (Evans and Smith, 2005). Peru has 20 genera and 82 species, but this number will increase as more species are recognized. This is not now easily accomplished because identification of some genera and many species remains in a state of confusion. The tribes are still unresolved due to the lack of definition and inconsistent use of characters (Evans and Smith, 2005). Reliable identifications are difficult since the majority of descriptions prior to 1940 lacked illustrations or comparisons with other similar species.

The subfamily **Rutelinae** (leaf chafers) includes 7 tribes, 2 of which do not occur in Peru (Adoretini from the Old World and Alvarengiini from southern Brazil), and approximately 4,300 species. Based on this checklist, the leaf chafers of Peru encompass a rich fauna with 52 genera, 270 species and subspecies, and 150 endemic species. The neighboring country of Ecuador includes 53 genera, 298 species, and 92 endemic species (Paucar-Cabrera, 2005). The last compilation of ruteline species of Peru was a product of the Hamburg Southern Peru Expedition in 1936, and this yielded 29 genera and 85 species (Ohaus, 1952).

Because of the economic importance and interest in the Rutelinae, classification and nomenclature of the group is undergoing extensive revisions. This checklist reflects changes in the tribes Anomalini (Ramírez-Ponce and Morón, 2009; Morón and Ramírez-Ponce, 2012), Anoplognathini (Smith, 2003), Anatistini (previously Spodochlamyini; Jameson and Ratcliffe, 2011), Geniatini (Hawkins and Jameson, 2005; Soula, 2010), and Rutelini (Soula, 1998, 2002a, b, 2003, 2005, 2006a, b, 2008, 2009, 2010, 2011a, b; Jameson, 1998; Moore and Jameson, 2013). It should be noted that Soula's species concept was typological as well as topological; specimens that displayed variation from the type specimen and/or specimens from unique localities were often described as new species, subspecies, or varieties, thus reflecting a "stamp collector" view of biodiversity. As a result, Soula greatly overestimated ruteline diversity by describing many new genera and species that we believe will become

invalid. In this checklist, Soula's taxa comprise nearly half of the ruteline diversity (119 species and 31 subspecies) in Peru. Because Soula's names were established in accordance with the rules of zoological nomenclature, the names must be considered as available. We do not address validity of Soula's species and genera here, but we caution the user in accepting Soula's classification and species concepts. Because of Soula's overestimation of ruteline diversity, lack of survey throughout South America, and poor taxonomic foundation, the Rutelinae are currently poor bioindicators for habitat conservation. Rutelines are important ecologically as pollinators and decomposers; agriculturally as consumers of crop leaves, roots, and fruits; and culturally as food and decorative adornment. Species in the subfamily are often highly metallic and large (up to 50 mm in length). Because of their beauty and abundance, the Shuar people (also Achuar, apach, inkis, jívaros, or jíbaros) of the eastern Amazonian areas in Peru and Ecuador use the bodies of some rutelines (especially *Chrysophora chrysochlora*) to create headpieces and necklaces (Ratcliffe, 2006). These decorative pieces are now popular among tourists and local people alike.

The subfamily **Dynastinae** is one of the most conspicuous subfamilies of the beetle family Scarabaeidae. Members of the subfamily occur in all the major biogeographic areas of the world (except the polar regions), although most species are found in the tropics, specifically the New World tropics. Dynastines comprise 196 genera and about 1,500 species grouped among 8 tribes. Six tribes, 87 genera, and at least 800 species occur in the New World, and most of these species occur in the Neotropics. Our checklist for Peru currently has 39 genera and 182 species. By comparison, Mexico, another large and megadiverse country, has 30 genera and 196 species (Ratcliffe *et al*., 2013), while Costa Rica and Panama together have 36 genera and 158 species (Ratcliffe, 2003).

Adult dynastines are small (4 mm) to very large (160 mm) beetles. The males in some species (principally Dynastini, Agaocephalini, and Oryctini) possess prominent and often spectacular horns on the head and/or prothorax which, together with their large size, have given rise to such popular names for them as "rhinoceros," "elephant", "hercules", and "unicorn" beetles. In fact, the entire subfamily is usually referred to as the rhinoceros beetles even though the majority of species do not possess horns. The adults of nearly all species are nocturnal or crepuscular, and many are readily attracted to lights at night. Adult dynastines are known to feed on ripe or rotting fruits, slime fluxes, and plant roots. The adults of some Cyclocephalini are important pollinators of palms and aroids when they feed on the floral parts of these plants.

The subfamily **Cetoniinae**, or flower chafers, are most abundant in Africa and Asia. In the New World they comprise 6 tribes in 41 genera with approximately 275 species (Krajcik, 2012). In Peru there are 4 tribes containing 8 genera and 18 species. The genus *Gymnetis* is still in need of revision, and the species names below have presumed synonyms that may turn out to be valid species.

The following checklist of Peruvian Scarabaeidae is extracted from many sources, principal among them are Ocampo and Colby (2009) (Allidiostomatinae); Skelley (2008), Smith and Skelley (2007), and Stebnicka (2005, 2007, 2009) (Aphodiinae); Edmonds (1994, 2000), Edmonds and Zidek (2010, 2012), and Figueroa *et al.* (2014) (Scarabaeinae in part); Evans and Smith (2009) (Melolonthinae); Machatschke (1972), Villatoro (2002), Jameson (1998), and Soula (1998–2011) (Rutelinae); Colby

(2009) (Orphninae), Endrödi (1966–1985) (Dynastinae); Erichson (1847) (Peru); Blackwelder (1944) (Scarabaeoidea), and Krajcik (2012). The older checklists in particular should be used with caution because classification and some names may have changed.

APHODIINAE

Aphodiini

Aidophus infuscatopennis (Schmidt, 1909)
Aphodius pseudolividus Balthasar, 1941
Blackburneus laxepunctatus (Schmidt, 1910)
Gonaphodiellus castanescens (Petrovitz, 1973)
Gonaphodiellus chapini (Hinton, 1934)
Gonaphodiellus nigrinus (Schmidt, 1916)*
Neotrichaphodioides woytkowskii Dellacasa, Dellacase, and Skelley, 2010*
Orodaliscoides rugosiceps (Harold, 1859)
Paranimbus peruanus (Erichson, 1834)
Trichaphodiellus brasiliensis (Laporte, 1840)

Eupariini

Ataeniopsis regulis (Balthasar, 1947)
Ataenius abancay Stebnicka, 2005*
Ataenius aequatorialis Petrovitz, 1961
Ataenius atramentarius (Erichson, 1847)
Ataenius attenuator Harold, 1874
Ataenius buenavistae Stebnicka, 2001
Ataenius carinator Harold, 1874
Ataenius catenulatus (Erichson, 1847)*
Ataenius columbicus Harold, 1889
Ataenius complicatus Harold, 1869
Ataenius costulifer Balthasar, 1941*
Ataenius crenaticollis Petrovitz, 1973
Ataenius gracilis (Melsheimer, 1844)
Ataenius huanus Stebnicka, 2007
Ataenius icanus Balthasar, 1951*
Ataenius impiger Schmdt, 1916
Ataenius lamarensis Stebnicka, 2007
Ataenius montanus Schmidt, 1911
Ataenius morator Harold, 1869
Ataenius napoensis Stebnicka, 2007
Ataenius nugator Harold, 1880
Ataenius palmaritoensis Stebnicka, 2007
Ataenius petrovitzi Balthasar, 1960
Ataenius picinus Harold, 1868
Ataenius platensis (Blanchard, 1846)
Ataenius rubrotessellatus (Blanchard, 1843)
Ataenius santarosae Stebnicka, 2007
Ataenius sculptilis Harold, 1868
Ataenius siminasus Petrovitz, 1973
Ataenius strigicaudus Bates, 1887
Ataenius tambopatae Stebnicka, 2001*
Auperia andamanensis (Koshantschikov, 1916)
Auperia capitosus (Harold, 1867)
Auperia huebneri (Petrovitz, 1970)
Auperia iquitosae (Stebnicka, 2002)
Auperia loretoensis (Stebnicka, 2002)*
Euparixia boliviana Gordon and McCleve, 2003
Euparixiodes johnsoni Stebnicka, 1998
Lomanoxoides mapitunari Stebnicka and Skelley, 2005*
Odontolytes iquitosae (Stebnicka, 2007)
Passaliolla corticalis (Bates, 1887)
Saprosites dentipes Harold, 1867
Saprosites parallelus Harold, 1867
Saprosites sulcatus Harold, 1869

Odontolochini

Amerilochus cinereus Skelley, 2007*
Saprolochus tambopatae Stebnicka and Galante, 2007
Saprolochus tridentatus Skelley, 2007
Saprositellus denticulatus Balthasar, 1967
Saprositellus peruanus Stebnicka, 2003*
Stebnickiella zosterixys Skelley, 2007*

Psammodiini

Mysarus peruanus Petrovitz, 1962*

Rhyparini

Aschnarhyparus peregrinus (Hinton, 1934)

Stereomerini

Termitaxis holmgreni Krikken, 1970*

SCARABAEINAE

Onthophagini

Digitonthophagus gazella (Fabricius, 1787)
Onthophagus bidentatus Drapiez, 1819*
Onthophagus clypeatus Blanchard, 1846
Onthophagus coscineus Bates, 1887
Onthophagus haematopus Harold, 1875
Onthophagus marginicollis Harold, 1880
Onthophagus onorei Zunino and Halffter, 1998
Onthophagus onthochromus Arrow, 1913
Onthophagus ophion Erichson, 1847
Onthophagus osculatii Guérin-Méneville, 1855
Onthophagus ptox Erichson, 1847*
Onthophagus ranunculus Arrow, 1913
Onthophagus rhinophyllus Harold, 1868
Onthophagus rubrescens Blanchard, 1846
Onthophagus schunckei Paulian, 1936*
Onthophagus sp. aff. *tristis* Harold, 1873
Onthophagus xanthomerus Bates, 1887
Onthophagus sp. aff. *xanthomerus* Bates, 1887

Oniticellini

Eurysternus caribaeus (Herbst, 1789)
Eurysternus cayennensis Laporte, 1840
Eurysternus contractus Génier, 2009
Eurysternus foedus Guérin-Méneville, 1830
Eurysternus gracilis Génier, 2009
Eurysternus hamaticollis Balthasar, 1939
Eurysternus howdeni Génier, 2009
Eurysternus hypocrita Balthasar, 1939
Eurysternus inca Génier, 2009
Eurysternus inflexus Germar, 1824
Eurysternus lanuginosus Génier, 2009
Eurysternus marmoreus Laportee, 1840
Eurysternus nigrovirens Génier, 2009
Eurysternus plebejus Harold, 1880
Eurysternus squamosus Génier, 2009
Eurysternus streblus Genier, 2009
Eurysternus strigilatus Génier, 2009
Eurysternus vastiorum Martínez, 1988
Eurysternus wittmerorum Martínez, 1988

Canthonini

Anisocanthon villosus (Harold, 1868)
Canthon aberrans (Harold, 1868)
Canthon aequinoctialis Harold, 1868
Canthon angustatus Harold, 1867
Canthon balteatus Boheman, 1858
Canthon bimaculatus Schmidt, 1922
Canthon brunneus Schmidt, 1922
Canthon chiriguano Martinez and Halffter, 1972
Canthon coloratus Schmidt, 1922
Canthon conformis Harold, 1868
Canthon fulgidus Redtenbacher, 1867
Canthon fuscipes Erichson, 1847
Canthon gemellatus Erichson, 1847
Canthon helleri Schmidt, 1922
Canthon janthinus Blanchard, 1843
Canthon juvencus Harold, 1868
Canthon laesum Erichson, 1847
Canthon lituratus Germar, (1813)
Canthon luteicollis Erichson, 1847
Canthon sp. aff. *matthewsi* Martínez and Halffter, 1972
Canthon monilifer Blanchard, 1843
Canthon mutabilis Lucas, 1857
Canthon muticus Harold, 1867
Canthon pallidus Schmidt, 1922
Canthon sp. aff. *pallidus* Schmidt, 1922
Canthon paraguayanum Balthasar, 1939
Canthon quadriguttatus (Olivier, 1789)
Canthon quinquemaculatus Laporte, 1840
Canthon rubrescens Blanchard, 1843
Canthon semiopacus Harold, 1868
Canthon septemmaculatus septemmaculatus (Latreille, 1807)
Canthon septemmaculatus histrio LePeletier and Serville, 1828
Canthon sericatus Schmidt, 1922
Canthon simulans Martínez, 1950
Canthon smaragdulus (Fabricius, 1781)
Canthon subhyalinus Harold, 1867
Canthon triangulare Drury, 1870
Canthon unicolor Blanchard, 1843
Canthon velutinus Harold, 1868
Canthon virens chalybaeus Blanchard, 1843
Canthonella sp. aff. *amazonica* Ratcliffe and Smith, 1999
Canthonella barrerai Halffter and Martínez, 1968
Canthonella sp. aff. *catharinensis* Pereira and Martínez, 1956
Canthonella cf. *gomezi* Halffter and Martínez, 1968
Canthonidia rubromaculata (Blanchard, 1846)
Cryptocanthon campbellorum Howden, 1973
Deltochilum aequinoctiale Buquet, 1844
Deltochilum amazonicum Bates, 1887
Deltochilum cf. *aureopilosum* Paulian, 1939
Deltochilum burmeisteri Harold, 1867
Deltochilum carinatum Westwood, 1837
Deltochilum crenulipes Paulian, 1938
Deltochilum erodioides Harold, 1867
Deltochilum fuscocupreum Bates, 1870
Deltochilum granulatum Bates, 1870
Deltochilum howdeni Martínez, 1955
Deltochilum hypponum Buquet, 1844

Deltochilum sp. aff. *komareki* Balthasar, 1939
Deltochilum mexicanum Burmeister, 1848
Deltochilum orbiculare Lansberge, 1874
Deltochilum peruanum Paulian, 1939
Deltochilum pretiosum Harold, 1875
Deltochilum pseudoicarus Balthasar, 1939
Deltochilum robustus Molano and Gonzalez, 2009
Deltochilum tessellatum Bates, 1870
Deltochilum valgum Burmeister, 1873
Deltochilum sp. aff. *valgum* Burmeister, 1873
Malagoniella astyanax (Olivier, 1789)
Malagoniella cupreicollis Waterhouse, 1890*
Pseudocanthon felix (Arrow, 1913)
Pseudocanthon xanthurum (Blanchard, 1843)
Scybalocanthon aereus (Schmidt, 1922)
Scybalocanthon imitans (Harold, 1868)
Scybalocanthon moniliatus (Bates, 1887)
Scybalocanthon pinopterus (Kirsch, 1873)
Scybalocanthon sexspilotus (Guérin-Méneville, 1855)
Scybalocanthon trimaculatus (Schmidt, 1922)
Scybalocanthon zischkai Martínez, 1949
Scybalophagus rugosus (Blanchard, 1846)
Streblopus opatroides Lansberge, 1874
Streblopus punctatus Balthasar, 1938*
Sylvicanthon bridarollii (Martínez, 1949)
Sylvicanthon furvus (Schmidt, 1921)

Dichotomiini

Anomiopus andrei Canhedo, 2006
Anomiopus batesi (Waterhouse, 1891)
Anomiopus brevipes (Waterhouse, 1891)
Anomiopus cambeforti Canhedo, 2006*
Anomiopus foveicollis Canhedo, 2006
Anomiopus gilli Canhedo, 2006*
Anomiopus idei Canhedo, 2006*
Anomiopus intermedius (Waterhouse, 1891)
Anomiopus pictus (Harold, 1862)
Anomiopus pishtaco Edmonds and Figueroa, 2013*
Anomiopus pumilius Canhedo, 2006
Anomiopus smaragdinus (Westwood, 1842)
Anomiopus validus Canhedo, 2006*
Ateuchus aeneomicans (Harold, 1868)
Ateuchus cereus (Harold, 1868)
Ateuchus columbianus (Harold, 1868)
Ateuchus connexus (Harold, 1868)
Ateuchus sp. aff. *laevicollis* (Harold, 1868)
Ateuchus peruanus (Balthasar, 1939)*
Ateuchus pygidialis (Harold, 1868)
Ateuchus sp. aff. *pygidialis* Harold, 1868
Ateuchus scatimoides (Balthasar, 1939)
Ateuchus sp. aff. *setulosus* Balthasar, 1939
Ateuchus simplex (Le Peletier and Serville, 1828)
Ateuchus striatulus (Preudhomme de Borre, 1886)
Ateuchus substriatus (Harold, 1868)
Ateuchus viridimicans (Boucomont, 1935)
Besourenga horacioi (Martínez, 1967)
Bdelyrus cochabambae Cook, 2000
Bdelyrus howdeni Cook, 1998
Bdelyrus iquitosensis Cook, 2000*
Bdelyrus lobatus Cook, 1998*
Bdelyrus parvus Cook, 1998
Bdelyrus pecki Cook, 1998
Bdelyrus peruviensis Cook, 1998*
Bradypodidium adisi (Ratcliffe, 1980)
Canthidium angusticeps (Bates, 1887)
Canthidium atramentarium Balthasar, 1939
Canthidium basipunctatum Balthasar, 1939
Canthidium batesi Harold, 1867
Canthidium bicolor Boucomont, 1928
Canthidium sp. aff. *centrale* Boucomont, 1928
Canthidium coerulescens Balthasar, 1939
Canthidium cupreum (Blanchard, 1846)
Canthidium sp. aff. *deyrollei* Harold, 1867
Canthidium discolor Harold, 1867
Canthidium cf. *dohrni* Harold, 1867
Canthidium escalerai Balthasar, 1939
Canthidium sp. aff. *funebre* Balthasar, 1939
Canthidium gerstaeckeri Harold, 1867
Canthidium sp. aff. *gigas* Balthasar, 1939
Canthidium histrio Balthasar, 1939
Canthidium kirschi Harold, 1875
Canthidium lentum Erichson, 1847
Canthidium miscellum Harold, 1883
Canthidium cf. *onitoides* (Perty, 1830)
Canthidium sp. aff. *quadridens* Harold, 1867
Canthidium cf. *ruficolle* (Germar, 1824)
Canthidium thalassinum (Erichson, 1847)
Dichotomius adrastus (Harold, 1875) *
Dichotomius apicalis (Lüderwaldt, 1931)
Dichotomius batesi (Harold, 1869)
Dichotomius belus (Harold, 1869) *
Dichotomius bicornis (Waterhouse, 1891)*
Dichotomius bicuspis Germar, 1824
Dichotomius calcaratus (Arrow, 1913)
Dichotomius camargoi (Martínez, 1955)
Dichotomius conicollis (Blanchard, 1843)
Dichotomius cotopaxi (Guerin, 1855)
Dichotomius cuprinus (Felsche, 1901)*
Dichotomius diabolicus (Harold, 1875)
Dichotomius fissus (Harold, 1867)
Dichotomius sp. aff. *fonsecae* (Lüderwaldt, 1924)
Dichotomius globules (Felsche, 1901)
Dichotomius inachus (Erichson, 1847)
Dichotomius lucasi (Harold, 1869)
Dichotomius mamillatus (Felsche, 1901)
Dichotomius melzeri (Lüderwaldt, 1922)
Dichotomius ocellapunctatus (Felsche, 1901)
Dichotomius ohausi (Lüderwaldt, 1924)
Dichotomius planicollis (Gillet, 1911)
Dichotomius prietoi Martínez and Martínez, 1982

Dichotomius problematicus (Lüderwaldt, 1924)
Dichotomius protectus (Harold, 1867)
Dichotomius pullus (Felsche, 1910)*
Dichotomius quinquelobatus (Felsche, 1901)
Dichotomius robustus (Lüderwaldt, 1935)
Dichotomius satanas (Harold, 1867)
Dichotomius semiaeneus (Germar, 1824)
Dichotomius simplicicornis (Lüderwaldt, 1924)
Dichotomius virescens (Lüderwaldt, 1924)
Dichotomius worontzowi (Pereira, 1942)
Genieridium cryptops (Arrow, 1913
Homocopris torulosus (Eschscholtz, 1822)
Onoreidium cristatum (Arrow, 1931)
Ontherus alexis (Blanchard, 1846)
Ontherus aphodioides Burmeister, 1847
Ontherus ashei Génier, 1996*
Ontherus azteca Harold, 1869
Ontherus brevipennis Harold, 1867
Ontherus bridgesi Waterhouse, 1891
Ontherus sp. aff. *bridgesi* Waterhouse, 1891
Ontherus carinifrons Lüderwaldt, 1930
Ontherus edentulus Génier, 1996
Ontherus howdeni Génier, 1996
Ontherus laminifer Balthasar, 1938
Ontherus obliquus Génier, 1996
Ontherus pubens Génier, 1996
Ontherus raptor Génier, 1996
Ontherus rectus Génier, 1996*
Ontherus sulcator (Fabricius, 1775)
Ontherus tenuistriatus Génier, 1996*
Ontherus ulcopygus Génier, 1996
Scatimus cucullatus Erichson, 1847*
Scatimus monstrosus Balthasar, 1939
Scatimus sp. aff. *onorei* Génier and Kohlmann, 2003
Scatimus quadricuspis Génier and Kohlmann, 2003*
Scatimus strandi Balthasar, 1939
Sinapisoma minuta Boucomont, 1928
Trichillum externepunctatum (Preudhomme de Borre, 1880)
Uroxys bahianus Boucomont, 1927
Uroxys elongatus Harold, 1868
Uroxys sp. aff. *kratochvili* Balthasar, 1947
Uroxys sp. aff. *minutus* Harold, 1868
Uroxys peruanus Balthasar, 1940*
Uroxys sp. aff. *simplex* Waterhouse, 1891
Uroxys variabilis Robinson, 1951

Phanaeini

Coprophanaeus callegarii Arnaud, 2002*
Coprophanaeus degallieri Arnaud, 1997
Coprophanaeus ignecinctus (Felsche, 1909)
Coprophanaeus lancifer (L., 1767)
Coprophanaeus larseni Arnaud, 2002
Coprophanaeus ohausi (Felsche, 1911)
Coprophanaeus parvulus (Olsoufieff, 1924)
Coprophanaeus suredai Arnaud, 1996
Coprophanaeus telamon (Erichson, 1847)
Dendropaemon angustipennis Harold, 1869
Dendropaemon telephus Waterhouse, 1891
Diabroctis mimas (L., 1758)
Gromphas aeruginosa (Perty, 1830)
Gromphas amazonica (Bates, 1870)
Phanaeus sororibispinus Edmonds and Zidek, 2012
Sulcophanaeus faunus (Fabricius, 1775)
Megatharsis buckleyi Waterhouse, 1891
Oruscatus davus (Erichson, 1847)
Oxysternon conspicillatum (Weber, 1801)
Oxysternon lautum (MacLeay, 1819)
Oxysternon silenus Laporte, 1840
Oxysternon spiniferum Laporte, 1840
Phanaeus achilles Boheman, 1858
Phanaeus bispinus Bates, 1868
Phanaeus cambeforti Arnaud, 1982
Phanaeus chalcomelas (Perty, 1830)
Phanaeus haroldi Kirsch, 1871
Phanaeus lecourti Arnaud, 2000
Phanaeus lunaris Taschenberg, 1870
Phanaeus meleagris Blanchard, 1843
Sulcophanaeus actaeon (Erichson, 1847)*
Tetramereia convexa (Harold, 1869)

ORPHNINAE

Aegidinus petrovi Colby, 2009*
Aegidinus teamscaraborum Colby, 2009
Paraegidium costalimai Vulcano, Pereira, and Martínez, 1966

ALLIDIOSTOMATINAE

Allidiostoma simplicifrons (Fairmaire, 1885)
Parallidiostoma tricornum Ocampo and Colby, 2009*

MELOLONTHINAE

Sericini

Astaena andicola Frey, 1973*
Astaena biciliata Saylor, 1946*
Astaena exquisita Frey, 1973*
Astaena glabroclypealis Frey, 1974

Astaena moseri Frey, 1973*
Astaena negligens Frey, 1973*
Astaena penai Frey, 1973*
Astaena peruana Moser, 1918*
Astaena peruensis Frey, 1973*
Astaena pottsi Saylor, 1946*
Astaena pygidia Saylor, 1946*
Astaena setosa Frey, 1973*
Astaena tridentata Erichson, 1847
Raysymmela huanuca Saylor, 1947*
Symmela varians Erichson, 1847*

Diplotaxini
Liogenys leechi Frey, 1967*

Melolonthini
Phyllophaga austera (Erichson, 1847)*
Phyllophaga jumberea Saylor, 1942*
Phyllophaga marcapatana Moser, 1918*
Phyllophaga pachypyga (Burmeister, 1855)
Phyllophaga peruana (Moser, 1918)
Phyllophaga umbrosa (Erichson, 1847)*

Macrodactylini
Ancistrosoma hilare Arrow, 1913
Ancistrosoma intermedium Arrow, 1913*
Ancistrosoma klugii Curtis, 1836*
Ancistrosoma reductum Frey, 1964*
Ancistrosoma vittigerum Erichson, 1847
Barybus compacta (Erichson, 1847)*
Barybus peruana Moser, 1918*
Barybus squamiger Frey, 1967*
Calodactylus abendrothii Kirsch, 1873*
Calodactylus heterosquamosus Frey, 1973*
Ceraspis innotata (Blanchard, 1850)*
Ceraspis penai Frey, 1964*
Ceraspis rubiginosa (Latreille, 1811)*
Ceraspis rufoscutellata Moser, 1919*
Ceraspis squamulifera (Moser, 1919)
Chariodactylus sublaevicollis Moser, 1919*
Clavipalpus peruanus Moser, 1918*
Clavipalpus spadiceus (Burmeister, 1855)*
Ctilocephala asperula (Perty, 1830)
Dicrania peruana Frey, 1972*
Isonychus arbusticola Erichson, 1847*
Isonychus cervicapra Frey, 1965*
Macrodactylus sapphirinus Moser, 1919*
Macrodactylus sulcicollis Moser, 1919*
Macrodactylus vittipennis Moser, 1919*
Plectris aberrans Frey, 1964*
Plectris candezei Frey, 1967
Plectris kochi Frey, 1967 *
Plectris lanata Frey, 1964*
Isonychus cervinalis Frey, 1965*
Isonychus cervinoides Frey, 1965*
Isonychus cervinus Erichson, 1847
Isonychus egregius Frey, 1965*
Isonychus fraudulentus Frey, 1969*
Isonychus nitens Moser, 1921*
Isonychus nubeculus Frey, 1969*
Isonychus ovinus Erichson, 1847*
Isonychus pavonii Erichson, 1847*
Isonychus peruanus Moser, 1921*
Isonychus pulchellus Moser, 1918*
Isonychus rosettae Frey, 1969*
Isonychus saylori Frey, 1969*
Isonychus similis Frey, 1973*
Isonychus simulator Frey, 1969*
Macrodactylus bilineolatus Moser, 1919*
Macrodactylus bistriatus Moser, 1919*
Macrodactylus brenskei Moser, 1918*
Macrodactylus cinereus Blanchard, 1850*
Macrodactylus discipennis Moser, 1918*
Macrodactylus marginicollis Moser, 1919*
Macrodactylus peruanus Moser, 1919*
Plectris molesta (Kirsch, 1873)*
Plectris penaella Frey, 1967*
Plectris penai Frey, 1967*
Plectris sculptipennis Frey, 1974*
Plectris tenebrosa Frey, 1967*
Plectris tolimana (Moser, 1921)
Plectris tuberculata (Moser, 1919)

