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Updating checklist of family scarabaeidae (Coleoptera) in Egypt

El-Shewy Dalia ADOI: <https://doi.org/10.22271/j.entomol.2024.v12.i3a.9316>**Abstract**

In this work, the updating checklist of the Egyptian species of family Scarabaeidae (Coleoptera) is presented. This list includes 293 species belonging to 20 tribes in 7 subfamilies that records in literatures and material kept in the main reference insect collections of Egypt. The taxa (subfamilies, tribes, genera and species) are arranged in alphabetical order.

Keywords: Coleoptera, Scarabaeidae, Egypt**Introduction**

Family Scarabaeidae or scarab beetles is one of the largest families of order Coleoptera, consists of over 35,000 worldwide. The first comprehensive study that contained information on the scarab beetles of Egyptian fauna was presented by (Alfeiri, 1976) ^[1], who reported on 188 species belonging to 14 Subfamilies with notes on local distribution. According to the latest edition of the catalogue of Palearctic Coleoptera (Löbl, 2008) ^[12] 293 species of Scarabaeidae are currently Known from Egypt belonging to 7 subfamilies.

Several subfamilies have been elevated to family rank (e.g., Geotrupidae, Glaresidae, Glaphyridae, Hybosoridae and Ochodaeidae); more information on the survey, localities, biodiversity, phylogeny and taxonomy were included in the studies of (El-Akkad *et al*, 1997; El-Moursy *et al*, 1996, 1998& 2021; Fadl and Mossaad, 1997; Emad, 2000; Abdel Dayem *et al*, 2016, Salem *et al* 1985, 1986 and 2020, El-Metwally, 2017; El-Shewy, 2018 & 2023; Rahik *et al* 2023) ^[3, 5-7, 11, 10, 2, 13-15, 4, 8-9, 16].

Materials and Methods

this work is based on all records of the species of the family Scarabaeidae from Egypt, whether in literatures or in the main reference insect collections in Egypt, these collections are; The Egyptian reference museum of insects (Plant protection research institute), collection of Alfieri (Al-Azhar University, faculty of Agriculture), collection of Egyptian Entomological Society, Collection of faculty of Science (Ain Shams University) and Collection of faculty of Science (Cairo University) recent taxonomic position and senior synonyms are provided following Loble *et al*. (2008) ^[12].

Results and Discussion

the data obtained show that there were 293 scarabaeid species belonging to 20 tribes in 7 subfamilies with synonyms of some species and the recent taxonomic position are included as following;

Family Scarabaeidae Latreille,1802**Subfamily Aphodiinae****Tribe Aphodiini***Aphodius immundus* Creutzer, 1977(= *Aphodius fulvicollis* Mulsant)*Aphodius hydrochaeris* (Fabricius, 1798)(= *Aphodius tataricus* Harold)*Aphodius turbatus* Baudi di Selve, 1870**Corresponding Author:****El-Shewy Dalia A**

