A new species of the genus *Pentaphyllus* Dejean, 1821 (Coleoptera, Tenebrionidae, Diaperinae) from the Baltic amber and checklist of the fossil Tenebrionidae

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Pentaphillus cioides sp. nov. is described from Baltic amber and data on pre-Pleistocene fossil Tenebrionidae are given.

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Introduction

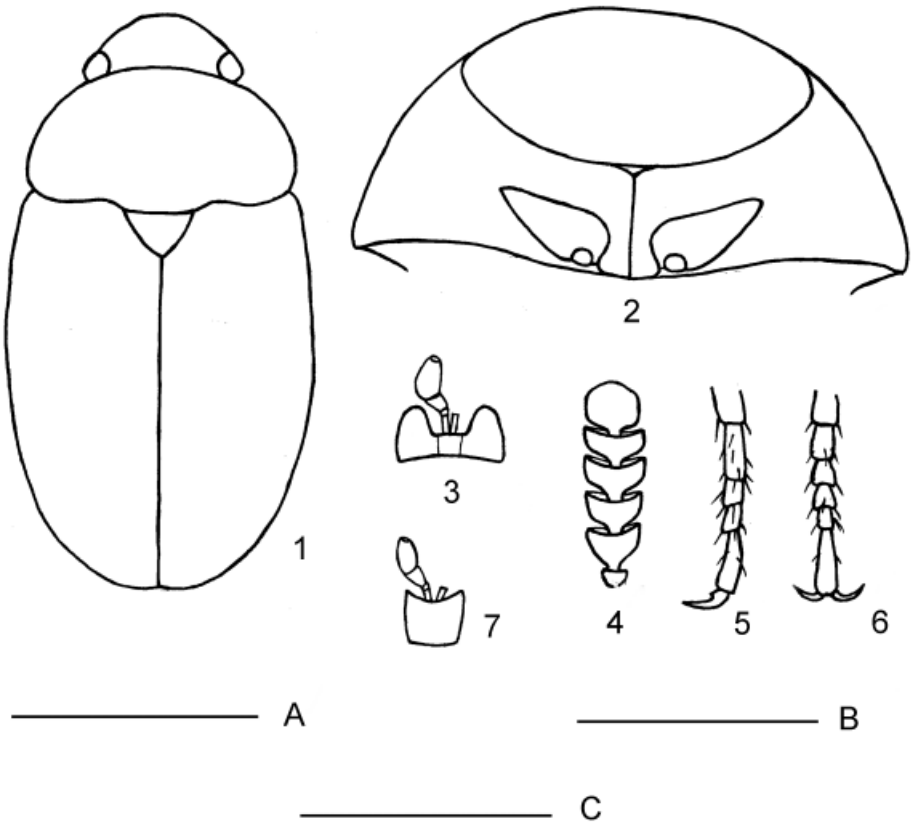
The family Tenebrionidae is quite large coleopterous group, however, there are published not so many data on them from fossils (see complete references in Spahr, 1981a, 1981b and Ponomarenko & Kirejtshuk, 2008). It can be explained by two circumstances. On the one hand, many members of this family are not flier and associated with soil habitats in arid and semiarid areas and, therefore, had not so many chances to come in deposition of both lacustrine sites and amber. On the other hand, even accessible fossil specimens have not expressive or completely missing diagnostic characters and, subsequently, many forms already described have a rather obscure characteristic. Most representatives of extinct forms of this family are known from Baltic and Dominican amber (see appendix) and predominantly belong to the forest groups. The remainder scantily spreads through different resources, although comparatively many forms were described from the outcrop of the Middle Eocene Geisental [most species from Geisental (Pongracz, 1935; Haupt, 1950, 1960) have rather unclear attribution and now interpreted mainly as "incertae sedis" and, therefore, are needed to be re-studied].

As yet only 10 fossil species of the subfamily Diaperinae have been known. They are *Platydema antiquorum* Wickham, 1913 and *P. bethunei* Wickham, 1913 recorded from Florissant (Lower Oligocene); *P. geinitzi* Heyden et Heyden, 1866 from Rott (Lower Miocene, Aquitanian); ? *Ceropria messelense* Hornschemeyer, 1994 from Messel (Middle Eocene, Messel Formation) and 6 species from Dominican amber: *Liodema phalacroides* Doyen et Poinar, 1994; *Neomida senicula* Doyen et Poinar, 1994; *Tyrtaeus azureus* Doyen et Poinar, 1994; *T. elongatus* Doyen et Poinar, 1994; *T. flavoantennatus* Doyen et Poinar, 1994; *T. thoracicus* Doyen et Poinar, 1994. Besides, one species from the Baltic amber without mention of genus and species attribution is mentioned in both Helm (1896) and Larsson (1978). The subfamily was primarily associated with arboreal habitats, living on tree fungi and in subcortical space.

Pentaphyllus cioides sp. nov.
(Figs 1-7, Pl. 1, A-C)

Holotype. "48/2001" from the collection F. Kernegger destined to be deposited in the Zoological Institute of the Russian Academy of Sciences (St. Petersburg); Amber quarry Jantarny near Kaliningrad (formerly Koenigsberg), Kaliningrad region, Russia, Upper Eocene.

Description. Length 1.7, width 1.0, height 0.8 mm. Rather convex dorsally and slightly convex ventrally; body unicolorous brownish with lighter (reddish) appendages; glabrous dorsally and ventrally. Pronotum and elytra with distinct punctures somewhat larger than eye facets in diameter, interspaces between punctures more or less broader than a puncture diameter, smoothed or completely smooth. Metaventrite and abdominal ventrites with punctures 1.5-2.0 times as large as eye facets in diameter, but somewhat denser and with more or less raised microsculpture, although along the middle of both metaventrite and ventrites



Figs 1-7. 1-6, *Pentaphyllus cioides* sp. nov. **1**, body, dorsal; **2**, prothorax, ventral; **3**, mentum and labial palpus, ventral; **4**, antennal club, lateral; **5**, mesotarsus, dorsal; **6**, metatarsus, lateral. **7**, *P. testaceus*, mentum and labial palpus, ventral. Scales: A – to fig. 1, bar 0.7 mm; B – to fig. 2, bar 0.35 mm; C – to figs 3-7, bar 0.18 mm.

punctures becoming smaller and sparser, and interspaces completely smooth.

Head as long as distance between eyes, gently vaulted and with a comparatively feeble transverse depression before elevated anterior part of frons. Labrum somewhat exposed from under frons and with invisible outline. Mandibles scarcely exposed from under frons and labrum. Antennae with 5-segmented club, composing of antennomeres 7-10 subequal in shape and size, and antenomere 11 markedly longer than each of previous ones; antennomere 2 slightly shorter than scape and slightly longer than each of antennomeres 3-6. Pronotum strongly convex along middle (its upper outline nearly straight in lateral view), steeply sloping laterally and not explanate at sides; its anterior edge rather convex, sides nearly rectilinearly narrowing anrteriorly, posterior edge rather convex and with distinct sinuation at sides of scutellum. Elytra slightly longer than wide combined, extremely steeply sloping (subvertical) along sides and rather steeply at apices.

Mentum comparatively narrow and subquadrangular. Last labial palpomere somewhat narrowed apically. Prosternum with a distinct median carina along entire length (reaching the end of subangular apex of prosternal process, which is wider than antennal flagellum in the narrowest part). Distance between mesocoxae about 1.5 times and that between metacoxae about twice as broad as that between procoxae. Metaventrite weakly vaulted, with a distinct median line (which is not depressed) and moderately deeply emarginated posterior edge between coxae. Abdominal ventrite 1 about 1.3 times as long as ventrite 2; hypopygidium subequal in length with ventrite 2, ventrite 3 somewhat shorter and ventrite 4 shortest.

Legs morderately long. Tibia narrow and subequal in width, subparallel-sided and with rounded outer apical angle, about 2/3 as wide as antennal club, spurs rather thin and comparatively short and comparable in length with setae at outer apical angle. Femora 2 to 2.3 times as wide as tibiae, with gently convex outline of anterior and

posterior edges. Tarsi about 3/4 as long as tibiae; pro- and mesotarsomeres 1-4 as metatarsomeres 1-3 subconical and, oblique apices, covered with sparse and moderately long setae; claws slightly dentate at base and with a rediment of empodium between.

Comparison. This new species should be regarded as a true member of the genus *Pentaphyllus* Latreille, 1829 because its antennae have a distinct 5-segmented club and eyes are without emargination. It is also characterized by the comparatively long and medially carinate prosternum (in *P. chrysomeloides* (Rossi, 1792) – shorter and subflattened, with a transverse depression before prosternal process, while in *P. testaceus* (Hellwig, 1792) – as long as in the new species, medially convex and without transverse depression) and subflattened metasternum (in *P. chrysomelloides* it is medially depressed). This new species has a ciid-like appearance, including its comparatively narrow head oriented ventrally and somewhat retracted into the prothorax and steeply sloping elytral apices. It has a rather convex and relatively robust body with comparable level of convexity in pronotum and elytra; pronotum widest at rounded posterior angles, nearly rectilinearly narrowing anteriorly and evenly sloping sides (without evident explanation); distinct, rather coarse and widely dispersed punctures on dorsum (head, pronotum and elytra); smoothed to completely smooth sculpture of interspaces; rather compact 5-segmented antennal club, which is almost as long as the rest of antenna (antennal club is markedly looser in most of extant species). Such combination of characters put this new species in a quite isolated position among the congeners from the recent fauna, especially due to the peculiar shape and orientation of its head. A ciid-like appearance is more or less characteristic of many members of this genus, but, in contrast to the Baltic species, all recent species have the rather wide head which cannot be retracted into the prothorax at the level observed in the holotype of this new species. The most ciid-like appearance is demonstrated by the recent *P. nanus* Kaszab, 1955 and *P. biconiger* Gebien, 1925, but the new species differs from them in the smaller and more slender body, subrectilinear sides of pronotum and narrow protibia (not dilated apically) and longer last antennomere (*P. biconiger* has some sinuation at each side of scutellum, but not so deep as that in the new species). *P. pygmaeus* Champion, 1894 has also a somewhat similar appearance, although the new species, except the mentioned features in the shape of head, is well distinguished by the sparser punctation on dorsum (head, pronotum and elytra), subrectilinear pronotal sides, more or less distinct sinuation of pronotal posterior edge at each side of scutellum and less elevated anterior edge of frons.

This new species can also be compared with the following extant representatives of the genus (although none of them has sinuation of posterior edge of pronotum at each side of scutellum, but their head is more exposed and oriented anteriorly, and/or their elytral apices are more gently sloping than in the new species):

– *P. basalis* Gebien, 1914 and *P. mentaweicus* Gebien, 1925: differs from them in the smaller and more robust body, coarser punctation on dorsum, much shorter and more compact antennal club; and from *P. mentaweicus* also in the not arcuate pronotal sides; and from *P. basalis* also in the rounded posterior angles of pronotum.

– *P. ensifera* Fauvel, 1904: differs from it in the more robust, not arcuate pronotal sides and somewhat sparser punctation of dorsum, longer antennal club with larger apical antennomere;

– *P. minimus* Kulzer, 1957: differs in the much more robust body, sparser punctation of dorsum, not arcuate pronotal sides, shorter and more compact antennal club;

– *P. spinipes* Gebien, 1925: differs from it in the smaller body, much more sparse punctation, smoothed interspaces between punctures and not subparallel pronotal sides;

– *P. tokarensis* Nakane, 1963: differs from it in the sparser punctation of dorsum, not arcuate and not (sub)explanate pronotal sides; smaller and more compact antennal club;

– *P. biroi* Kaszab, 1955 and *P. nitidulus* Reitter, 1883: differs from them in the more robust body, more compact antennal club, sparser and coarser punctures and smooth interspaces on dorsum; and from *P. biroi* in the not (sub)explanate pronotal sides; and from *P. nitidulus* in the markedly wider antennal club;

– *P. ardoini* Kaszab, 1969: differs from it in the more convex body, more compact antennal club, sparser and larger punctures on dorsum, subrectilinear and steeply sloping pronotal sides narrowing anteriorly (not widely rounded and explanate).

Etymology. The species epithet was formed from the Latin generic name "*Cis*" and "*ides*" (similar, like).

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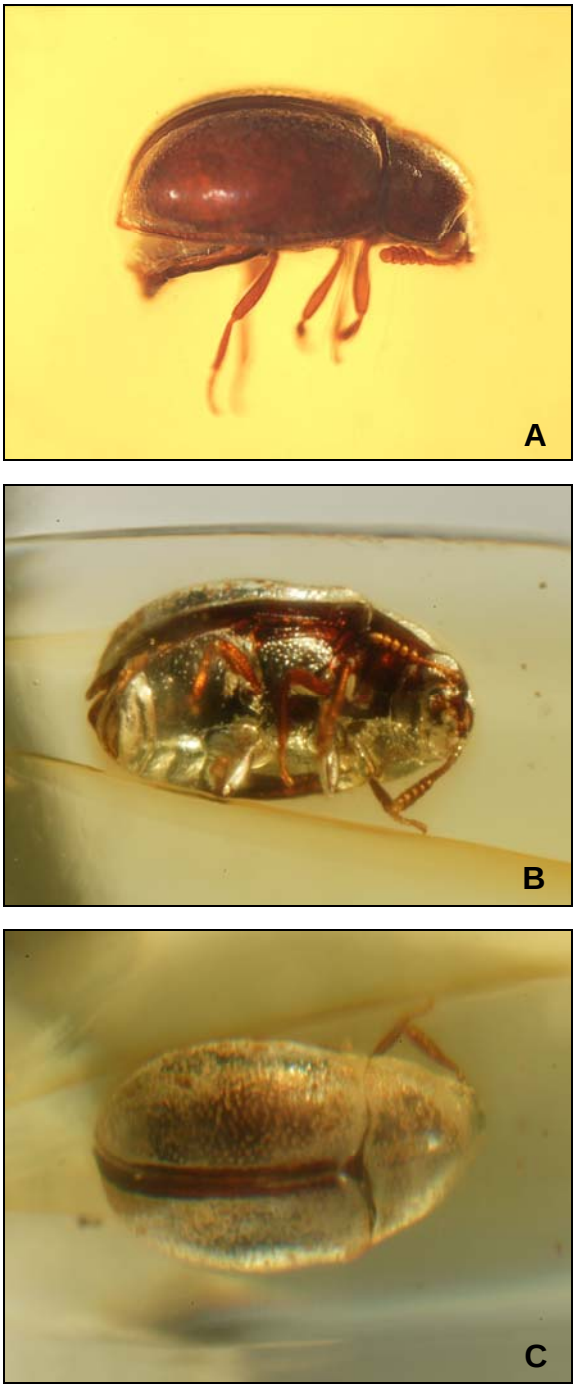

Plate 1. *Pentaphyllus cioides*, length 1.8 mm: **A** – body, lateral; **B** – idem, ventral; **C** – laterodorsal.

APPENDIX I

Checklist of fossil Tenebrionidae (after Ponomarenko & Kirejtshuk, 2008)

