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A PROPOSE TO NEW ARRANGEMENTS ON SOME DORCADIONINI (COLEOPTERA: CERAMBYCIDAE)

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[Özdikmen, H. & Kaya, G. 2015. A propose to new arrangement on some Dorcadionini (Coleoptera: Cerambycidae). Munis Entomology & Zoology, 10 (1): 1-10]

ABSTRACT: The Turkish endemic subgenus *Dorcadion* (*Megalodorcadion*) Pesarini & Sabbadini is upgraded to genus level. In accordance with, two new subgenera are proposed for *Megalodorcadion* Pesarini & Sabbadini stat. n.. And also two new subgenera are proposed for the genus *Neodorcadion* Ganglbauer too. A short key to the genus group taxa of Dorcadionini for Turkey is also proposed.

KEY WORDS: Cerambycidae, Dorcadionini, *Dorcadion*, *Megalodorcadion*, *Neodorcadion*, new subgenera.

The name *Megalodorcadion* was proposed by Pesarini & Sabbadini (1999) with the type species *Dorcadion ledereri* J. Thomson, 1865 by original designation as a subgenus of *Dorcadion* Dalman, 1817. The subgenus, *Dorcadion* (*Megalodorcadion*), included 5 species in their work as *Dorcadion escherichi* Ganglbauer, 1897; *Dorcadion glabrofasciatum* K. Daniel, 1900; *Dorcadion ledereri* J. Thomson, 1865; *Dorcadion parallelum* Küster, 1847 and *Dorcadion walteri* Holzschuh, 1991 which were placed by Breuning (1962) in the subgenus *Dorcadion* (*Pedestredorcadion*) Breuning, 1943. Also, Özdikmen (2010) stated 6 species (including *D. angorensis*) on the base of Pesarini & Sabbadini (1999). The same 5 species (except *D. angorensis* that is accepted as a synonym of *D. escherichi*) were also given by Danilevsky in Palaearctic catalogue of Löbl & Smetana (2010) in the subgenus *Dorcadion* (*Megalodorcadion*) Pesarini & Sabbadini, 1999 again. Later, Özdikmen & Kaya (2013) was described a new species of *Dorcadion* (*Megalodorcadion*) from Çorum province of Turkey. So the number of species in the subgenus was raised to 6. All species of the subgenus are endemic to Turkey now.

Pesarini & Sabbadini (1999) stated that “*The species in the subgenus can be divided into two distinct groups, although related to one another: the first consists D. ledereri* Thomson, *D. parallelum* Küster and taxa closely related to *D. escherichi* Ganglbauer (*escherichi* Ganglbauer, *angorensis* Ganglbauer and *walteri* Holzschuh), the second by only *D. glabrofasciatum* Daniel. The first group is characterized by the shape particularly elongated and parallel or almost parallel sides of elytra in ♂♂ that have a composed coating of condensed showy white pubescence into bands; in *D. glabrofasciatum*, however, the elytra of ♂ are less distinctly elongated, and have bands of black velvety pubescence alternating hairless bands” in his work with original description of the subgenus.

Otherwise, Özdikmen & Kaya (2013) in simple terms stated the subgenus has three different groups. “*First group includes three species as D. escherichi, D. ledereri and D. walteri. Second group includes only 1 species as D. parallelum. Third group includes two species as D. glabrofasciatum and D. dombilicoides*”. Although they never described the groups in their work. Anyway, the subgenus, *Dorcadion* (*Megalodorcadion*), has different groups clearly.

Consequently, we propose that *Megalodorcadion* Pesarini & Sabbadini, 1999

stat. n. is a separate genus. Moreover, the genus has three different groups. So we also propose two new subgenera for the genus.

Genus *MEGALODORCADION* Pesarini & Sabbadini, 1999: 58 stat. n.
[Type sp.: *Dorcadion ledereri* J. Thomson, 1865]

As mentioned by Pesarini & Sabbadini (1999), the genus is essentially characterized by the shape of the apex of the hind tibiae and pronotum. The hind tibiae have the two spines that are much smaller and less divergent. Pronotum has a discal gibbosity on the both sides of the base. The gibbosity lined on the inside by a dimple more or less prolonged forward. The dimple, clearly visible in the denuded specimens, is generally covered by a band of dense black hairs that makes it less obvious.

As expected, the genus is closely related with *Dorcadion* (*Cribridorcadion*) Pic, 1901. The genus is easily distinguished it by above mentioned characters. In *Dorcadion* (*Cribridorcadion*), the hind tibiae have a highly developed inner apical spine, approximately how long the thickness tibial apex, and strongly divergent (at nearly right angles) from the apical external spine, shorter but equally highly developed. Pronotum has not a discal gibbosity.

Subgenus *MEGALODORCADION* Pesarini & Sabbadini, 1999: 58
(Figs. 1a, b, c)

[Type sp.: *Dorcadion ledereri* J. Thomson, 1865]

The subgenus is essentially characterized by the shape elongated and subparallel sides of elytra in $\sigma\sigma$ that have a composed coating of condensed showy white pubescence into bands. Moreover, bands of elytra not fused and pronotum always clothed with a complete median band of condensed pubescence. Legs more or less reddish.

It is represented by three species as *Megalodorcadion escherichi*, *M. ledereri* and *M. walteri* now.

***Megalodorcadion escherichi* (Ganglbauer, 1897: 54)**

Orig. comb.: *Dorcadion escherichi* Ganglbauer, 1897: 54

Type loc.: Ankara prov. (Turkey)

Synonyms: *Dorcadion egregium* Ganglbauer, 1897: 56; *Dorcadion angorense* Ganglbauer, 1897: 57; *Dorcadion escherichi* var. *obliquesignatum* Pic, 1900: 12; *Dorcadion escherichi* var. *posticedisjunctum* Pic, 1909: 99; *Dorcadion ledereri* var. *cappadocicum* Breuning, 1946: 132.

Records in Turkey: Amasya, Ankara, Bilecik, Cappadocia, Konya, Tokat.

Distribution: Turkey.

Chorotype: Anatolian.

Remarks: This species is endemic to Turkey. It is distributed in Central Anatolian Region and C & W parts of Northern Anatolia for Turkey.

***Megalodorcadion ledereri* (Thomson, 1865: 548)**

Orig. comb.: *Dorcadion ledereri* Thomson, 1865: 548

Type loc.: Turkey ("Russia or." definitely mistaken information)

Synonyms: *Dorcadion ledereri* m. *discoseparatum* Breuning, 1946: 132 [Turkey: Amasya]; *Dorcadion ledereri* m. *preconjunctum* Breuning, 1946: 132 [Turkey: Amasya]; *Dorcadion ledereri* m. *presuturenigrum* Breuning, 1970: 98 [Turkey: Tokat]

Records in Turkey: Amasya, Çorum, Samsun.

Distribution: Turkey.

Chorotype: Anatolian.

Remarks: This species is endemic to Turkey. It is distributed only in C parts of Northern Anatolia for Turkey.

***Megalodorcadion walteri* (Holzschuh, 1991: 55)**

Orig. comb.: *Dorcadion walteri* Holzschuh, 1991: 55

Type loc.: Bolu prov. (Turkey)

Records in Turkey: Bolu.

Distribution: Turkey.

Chorotype: Anatolian.

Remarks: This species is endemic to Turkey. It is distributed only in NW part of Northern Anatolia for Turkey.

Subgenus *FUSODORCADION* subgen. n.

(Fig. 1d)

[Type sp.: *Dorcadion parallelum* Küster, 1847]

The new subgenus is essentially characterized by the shape particularly elongated and parallel sides of elytra in $\sigma\sigma$ that have a composed coating of condensed showy white pubescence into bands. Moreover, bands of elytra fused and pronotum always clothed with a complete median band of condensed pubescence. Legs black, not reddish.

Etymology: The name derived from Latin word “fusus” (meaning in English “fuse”).

It is represented only by one species as *M. parallelum* now.

***Megalodorcadion parallelum* (Küster, 1847: 79)**

Orig. comb.: *Dorcadion parallelum* Küster, 1847: 79

Type loc.: Turkey

Synonym: *Dorcadion parallelum* m. *rufinimembre* Breuning, 1946: 132 [?Syria, undoubtedly mislabeled].

Records in Turkey: , Amasya, Ankara, ÇorumTokat, Yozgat.

Distribution: Turkey.

Chorotype: Anatolian.

Remarks: This species is endemic to Turkey. It is distributed in N part of Central Anatolia, and C parts of Northern Anatolia for Turkey.

Subgenus *ANATOLODORCADION* subgen. n.

(Figs. 1e, f)

[Type sp.: *Dorcadion dombilicoides* