



An annotated checklist of the oryctine rhinoceros beetles (Coleoptera: Scarabaeidae: Dynastinae: Oryctini) of the Neotropical and Nearctic realms

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Abstract

A brief review of the taxonomy and natural history of the New World Oryctini is provided. An updated and annotated checklist of the Oryctini of the Neotropical and Nearctic realms is included. This now includes 14 genera, 133 extant species, and two extinct species. *Tehuacania porioni* Dechambre, 2009 (Oryctini) is reduced to synonymy with *Barutus hartmanni* Ratcliffe, 2003 (Pentodontini).

Key words: species catalog

Introduction

The tribe Oryctini is one of the most species rich groups of Dynastinae, and more than half the species occur in the Neotropical and Nearctic regions where there is considerable endemism (Mizinum 1999). Species of Oryctini are characterized by mostly brown to black coloration (rarely pale yellow); a large, robust, elongate body; clypeus emarginate, acuminate, or with two teeth; mentum narrow; mandibles exposed and broad; antenna with 9–10 antennomeres, the club short or prolonged; protibia tridentate or quadridentate; prosternal process either long or short; elytra smooth, densely punctate, or with striae or rows of punctures; apex of metatibia usually with teeth, sometimes with lobes or crenulations; and coxal cavities broad. The larvae are scarabaeiform with the cranium densely punctate and dark to reddish brown, the maxillary stridulatory teeth are truncate, and the antenna have 2–14 dorsal sensory spots on the last antennomere (Gasca *et al.* 2008).

Sexual dimorphism in the Oryctini is usually pronounced with the males possessing prominent tubercles or horns on the head and/or pronotum. In males, the sides of the pronotum may have a rugose area (*areola apposita*), and some species of *Heterogomphus* Burmeister have tubercles or small prominences above the lateral margin. Some species of Oryctini exhibit allometric growth of their horns where the form and size of the horns in males of the same species may vary considerably. Males with large horns are called "major males", and males with small horns are called "minor males". The body size and development of horns seems to be determined primarily by nutritional conditions of the larvae during periods of growth and development (Ratcliffe 2003).

Natural history

Adults are nocturnal and are often attracted to lights at night. During the day, they seek shelter and hide. Adults of some species feed on rotting fruit or decaying vegetation, while other species make tunnels in the stems of living plants, such as sugar cane and several species of palms (Ratcliffe 2003). Some larvae live in the soil and feed on decaying organic matter, while others live in accumulations of compost in rotting tree trunks or roots, in the large stems of palms, or in the nests of ants (Morón *et al.* 1997).

Economic importance

In the tropics, some species are occasionally important pests of economically important plants. Several species of *Strategus* Kirby are pests of palms in the family Arecaceae (Lourenção *et al.* 1999). *Strategus aloeus* (Linnaeus) larvae attack the roots and the base of coconuts and pineapples (Costa Lima 1953) and occasionally mangos (Bodkin 1919). The adults feed on the roots of several species of palms (Bodkin 1919, Cockerell 1946, Gonçalves 1946, Vayssiere 1965), leaves of Agavaceae (Nevermann 1933), and sugarcane (Ratcliffe 2003). *Strategus surinamensis* Burmeister is sometimes a major pest of the palm species *Bactris gasipaes* Kunth (Arecaceae) in the Amazon region of Peru (Couturier *et al.* 1996). Males of *Podishnus agenor* (Olivier) build galleries in the stems of sugar cane and corn, releasing hormones to attract females (Morón *et al.* 1997).

In tropical countries, such as Colombia, the study of scarabs as pests of agricultural products has great importance. Most investigations have focused on the control of larvae and adults through the use of chemicals and entomopathogenic organisms. Restrepo-Giraldo and Lopez-Avila (2000) conducted a national survey in Colombia that registered the following species of Oryctini as pests of economic importance (adult and/or larva): *Heterogomphus dilaticollis* Burmeister (pasture), *Podishnus agenor* (cabbage, cauliflower, coconut, oil palms, potatoes, corn, pineapple, sugar cane), *Strategus aloeus* (cotton, coconut, sugar cane), and *Strategus jugurtha* Burmeister (coconut and oil palms).

Some species are associated with ant nests. *Coelosis biloba* (Linnaeus) females lay eggs in the nests of *Atta sexdens* (Linnaeus) (Ratcliffe 2003), *Atta cephalotes* (Linnaeus), and *Atta mexicana* (Smith) (Bruch 1917, Navarrete-Heredia 2001). The larvae feed on fungi and organic matter and developed in the chambers of ant nests. Adults of *S. aloeus* have also been found in debris deposits from the nests of *Atta mexicana* in Mexico (Deloya 1988) and *Atta columbica* Guérin-Meneville in Colombia (Neita *et al.* 2006).

Taxonomy

The taxonomic position of the Oryctini has undergone several revisions. Mulsant (1842) used the term Oryctésiens to refer to those lamellicorn scarabs with the prosternum covered with bristles, the antennae with ten antennomeres, and the mandibles projected laterally. Burmeister (1847) proposed the name Oryctidae, which has been used consistently since that time but at the tribal level. Other authors, such as Lacordaire (1856), LeConte and Horn (1883), Bates (1888), Casey (1915), and Arrow (1937) conserved this usage. Bates (1888) used "Pentodontinae" for a set of Central American genera: *Ligyryus* Burmeister (now *Tomarus* Erichson), *Bothynus* Hope, *Cheiroplatys* Hope (now *Orizabus* Fairmaire in part), and *Euetheola* Bates. Mulsant (1842) established the pentodontines as a separate group from the oryctines, but Arrow (1937), Blackwelder (1944), Saylor (1946a, b), and Arnett (1968), did not follow this classification and, instead included the pentodontines within the Oryctini. Finally Oryctini was redefined when Endrödi (1969, 1985) reinstated the use of Pentodontini.

The two tribes can be separated by the presence of a truncate and smooth to crenulate margin at the apex of the metatibia in Pentodontini, while in Oryctini the margin of the apex of the metatibia is usually dentate or strongly crenulate. This single character to separate these tribes is variable, and further analysis is needed to clarify the phylogenetic relationships and classification of genera within the two tribes (Ratcliffe 2003).

During the preparation of this checklist, it was discovered that the names *Scarabaeus dubius* Palisot de Beauvois, 1805 and *S. oblongus* Palisot de Beauvois, 1807 refer to the same species. The former name has priority and should be considered the valid name of this species, which is now referred to as *Strategus oblongus* (Palisot de Beauvois). The 1805 *Scarabaeus dubius* is illustrated on plate 3e, Fig. 2, whereas the 1807 *S. oblongus* is described (Pages 74-75) and illustrated (Plate 2, Figs. 2-4). Inasmuch as *S. dubius* has not been used to refer to *S. oblongus* since it was illustrated in 1805, we attempted to enact a reversal of precedence using Article 23.9 of the Code to suppress *S. dubius*. However, we were unable to find 25 references using the name *S. oblongus* since 1961 in order to use reversal of precedence. Accordingly, as stipulated in Article 23.9.3, an application will be made to the International Commission on Zoological Nomenclature to maintain the use of the younger synonym in order to maintain nomenclatural stability.

Synopsis and foundation of the checklist

The tribe Oryctini is worldwide in distribution except for Australia and the northern parts of Europe, Asia, and North America (Ratcliffe & Cave 2006). It currently contains 26 genera and over 230 species. There are about 46 species in the Afrotropical region and 31 species in the Oriental region (Endrödi 1985). Table 1 summarizes the genera of Oryctini for the Neotropical and Nearctic Regions and includes an estimate of the number of species for this region. The list (mainly compiled from scientific literature) includes 133 extant species and two fossil species.

There are four monotypic genera in the Neotropics, and two of them are endemic to the Caribbean region (*Calypsoryctes* Howden and *Licnostrategus* Prell). The Mexican genus *Tehuacania* Endrödi was monotypic until Dechambre (2009) described *T. porioni* from Costa Rica. Dechambre's photographs, drawings, and descriptions all show characters that are consistent with those of *Barutus hartmani* Ratcliffe (Pentodontini), and so we here place *Tehuacania porioni* as a **NEW SYNONYM** of *Barutus hartmani*. The three genera with the greatest number of species are *Heterogomphus*, *Strategus*, and *Megaceras* Hope (Table 1).

TABLE 1. Synopsis of extant New World Oryctini.

Taxon	Species number
<i>Calypsoryctes</i> Howden, 1970	1
<i>Coelosis</i> Hope, 1837	7
<i>Enema</i> Hope, 1837	2
<i>Gibboryctes</i> Endrödi, 1974	4
<i>Heterogomphus</i> Burmeister, 1847	45
<i>Hispanioryctes</i> Howden & Endrödi, 1978	4
<i>Irazua</i> Ratcliffe, 2003	1
<i>Licnostrategus</i> Prell, 1933	1
<i>Megaceras</i> Hope, 1837	18
<i>Megaceropsis</i> Dechambre, 1976	2
<i>Podischnus</i> Burmeister, 1847	3
<i>Strategus</i> Kirby, 1828	33
<i>Tehuacania</i> Endrödi, 1975	1
<i>Xyloryctes</i> Hope, 1837	11
Total (14)	133

Heterogomphus, with the greatest number of species, is widely distributed from northern Mexico to southern Argentina; most of its species are distributed in South America. The genus *Heterogomphus* is in need of a taxonomic revision that would, in our view, probably reduce the number of species from the current number.

Strategus has a wider distribution from the south central United States to southern Argentina and the Caribbean region. *Megaceras* has a more restricted distribution in the Neotropics from Central America to Argentina. Several species have strong external morphological similarity so the form of the male parameres must be examined for reliable species identification. *Megaceras* is also a genus that is in need of a taxonomic revision. *Enema*, with only two species, is widely distributed in the Neotropics, while *Megaceropsis* Dechambre and *Tehuacania* have distributions restricted to Bolivia and French Guyana, and Mexico respectively.

Hispanioryctes Howden & Endrödi was established as a monotypic genus for *H. wittmeri* from the Dominican Republic. Ratcliffe and Cave (2001) recently described three new species of these rare beetles from Hispaniola. *Xyloryctes* Hope is found from Panama to southern Canada, and the similarity in external morphology and form of the parameres makes for difficult identification of some species. The monotypic genus *Irazua* Ratcliffe occurs in Costa Rica and El Salvador and is most similar to some species of *Heterogomphus* but is easily distinguished by the tridentate (as opposed to quadridentate) protibia. All species of the genus *Gibboryctes* Endrödi are rare and found in South America, with one of them, *G. waldenfelsi* Endrödi, reaching southern Panama. Similarly, all species of the genus *Coelosis* Hope and *Podischnus* Burmeister are found in South America with only *C. biloba* (Linnaeus) and *P. agenor* (Olivier) extending into Central America and Mexico.

We generated this checklist by referencing the taxonomic and biodiversity literature through January 2011. Inasmuch as new species are being described all the time, there may be a few omissions for new taxa that are in press or in review. The principal purpose of the checklist is to provide an updated catalog of the New World Oryctini because there are now additional taxa and distributional records since the catalog by Krajcik (2005).

Checklist of the Oryctini of the Neotropical and Nearctic Regions

Provided for each species are the original nomenclatural combination, synonyms, a list of countries in which they are found, elevation range in meters, the sexes known (f = female, m = male), and the most recent literature.

Taxon	Distribution	Elevation Range (m)	Known sex	Reference
<i>Calypsoryctes dynastoides</i> Howden, 1970 <i>Calypsoryctes dynastoides</i> Howden 1970: 11	Jamaica		m f	Howden 1970
<i>Coelosis bicornis</i> (Leske, 1779) <i>Scarabaeus bicornis</i> Leske 1779: 418 <i>Coelosis recifensis</i> Bourgin 1944: 137 <i>Scarabaeus codrus</i> Olivier 1789: 179	Venezuela, Colombia, Bolivia, Brazil, Paraguay, Argentina	0–1000	m f	Endrödi 1985, Iannuzzi & Marinoni 1995
<i>Coelosis biloba</i> (Linnaeus, 1767) <i>Scarabaeus biloba</i> Linnaeus 1767: 544 <i>Coelosis lepesmei</i> Bourgin 1944: 129 <i>Coelosis incana</i> Bourgin 1944: 129 <i>Coelosis cacica</i> Bourgin 1944: 131 <i>Coelosis tibialis</i> Bourgin 1944: 132	Mexico, Belize, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Venezuela, Colombia, Ecuador, Peru, Bolivia, Brazil	0–1200	m f	Endrödi 1985, Iannuzzi & Marinoni 1995, Ratcliffe & Cave 2006, Gillet 2009
<i>Coelosis bourgini</i> (Dechambre, 1976) <i>Millotsis bourgini</i> Dechambre 1976: 131	Brazil		m f	Endrödi 1985, Iannuzzi & Marinoni 1995
<i>Coelosis denticornis</i> Arrow, 1937 <i>Coelosis denticornis</i> Arrow 1937: 52	Brazil, Argentina		m	Endrödi 1985, Iannuzzi & Marinoni 1995
<i>Coelosis hippocrates</i> Blanchard, 1846 <i>Coelosis hippocrates</i> Blanchard 1846: Table 11, Fig. 3 <i>Coelosis nitidus</i> Arrow 1937: 52	Bolivia, Argentina		m f	Endrödi 1985, Iannuzzi & Marinoni 1995
<i>Coelosis inermis</i> Sternberg, 1908 <i>Coelosis inermis</i> Sternberg 1908: 3 <i>Millotsis colasi</i> Bourgin 1944: 145	Bolivia, Brazil, Uruguay		m f	Endrödi 1985, Iannuzzi & Marinoni 1995
<i>Coelosis sylvanus</i> (Fabricius, 1775) <i>Scarabaeus sylvanus</i> Fabricius 1775: 11	Brazil		m f	Endrödi 1985, Iannuzzi & Marinoni 1995

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Taxon	Distribution	Elevation Range (m)	Known sex	Reference
<i>Enema endymion</i> Chevrolat, 1843 <i>Enema endymion</i> Chevrolat 1843: 29 <i>Enema lupercus</i> Burmeister 1847: 236 <i>Enema paniscus</i> Burmeister 1847: 236 <i>Enema gibbicollis</i> Sternberg 1908: 24	Mexico, Belize, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Venezuela, Colombia, Bolivia, Brazil	35–1650	m f	Morón <i>et al.</i> 1997, Ratcliffe 2003, Gillet 2009
<i>Enema pan</i> (Fabricius, 1775) <i>Scarabaeus pan</i> Fabricius 1775: 5 <i>Scarabaeus chorinaeus</i> Fabricius 1775: 5 <i>Scarabaeus quadrispinosus</i> Fabricius 1781: 11 <i>Scarabaeus enema</i> Fabricius 1787: 4 <i>Scarabaeus aeneas</i> Kirby 1819: 399 <i>Scarabaeus titornus</i> Perty 1830: 45 <i>Enema lupercus</i> Chevrolat 1843: 28 <i>Enema infundibulum</i> Burmeister 1847: 234	Mexico, Honduras, Nicaragua, Costa Rica, Panama, French Guiana, Colombia, Ecuador, Peru, Bolivia, Brazil, Paraguay	25–1500	m f	Morón <i>et al.</i> 1997, Ratcliffe 2003
<i>Gibboryctes bollei</i> Dechambre, 2006 <i>Gibboryctes bollei</i> Dechambre 2006: 156	Paraguay, Argentina		m f	Dechambre 2006
<i>Gibboryctes gracilicornis</i> (Prell, 1912) <i>Heterogomphus gracilicornis</i> Prell 1912: 105 <i>Gibboryctes acuminatus</i> Endrödi 1978: 80	Argentina		m	Dupuis & Dechambre 2008
<i>Gibboryctes szelenyii</i> Endrödi, 1974 <i>Gibboryctes szelenyii</i> Endrödi 1974: 14	Paraguay		m	Endrödi 1985
<i>Gibboryctes waldenfelsi</i> (Endrödi, 1977) <i>Strategus waldenfelsi</i> Endrödi 1977: 335 <i>Gibboryctes porioni</i> Dechambre 1981: 124	Panama, French Guiana, Colombia, Peru, Brazil		m f	Ratcliffe 2003
<i>Heterogomphus aequatorius</i> Bates, 1891 <i>Heterogomphus aequatorius</i> Bates 1891: 33	Colombia, Ecuador		m m f	Endrödi 1985
<i>Heterogomphus achilles</i> Burmeister, 1847 <i>Heterogomphus achilles</i> Burmeister 1847: 229	Brazil		m f	Endrödi 1985
<i>Heterogomphus aidoneus</i> (Perty, 1830) <i>Scarabaeus aidoneus</i> Perty 1830: 45 <i>Hoplitogomphus piliger</i> Prell 1912: 127 <i>Hoplitogomphus affinis</i> Prell 1912: 127	Ecuador, Brazil, Paraguay, Argentina		m f	Endrödi 1985, Gasca <i>et al.</i> 2008
<i>Heterogomphus amphitryon</i> Burmeister, 1847 <i>Heterogomphus amphitryon</i> Burmeister 1847: 227	Brazil		m	
<i>Heterogomphus arrowi</i> Prell, 1912 <i>Heterogomphus arrowi</i> Prell 1912: 143	Peru, Bolivia		m	Ratcliffe & Dechambre 1983

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Taxon	Distribution	Elevation Range (m)	Known sex	Reference
<i>Heterogomphus bicuspis</i> Endrödi, 1976 <i>Heterogomphus bicuspis</i> Endrödi 1976: 88	Colombia, Bolivia		m	Ratcliffe & Dechambre 1983
<i>Heterogomphus binodosus</i> Prell, 1912 <i>Heterogomphus binodosus</i> Prell 1912: 114	Brazil		m f	Endrödi 1985
<i>Heterogomphus bispinosus</i> Burmeister, 1847 <i>Heterogomphus bispinosus</i> Burmeister 1847: 227 <i>Heterogomphus eteocles</i> Burmeister 1847: 228 <i>Heterogomphus polynices</i> Prell 1912: 109	Brazil, Paraguay, Argentina		m f	Endrödi 1985, Dupuis & Dechambre 2008
<i>Heterogomphus bourcierii</i> Guérin-Méneville, 1851 <i>Heterogomphus bourcierii</i> Guérin-Méneville 1851: 160	Colombia, Ecuador, Brazil		m f	Endrödi 1985
<i>Heterogomphus carayoni</i> Dechambre, 1986 <i>Heterogomphus carayoni</i> Dechambre 1986: 306	Colombia		m	Endrödi 1985, Dechambre 1986
<i>Heterogomphus castaneus</i> Dupuis & Dechambre, 2008 <i>Heterogomphus castaneus</i> Dupuis & Dechambre 2008: 9	Brazil		m	Dupuis & Dechambre 2008
<i>Heterogomphus chevrolati</i> Burmeister, 1847 <i>Heterogomphus chevrolati</i> Burmeister 1847: 233 <i>Heterogomphus eurytus</i> Bates 1888: 327 <i>Heterogomphus punctatissimus</i> Prell 1912: 135 <i>Heterogomphus insignis</i> Prell 1912: 135 <i>Heterogomphus splendens</i> Endrödi 1976: 66	Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Colombia, Ecuador, Bolivia, Brazil	25–2000	m f	Endrödi 1985, Morón <i>et al.</i> 1997, Ratcliffe & Cave 2006
<i>Heterogomphus consanguineus</i> Prell, 1912 <i>Heterogomphus consanguineus</i> Prell 1912: 121	Brazil, Argentina		m	Dupuis & Dechambre 2008
<i>Heterogomphus consors</i> Prell, 1912 <i>Heterogomphus consors</i> Prell 1912: 165	Ecuador		m	Endrödi 1985
<i>Heterogomphus coriaceus</i> Prell, 1912 <i>Heterogomphus coriaceus</i> Prell 1912: 160 <i>Heterogomphus effeminatus</i> Ratcliffe 2006: 10	French Guiana, Guyana		f	Endrödi 1976, Ponchel 2010
<i>Heterogomphus cribicollis</i> Prell, 1912 <i>Heterogomphus cribicollis</i> Prell 1912: 118	Brazil		m f	Endrödi 1985
<i>Heterogomphus curvicornis</i> Prell, 1912 <i>Heterogomphus curvicornis</i> Prell 1912: 148	Ecuador		m f	Endrödi 1985

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Taxon	Distribution	Elevation Range (m)	Known sex	Reference
<i>Heterogomphus dejeani</i> Reiche, 1859 <i>Heterogomphus dejeani</i> Reiche 1859: 17 <i>Heterogomphus depressus</i> Prell 1912: 159	Brazil		m f	Endrödi 1985
<i>Heterogomphus dilaticollis</i> Burmeister, 1847 <i>Heterogomphus dilaticollis</i> Burmeister 1847: 229	Venezuela, Colombia, Ecuador, Peru	1900–3500	m f	Endrödi 1985
<i>Heterogomphus flohri</i> (Kolbe, 1906) <i>Daemonoplus flohri</i> Kolbe 1906a: 269	Mexico, Guatemala Venezuela, Colombia, Bolivia		m f	Endrödi 1985, Ratcliffe & Cave 2006
<i>Heterogomphus hiekei</i> Endrödi, 1976 <i>Heterogomphus hiekei</i> Endrödi 1976: 100	Brazil		m f	Endrödi 1985
<i>Heterogomphus hirticollis</i> Prell, 1912 <i>Heterogomphus hirticollis</i> Prell 1912: 139	Peru		m f	Endrödi 1985
<i>Heterogomphus hirtus</i> Prell, 1912 <i>Heterogomphus hirtus</i> Prell 1912: 166 <i>Tracheterogomphus bolivianus</i> Muche 1961: 3	Venezuela, Ecuador, Bolivia		m f	Endrödi 1985
<i>Heterogomphus hopei</i> Burmeister, 1847 <i>Heterogomphus hopei</i> Burmeister 1847: 231 <i>Heterogomphus excavatus</i> Prell 1912: 159	Brazil		m f	Endrödi 1985
<i>Heterogomphus inarmatus</i> Ohaus, 1910 <i>Heterogomphus inarmatus</i> Ohaus 1910: 185 <i>Heterogomphus ochoai</i> Martínez 1966: 75	Peru, Argentina		m f	Endrödi 1985
<i>Heterogomphus incornutus</i> Prell, 1912 <i>Heterogomphus incornutus</i> Prell 1912: 150	Peru		m	Endrödi 1985
<i>Heterogomphus julus</i> Burmeister, 1847 <i>Heterogomphus julus</i> Burmeister 1847: 225 <i>Heterogomphus curtipennis</i> Prell 1912: 104	Brazil		m f	Endrödi 1985
<i>Heterogomphus laticollis</i> Prell, 1912 <i>Heterogomphus laticollis</i> Prell 1912: 115 <i>Heterogomphus politus</i> Prell 1912: 117 <i>Heterogomphus melancholicus</i> Prell 1912: 116	Brazil, Uruguay, Argentina		m f	Endrödi 1985
<i>Heterogomphus mirabilis</i> Prell, 1912 <i>Heterogomphus mirabilis</i> Prell 1912: 136	Peru		m f	Endrödi 1985

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Taxon	Distribution	Elevation Range (m)	Known sex	Reference
<i>Heterogomphus mniszehi</i> (Thomson, 1859) <i>Daemonoplus mniszehi</i> Thomson 1859: 69 <i>Daemonoplus pehlkei</i> Kolbe 1906a: 273 <i>Daemonoplus kolbei</i> Prell 1912: 155	Belize, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Venezuela, Colombia, Brazil		m f	Endrödi 1985, Ratcliffe 2003, Ratcliffe & Cave 2006, Gillet 2009
<i>Heterogomphus monotuberculatus</i> Dupuis & Dechambre, 2008 <i>Heterogomphus monotuberculatus</i> Dupuis & Dechambre 2008: 13	Paraguay		m f	Dupuis & Dechambre 2008
<i>Heterogomphus niger</i> Endrödi, 1978 <i>Heterogomphus niger</i> Endrödi 1978: 79	unknown		m f	Endrödi 1985
<i>Heterogomphus onorei</i> Voirin, 1984 <i>Heterogomphus onorei</i> Voirin 1984: 289	Ecuador		m	Voirin 1984
<i>Heterogomphus orsilochus</i> (Erichson, 1847) <i>Oryctes orsilochus</i> Erichson 1847: 95	Peru		f	Endrödi, 1976
<i>Heterogomphus pauson</i> (Perty, 1830) <i>Scarabaeus pauson</i> Perty 1830: 45 <i>Heterogomphus astyanax</i> Burmeister 1847: 226 <i>Heterogomphus punctipennis</i> Prell 1912: 114	Brazil, Argentina		m f	Endrödi 1985, Dupuis & Dechambre 2008
<i>Heterogomphus peruanus</i> Endrödi, 1976 <i>Heterogomphus peruanus</i> Endrödi 1976: 84	Peru		m	Endrödi 1985
<i>Heterogomphus pilosus</i> Dechambre, 1998 <i>Heterogomphus pilosus</i> Dechambre 1998a: 41	Peru		m	Dechambre 1998a
<i>Heterogomphus porioni</i> Dechambre, 1998 <i>Heterogomphus porioni</i> Dechambre 1998a: 42	Peru		m f	Dechambre 1998a
<i>Heterogomphus rubripennis</i> Prell, 1912 <i>Heterogomphus rubripennis</i> Prell 1912: 144	Ecuador, Peru		m	Endrödi 1985
<i>Heterogomphus rugicollis</i> Prell, 1912 <i>Heterogomphus rugicollis</i> Prell 1912: 137 <i>Heterogomphus ohausi</i> Prell 1912: 138	Mexico, Honduras, Venezuela, Colombia, Ecuador, Peru		m f	Endrödi 1985
<i>Heterogomphus rugosus</i> (Blanchard, 1842) <i>Megaceras rugosus</i> Blanchard 1842: Plate 11, Fig. 2 <i>Heterogomphus morbillosus</i> Burmeister 1847: 225	Bolivia, Brazil, Uruguay		m	Endrödi 1985, Dupuis & Dechambre 2008