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(= *Aphodius lineimargo* Reitter)
Aphodius fimetarius (Linnaeus, 1758)
 (= *Aphodius cardinalis* Reitter)
Aphodius ictericus ghadimaouensis Balthasar, 1929
Aphodius ictericus ictericus (Laicharting, 1781)
 (= *Aphodius nitidulus* Fabricius)
Aphodius longispina Küster, 1854
Aphodius lugens Creutzer, 1799
Aphodius punctipennis Erichson, 1848
Aphodius sabaeus Peyerimhoff, 1907
Aphodius wollastoni iranicus Balthasar, 1946
Aphodius wollastoni wollastoni Harold, 1862
Aphodius algericus Mariani & Pittino, 1938
Aphodius granaries (Linnaeus, 1767)
Aphodius hyxos Petrovitz, 1962
Aphodius unicolor A. G. Olivier, 1789
Aphodius vexator Balthasar, 1933
Aphodius hieroglyphicus Klug, 1845
Aphodius melanostictus W. L. E. Schmidt, 1840
Aphodius cognatus Fairmaire, 1860
 (= *Aphodius kluge* A. Schmidt)
Aphodius opacior D. Koshantschikov, 1894
Aphodius pruinosus Reitter, 1892
Aphodius quadriguttatus (Herbst, 1783)
Aphodius lividus (A. G. Olivier, 1789)
Aphodius angulosus Harold, 1869
Aphodius leucopterus Klug, 1845
Aphodius contractus contractus Klug, 1845
Aphodius contractus scolytoides P. H. Lucas, 1846
Aphodius angustatus Klug, 1845
Aphodius linearis Reiche & Saulcy, 1856
Aphodius rutilus Klug, 1845
Aphodius assectator Balthasar, 1961
Aphodius granulifrons Fairmaire, 1883
Aphodius laevicollis Harold, 1866
Aphodius osiris W. Koshantschikov, 1916
Aphodius palmetincolus Karsch, 1881
Aphodius rutilinus Reitter, 1892
Aphodius arabicus Harold, 1875
Aphodius nigrita Fabricius, 1801
 (= *Aphodius nigrifulus* Boheman)
Aphodius aegyptiacus Petrovitz, 1964
Aphodius desertus Klug, 1845
Aphodius pallescens Walker, 1871
Aphodius nanus Fairmaire, 1860
Aphodius chobauti Clouet des Pesruches, 1896
Aphodius lucidus Klug, 1845
Aphodius sturmi Harold, 1870
Aphodius vitellinus Klug, 1845
Aphodius niloticus Petrovitz, 1976
Aphodius signifier Mulsant & Rey, 1870
Macrorretrus confuses (Harold, 1862)
Sahlbergianus longissimus (J. R. Sahlberg, 1908)
Theotimius grandis Gory, 1830

Tribe Eupariini

Ataenius horticola Harold, 1869

Tribe Psammodiina

Brindalus porcicollis (Illiger, 1803)
 (= *psammodius porcicollis* Illiger)
Granulopsammodius plicatulus (Fairmaire, 1892)
leiopsammodius laevicollis (Klug, 1845)
 (= *psammodius laevicollis* Klug)

(= *psammodius pallidus* Reitter)
leiopsammodius scabrifrons (Walker, 1871)
 (= *psammodius scabrifrons* Walker)
psammodius asper (Fabricius, 1775)
 (= *psammodius sulcicollis* Illiger)
Pararhyssemus coluber (Mayet, 1887)
 (= *Rhyssemus coluber* Mayet)
Pararhyssemus tibialis (Fabricius, 1798)
Pleurophorus caesus (Creutzer, 1796)
Rhyssemodes orientalis (Mulsant & Godart, 1875)
Rhyssemus exaratus Marseul, 1878
Rhyssemus granosus (Klug, 1842)
Rhyssemus mayeti Clouët des Pesruches, 1901
Rhyssemus plicatus (Germar, 1817)

Tribe Coprini

Catharsius sesostris C. O. Waterhouse, 1888
 (= *Catharsius plyades* Péringuey)
Copris hispanus Linnaeus, 1764
 (= *Copris retusus* Mulsant)
Heliocopris gigas (Linnaeus, 1758)
 (= *Heliocopris isidis* Latreille)
Metacatharsius inermis (laporte, 1840)

Tribe Gymnopleurini

Gymnopleurus aeruginosus Harold, 1867
Gymnopleurus flagellates (Fabricius, 1787)
 (= *Gymnopleurus asperatus* Mulsant)
Gymnopleurus geoffroyi (Fuessly, 1775)
 (= *Gymnopleurus tuberculatus* Mulsant)
Gymnopleurus mopsus (Pallas, 1781)
 (= *Gymnopleurus castanonota* Seabra)
Gymnopleurus sericeifrons Fairmaire, 1887
 (= *Gymnopleurus aeneipes* Fairmaire)
 (= *Gymnopleurus subauratus* H. J. Kolbe)
Gymnopleurus sturmi (MacLeay, 1821)
 (= *Gymnopleurus convexiusculus* Machatschke)

Tribe Oniticellini

Euoniticellus fulvus (Goeze, 1777)
 (= *Euoniticellus minuta* Seabra)
Euoniticellus pallens (A. G. Olivier, 1789)
 (= *Euoniticellus concinnus* Gené)

Tribe Onitini

Bubas bubaloides A. janssens, 1938
Cheironitis furcifer (P. Rossi, 1792)
 (= *Cheironitis theryi* Tondu)
Cheironitis osiridis (Reiche, 1856)
 (= *Cheironitis inversus* A. Costa)
Cheironitis ungaricus irroratus (P. Rossi, 1790)
 (= *Onitis inversus* A. Costa)
Cheironitis ungaricus ungaricus (Herbst, 1789)
 (= *Onitis alexis* Mulsant)
Onitis alexis septentrionalis Balthasar, 1942
Onitis ezechias Reiche & Saulcy, 1856

Tribe Onthophagini

Caccobius schreberi (Linnaeus, 1767)
 (= *Onthophagus obscurus* Mulsant)
Digitonthophagus gazelle (Fabricius, 1787)
 (= *Onthophagus gazelle* Fabricius)
 (= *Onthophagus intermedius* Reiche)
Euonthophagus atramentarius (Ménétriés, 1832)

Euonthophagus bedeli bedeli (Reitter, 1891)
 (= *Onthophagus bedeli* Reitter)
Euonthophagus maindroni (d'Orbigny, 1897)
 (= *Onthophagus maindroni* d'Orbigny)
Onthophagus sticticus Harold, 1867
Onthophagus transcipicus König, 1889
 (= *Onthophagus lineatus* Reitter)
Onthophagus variegatus (Fabricius, 1798)
Onthophagus melanocephalus Klug, 1845
Onthophagus taurus (Schreber, 1759)
 (= *Onthophagus saharae* Bedel)
Onthophagus aerarius Reitter, 1892
Onthophagus nebulosus Reiche, 1864
Onthophagus obliquus (A. G. Olivier, 1789)
Onthophagus arcifer d'Orbigny, 1904
Onthophagus bicristatus d'Orbigny, 1905
Onthophagus bituberculatus (A. G. Olivier, 1789)
 (= *Onthophagus discoideus* A. G. Olivier)
Onthophagus blanchardi Harold, 1869
Onthophagus inermifrons d'Orbigny, 1902
Onthophagus nitidulus Klug, 1845
 (= *Onthophagus mediofasciatus* d'Orbigny)
 (= *Onthophagus tetraspilvs* Fairmaire)
Onthophagus noctivagus Harold, 1877
Onthophagus pictus Reitter, 1892
Onthophagus scaber Roth, 1851
Onthophagus sellatus Klug, 1845
Onthophagus sparsulus Reitter, 1892
Onthophagus vinctus Erichson, 1843

Tribe Scarabaeini

Scarabaeus armeniacus (Ménétriés, 1832)
 (= *Scarabaeus nigrociliatus* Machatschke)
Scarabaeus puncticollis (Latreille, 1819)
 (= *Scarabaeus parumpunctatus* Klug)
Scarabaeus semipunctatus Fabricius, 1792
 (= *Scarabaeus substriatus* Mulsant)
Scarabaeus aegyptiorum (Latreille, 1827)
 (= *Kheper aegyptiorum* Latreille)
Scarabaeus multidentatum (Klug, 1845)
Scarabaeus silenus (G. R. Gray, 1832)
 (= *Scarabaeus rotundipenne* Holdhaus)
Scarabaeus aegyptiacus Stolfa, 1938
Scarabaeus cristatus Fabricius, 1775
 (= *Scarabaeus cornifrons* Laporte)
Scarabaeus gangeticus Laporte, 1840
 (= *Scarabaeus indicus* Machatschke)
Scarabaeus sacer Linnaeus, 1758
 (= *Scarabaeus confluidens* Fleischer)
Scarabaeus senaariensis (Laporte, 1840)

Subfamily Cetoniinae

Tribe Cetoniini

Aethiessa floralis (Fabricius, 1787)
Aethiessa inhumata (Groy & Percheron, 1833)
Cetonia delagrangi Boucard, 1893
Pachnoda fasciata (Fabricius, 1775)
Pachnoda histrio (Fabricius, 1775)
Pachnoda interrupta (A. G. Olivier, 1789)
Pachnoda marginata (Drury, 1773)
Pachnoda savignyi (Groy & Percheron, 1833)
Pachnoda thoracica (Fabricius, 1775)
Protaetia judith (Reiche, 1871)
 (= *Potosia judith* Reiche)