Subfamilia **Lagriinae**

NN	Species		Age and site of finding
1	*Lagria sp*. (Klebs, 1910; Larsson, 1978)	[Lagriini]	Pg23, BalJ
2	*Statira dermoidea* Doyen et Poinar, 1994	[Lagriini]	Pg3-N1, DomJ
3	*Statira sp*. (Klebs, 1910)	[Lagriini]	Pg23, BalJ
4	*Laena sp*. (Klebs, 1910; Larsson, 1978)	[Laenini]	Pg23, BalJ
5	*Luprops sp*. (Klebs, 1910)	[Lupropini]	Pg23, BalJ
6	*Lorelus angulatus* Doyen et Poinar, 1994	[Lupropini]	Pg3-N1, DomJ
7	*Lorelus foraminosus* Doyen et Poinar, 1994	[Lupropini]	Pg3-N1, DomJ
8	*Lorelus minutulus* Doyen et Poinar, 1994	[Lupropini]	Pg3-N1, DomJ
9	*Lorelus wolcotti* Doyen et Poinar, 1994	[Lupropini]	Pg3-N1, DomJ
Subfamilia **Pimeliinae** Latreille, 1802			
10	*Miostenosis lacordairei* Wickham, 1913	[Stenosini]	Pg31, Flor
11	*Ologlyptus primus* Wickham, 1910	[Asidini]	Pg31, Flor
12	Genus et species incerti (Gersdorf, 1976)	[?Akidini]	N22, Will
13	*Trientoma hascens* Doyen et Poinar, 1994	[Edrotini]	Pg3-N1, DomJ
Subfamilia **Tenebrioninae** Latreille, 1802			
14	*Wattius reflexus* Doyen et Poinar, 1994	[Toxicini]	Pg3-N1, DomJ
15	*Bolitophagus vetustus* Heyden et Heyden, 1866	[Bolitophagini]	N1, Rott
16	*Bolitophagus sp*. (Berendt, 1845; Klebs, 1910; Larsson, 1978	[Bolitophagini]	Pg23, BalJ
17	*Rhipidandrus quadripapillatus* Doyen et Poinar, 1994	[Bolitophagini]	Pg3-N1, DomJ
18	*Protelerates centralis* Wickham, 1914	[Blaptini]	Pg31, Flor
19	*Meracantha lacustris* Wickham, 1909	[Amarygmini]	Pg31, Flor
20	*Cymatothes dominicus* Doyen et Poinar, 1994	[Amarygmini]	Pg3-N1, DomJ
21	*Helops atticus* Redtenbacher in Ungern, 1867	[Helopini]	N1aq, Kumi
22	*Helops meissneri* Heer, 1847	[Helopini]	N13, Oeni
23	*Helops molassicus* Heer, 1883	[Helopini]	N11, Laus
24	*Helops wetteravicus* Heyden, 1865	[Helopini]	Pg33, Salz
25	*Helops sp*. (Klebs, 1910; Larsson, 1978)	[Helopini]	Pg23, BalJ
26	genus et species incerti (Helm, 1896; Larsson, 1978)	[Helopini]	Pg23, BalJ
27	*Leichenum sp*. (Klebs, 1910; Larsson, 1978)	[Leichenini]	Pg23, BalJ
28	*Ephalus adumbratus* Scudder, 1892	[Opatrini]	Pg31, Flor
29	*Gonocephalum pristi*num Heyden et Heyden, 1866	[Opatrini]	N1, Rott
30	Ulus minutus Wickham, 1914	[Opatrini]	Pg31, Flor
31	genus et species incerti (Hieke & Pietrzeniuk, 1984)	[Opatrini]	Pg23, BalJ
32	*Tribolium sp*. (Klebs, 1910; Larsson, 1978)	[Triboliini]	Pg23, BalJ
33	*Hypodena marginalis* Doyen et Poinar, 1994	[Triboliini]	Pg3-N1, DomJ
34	*Uloma avia* Heyden et Heyden, 1866	[Ulomini]	N1, Rott
35	*Uloma sp*. (Klebs, 1910; Larsson, 1978)	[Ulomini]	Pg23, BalJ
36	*Tenebrio effossus* Germar, 1837	[Tenebrionini]	N1, Rott
37	*Tenebrio senex* Heyden, 1859	[Tenebrionini]	N1, Rott
Subfamilia **Palorinae** Matthews, 2003			
38	*Palorus sp*. (Klebs, 1910; Larsson, 1978)		Pg23, BalJ

NN	Species		Age and site of finding
Subfamilia **Alleculinae** Laporte de Castelnau, 1840			
39	*Hymenorus haydeni* Wickham, 1914	[Alleculini]	Pg31, Flor
40	*Hymenorus chiapasensis* Campbell, 1963	[Alleculini]	Pg3-N1, Chia
41	*Hymenorus oculatus* Doyen et Poinar, 1994	[Alleculini]	Pg3-N1, DomJ
42	*Hymenalia sp*. (Klebs, 1910; Larsson, 1978)	[Alleculini]	Pg23, BalJ
43	*Mycetochara sp*. (Klebs, 1910; Larsson, 1978)	[Alleculini]	Pg23, BalJ
44	*Gonodera antiq*ua (Wickham, 1913) (*Cistela*)	[Alleculini]	Pg31, Flor
45	*Gonodera vulcanica* (Wickham, 1914) (*Cistela*)	[Alleculini]	Pg31, Flor
46	*Gonodera sp*. (Berendt, 1845; Klebs, 1910; Larsson, 1978) (*Cistela*)	[Alleculini]	Pg23, BalJ
47	*Allecula austriaca* Zhang, 1989	[Alleculini]	N12, Shan
48	*Allecula dominula* (Heer, 1847)	[Alleculini]	N13, Oeni
49	*Allecula sp*. (Klebs, 1910; Larsson, 1978)	[Alleculini]	Pg23, BalJ
50	*Mycetocharoides baumeisteri* Schaufuss, 1888	[Alleculini]	Pg23, BalJ
51	*Isomira* (*Asiomira*) *avula* Seidlitz, 1898 (Larsson, 1978)	[Alleculini]	Pg23, BalJ
52	*Isomira* (subgenus incertus) *florissantensis* Wickham, 1914	[Alleculini]	Pg31, Flor
53	*Isomira* (subgenus incertus) *sp*. (Klebs, 1910; Larsson, 1978)	[Alleculini]	Pg23, BalJ
54	*Pseudocistela gracilis* Förster, 1891	[Alleculini]	Pg31, Brun
55	*Capnochroa senilis* Wickham, 1914	[Alleculini]	Pg31, Flor
56	*Parahymenorus sp*. (Doyen et Poinar, 1994)	[Alleculini]	Pg3-N1, DomJ
57	*Lobopoda annosa* Doyen et Poinar, 1994	[Alleculini]	Pg3-N1, DomJ
58	*Lobopoda sp*. (Doyen et Poinar, 1994)	[Alleculini]	Pg3-N1, DomJ
59	*Cteniopus sp*. (Klebs, 1910; Larsson, 1978)	[Omophlini]	Pg23, BalJ
60	*Cteniopinus sp*. (Hieke & Pietrzeniuk, 1984)	[Omophlini]	Pg23, BalJ
61	*Sinocistela gymnelytra* Zhang, 1989	**[**tribus incertus**]**	N12, Shan
62	*Sinocistela silpha* Zhang, 1989	**[**tribus incertus**]**	N12, Shan
63	*Jurallecula grossa* L. Medvedev, 1969	**[**tribus incertus**]**	J3, KarT
64	*Cistelites longipes* (Hong, 1985) (Procarabus)	**[**tribus incertus**]**	N12, Shan
65	*Cistelites minor* Heer, 1883	**[**tribus incertus**]**	Pg1, Umiv
66	*Cistelites punctulatus* Heer, 1883	**[**tribus incertus**]**	Pg1, Atan
67	*Cistelites sachalinensis* Heer, 1878	**[**tribus incertus**]**	K2, Mgat
68	*Cistelites spectabilis* Heer, 1847	**[**tribus incertus**]**	N13, Oeni
Subfamilia **Diaperinae** Latreille, 1802			
69	*Platydema bethunei* Wickham, 1913	[Diaperini]	Pg31, Flor
70	*Platydema antiquorum* Wickham, 1913	[Diaperini]	Pg31, Flor
71	*Platydema geinitzi* Heyden et Heyden, 1866	[Diaperini]	N1aq, Rott
72	? *Ceropria messelense* Hornschemeyer, 1994	[Diaperini]	Pg22, Mess
73	*Liodema phalacroides* Doyen et Poinar, 1994	[Diaperini]	Pg3-N1, DomJ
74	*Neomida senicula* Doyen et Poinar, 1994	[Diaperini]	Pg3-N1, DomJ
75	*Tyrtaeus azureus* Doyen et Poinar, 1994	[Adelini]	Pg3-N1, DomJ
76	*Tyrtaeus elongatus* Doyen et Poinar, 1994	[Adelini]	Pg3-N1, DomJ
77	*Tyrtaeus flavoantennatus* Doyen et Poinar, 1994	[Adelini]	Pg3-N1, DomJ
78	*Tyrtaeus thoracicus* Doyen et Poinar, 1994	[Adelini]	Pg3-N1, DomJ
79	genus et species incerti	[Adelini]	Pg23, BalJ
Subfamilia **Phrenapatinae** Solier, 1834			
80	? *Scolytocaulus brevis* Carter, 1911 (R)		N23, Alle