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Taxon	Distribution	Elevation Range (m)	Known sex	Reference
<i>Heterogomphus schoenherri</i> Burmeister, 1847 <i>Heterogomphus schoenherri</i> Burmeister 1847: 231 <i>Heterogomphus whymperi</i> Bates 1891: 33	Panama, Venezuela, Colombia, Ecuador		m f	Endrödi 1985, Ratcliffe 2003
<i>Heterogomphus telamon</i> (Burmeister, 1847) <i>Stypotrupes telamon</i> Burmeister 1847: 210 <i>Syneterogomphus sternbergi</i> Prell 1912: 55	Surinam, Brazil	22–115	m f	Endrödi 1985, Gasca <i>et al.</i> 2008
<i>Heterogomphus thoas</i> Burmeister, 1847 <i>Heterogomphus thoas</i> Burmeister 1847: 228	Colombia, Brazil		m f	Endrödi 1985
<i>Heterogomphus ulysses</i> Burmeister, 1847 <i>Heterogomphus ulysses</i> Burmeister 1847: 232 <i>Heterogomphus dupontii</i> Burmeister 1847: 232	Colombia, Peru, Brazil	60–600	m f	Endrödi 1985, Gasca <i>et al.</i> 2008
<i>Hispanioryctes paulseni</i> Ratcliffe & Cave, 2011 <i>Hispanioryctes paulseni</i> Ratcliffe & Cave 2011: 6	Dominican Republic		m	Ratcliffe & Cave 2011
<i>Hispanioryctes rugulopygus</i> Ratcliffe & Cave, 2011 <i>Hispanioryctes rugulopygus</i> Ratcliffe & Cave 2011: 8	Haiti, Dominican Republic		m	Ratcliffe & Cave 2011
<i>Hispanioryctes sculptilis</i> Ratcliffe & Cave, 2011 <i>Hispanioryctes sculptilis</i> Ratcliffe & Cave 2011: 10	Dominican Republic		m f	Ratcliffe & Cave 2011
<i>Hispanioryctes wittmeri</i> Howden & Endrödi, 1978 <i>Hispanioryctes wittmeri</i> Howden & Endrödi in Howden 1978: 389	Haiti, Dominican Republic		m	Ratcliffe & Cave 2011
<i>Irazua dilicra</i> Ratcliffe, 2003 <i>Irazua dilicra</i> Ratcliffe 2003: 319	Costa Rica		m f	Ratcliffe 2003
<i>Licnostrategus endymion</i> (Olivier, 1789) <i>Scarabaeus endymion</i> Olivier 1789: 22	Jamaica		m f	Howden 1970
<i>Megaceras brevis</i> Dechambre, 1998 <i>Megaceras brevis</i> Dechambre 1998c: 192	Peru			Dechambre 1998c
<i>Megaceras briansaltini</i> Ratcliffe, 2007 <i>Megaceras briansaltini</i> Ratcliffe 2007: 463	Peru		m	Ratcliffe 2007
<i>Megaceras celatum</i> Dechambre, 1998 <i>Megaceras celatum</i> Dechambre 1998b: 134	Peru, Bolivia		m	Dechambre 1998b

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Taxon	Distribution	Elevation Range (m)	Known sex	Reference
<i>Megaceras crassum</i> Prell, 1914 <i>Megaceras crassum</i> Prell 1914: 213 <i>Megaceras punctostriatum</i> Prell 1934: 57	Colombia, Ecuador, Bolivia, Brazil	60–400	m f	Gasca <i>et al.</i> 2008
<i>Megaceras endroedii</i> Dechambre, 1998 <i>Megaceras endroedii</i> Dechambre 1998b: 133	Peru		m	Dechambre 1998b
<i>Megaceras hoplites</i> Silvestre, 1996 <i>Megaceras hoplites</i> Silvestre 1996: 109	Brazil		m	Silvestre 1996
<i>Megaceras inexpectatum</i> Dechambre, 1998 <i>Megaceras inexpectatum</i> Dechambre 1998b: 134	Ecuador		m	Dechambre 1998b
<i>Megaceras inflatum</i> Prell, 1934 <i>Megaceras inflatum</i> Prell 1934: 57	Colombia, Peru		m f	Endrödi 1985
<i>Megaceras jason</i> (Fabricius, 1775) <i>Scarabaeus jason</i> Fabricius 1775: 6 <i>Scarabaeus chorinaeus</i> Olivier 1789: 15 <i>Scarabaeus militaris</i> Olivier 1789: 35 <i>Scarabaeus elephas</i> Voet 1806: 25 <i>Scarabaeus tubicen</i> Voet 1806: 25 <i>Scarabaeus cilix</i> Drapiez 1821: 274	French Guiana, Surinam, Venezuela, Ecuador, Bolivia		m f	Endrödi 1985
<i>Megaceras laevipenne</i> Prell, 1914 <i>Megaceras laevipenne</i> Prell 1914: 214	French Guiana, Colombia, Peru, Brazil	30–115	m f	Gasca <i>et al.</i> 2008
<i>Megaceras morpheus</i> Burmeister, 1847 <i>Megaceras morpheus</i> Burmeister 1847: 223 <i>Megaceras ixyon</i> Reiche 1859: 16	Honduras, Panama, Venezuela, Colombia, Ecuador, Peru, Brazil, Argentina	340–1160	m f	Endrödi 1985, Ratcliffe 2003
<i>Megaceras pauliani</i> Dechambre, 1975 <i>Megaceras pauliani</i> Dechambre 1975: 131	Colombia, Ecuador		m f	Dechambre 1975
<i>Megaceras philoctetes</i> (Olivier, 1789) <i>Scarabaeus philoctetes</i> Olivier 1789: 16 <i>Scarabaeus cadmus</i> Olivier 1789: 43 <i>Scarabaeus vectarius</i> Voet 1806: Table 14, Fig. 105 <i>Megaceras teucer</i> Burmeister 1847: 223 <i>Megaceras lycaon</i> Endrödi 1976: 32	French Guiana, Surinam, Venezuela, Colombia, Peru Brazil,	0–600	m f	Endrödi 1985, Dechambre 1998b, Gasca <i>et al.</i> 2008
<i>Megaceras porioni</i> Dechambre, 1981 <i>Megaceras porioni</i> Dechambre 1981: 123	Peru		m	Dechambre 1981

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Taxon	Distribution	Elevation Range (m)	Known sex	Reference
<i>Megaceras quadraticolle</i> Dechambre, 1975 <i>Megaceras quadraticolle</i> Dechambre 1975: 132 <i>Megaceras prelli</i> Endrödi 1976: 33	Ecuador, Peru, Brazil		m	Dechambre 1998b
<i>Megaceras remus</i> Reiche, 1859 <i>Megaceras remus</i> Reiche 1859:	French Guiana		m	Endrödi 1985
<i>Megaceras septentrionis</i> Bates, 1888 <i>Megaceras septentrionis</i> Bates 1888: 325 <i>Megaceras crassicornis</i> Dechambre 1975: 624	Mexico, Nicaragua, Costa Rica, Panama, Colombia, Ecuador	1000–1800	m f	Endrödi 1985, Ratcliffe 2003
<i>Megaceras stuebeli</i> Kirsch, 1885 <i>Megaceras stuebeli</i> Kirsch 1885: 223 <i>Megaceras amazonicum</i> Frings 1929: 21	Brazil	0–600	m f	Endrödi 1985
<i>Megaceropsis quadridentatus</i> Dechambre, 1976 <i>Megaceropsis quadridentatus</i> Dechambre 1976: 129	French Guiana		m	Endrödi 1985
<i>Megaceropsis lecourti</i> Dechambre, 1996 <i>Megaceropsis lecourti</i> Dechambre 1996: 55	Bolivia		m	Dechambre, 1996
<i>Oryctoantiquus borealis</i> Ratcliffe & Smith, 2005 <i>Oryctoantiquus borealis</i> Ratcliffe & Smith in Ratcliffe <i>et al.</i> 2005: 130	USA (fossil)			Ratcliffe <i>et al.</i> 2005
<i>Podischnus aegenor</i> (Olivier, 1798) <i>Scarabaeus aegenor</i> Olivier 1789: 178 <i>Scarabeus barbicornis</i> Latreille 1813: 201 <i>Podischnus propiquus</i> Prell 1911: 200	Mexico, Guatemala, Belize, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Colombia, Venezuela, French Guiana, Colombia, Ecuador, Peru, Brazil		m f	Endrödi 1985
<i>Podischnus oberthuri</i> Sternberg, 1907 <i>Podischnus oberthuri</i> Sternberg 1907: 343 <i>Podischnus horni</i> Sternberg 1907: 349	Ecuador, Bolivia, Paraguay		m f	Endrödi 1985
<i>Podischnus sexdentatus</i> (Taschenberg, 1870) <i>Heterogomphus sexdentatus</i> Taschenberg 1870: 186 <i>Podischnus beckeri</i> Sternberg 1907: 347	Colombia, Peru, Brazil		m f	Endrödi 1985
<i>Strategus adolescens</i> Kolbe, 1906 <i>Strategus adolescens</i> Kolbe 1906b: 15	Mexico		m f	Ratcliffe 1976

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Taxon	Distribution	Elevation Range (m)	Known sex	Reference
<i>Strategus aenobarbus</i> (Fabricius, 1775) <i>Scarabaeus aenobarbus</i> Fabricius 1775: 10 <i>Scarabaeus eurytus</i> Fabricius 1775: 5 <i>Scarabaeus fossula</i> Palisot de Beauvois 1805: plate III.e <i>Strategus laterispinus</i> Chapin 1932: 454	Navassa Island, Haiti, Dominican Republic,		m f	Ratcliffe 1976
<i>Strategus ajax</i> (Olivier, 1789) <i>Scarabaeus ajax</i> Olivier 1789: 27	Bahamas, Cuba		m f	Ratcliffe 1976, Ratcliffe 1982, Ratcliffe & Cave 2008
<i>Strategus aloeus</i> (Linnaeus, 1758) <i>Scarabaeus aloeus</i> Linnaeus 1758: 345 <i>Geotrupes semiramis</i> Fabricius 1801:12 <i>Scarabaeus aesalus</i> Laporte 1840: 112 <i>Strategus julianus</i> Burmeister 1847: 133 <i>Strategus piosomus</i> Kolbe 1906b: 24 <i>Strategus arizonicus</i> Schaeffer 1915: 47 <i>Strategus roosevelti</i> Casey 1915: 241 <i>Strategus frontalis</i> Casey 1915: 243 <i>Strategus tarsalis</i> Casey 1915: 243 <i>Strategus gaillardi</i> Casey 1915: 244	USA, Mexico, Belize, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Trinidad, French Guiana, Surinam, Guyana, Venezuela, Colombia, Ecuador, Peru, Bolivia, Brazil	0–1600	m f	Ratcliffe 1976, Ratcliffe 2003, Ratcliffe & Cave 2006, Gillet 2009
<i>Strategus anachoreta</i> Burmeister, 1847 <i>Strategus anachoreta</i> Burmeister 1847: 134	Bahamas, Cuba		m f	Ratcliffe 1976, Endrödi 1985, Ratcliffe & Cave 2008
<i>Strategus antaeus</i> (Drury, 1773) <i>Scarabaeus antaeus</i> Drury 1773: 74 <i>Scarabaeus maimon</i> Fabricius 1775: 10 <i>Scarabaeus divergens</i> Casey 1915: 246 <i>Strategus atrolucens</i> Casey 1915: 247 <i>Strategus pinorum</i> Casey 1915: 248 <i>Strategus septentrionis</i> Casey 1915: 249 <i>Strategus sinuatus</i> Casey 1915: 250 <i>Strategus semistriatus</i> Casey 1915: 250 <i>Strategus houstonensis</i> Knaus 1925: 182	USA		m f	Ratcliffe 1976, Endrödi 1985
<i>Strategus argentinus</i> Kolbe, 1906 <i>Strategus argentinus</i> Kolbe 1906b: 24	Uruguay, Argentina		m f	Ratcliffe 1976
<i>Strategus atlanticus</i> Ratcliffe, 1976 <i>Strategus atlanticus</i> Ratcliffe 1976: 119	Bahamas		m	Ratcliffe 1976
<i>Strategus caymani</i> Ratcliffe, 1976 <i>Strategus caymani</i> Ratcliffe 1976: 120	Cayman Islands		m f	Ratcliffe 1976, Ratcliffe & Cave 2010

