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Current Classification of the Families of Coleoptera

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CURRENT CLASSIFICATION OF THE FAMILIES OF COLEOPTERA

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Several works on the order Coleoptera have appeared in recent years, some of them creating new superfamilies, others modifying the constitution of these or creating new families, finally others are general revisions of the order. The authors believe that the current classification of this order, incorporating these changes would prove useful. The following outline is based mainly on Crowson (1960, 1964, 1966, 1967, 1971, 1972, 1973) and Crowson and Viedma (1964). For characters used on classification see Viedma (1972) and for family synonyms Abdullah (1969). Major features of this conspectus are the rejection of the two sections of Adephaga (Geadephaga and Hydradephaga), based on Bell (1966) and the new sequence of Heteromera, based mainly on Crowson (1966), with adaptations.

Order COLEOPTERA

I. Suborder ARCHOSTEMATA

Superfamily CUPEDOIDEA

1 Family Cupedidae
2 Family Micromalthidae

II. Suborder ADEPHAGA

Superfamily CARABOIDEA

3 Family Rhysodidae
4 Family Paussidae
5 Family Carabidae
6 Family Cicindelidae
7 Family Trachypachidae
8 Family Haliplidae
9 Family Amphizoidae
10 Family Hygrobiidae
11 Family Noteridae
12 Family Dytiscidae
13 Family Gyrinidae

III. Suborder MYXOPHAGA

Superfamily SPHAERIOIDEA

14 Family Lepiceridae
15 Family Sphaeriidae
16 Family Hydroscaphidae
17 Family Torridincolidae

IV. Suborder POLYPHAGA

Series STAPHYLINIFORMIA

Superfamily HYDROPHILOIDEA

18 Family Hydraenidae
19 Family Hydrochidae
20 Family Spercheidae
21 Family Georyssidae
22 Family Hydrophilidae

Superfamily HISTEROIDEA

23 Family Sphaeritidae
24 Family Syntelüdae
25 Family Histeridae

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Superfamily STAPHYLINOIDEA

26 Family Ptiliidae
27 Family Limulodidae
28 Family Dasyceridae
29 Family Leptinidae
30 Family Anisotomidae
31 Family Scydmaenidae
32 Family Silphidae
33 Family Staphylinidae
34 Family Pselaphidae

Series SCARABAEIFORMIA

Superfamily SCARABAEOIDEA

35 Family Lucanidae
36 Family Passalidae
37 Family Trogidae
38 Family Acanthoceridae
39 Family Geotrupidae
40 Family Scarabaeidae
41 Family Glaphyridae
42 Family Hybosoridae

Superfamily EUCINETOIDEA

43 Family Clambidae
44 Family Eucinetidae
45 Family Helodidae

Superfamily DASCILLOIDEA

46 Family Dascillidae
47 Family Karumiidae
48 Family Rhipiceridae

Series ELATERIFORMIA

Superfamily BYRRHOIDEA

49 Family Byrrhidae

Superfamily DRYOPOIDEA

50 Family Psephenidae
51 Family Ptilodactylidae
52 Family Eulichadidae
53 Family Eurypogonidae
54 Family Chelonariidae
55 Family Heteroceridae
56 Family Limnichidae
57 Family Dryopidae
58 Family Elmidae

Superfamily BUPRESTOIDEA

59 Family Buprestidae

Superfamily ARTEMATOPOIDEA

60 Family Artematopidae
61 Family Callirhipidae
62 Family Brachypsectridae

Superfamily ELATEROIDEA

63 Family Cebrionidae
64 Family Elateridae
65 Family Trixagidae
66 Family Cerophytidae
67 Family Perothopidae
68 Family Eucnemidae

Superfamily CANTHAROIDEA

69 Family Cneoglossidae
70 Family Plastoceridae
71 Family Homalisidae
72 Family Lycidae
73 Family Drilidae
74 Family Phengodidae
75 Family Telegeusidae
76 Family Lampyridae
77 Family Omethidae
78 Family Cantharidae

Series BOSTRYCHIFORMIA

Superfamily DERMESTOIDEA

79 Family Derodontidae
80 Family Nosodendridae
81 Family Dermestidae
82 Family Thorictidae
83 Family Sarothriidae

Superfamily BOSTRYCHOIDEA

84 Family Anobiidae
85 Family Ptinidae
86 Family Bostrychidae
87 Family Lyctidae

Series CUCUJIFORMIA

Superfamily CLEROIDEA

88 Family Phloiophilidae
89 Family Peltidae
90 Family Trogossitidae
91 Family Chaetosomatidae
92 Family Cleridae
93 Family Phycosecidae
94 Family Melyridae