Pachydemini
Diaphylla hispida Erichson, 1847*
Leuretra pectoralis Erichson, 1847

RUTELINAE

Anatistini
Spinochlamys macropus (Benderitter, 1921)*
Spodochlamys feyeri Ohaus, 1908
Spodochlamys iheringi Ohaus, 1905
Spodochlamys latipes Arrow, 1946
Spodochlamys peruvianus Soula, 2010*

Rutelini

Acraspedon bernierei Soula, 2002*
Acraspedon peruvianus Soula, 2002*
Aequatoria cludtsi Soula, 2002*
Aequatoria davidi Soula, 2005*
Aequatoria lequericai Soula, 2006*
Anticheiroides adamsii nevinsoni (Fowler, 1906)*
Anticheiroides davidi Soula, 2006
Catoclastus chevrolatii Solier, 1851*
Catoclastus jaumesi Soula, 2010*
Catoclastus rabinovichi Martínez, 1971*
Chlorota callegariorum Soula, 2005*
Chlorota chaparroi Curoe and Soula, 2005*
Chlorota chavezlopezi Soula, 2006*
Chlorota columbica columbica (Ohaus, 1912)
Chlorota columbica peruana Soula, 2002*
Chlorota nasuta Ohaus, 1905
Chlorota sergiocastroi Soula, 2008*
Chlorota surinama surinama (Ohaus, 1898)
Chlorota surinama iquitosensis Soula, 2005*
Chrysina argenteola (Bates, 1888)
Chrysophora chrysochlora (Latreille, 1811)
Cnemida retusa (Fabricius, 1801)
Dorysthetus andicola Ohaus, 1905
Dorysthetus fulgida (Waterhouse, 1881)
Dorysthetus mezai Soula, 2005*
Dorysthetus peruanus (Ohaus, 1905)
Epichalcoplethis benjamini Bouchard and Soula, 2006
Epichalcoplethis gilleti Soula, 2010
Epichalcoplethis santistebani Bouchard and Soula, 2006*
Epichalcoplethis schiffleri Bouchard and Soula, 2006*
Eremophygus philippi Ohaus, 1910
Exanticheira vidua (Ohaus, 1922)
Exothyridium filippii Soula, 2002*
Exothyridium mercieri Soula, 2002*
Heterochlorota colini Soula, 2008*
Heterochlorota mathildae mathildae (Ohaus, 1908)
Heterochlorota mathildae peruana Soula, 2002*
Homonyx maurettei Soula, 2010 *
Homonyx peruanus Ohaus, 1913*
Homonyx zovii Demez and Soula, 2011
Hypaspidius costatus (Burmeister, 1844)*
Lagochile aequatorialis aequatorialis Ohaus, 1898
Lagochile aequatorialis raimondii Soula, 2005*
Lagochile amazona (Thunberg, 1822)
Lagochile andicola andicola Ohaus, 1903
Lagochile andicola condori Soula, 2005*
Lagochile anophrys (Ohaus, 1914)
Lagochile brunnea brunnea (Perty, 1830)
Lagochile brunnea satipoensis Soula, 2005*
Lagochile brunnea tenaensis Soula, 2005*
Lagochile brusteli Soula, 2005*
Lagochile cachetica cachetica Ohaus, 1903
Lagochile cachetica fusciventris Ohaus, 1912*
Lagochile cachetica orientalis Soula, 2005
Lagochile ciliata ciliata Ohaus, 1908
Lagochile delassisei Soula, 2005*
Lagochile ebrardi Soula, 2010*
Lagochile fuscoviridis Bouchard and Soula, 2005
Lagochile peruana peruana Ohaus, 1898
Lagochile peruana huallagensis Soula, 2005*
Lagochile peruana occidentalis Soula, 2005*
Lagochile pottgensi Demez and Soula, 2010
Lagochile rodriguezi Soula, 2009*
Lagochile santacruzis santacruzis (Machatschke, 1972)*
Lagochile santacruzis chanchomayoensis Soula, 2005*
Lagochile solimoensis solimoensis Ohaus, 1903
Lagochile solimoensis oberthuri Soula, 2005
Lagochile solimoensis wadai Soula, 2005*
Lagochile tibialis (Ohaus, 1935)*
Lagochile trigona trigona (Herbst, 1790)
Lagochile trigona mancocapaci Soula, 2005*
Lagochile trigona pozuzoensis Soula, 2005*
Lagochile vergaracobianae Soula and Curoe, 2005*
Lagochile vasseli Soula, 2010*
Lagochile villatoroae villatoroae Soula, 2005*
Lagochile villatoroae tingomariaensis Soula, 2005*
Lasiocala detingomaria Soula, 2006*
Lasiocala dioni Soula, 2006*
Lasiocala jenseni Soula, 2006*
Lasiocala josei Soula, 2006*
Lasiocala lamasi Soula, 2006*
Lasiocala schmiti Soula, 2006*
Lasiocala vasseli Soula, 2010*
Macraspis andicola Burmeister, 1844
Macraspis assimilis Ohaus, 1908*
Macraspis bicincta bicincta Burmeister, 1844
Macraspis chalcea Burmeister, 1844
Macraspis chloraspis chloraspis Laporte, 1840
Macraspis chloraspis subandina Soula, 1998
Macraspis chrysis (L., 1764)
Macraspis concoloripes ratcliffi (Soula, 2005)
Macraspis festiva Burmeister, 1844
Macraspis maculata maculata Burmeister, 1844
Macraspis maculicollis Ohaus, 1905*
Macraspis martinezi martinezi Soula, 2003
Macraspis melanaria (Blanchard, 1850)
Macraspis peruviana Ohaus, 1898*
Macraspis pseudochrysis Landin, 1956
Macraspis stirpita Ohaus, 1914*
Macraspis testaceipennis Ohaus, 1898
Macraspis willersi Soula, 2010*
Macraspis xanthosticta Burmeister, 1844
Mecopelidnota arrowi Bates, 1904
Mecopelidnota dewynteri Soula, 2008*
Mecopelidnota marxi Soula, 2008
Mecopelidnota mezai Soula, 2008*
Mesomerodon spinipenne Ohaus, 1905
Microrutela campa (Ohaus, 1922)
Microrutela ucalayiensis Jameson, 1997
Minidorysthetus hoehnei (Ohaus, 1914)*

Minidorysthetus tingomariaensis Soula, 2006*
Minidorysthetus ucayaliensis Soula, 2006*
Minidorysthetus vandemergheli Soula, 1998*
Oryctomorphus maculicollis Guérin-Méneville, 1838
Parachlorota estebani Demez and Soula, 2010*
Parachlorota josei Soula, 2005*
Parachlorota morettoi Soula, 2002*
Paradorysthetus signatipennis signatipennis (Ohaus, 1908)*
Paraptenomela amazona tingomariaensis Soula, 2002*
Paraptenomela opalescens (Ohaus, 1935)*
Paratelaugis robusta robusta (Kirsch, 1871)
Pelidnota angiae Demez and Soula, 2009*
Pelidnota bondili Soula, 2006*
Pelidnota brusteli Soula, 2010*
Pelidnota chlorana Erichson, 1847
Pelidnota dobleri Frey, 1967
Pelidnota fusciventris fusciventris Ohaus, 1905*
Pelidnota halleri Demez and Soula, 2010*
Pelidnota hernanlequericai Soula, 2006*
Pelidnota hoefigi Ohaus, 1912*
Pelidnota incerta Soula, 2006*
Pelidnota injantepalominoi Demez and Soula, 2010*
Pelidnota lacazei Soula, 2010*
Pelidnota mezai Soula, 2009*
Pelidnota neitamorenoi neitamorenoi (Soula, 2006)
Pelidnota neitamorenoi rodriguezdemendozaensis Soula, 2010*
Pelidnota ohausi ohausi Frey, 1976
Pelidnota ohausi piurensis (Soula, 2006)*
Pelidnota peslieri Soula, 2009*
Pelidnota polita (Latreille, 1811)
Pelidnota porioni Soula, 2010*
Pelidnota satipoensis Demez and Soula, 2010*
Pelidnota schneideri Soula, 2010*
Pelidnota subandina subandina Ohaus, 1905
Pelidnota testaceovirens felipemezai Soula, 2006*
Pelidnota toulgoeti Soula, 2006*
Pelidnota uncinata Ohaus, 1930
Pelidnota unicolor unicolor (Drury, 1778)
Pelidnota unicolor subandina Soula, 2009*
Pelidnota werneri Soula, 2006*
Pelidnota zovii Soula, 2010*
Pseudochlorota peruana Ohaus, 1905*
Pseudohypaspidius antoinei Soula, 1998*
Pseudohypaspidius silvestrei Soula, 2002*
Pseudomacraspis affinis affinis (Laporte, 1840)
Pseudomacraspis affinis amazonica Soula, 2002
Pseudomacraspis beryllina beryllina (Erichson, 1847)*
Pseudothyridium (Pseudothyridium) bouchardi Soula, 2002*
Pseudothyridium buckwaldi (Ohaus, 1912)
Pseudothyridium ericki Soula, 2006*
Pseudothyridium hirtum (Kirsch, 1870)
Pseudothyridium juanjosei Soula, 2006*
Pseudothyridium minettii Soula, 2002*
Pseudothyridium oblongum oblongum (Ohaus, 1905)*
Pseudothyridium quentini Soula, 2002*
Ptenomela grangesi Soula, 2006*
Ptenomela tavakiliani Soula, 2002*
Ptenomela toulgoeti Soula, 2006*
Rutela heraldica Perty, 1832
Rutela histrio Sahlberg, 1823
Rutela histrioparilis Jameson, 1997
Rutela laeta (Weber, 1801)
Rutela lineola (Linnaeus, 1767)
Rutela tricolorea (Ohaus, 1905)
Sorocha bousqueti Soula, 2006*
Sorocha carloti Demez and Soula, 2010*
Sorocha castroi Soula, 2008*
Sorocha champenoisi Soula, 2006*
Sorocha chapellei Demez and Soula, 2010*
Sorocha damasoi Soula, 2006*
Sorocha jeanmaurettei Demez and Soula, 2010*
Sorocha lamasi lamasi Soula, 2006*
Sorocha lamasi satipoensis Soula, 2006 *
Sorocha maylini Soula, 2006*
Sorocha similis (Ohaus, 1908)*
Sorocha yelamosi Soula, 2010*
Telaugis aenescens aenescens Burmeister, 1844
Telaugis aenescens subandina Soula, 1998*
Theuremaripa buchei (Soula, 2002)*
Theuremaripa imitatrix (Ohaus, 1903)
Theuremaripa meyeri (Soula, 2005)*
Thyriochlorota lassalei Soula, 2002*
Thyriochlorota villosa (Ohaus, 1908)*
Tipicha champanheti Soula, 2002*
Tipicha joliveti Soula, 2002*
Vayana melzeri melzeri Ohaus, 1928
Vayana melzeri subandina Soula, 1998*

Anomalini

Callistethus aequatorialis huanapensis (Ohaus, 1908)*
Callistethus antis (Ohaus, 1903)*
Callistethus cicatricosa (Perty, 1832)
Callistethus eckhardti (Ohaus, 1897)*
Callistethus kulzeri (Frey, 1968)*
Callistethus marginatus (Fabricius, 1792)
Callistethus penai (Frey, 1968)*
Callistethus pyritosus (Erichson, 1847)*
Callistethus rufomicans (Ohaus, 1897)
Callistethus suratus (Burmeister, 1844)*
Callistethus tricostatus (Ohaus, 1897)
Paranomala cincta viridicollis Burmeister, 1844
Paranomala hylobia (Ohaus, 1897)*
Paranomala inconstans Burmeister, 1844
Paranomala undulata peruviana Guérin-Méneville, 1838*
Strigoderma marginata (Olivier, 1789)
Strigoderma peruviensis Blanchard, 1850
Strigoderma sulcipennis sumtuosa Burmeister, 1844

Anoplognathini

Platycoelia abdominalis Ohaus, 1904*
Platycoelia aenigma Smith, 2003*
Platycoelia alternans Erichson, 1847
Platycoelia baessleri (Ohaus, 1904)*
Platycoelia burmeisteri Arrow, 1899
Platycoelia convexa Smith, 2003
Platycoelia flavostriata (Latreille, 1813)
Platycoelia gaujoni Ohaus, 1904
Platycoelia helleri (Ohaus, 1904)
Platycoelia inca Smith, 2003*
Platycoelia inflata Ohaus, 1904
Platycoelia insolita Smith, 2003*
Platycoelia kirschi (Ohaus, 1904)*
Platycoelia laelaps (Gutiérrez, 1951)*
Platycoelia lutescens Blanchard, 1851
Platycoelia marginata Burmeister, 1844
Platycoelia peruviana Smith, 2003
Platycoelia pomacea Erichson, 1847
Platycoelia prasina Erichson, 1847
Platycoelia rufosignata Ohaus, 1904
Platycoelia selanderi Martínez and Martínez, 1994

Geniatini

Bolax albopilosa Ohaus, 1917*
Bolax andicola Burmeister, 1844*
Bolax boliviensis Ohaus, 1898
Bolax cupreoviridis Ohaus, 1931*
Bolax disgamia Ohaus, 1917*
Bolax glabripennis Ohaus, 1917*
Bolax gonzalofideli Soula, 2010*
Bolax incogitata Dohrn, 1883
Bolax malkini Soula, 2010*
Bolax nigriceps Ohaus, 1917*
Bolax robackeri Soula, 2010*
Bolax rutila Erichson, 1847*
Geniates balzapamae Ohaus, 1917
Leucothyreus baeri Ohaus, 1917*
Leucothyreus demetrius Ohaus, 1918*
Leucothyreus lazarus Ohaus, 1918
Leucothyreus saparus Ohaus, 193*
Lobogeniates bicolor Ohaus, 1917
Trizogeniates aphilus Villatoro, 2002*
Trizogeniates apicalis Ohaus, 1917*
Trizogeniates barrerai Martínez, 1965*
Trizogeniates caiporae Villatoro, 2002
Trizogeniates catsus Villotoro, 2002
Trizogeniates crispospinatus Villatoro, 2002*
Trizogeniates laticollis Ohaus, 1931
Trizogeniates ohausi Villatoro, 2002
Trizogeniates planipennis Ohaus, 1917
Trizogeniates temporalis Ohaus, 1917
Trizogeniates tibialis Ohaus, 1917
Trizogeniates trivittatus Ohaus, 1917

DYNASTINAE

Cyclocephalini

Acrobolbia macrophylla Ohaus, 2012
Ancognatha castanea Erichson, 1847
Ancognatha erythrodera (Blanchard, 1841)
Ancognatha humeralis Burmeister, 1847
Ancognatha lutea Erichson, 1847
Ancognatha scarabaeoides Erichson, 1847
Ancognatha vulgaris Arrow, 1911
Aspidolea brunnea Höhne, 1922
Aspidolea collaris Endrödi, 1965*
Aspidolea fuliginea (Burmeister, 1847)
Aspidolea laticeps Harold, 1869
Aspidolea lindae Ratcliffe, 1978
Aspidolea mimethes (Höhne, 1922)*
Aspidolea notaticollis Höhne, 1922
Aspidolea singularis Bates, 1888
Aspidolea suturalis Höhne, 1922
Augoderia freyi Endrödi, 1976*
Chalepides paradytis Ponchel and Dechambre, 2003
Cyclocephala affinis Endrödi, 1966
Cyclocephala almitana Dechambre, 1992
Cyclocephala altamontana Dechambre, 1999
Cyclocephala amazona (L., 1767)
Cyclocephala bicolor Laporte,1840
Cyclocephala brevis Höhne, 1923
Cyclocephala colasi Endrödi, 1964
Cyclocephala confusa Endrödi, 1966
Cyclocephala contracta Kirsch, 1873
Cyclocephala couturieri Dechambre, 1999
Cyclocephala dilatata (Prell, 1934)
Cyclocephala diluta Erichson, 1847
Cyclocephala discolor (Herbst, 1792)
Cyclocephala dispar (Herbst, 1792)
Cyclocephala flavoscutellaris Höhne, 1923
Cyclocephala flora Arrow, 1911
Cyclocephala freyi Endrödi, 1964
Cyclocephala fulgurata Burmeister, 1847
Cyclocephala fulvipennis Burmeister, 1847
Cyclocephala genieri Joly, 2010*
Cyclocephala goetzi Endrödi, 1966*
Cyclocephala guycolasi Dechambre, 1992
Cyclocephala hirsuta Höhne, 1923
Cyclocephala inca Endrödi, 1966
Cyclocephala isabellina Höhne, 1923
Cyclocephala kaszabi Endrödi, 1964
Cyclocephala ligyrina Bates, 1888
Cyclocephala lineigera Höhne, 1923
Cyclocephala liomorpha Arrow, 1911

Cyclocephala lunulata Burmeister, 1847
Cyclocephala macrophylla Erichson, 1847
Cyclocephala mannheimsi Endrödi, 1964
Cyclocephala marginalis Kirsch,1870
Cyclocephala mecynotarsis Höhne, 1923
Cyclocephala melanocephala (Fabricius, 1775)
Cyclocephala molesta Endrödi, 1969
Cyclocephala moreti Dechambre, 1992
Cyclocephala morphoidina Prell, 1937
Cyclocephala munda Kirsch, 1870
Cyclocephala obscura Endrödi, 1966*
Cyclocephala ocellata Bolívar y Pieltain, Jiménez-Asúa, and Martínez, 1963
Cyclocephala octopunctata Burmeister, 1847
Cyclocephala panthera Dechambre, 1979
Cyclocephala paraflora Martínez, 1978
Cyclocephala paraguayensis Arrow, 1903
Cyclocephala peruana Endrödi, 1966*
Cyclocephala pilosa Dupuis, 2006*
Cyclocephala prolongata Arrow, 1902
Cyclocephala pugnax Arrow, 1914
Cyclocephala quadripunctata Höhne, 1923
Cyclocephala rufovaria Arrow, 1911
Cyclocephala rustica municipalis Höhne, 1923
Cyclocephala saltini Ratcliffe, 2008
Cyclocephala scarabaeina (Gyllenhal, 1817)
Cyclocephala sexpunctata Laporte, 1840
Cyclocephala simulatrix Höhne, 1923
Cyclocephala spilopyga Erichson, 1847
Cyclocephala stictica Burmeister, 1847
Cyclocephala testacea Burmeister, 1847
Cyclocephala tronchonii Martínez, 1975*
Cyclocephala tylifera Höhne, 1923
Cyclocephala verticalis Burmeister, 1847
Cyclocephala viridis Dechambre, 1982
Cyclocephala zurstrasseni Endrödi, 1964*
Dyscinetus dubius (Olivier, 1798)
Dyscinetus dytiscoides (Arrow, 1911)
Dyscinetus olivaceus Höhne, 1923
Dyscinetus paradytis Ponchel and Dechambre, 2003
Erioscelis peruana Saylor, 1946*
Erioscelis proba (Sharp, 1877)
Harposcelis paradoxus Burmeister, 1847
Mimeoma signatoides Höhne, 1923
Stenocrates bicarinatus Robinson, 1948
Stenocrates carbo Prell, 1937
Stenocrates celatus Prell, 1937
Stenocrates clipeatus Endrödi, 1966
Stenocrates cognatus Endrödi, 1966
Stenocrates cultor Burmeister, 1847
Stenocrates haackae Ratcliffe, 1979
Stenocrates holomelanus (Germar, 1824)
Stenocrates minutus Endrödi, 1966
Stenocrates nasutus Dechambre, 1979*
Stenocrates popei Endrödi, 1971

Pentodontini

Bothynus entellus (LePeletier and Serville, 1828)
Bothynus lancifer Dechambre, 1981*
Diloboderus abderus (Sturm, 1826)
Heteroglobus obesus Dupuis and Dechambre, 2008*
Hylobothynus obesus Ohaus, 1910
Oxyligyrus contractus Dupuis, 2010*
Tomarus burmeisteri (Steinheil, 1872)
Tomarus ebenus (DeGeer, 1774)
Tomarus gyas Erichson, 1847
Tomarus maimon Erichson, 1847
Oxyligyrus peruanus Endrödi, 1966
Parapucaya amazonica Prell, 1934
Parapucaya nodicollis (Kirsch, 1873)
Pentodina peruviana Endrödi, 1968
Piscoperus paracanicola Ratcliffe and Giraldo, 2014*
Tomarus bituberculatus (Palisot de Beauvois, 1805)
Tomarus maternus (Prell, 1937)
Tomarus peruvianus (Endrödi, 1970)
Tomarus similis (Endrödi, 1968)
Tomarus villosus (Burmeister, 1847)

Oryctini

Coelosis biloba (L., 1767)
Enema pan (Fabricius, 1775)
Heteroglobus obesus Dupuis and Dechambre, 2008
Heterogomphus arrowi Prell, 1912*
Heterogomphus dilaticollis Burmeister, 1847
Heterogomphus hirticollis Prell, 1912*
Heterogomphus hirtus Prell, 1912
Heterogomphus incornutus Prell, 1912*
Heterogomphus mirabilis Prell, 1912*
Heterogomphus ochoai Martínez, 1966
Heterogomphus orsilochus Erichson, 1847
Heterogomphus peruanus Endrödi, 1976*
Heterogomphus pilosus Dechambre, 1998
Heterogomphus porioni Dechambre, 1998
Heterogomphus rugicollis Prell, 1912
Heterogomphus rubripennis Prell, 1912
Heterogomphus ulysses Burmeister, 1847
Megaceras brevis Dechambre, 1999
Megaceras briansaltini Ratcliffe, 2007*
Megaceras endroedii Dechambre, 1998
Megaceras inflatum Prell, 1934
Megaceras laevipenne Prell, 1914
Megaceras morpheus Burmeister, 1847
Megaceras philoctetes (Olivier, 1789)
Megaceras porioni Dechambre, 1981
Megaceras quadraticollis Dechambre, 1975
Podischnus oberthueri Sternberg, 1907
Podischnus sexdentatus (Taschenberg, 1870)
Strategus aloeus (L., 1758)
Strategus jugurtha Burmeister, 1847
Strategus surinamensis hirtus Sternberg, 1910

Phileurini

Amblyodus castroi Grossi and Grossi, 2011
Amblyoproctus chalumeaui Endrödi, 1977
Amblyoproctus piliger (Perty, 1830)
Amblyoproctus rugosus (Erichson, 1847)
Archophileurus aper Endrödi, 1977
Archophileurus burmeisteri (Arrow, 1908)
Archophileurus oedipus (Prell 1912)
Archophileurus peruanus Endrödi, 1977
Archophileurus sus Dechambre, 2006*
Hemiphileurus brasiliensis Endrödi, 1978
Hemiphileurus depressus (Fabricius, 1801)
Hemiphileurus elongatus Dupuis and Dechambre, 2000*
Hemiphileurus howdeni Endrödi, 1978*
Hemiphileurus isabellae Dupuis, 2004*
Hemiphileurus kahni Dupuis and Dechambre, 2000*
Homophileurus quadrituberculatus (Palisot de Beauvois, 1805)
Homophileurus waldenfelsi Endrödi, 1978
Microphileurus caviceps Kolbe, 1910
Microphileurus subulo Prell, 1912*
Oryctophileurus armicollis Prell, 1911
Palaeophileurus carbo Ratcliffe, 2002
Palaeophileurus erebus Ratcliffe, 2002
Palaeophileurus marcusoni Ratcliffe, 1998
Palaeophileurus ocampoi Neita and Ratcliffe, 2012
Palaeophileurus proximus Dechambre, 1997
Palaeophileurus sclateri (Bates, 1887)
Phileucourtus bicornutus Dechambre, 2008*
Phileurus angustatus Kolbe, 1910
Phileurus didymus (L., 1758)
Phileurus excavatus Prell, 1911
Phileurus kaszabi Endrödi, 1978
Phileurus valgus (Olivier, 1789)

Agaocephalini

Aegopsis chaminadei Dechambre, 2000
Aegopsis peruvianus Arrow, 1941*
Brachysiderus quadrimaculatus Waterhouse, 1881
Mitracephala humboldti Thomson, 1859

Dynastini

Dynastes hercules (L., 1758)
Dynastes neptunus (Quensel, 1806)
Golofa aegeon (Drury, 1773)
Golofa clavigera (L., 1771)
Golofa eacus Burmeister, 1847
Golofa spatha Dechambre, 1989
Golofa testudinarius (Prell, 1934)*
Golofa unicolor (Bates, 1891)

CETONIINAE

Cetoniini

Euphoria steinheili Janson, 1878

Gymnetini

Desicasta lobata (Olivier, 1789)
Desicasta purpurascens (Schoch, 1898)
Gymnetis balzarica Janson, 1880
Gymnetis coturnix Burmeister, 1842 (=? *G. phasianus* Burmeister, 1842)
Gymnetis mathani Pouillaude, 1913
Gymnetis holoserica Voet, 1778 (=? *G. chanchamayensis* Pouillaude, 1913)
Gymnetis pardalis (Gory and Percheron, 1833) (=? *G. cupriventris* Janson, 1880)
Gymnetis pantherina (Blanchard, 1843)
Gymnetis rufilateris (Illiger, 1800)
Gymnetis subpunctata Westwood, 1874 (=? *G. variabilis* Moser, 1921)
Hoplopyga liturata (Olivier, 1789)
Hoplopyga peruana Moser, 1912
Marmarina maculosa (Olivier, 1789)

Cremastocheilini

Cyclidius lacordairei Thomson, 1860*
Genuchinus sp.

Trichiini

Golinca davisii Waterhouse, 1877*
Golinca ishiharai Nagai, 1994*

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Literature Cited

Blackwelder, R. E. 1944. Checklist of the coleopterous insects of Mexico, Central America, the West Indies, and South America, part 2. Bulletin of the United States National Museum 185:189–341.

Carlson, D. 2002. Chapter 39, Ochodaeidae Mulsant and Rey 1870. *In* Arnett, R. H., M. Thomas, P. E. Skelley, and J. H. Frank (eds.), American Beetles, Volume 2: 28–31. CRC Press, Boca Raton, FL. 861 pp.

Carlson, D., and M. J. Paulsen. 2012. Ochodaeidae Mulsant & Rey, 1871. Generic Guide to New World Scarab Beetles. http://museum.unl.edu/research/entomology/Guide/Scarabaeoidea/Ochodaeidae/Ochodaeidae-Overview/OchodaeidaeO.html (Last accessed 28 February 2014).

Colby, J. 2009. Monographic revision of the genus *Aegidinus* Arrow (1904) and generic phylogeny of the world Orphninae (Coleoptera: Scarabaeidae: Orphninae). Insecta Mundi 0076:1–41.

Doesburg, P.H. van. 1942. Passalidae (Col.): 329-335. In Titschack, E. (ed.) Beiträge zur Fauna Perus. Nach der Hamburger Südperu-Expedition, 1936, Vol. I. Jena, G. Fisher, 404 pp.

Edmonds, W. D. 1994. Revision of *Phanaeus* Macleay, a New World genus of scarabaeine dung beetles (Coleoptera: Scarabaeidae, Scarabaeinae). Contributions in Science (Natural History Museum of Los Angeles) 44:1–105.