Protaetia afficta (Groy & Percheron, 1833)
 (= *Potosia servillii* Burmeister)
Protaetia vidua (Groy & Percheron, 1833)
 (= *Potosia aegyptiaca* Groy & Percheron)
Protaetia cuprea ignicollis (Groy & Percheron, 1833)
Stalagmosoma albellum (Pallas, 1781)
Stalagmosoma cynanki (Groy & Percheron, 1833)
Tropinota squalida pilosa Brullé, 1832
Oxythyrea abigail Reiche & Saulcy, 1856
Oxythyrea cinctella Schaum, 1841
Oxythyrea funesta (Poda von Neuhaus, 1761)
Oxythyrea noemi Reiche & Saulcy, 1856

Tribe Goliathini

Gnathocera trivittata aegyptiaca Kraatz, 1886

Subfamily Dynastinae

Tribe Oryctini

Oryctes nasicornis kuntzeni Minck, 1914
Oryctes nasicornis nasicornis (Linnaeus)
Oryctes agamemnon agamemnon Burmeister, 1847
Oryctes agamemnon sinaicus Walker, 1871
Oryctes sahariensis Bruneau de Miré, 1960

Tribe Pentodontini

Coptognathus crassipes Burmeister, 1847
Heteronychus licas (Klug, 1835)
Heteronychus parumpunctatus Burmeister, 1847
Pentodon algerinus (Fuessly, 1778)
 (= *Pentodon bispinosus* Küster)
Pentodon bidens sulcifrons Küster, 1848
Pentodon variolopunctatus deserti (Heyden, 1900)
Phyllognathus excavates (Forster, 1771)
Podalgus cuniculus arabicus Fairmaire, 1895
Temnorhynchus baal Reiche & Saulcy, 1856

Subfamily Eremazinae

Eremazus punctatus (Harold, 1869)
Eremazus unistriatus Mulsant, 1851

Subfamily Melolonthinae

Tribe Melolonthini

Cryptotrogus weisei Kraatz, 1888

Tribe Pachydemini

Pachydema albipilis Reitter, 1902
Pachydema bullata Burmeister, 1855
Pachydema conica Reitter, 1902
Pachydema grandipalpis Reitter, 1902
Pachydema immatura Burmeister, 1855
Pachydema israelitica Crotch, 1872
Pachydema nocturna Crotch, 1872
Pachydema palposa Reitter, 1902
Pachydema pilosa Walker, 1871
Pachydema sancta Crotch, 1872
Pachydema sinaitica Crotch, 1872
Pachydema unicolor (P. H. Lucas, 1851)
Tanyproctus sinaiticus (Heyden, 1900)
Tanyproctus indesciptions Baraud, 1979

Tribe Rhizotrogini

Aplidia aegyptiaca (Kraatz, 1882)
 (= *Haplidia aegyptiaca* Kraatz)
Aplidia nididula (Kraatz, 1882)

Madotrogus sinaicus (Baraud, 1975)

Tribe Schizonychini

Schizonycha flavicornis Brenske, 1898

(= *Schizonycha africana* Burmeister)

Schizonycha nilotica C. E. Blanchard, 1851

Subfamily Sericinae

Tribe Sericini

Ablaberoides abyssinicus (Brenske, 1902)

Hetamius demaisonii Fairmaire, 1893

Maladera sinaica D. Ahrens, 2000

Paratriodontia olivieri (C. E. Blanchard, 1850)

Subfamily Rutelinae

Tribe Adoretini

Adoretus aegrotus Burmeister, 1844

Adoretus garamas Peyerimhoff, 1921

Adoretus granulifrons Fairmaire, 1882

(= *Adoretus graniceps* Reitter)

Adoretus quadridens Marseul, 1878

Adoretus senescens Walker, 1871

Adoretus clypeatus Burmeister, 1844

Tribe Anomalini

Brancoptia pumila (Marseul, 1878)

Chaetopteropia aegyptica (Machatschke, 1961)

Rhinyptia rostrate Burmeister, 1844

(= *Adoretus tewfikii* Pic)

Anomala obscuripes Fairmaire, 1892

(= *Anomala femorata* Reitter)

Anomala plebeja (A. G. Olivier, 1789)

Pharaonus fasciculatus (Burmeister, 1844)

Tribopertha aegyptica (C. E. Blanchard, 1851)

Trichopopillia dorsalis nilotica (Kraatz, 1892)

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