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## Catalog, nomenclatural acts and distribution of Scarabaeinae (Coleoptera, Scarabaeidae) from Ecuador Version 2

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## **Abstract**

The Ecuadorian territory is divided into four natural regions: the coastal lowlands, the Andean highlands, the Amazon basin and the Galapagos Islands. Each of these regions has its own ecosystems and specific vegetation. The purpose of this work is to compile an updated catalog of the Scarabaeinae (Coleoptera: Scarabaeidae) of Ecuador that includes distributional data and several nomenclatural acts. We compiled data from 26 scientific collections, with the examination of 13,550 scarabaeines; additionally, 375 bibliographic references were reviewed for their taxonomic histories. The Scarabaeinae fauna from Ecuador contains 33 genera and 219 species, with 45 range-restricted (endemic) species and eight records erroneously attributed. The following nomenclatural acts are made: **new status as valid species** (3): Canthon (Glaphyrocanthon) ohausi Balthasar, 1939 stat. n.; Deltochilum (Calhyboma) arrowi Paulian, 1939 stat. n; and Dichotomius (Dichotomius) angustus (Luederwaldt, 1923) stat. n. New synonyms (4): Deltochilum (Deltohyboma) aureopilosum Paulian, 1938 syn. n.; Dichotomius (Dichotomius) provisorius Luederwaldt, 1925 syn. n.; Dichotomius (Dichotomius) hempeli Pereira, 1942 syn. n.; and *Uroxys magnus* Balthasar, 1940 syn. n. Revalidated names (4): Canthidium (Canthidium) orbiculatum (Lucas, 1859); Coprophanaeus (Coprophanaeus) florenti Arnaud, 2002; Dichotomius (Luederwaldtinia) fortepunctatus (Luederwaldt, 1923) and Phanaeus (Notiophanaeus) pyrois funereus Balthasar, 1939. Revised status (1): Canthon (Glaphyrocanthon) subhyalinoides Balthasar, 1939. New combination (1): Uroxys ohausi (Balthasar, 1938) comb. n. Lectotype designations (69): Choeridium aeneomicans Harold, 1868; Choeridium connexum Harold, 1868; Choeridium ecuadorense Boucomont, 1928; Canthidium aurifex Bates 1887; Canthidium centrale Boucomont, 1928; Canthidium coerulescens Balthasar, 1939; Canthidium inoptatum Balthasar, 1939; Canthidium lentum Erichson, 1847; Onthophagus onitoides Perty, 1830; Choeridium orbiculatum Lucas, 1859; Canthidium rufinum Harold, 1867; Deltochilum aberrans Harold, 1868; Canthon angustatus Harold, 1867; Canthon balteatus Boheman, 1858; Canthon balteatus var. lojanus Balthasar, 1939; Canthon delicatulus Balthasar, 1939; Canthon fuscipes Erichson, 1847; Canthon gemellatus Erichson, 1847; Canthon luteicollis Erichson, 1847; Canthon nitidicollis Lucas, 1859; Canthon angustatus ohausi Balthasar, 1939; Canthon plagiatus Harold, 1880; Canthon politus Harold, 1868; Ateuchus bidens Fabricius, 1801; Canthon semiopacus Harold, 1868; Canthon subhyalinus Harold, 1867; Canthon subhyalinoides Balthasar, 1939; Hyboma aeguinotiale Buquet, 1844; Deltochilum erodioides Harold, 1867; Deltochilum tessellatum var. arrowi Paulian, 1939; Deltochilum barbipes Bates, 1870; Deltochilum aureopilosum Paulian, 1938; Deltochilum batesi Paulian, 1938; Hyboma dromedarius Castelnau, 1840; Hyboma hyppona Buquet, 1844; Hyboma arrogans Buquet, 1844; Deltochilum mexicanum Burmeister, 1848; Deltochilum orbiculare Lansberge, 1874; Deltochilum tessellatum Bates, 1870; Pinotus satanas var. angustus Luederwaldt, 1923; Pinotus provisorius Luederwaldt, 1925; Pinotus compressicollis Luederwaldt, 1929; Copris scalpellum Taschenberg, 1870; Pinotus abnormis Luederwaldt, 1923; Pinotus divergens Luederwaldt, 1923; Pinotus fortepunctatus Luederwaldt, 1923; Pinotus monstrosus Harold, 1875; Pinotus podalirius Felsche, 1901; Pinotus problematicus Luederwaldt, 1923; Pinotus hempeli Pereira, 1942; Pinotus

protectus Harold, 1867; Pinotus protectus var. tridentatus Luederwaldt, 1923; Pinotus quinquedens Felsche, 1910; Pinotus quinquelobatus Felsche, 1901; Pinotus achamas Harold, 1867; Onthophagus dicranoides Balthasar, 1939; Onthophagus digitifer Boucomont, 1932; Onthophagus lojanus Balthasar, 1939; Onthophagus xanthomerus Bates, 1887; Phanaeus achilles Boheman, 1858; Canthon kaestneri Balthasar, 1939; Canthon moniliatus Bates, 1887; Uroxys elongatus Harold, 1868; Uroxys latesulcatus Bates, 1891; Uroxys magnus Balthasar, 1940; Pseuduroxys ohausi Balthasar, 1938; Uroxys pauliani Balthasar, 1940; Uroxys rugatus Boucumont, 1928 and Uroxys sulcicollis Harold, 1880. Maps of geographical distribution of each species are provided.

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## **Protocol**

Step 1.

Step 2.