Edmonds, W. D. 2000. Revision of the Neotropical dung beetle genus *Sulcophanaeus* (Coleoptera: Scarabaeidae: Scarabaeinae). Folia Heyrovskyana Supplementum 6:1–60.

Edmonds, W. D., and J. Zidek. 2010. A taxonomic review of the neotropical genus *Coprophanaeus* Olsoufieff, 1924 (Coleoptera: Scarabaeidae, Scarabaeinae). Insecta Mundi 129:1–111.

Edmonds, W. D., and J. Zídek. 2012. Taxonomy of *Phanaeus* revisited: revised keys to and comments on species of the New World dung beetle genus *Phanaeus* MacLeay, 1819 (Coleoptera: Scarabaeidae: Scarabaeinae: Phanaeini). Insecta Mundi 274:1–108.

Elgueta, M. 2000. Coleoptera of Chile. *In* F. Martín Piera, J. J. Morrone, and A. Melic (eds.), Hacia un proyecto CYTED para el Inventario y Estimación de la Diversidad Entomológica en Iberoamérica: PrIBES 2000. Monografías Tercer Milenio. Vol. 1:145–154.

Endrödi, S. 1966. Monographie der Dynastinae (Coleoptera, Lamellicornia). I. Entomologische Abhandlungen 33:1–460.

Endrödi, S. 1969. Monographie der Dynastinae. 4. Tribus: Pentodontini Entomologische Abhandlungen 37:1–145.

Endrödi, S. 1976a. Monographie der Dynastinae (Coleoptera) 6. Tribus: Dynastini. Acta Zoologica Academiae Scientiarum Hungaricae 22:217–269.

Endrödi, S. 1976b. Monographie der Dynastinae 5. Tribus: Oryctini (die Arten von Amerika) (Coleoptera Melolonthidae). Folia Entomologica Hungarica 29:9–174.

Endrödi, S. 1977. Monographie der Dynastinae 8. Tribus: Phileurini, amerikanische Arten I. (Coleoptera). Folia Entomologica Hungarica 30:7–45.

Endrödi, S. 1978. Monographie der Dynastinae 8. Tribus: Phileurini, amerikanische Arten II. (Coleoptera). Folia Entomologica Hungarica 31:85–164.

Endrödi, S. 1985. The Dynastinae of the World. Dr. W. Junk Publisher, Dordrecht, The Netherlands. 800 pp., 46 plates.

Erichson, W. F. 1847. Conspectus insectorum coleopterorum quae in Republica Peruana observata sunt. Archiv für Naturgeschichte 13:67–185.

Evans, A. V., and A. B. T. Smith. 2009. An electronic checklist of the New World chafers (Coleoptera: Scarabaeidae: Melolonthinae), Version 3. http://museum.unl.edu/research/entomology/SSSA/nwmelos.htm (Last accessed 29 January 2014).

Figueroa, L., W. D. Edmonds, and N. M. Luján. 2014. La tribu Phanaeini (Coleoptera, Scarabaeidae, Scarabaeinae) en el Perú. Revista Peruana de Biología 21:125–138.

Gill, B. D. 2005. Scarabaeidae, Scarabaeinae. Generic Guide to New World Scarabs. http://museum.unl.edu/research/entomology/Guide/Scarabaeoidea/Scarabaeidae/Scarabaeinae/Scarabaeinae-Overview/ScarabaeinaeO.html (Last accessed 26 February 2014).

Hanski, I., and Y. Cambefort (eds.). 1991. *Dung Beetle Ecology*. Princeton University Press, Princeton, NJ 481 pp.

Hincks, W. D., and J. R. Dibb. 1935. *Passalidae. Coleopterorum Catalogus. Pars 142:* Dr. W. Junk, Gravenhage, The Netherlands. 118 pp.

Howden, H. F. 1985. A Revision of the South American species in the genus *Neoathyreus* Howden and Martinez (Coleoptera, Scarabaeidae, Geotrupinae). Contributions of the American Entomological Institute 21:1–95.

Howden, H. F. 2002. New species of Central and South American Athyreini (Coleoptera: Scarabaeidae: Geotrupinae). The Coleopterists Bulletin 53:339–354.

Howden, H. F., and A. Martinez. 1978. A review of the New World genus *Athyreus* Macleay (Scarabaeidae, Geotrupinae, Athyreini). Contributions of the American Entomological Institute 15:1–70.

Jameson, M. L. 1998. Phylogenetic analysis of the subtribe Rutelina and revision of the *Rutela* generic groups (Coleoptera: Scarabaeidae: Rutelinae: Rutelini). Bulletin of the University of Nebraska State Museum 14:1–184.

Jameson, M. L. 2002a. Chapter 29, Geotrupidae Latreille 1801. *In* Arnett, R. H., M. Thomas, P. E. Skelley, and J. H. Frank (eds.), American Beetles, Volume 2:23–27. CRC Press, Boca Raton, FL. 861 pp.

Jameson, M. L. 2002b. Chapter 31, Hybosoridae Erichson 1847. *In* Arnett, R. H., M. Thomas, P. E. Skelley, and J. H. Frank (eds.), American Beetles, Volume 2:32–33. CRC Press, Boca Raton, FL, 861 pp.

Jameson, M. L., and S. J. Hawkins. 2005. Synopsis of the genera of Geniatini (Coleoptera: Scarabaeidae: Rutelinae) with an annotated catalog of species. Zootaxa 874:1–76.

Jameson, M. L., and B. C. Ratcliffe. 2011. Revision of the Neotropical scarab beetle tribe Anatistini (Coleoptera: Scarabaeidae: Rutelinae). Bulletin of the University of Nebraska State Museum 26:1–100.

Krajcik, M. 2012. *Checklist of the World Scarabaeoidea*. Anima.X, Supplement 5. Plzen, Czech Republic. 278 pp.

Larsen, T. H., F. Escobar, and I. Armbrecht. 2011. Insects of the tropical Andes: diversity patterns, processes and global change. *In* Herzog, S. K., R. Martínez, P. M. Jørgensen, and H. Tiessen (eds.). *Climate Change and Biodiversity in the Tropical Andes*, pp. 228–244. Inter-American Institute for Global Change Research (IAI) and Scientific Committee on Problems of the Environment (SCOPE), 348 pp. [online] URL: http://www.iai.int/files/communications/publications/scientific/Climate_Change_and_Biodiversity_in_the_Tropical_Andes/book.pdf (Last accessed 27 February 2014).

Larsen, T., and F. Génier. 2008a. Dung beetles of Cocha Cashu Biological Station, Madre de Dios, Peru, Version 1. Rapid Color Guide #413, Version 1. http://fm2.fieldmuseum.org/plantguides/guideimages.asp?ID=365 (Last accessed 25 February 2014).

Larsen, T., and F. Génier. 2008b. Dung beetles of Los Amigos Biological Station (CICRA), Madre de Dios, Peru. Version 1. Rapid Color Guide #414, Version 1. http://fm2.fieldmuseum.org/plantguides/guideimages.asp?ID=364 (Last accessed 25 February 2014).

Machatschke, J. W. 1972. *Coleopterorum Catalogus Supplementa, Part 66, Fascicle 1, Scarabaeoidea: Melolonthidae*, *Rutelinae*. Dr. W. Junk, Gravenhage, The Netherlands. 361 pp.

Moore, R. M., and M. L. Jameson. 2013. Taxonomic and nomenclatural changes in the pelidnotine scarabs (Coleoptera: Scarabaeidae: Rutelinae. Rutelini). The Coleopterists Bulletin 67:377–387.

Morón, M. A., and A. Ramírez-Ponce. 2012. Mesoamerican genera of Anomalini (Coleoptera: Melolonthidae: Rutelinae): a brief review. Trends in Entomology 8:97–114.

Ocampo, F. C. 2002. A new species of *Hybochaetodus* Arrow (Coleoptera: Scarabaeoidea: Hybosoridae: Anaidini) from Peru. The Coleopterists Bulletin 56:446.

Ocampo, F. C. 2006. Phylogenetic analysis of the scarab family Hybosoridae and monographic revision of the New World subfamily Anaidinae (Coleoptera: Scarabaeoidea). 1. Introduction to the family

Hybosoridae (Coleoptera: Scarabaeoidea). Bulletin of the University of Nebraska State Museum 19:3–6

Ocampo, F. C., and A. Ballerio. 2006. Phylogenetic analysis of the scarab family Hybosoridae and monographic revision of the New World subfamily Anaidinae (Coleoptera: Scarabaeoidea). 4. Catalog of the subfamilies Anaidinae, Ceratocanthinae, Hybosorinae, Liparochrinae, and Pachyplectrinae (Scarabaeoidea: Hybosoridae). *Bulletin of the University of Nebraska State Museum* 19:178–209.

Ocampo, F. C., and J. Colby. *Parallidiostoma tricornum* Ocampo and Colby new genus and species of Allidiostomatinae from Peru (Coleoptera: Scarabaeidae). Zootaxa 2287:64–68.

Ohaus, F. 1952. Rutelinae (Col. Scarab.). *In* E. Titschack (ed.), *Beiträge zur Fauna Perus. Nach der Ausbeute der Hamburger Südperu-Expedition 1936, anderer Sammlungen, wie auch auf Grund von Literaturangaben*, pp. 1–10. Wissenschaftlich Bearbeitungen Band III, Jena, Germany.