Superfamily LYMEXYLOIDEA

95 Family Lymexylidae

Superfamily STYLOPOIDEA

96 Family Mengeidae
97 Family Stylopidae

Superfamily CUCUJOIDEA

Section CLAVICORNIA

98 Family Nitidulidae
99 Family Smicripidae
100 Family Rhizophagidae
101 Family Protocucujidae
102 Family Sphindidae
103 Family Boganiidae
104 Family Hypocopridae
105 Family Passandridae
106 Family Cucujidae
107 Family Silvanidae
108 Family Helotidae
109 Family Propalticidae
110 Family Cryptophagidae
111 Family Languriidae
112 Family Erotylidae
113 Family Phalacridae
114 Family Cerylonidae
115 Family Corylophidae
116 Family Coccinellidae
117 Family Endomychidae
118 Family Discolomidae
119 Family Merophysidae
120 Family Lathridiidae

Section HETEROMERA

121 Family Tetratomidae
122 Family Mycetophagidae
123 Family Pterogeniidae
124 Family Cisidae
125 Family Biphyllidae
126 Family Byturidae
127 Family Synchroidae
128 Family Zopheridae
129 Family Cephaloidae
130 Family Perimylopidae
131 Family Merycidae
132 Family Monommidae
133 Family Colydiidae
134 Family Nilionidae
135 Family Tenebrionidae
136 Family Lagriidae
137 Family Alleculidae
138 Family Melandryidae
139 Family Mordellidae
140 Family Rhipiphoridae
141 Family Scraptiidae
142 Family Pythidae
143 Family Trictenotomidae
144 Family Pyrochroidae
145 Family Salpingidae
146 Family Elacatidae

Section HETEROMERA (Continued)

147 Family Cononotidae
148 Family Mycteridae
149 Family Boridae
150 Family Inopeplidae
151 Family Anthicidae
152 Family Meloidae
153 Family Aderidae

Incertae sedis

154 Family Prostomidae
155 Family Oedemeridae
156 Family Petriidae
157 Family Tretothoracidae
158 Family Aculognathidae

Superfamily CHRYSOMELOIDEA

159 Family Cerambycidae
160 Family Bruchidae
161 Family Chrysomelidae

Superfamily CURCULIONOIDEA

162 Family Nemonychidae
163 Family Anthribidae
164 Family Belidae
165 Family Oxycorynidae
166 Family Proterhinidae
167 Family Attelabidae
168 Family Brenthidae
169 Family Apionidae
170 Family Curculionidae

Uncertain superfamily position

171 Family Phaenocephalidae

LITERATURE CITED

Abdullah, M. 1969. Conspectus of the current classification of Coleoptera with synonymies. Beitr. Entomol. 19(316):683-685.

————————. 1973. The improvement of an existing modern classification in biology. Zool. Beitr. 19:13-41.

Bell, R. T. 1966. *Trachypachus* and the origin of the Hydradephaga (Coleoptera). Coleop. Bull. 20:107-112.

Crowson, R. A. 1960. The phylogeny of Coleoptera. Ann. Rev. Entomol. 5:111-134.

————————. 1964. A review of the classification of Cleroidea (Coleoptera) with descriptions of two new genera of Peltidae and of several new larval types. Trans. R. Entomol. Soc. Lond. 116:275-327.

————————. 1966. Observations on the constitution and subfamilies of the family Melandryidae (Coleoptera). Eos 41:507-513.

————————. 1967. The natural classification of the families of Coleoptera. E. W. Classey, Hampton, Middlesex.

————————. 1971. Observations on the superfamily Dascilloidea (Coleoptera: Polyphaga), with the inclusion of Karumiidae and Rhipiceridae. Zool. Journ. Linn. Soc. 50(1):11-19.

————————— 1972. A review of the classification of Cantharoidea (Coleoptera), with the definition of two new families, Cneoglossidae and Omethidae. Rev. Univ. Madrid 82:35-77.

————————. 1973. On a new Superfamily Artematopoidea of polyphagan beetles, with the definition of two new fossil genera from the Baltic Amber. J. nat. Hist. 7:225-238.

Crowson, R. A. y M. G. de Viedma. 1964. Observations on the relationships of the genera *Circaeus* Yablok. and *Mycterus* Clairv. with a description of the presumed larva of *Mycterus*. (Col. Heteromera). Eos 40:99-107.

Viedma, M. G. de. 1972. El proceso de las classificaciones naturales (filogenéticas o evolutivas) en el orden Coleoptera. Rev. Univ. Madrid 82:79-105.