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Taxon	Distribution	Elevation Range (m)	Known sex	Reference
<i>Strategus centaurus</i> Kolbe, 1906 <i>Strategus centaurus</i> Kolbe 1906b: 29	Brazil, Paraguay, Argentina		m f	Ratcliffe 1976
<i>Strategus cessus</i> LeConte, 1866 <i>Strategus cessus</i> LeConte 1866: 382 <i>Strategus beckeri</i> Kolbe 1906b: 14 <i>Anastrategus cavicauda</i> Casey 1915: 233 <i>Anastrategus durangoensis</i> Casey 1915: 234 <i>Anastrategus inflatus</i> Casey 1915: 233 <i>Anastrategus tantalus</i> Casey 1915: 234	USA, Mexico		m f	Ratcliffe 1976
<i>Strategus cessatus</i> Wickham, 1914 <i>Strategus cessatus</i> Wickham 1914: 461	USA (fossil)			Ratcliffe 1976
<i>Strategus craigi</i> Ratcliffe, 1976 <i>Strategus craigi</i> Ratcliffe 1976: 124	USA, Mexico		m	Ratcliffe 1976, Ratcliffe 1982
<i>Strategus fallaciosus</i> Kolbe, 1906 <i>Strategus fallaciosus</i> Kolbe 1906b: 16	Mexico		m f	Ratcliffe 1976
<i>Strategus fascinus</i> Burmeister, 1847 <i>Strategus fascinus</i> Burmeister 1847: 131	Colombia		m	Ratcliffe 1976
<i>Strategus hipposiderus</i> Ratcliffe, 1976 <i>Strategus hipposiderus</i> Ratcliffe 1976: 127	Mexico, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Colombia, Brazil	0–1500	m f	Ratcliffe 1976
<i>Strategus howdeni</i> Ratcliffe, 1976 <i>Strategus howdeni</i> Ratcliffe 1976: 129	Mexico		m f	Ratcliffe 1976
<i>Strategus inermis</i> Arrow, 1947 <i>Strategus inermis</i> Arrow 1947: 223	Haiti		m	Ratcliffe 1976
<i>Strategus jugurtha</i> Burmeister, 184 <i>Strategus jugurtha</i> Burmeister 1847: 131	Mexico, Belize, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Venezuela, Colombia, Ecuador, Peru	0–1520	m f	Ratcliffe 1976, Endrödi 1985, Gillet 2009
<i>Strategus longichomperus</i> Ratcliffe, 1976 <i>Strategus longichomperus</i> Ratcliffe 1976: 132	Mexico, Belize, Guatemala, Honduras	0–1000	m f	Ratcliffe 1976, Endrödi 1985, Gillet 2009
<i>Strategus mandibularis</i> Sternberg, 1910 <i>Strategus mandibularis</i> Sternberg 1910: 99	Brazil, Paraguay, Argentina		m f	Ratcliffe 1976

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Taxon	Distribution	Elevation Range (m)	Known sex	Reference
<i>Strategus moralesdelgadorum</i> Delgado, 1997 <i>Strategus moralesdelgadorum</i> Delgado 1997: 253	Mexico	2100–2800	m f	Delgado 1997
<i>Strategus mormom</i> Burmeister, 1847 <i>Strategus mormom</i> Burmeister 1847: 130	USA		m f	Ratcliffe 1976
<i>Strategus oblongus</i> (Palisot de Beauvois, 1807; see discussion under Taxonomy for usage of name) <i>Scarabaeus dubius</i> Palisot de Beauvois, 1805:plate III.e <i>Scarabaeus oblongus</i> Palisot de Beauvois 1807: 74 <i>Scarabaeus quadrioveatus</i> Palisot de Beauvois 1807: 74	Cayman Islands, Haiti, Dominican Republic, Puerto Rico		m f	Ratcliffe 1976, Ratcliffe & Cave 2010
<i>Strategus sarpedon</i> (Burmeister, 1847) <i>Podalgus sarpedon</i> Burmeister 1847: 122	Cuba		m f	Ratcliffe 1976
<i>Strategus simson</i> (Linnaeus, 1758) <i>Scarabaeus simson</i> Linnaeus 1758: 345 <i>Scarabaeus titanus</i> Fabricius 1775: 10	Jamaica		m f	Ratcliffe 1976
<i>Strategus splendens</i> (Palisot de Beauvois, 1809) <i>Scarabaeus splendens</i> Palisot de Beauvois 1809: 89 <i>Scarabaeus boscii</i> Palisot de Beauvois 1809: 89 <i>Anastrategus cognatus</i> Casey 1915: 236 <i>Anastrategus carolinensis</i> Casey 1915: 237	USA		m f	Ratcliffe 1976
<i>Strategus surinamensis hirtus</i> Sternberg, 1910 <i>Strategus hirtus</i> Sternberg 1910: 100 <i>Strategus kolbeanus</i> Prell 1934: 164	Peru, Bolivia, Brazil, Paraguay, Argentina	0–200	m f	Ratcliffe 1976, Gasca <i>et al.</i> 2008
<i>Strategus surinamensis surinamensis</i> Burmeister, 1847 <i>Strategus surinamensis surinamensis</i> Burmeister 1847: 135	Trinidad, French Guiana, Surinam, Guyana, Venezuela, Colombia, Ecuador, Brazil	0–80	m f	Ratcliffe 1976, Gasca <i>et al.</i> 2008
<i>Strategus symphenax</i> Ratcliffe, 1976 <i>Strategus symphenax</i> Ratcliffe 1976: 148	Cuba		m	Ratcliffe 1976
<i>Strategus talpa</i> (Fabricius, 1792) <i>Scarabaeus talpa</i> Fabricius 1792: 32 <i>Strategus barbigerus</i> Chapin 1932: 455 <i>Strategus gracilis</i> Endödi 1976: 149 <i>Strategus thomasi</i> Endrödi 1976: 153	Bahamas, Cayman Islands, Puerto Rico, Virgin Islands, Saint Barthélemy, Antigua		m f	Ratcliffe 1976, Ratcliffe & Dechambre 1983, Ratcliffe & Cave 2008, Ratcliffe & Cave 2010

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Taxon	Distribution	Elevation Range (m)	Known sex	Reference
<i>Strategus tarquinius</i> Ratcliffe, 1976 <i>Strategus tarquinius</i> Ratcliffe 1976: 153	Grenada		m f	Ratcliffe 1976
<i>Strategus temoltzin</i> Morón & Nogueira, 2008 <i>Strategus temoltzin</i> Morón & Nogueira 2008: 95	Mexico		m f	Morón & Nogueira, 2008
<i>Strategus validus</i> (Fabricius, 1775) <i>Scarabaeus validus</i> Fabricius 1775: 6 <i>Scarabaeus tricornis</i> Jablonski 1785: 269 <i>Oryctes faunus</i> Billberg 1820: 383 <i>Strategus tridens</i> Burmeister 1847:133 <i>Strategus monguilloni</i> Voirin 1979: 9	Brazil, Paraguay, Uruguay, Argentina	0–200	m f	Ratcliffe 1976, Gasca <i>et al.</i> 2008, Ratcliffe 1982
<i>Strategus verrilli</i> Ratcliffe, 1976 <i>Strategus verrilli</i> Ratcliffe 1976: 157 (replacement name for <i>Strategus tricornis</i> Verrill 1906) <i>Strategus tricornis</i> Verrill 1906: 317 (junior secondary homonym of <i>Scarabaeus tricornis</i> Jablonski 1785: 269)	Dominica		m	Ratcliffe 1976
<i>Tehuacania howdeni</i> Endrödi, 1975 <i>Tehuacania howdeni</i> Endrödi 1975: 261	Mexico	1600–1700	m f	Endrödi 1975, Bitar & Morón 2009
<i>Xyloryctes corniger</i> Bates, 1888 <i>Xyloryctes corniger</i> Bates 1888: 115	Mexico, Guatemala		m f	Endrödi 1985
<i>Xyloryctes ensifer</i> Bates, 1888 <i>Xyloryctes ensifer</i> Bates 1888: 324 <i>Xylocyctes laevipennis</i> Sternberg 1908: 14 <i>Xylocyctes parpendicularis</i> Sternberg 1908: 19	Mexico, Guatemala, El Salvador, Honduras		m f	Endrödi 1985, Ratcliffe & Cave 2006
<i>Xyloryctes furcatus</i> Burmeister, 1847 <i>Xyloryctes furcatus</i> Burmeister 1847: 209	Mexico		m f	Endrödi 1985
<i>Xyloryctes guatemalensis</i> Bitar & Delgado, 2009 <i>Xyloryctes guatemalensis</i> Bitar & Delgado 2009: 213	Guatemala	1500–2100	m f	Bitar & Delgado 2009
<i>Xyloryctes howdenorum</i> Delgado & Nájera-Rincón, 1992 <i>Xyloryctes howdenorum</i> Delgado & Nájera-Rincón 1992: 215	Mexico		m f	Delgado & Nájera-Rincón 1992

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Taxon	Distribution	Elevation Range (m)	Known sex	Reference
<i>Xyloryctes jamaicensis</i> (Drury, 1773) <i>Scarabaeus jamaicensis</i> Drury 1773: 54 <i>Scarabaeus satyrus</i> Fabricius 1775: 12 <i>Scarabaeus americanus</i> Palisot de Beauvois 1807: 75 <i>Xyloryctes lacustris</i> Casey 1915: 255 <i>Xyloryctes tenuicornutus</i> Casey 1915: 255 <i>Xyloryctes obsolescens</i> Casey 1915: 256	Canada, USA		m f	Ratcliffe 2009
<i>Xyloryctes lobicollis</i> Bates, 1888 <i>Xyloryctes lobicollis</i> Bates 1888: 323	Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama	1000–2500	m f	Endrödi 1985, Morón <i>et al.</i> 1997, Ratcliffe, 2003, Ratcliffe 2006
<i>Xyloryctes splendidus</i> Prell, 1914 <i>Xyloryctes splendidus</i> Prell 1914: 211	Honduras, Costa Rica, Panama	1250–1720	m f	Endrödi 1985, Ratcliffe, 2003, Ratcliffe & Cave 2006
<i>Xyloryctes telephus</i> Burmeister, 1847 <i>Xyloryctes telephus</i> Burmeister 1847: 209	Mexico	1400–2500	m f	Endrödi 1985
<i>Xyloryctes teuthras</i> Bates, 1888 <i>Xyloryctes teuthras</i> Bates 1888: 324	Mexico, Guatemala, Honduras, Costa Rica		m f	Endrödi 1985, Ratcliffe, 2003, Ratcliffe & Cave 2006
<i>Xyloryctes thestalus</i> Bates, 1888 <i>Xyloryctes thestalus</i> Bates 1888: 325 <i>Cheiroplatys verticalis</i> Fall 1905: 272 <i>Xyloryctes intermedius</i> Sternberg 1908: 22 <i>Xyloryctes faunus</i> Casey 1915: 256 <i>Xyloryctes hebes</i> Casey 1915: 257 <i>Xyloryctes borealis</i> Endrödi 1975: 262	USA, Mexico	1300–2700	m f	Endrödi 1985, Morón <i>et al.</i> 1997, Ratcliffe 2009

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