Paucar-Cabrera, A. 2005. A catalog and distributional analysis of the Rutelinae (Coleoptera: Scarabaeidae) of Ecuador. Zootaxa 948:1–92.

Paulsen, M. J. 2005. Lucanidae (Leach 1815). Generic Guide to New Word Scarab Beetles. http://museum.unl.edu/research/entomology/Guide/Scarabaeoidea/Lucanidae/Lucanidae-Overview/LucanidaeO.html (Last accessed 26 February 2014).

Paulsen, M. J. 2013. Annotated Checklist of the New World Lucanidae (Coleoptera: Scarabaeoidea). Version 4.0, uploaded 12 October, 2013. http://museum.unl.edu/research/entomology/Guide/Scarabaeoidea/Lucanidae/Lucanidae-Catalog/LucanidaeC.htm (Last accessed 25 February 2014).

Ramírez-Ponce, A., and M. A. Morón. 2009. Relaciones filogenéticas del género *Anomala* (Coleoptera: Melolonthidae: Rutelinae). Revista Mexicana de Biodiversidad 80:357–394.

Ratcliffe, B. C. 2003. The dynastine scarab beetles of Costa Rica and Panama. Bulletin of the University of Nebraska State Museum 16:1–506.

Ratcliffe, B. C. 2006. Scarab beetles in human culture. Coleopterists Society Monograph Number 5:85–101.

Ratcliffe, B. C., R. D. Cave, and E. Cano. 2013. The dynastine scarab beetles of Mexico, Guatemala, and Belize. Bulletin of the University of Nebraska State Museum 27:1–666.

Scholtz, C. H. 1982. Catalogue of world Trogidae (Coleoptera: Scarabaeoidea). Republic of South Africa, Department of Agriculture and Fisheries, Entomology Memoir No. 54:1–27.

Scholtz, C. H., and D. J. Browne. 1996. Polyphyly in the Geotrupidae (Coleoptera: Scarabaeoidea): a case for a new family. Journal of Natural History 30:597–614.

Schuster, J. C. 2002. Chapter 25. Passalidae Leach 1815. *In* Arnett, R. H., M. Thomas, P. E. Skelley, and J. H. Frank (eds.), American Beetles, Volume 2:12–14. CRC Press, Boca Raton, FL. 861 pp.

Skelley, P. E. 2008. Scarabaeidae, Aphodiinae. Generic Guide to New World Scarab Beetles. http://museum.unl.edu/research/entomology/Guide/Scarabaeoidea/Scarabaeidae/Aphodiinae/Aphodiinae-Overview/AphodiinaeO.html (Last accessed 28 February 2014).

Smith, A. B. T. 2003. A monographic revision of the genus *Platycoelia* Dejean (Coleoptera: Scarabaeidae: Rutelinae: Anoplognathini). Bulletin of the University of Nebraska State Museum 15:1–202.

Smith, A. B. T., and P. E. Skelley. 2007. A review of the Aphodiinae (Coleoptera: Scarabaeidae) of southern South America. Zootaxa 1458:1–80.

Smith, R., K. Rassmann, H. Davies and N. King (eds.). 2011. Why taxonomy matters. http://www.bionet-intl.org/opencms/opencms/caseStudies/pdf/BioNETCase-Studies-Aug2011.pdf. BioNET INTERNATIONAL, Egham, United Kingdom (Last accessed 24 February 2014).

Soula, M. 1998. *Les Coleopteres du Monde, 26.1: Rutelini 2. Revision des Anthicheirina 1*. Sciences Nat; Venette, France. 116 pp.

Soula, M. 2002a. *Les Coleopteres du Monde, 26.2: Rutelini 2. Revision des Anthicheirina 2*. Hillside Books; Canterbury, England. 296 pp.

Soula, M. 2002b. *Les Coleopteres du Monde, 26: Rutelini 2*. Hillside Books; Canterbury, England. 102 pp.

Soula, M. 2003. *Les Coleopteres du Monde, 29: Rutelini 3. Pseudoptenomela – Paraptenomela – Exoptenomela – Ptenomela – Calomacraspis – Paramacraspis – Paradorysthetus – Macraspis – Pseudorysthetus – Dorysthetus – Anticheiroides – Anticheira – Pseudoanthicheiroides*. Hillside Books; Canterbury, England. 79 pp.

Soula, M. 2005. *Les Coleopteres du Monde, 26.3: Rutelini 2. Revision des Anticheirina 3*. Hillside Books; Canterbury, England. Pp. 297–409.

Soula, M. 2006a. Les coleopteres du nouveau monde. Volume 1: Rutelini 1. Révision des Pelidnotina 1 et des Lasiocalina. Une révision des genres *Strigidia*, *Chalcoplethis Epichalcoplethis, Sorocha, Lasiocala,*

Minilasiocala, Pseudochlorota, Homeochlorota, Pachacama (Coleoptera: Scarabaeidae: Rutelinae: Rutelini: Pelidnotina et Lasiocalina). Besoiro: Supplément au Bulletin de liaison de l'Association Entomologique pour la Connaissance de la Faune Tropicale. AECFT; Saintry, France. 176 pp.

Soula, M. 2006b. *Les Coleopteres du Nouveau Monde. Rutelini 4. Révision des Pelidnotina 4 (Coleoptera Scarabaeidae: Rutelinae: Rutelini: Pelidnotina)*. AECFT; Saintry, France. 65 pp.

Soula, M. 2008. Les coleopteres du nouveau monde. Volume 2: Rutelini 2. Révision des Pelidnotina 2. Révision des genres: *Parhoplognathus, Chipita* n. gen., *Heteropelidnota, Homothermon, Hoplopelidnota, Mesomerodon, Mecopelidnota, Patatra* n. gen. (Coleoptera: Scarabaeidae, Rutelinae, Rutelini). Besoiro: Supplément au Bulletin de liaison de l'Association Entomologique pour la Connaissance de la Faune Tropicale. AECFT; Saintry, France. 40 pp.

Soula, M. 2009. Les coleopteres du nouveau monde. Volume 3: Rutelini 3. Révision des Pelidnotina 3. Photos de toutes le espéces de *Lagochile.* Une révision des genres *Pelidnota, Ectinoplectron, Pseudogeniates, Xenopelidnota* (Coleoptera: Scarabaeidae: Rutelinae: Rutelini: Pelidnotina). Besoiro: Supplément au Bulletin de liaison de l'Association Entomologique pour la Connaissance de la Faune Tropicale. AECFT; Saintry; France. 137 pp.

Soula, M. 2010. Les coleopteres du nouveau monde. Volume 5: Geniatini 1. Révision du genre Bolax (Coleoptera: Scarabaeidae: Rutelini: Geniatini). Besoiro: Supplément au Bulletin de liaison de l'Association Entomologique pour la Connaissance de la Faune Tropicale. AECFT; Saintry, France. 85 pp.

Soula, M. 2011a. Les coleopteres du nouveau monde. Volume 4: Rutelini 4. Révision des Pelidnotina 4. Une révision des genres *Catoclastus, Homonyx.* Retour sur quelques espèces ou groupe d'espèces de *Pelidnota.* Addenda 2010. (Coleoptera: Scarabaeidae: Rutelinae: Rutelini: Pelidnotina). Besoiro: Supplément au Bulletin de liaison de l'Association Entomologique pour la Connaissance de la Faune Tropicale. AECFT; Saintry, France. 66 pp.

Soula, M. 2011b. Les Coleopteres du Nouveau Monde. Geniatini 1. Révision du genre Bolax (Coleoptera: Scarabaeidae: Rutelinae: Geniatini). Besoiro: Supplément au Bulletin de liaison de l'Association Entomologique pour la Connaissance de la Faune Tropicale. AECFT; Saintry, France. 85 pp.

Stebnicka, Z. T. 2005. The New World species of *Ataenius* Harold, 1867. VI. Revision of the *A. aequalis-plataensis*-group (Coleoptera: Scarabaeidae: Aphodiinae: Eupariini). *Acta Zoologica Cracoviensia* 48B:99–138.

Stebnicka, Z. T. 2007. *The Genus Ataenius Harold, 1867 (Coleoptera: Scarabaeidae: Aphodiinae) of New World*. Institute of Systematics and Evolution of Animals, Polish Academy of Sciences, Kraków, Poland. 155 pp.

Stebnicka, Z. T. 2009. *The tribe Eupariini of New World (Coleoptera: Scarabaeidae: Aphodiinae)*. Institute of Systematics and Evolution of Animals, Polish Academy of Sciences, Kraków, Poland. 135 pp.

Vaz-de-Mello, F. 2000. Estado atual de conhecimento dos Scarabaeidae *s. str* (Coleoptera: Scarabaeoidea) do Brasil. *In* F. Martín Piera, J. J. Morrone, and A. Melic (eds.), Hacia un Proyecto CYTED para el Inventario y Estimación de la Diversidad Entomológica en Iberoamérica: PrIBES 2000. Monografías Tercer Milenio, Volume 1:183–195.

Villatoro, K. 2002. Revision of the Neotropical genus *Trizogeniates* Ohaus (Coleoptera: Scarabaeidae: Rutelinae: Geniatini). Entomotropica 17:225–294.

Zidek, J. 2013. Checklist and bibliography of the Trogidae (Coleoptera: Scarabaeoidea). Insecta Mundi 314:1–38