NN	Species	Age and site of finding
Subfamilia **Coelometopinae** Lacordaire, 1859		
81	*Nesocyrtosoma antiquus* (Kaszab et Schawaller, 1984) (*Hesiodobates*)	Pg3-N1, DomJ
82	*Nesocyrtosoma antiquus* Doyen et Poinar, 1994	Pg3-N1, DomJ
83	*Nesocyrtosoma celadonum* Doyen et Poinar, 1994	Pg3-N1, DomJ
84	*Nesocyrtosoma hadratum* Doyen et Poinar, 1994	Pg3-N1, DomJ
85	*Nesocyrtosoma impensum* Doyen et Poinar, 1994	Pg3-N1, DomJ
86	*Nesocyrtosoma phthanatum* Doyen et Poinar, 1994	Pg3-N1, DomJ
Subfamilia **incerta**		
87	*Tagenopsis brevicornis* Heer, 1865	N13, Oeni
88	*Pyrochalcaspis geiseltalensis* Haupt, 1950	Pg22, Geis
89	*Eodromus agilis* (Meunier, 1915) (=*aeneocupreus* Pongracz, 1935)	Pg22, Geis
90	*Eodromus helopoides* Haupt, 1950	Pg22, Geis
91	*Eodromus parvus* Haupt, 1956	Pg22, Geis
92	*Eodromus punctatostriatus* Haupt, 1950	Pg22, Geis
93	*Eodromus punct*atosulcatus Pongracz, 1935	Pg22, Geis
94	*Caryosoma rugosus* Haupt, 1950	Pg22, Geis
95	*Parakeleusticus postumus* Haupt, 1950	Pg22, Geis
96	*Anthracohelops gigas* Haupt, 1950	Pg22, Geis
97	*Anthracohelops minutus* Haupt, 1950	Pg22, Geis
98	*Mimohelops venosus* Haupt, 1950	Pg22, Geis
99	*Parapiophorus nitidus* Haupt, 1950	Pg22, Geis
100	*Eohelaeus perpunctatus* Haupt, 1950	Pg22, Geis
101	*Eohelaeus sublaevis* Haupt, 1950	Pg22, Geis
102	*Eoallognosis limbellus* Haupt, 1950	Pg22, Geis
103	*Rhinohelaeites longipes* Haupt, 1950	Pg22, Geis
104	*Rhinohelaeites punctatulus* Haupt, 1950	Pg22, Geis
105	*Rhinohelaeites undulatus* Haupt, 1950	Pg22, Geis
106	*Teneobrionites alatus* Cockerell, 1927	Pg31, Flor
107	*Teneobrionites anglicus* Cockerell, 1920	Pg23, Bour
108	*Teneobrionites inclinans* Cockerell, 1925	Pg13-21, Sunc
109	*Protoplatycera laticornis* Wickham 1914	Pg31, Flor
110	genus et species incerti (Burmeister, 1832: *Hopatrum*); Larsson, 1978)	Pg23, BalJ
111	genus et species incerti (Helm, 1896; Larsson, 1978: Pimelidae, Opatridae)	Pg23, BalJ

Abbreviation for ages: J – Jurassic; K – Cretaceous; N – Neogene; Pg – Paleogene; R – Recent.
Abbreviation for outcrops: Alle – Allendale, amber, Australia; Pliocenian; Atan – Atanrkerdluk, Greenland, Upper Cretaceous, Maastrichian; Bour – Bournemouth, Dorset, England, lower Middle Eocene, Bagshot series; BalJ – Baltic amber, Baltic See coast and Amber quarry Jantarny near Kaliningrad (formerly Koenigsberg), Kaliningrad region, Russia, Upper Eocene, Prussian Formation; Brun – Brunstatt 5 km SW Mulhouse, Haut-Rhine dept., Elsas, France, Oligocene; Chia – Chiapas, amber of Yukatan, Mexico, Oligocene-Miocene, Sinojovel Formation; DomJ – Dominican amber, Dominican Republic, Gaiti Island, Lower Miocene; Flor – Florissant, S fork of Twin creek, Front Range near Pike's Peak, Colorado St., U.S.A., Lower Oligocene; Geis - Geiseltal near Halle, Germany, Middle Eocene; KarT – Kara-Tau (Karatau), Mikhailovka, Galkino, Tchokhaj, Kara-Bas-Tau, right bank of Kashkar-Ata River valley, outcrops near villages Kitaevka and Uspenovka, Kara-Tau Range, Algabass distr., Chimkent obl., Kazakhstan; Upper Jurassic, ? Oxfordian, Karabastau Formation; Kumi – Eubea Is., Greece, Miocene, Messinian; Laus – Greenland, Upper Cretaceous, Maastrichian; Mess – Messel, Quarry Messel, 9 km NE Darmstadt, Hessen, Germany, Middle Eocene, Messel Formation; Mgat – Mgachy, Sakhalin, Cretaceous; Oeni – Oeningen, near Baden lake, Baden-Wurtemberg, Germany, Upper Miocene; Rott – Oeningen, near Baden lake, Baden-Wurtemberg, Germany; Upper Miocene; Salz – Salzhauzen, Niedersaxen, Germany, Upper Oligocene; Shan – Shanwang basin, Linqu County, Shandong Province, China, Lower-Middle Miocenian, Langian-Serravallian, Shanwang Formation; Sunc – Sunchal, La Mendieta, Jujuy Prov., northern Argentina, Paleocene (?Eocene), Maiz Gordo Formation; Umiv – Umivik, Greenland; Cretaceous, Albian-Cenomanian; Will – Willershausen, Harz, Niedersachsen, Germany; Upper Pliocenian.
Note: *Megalocera rubricollis* Hope, 1842 is known from copal (according to Handlirsch, 1925: 238) and not included in the above list.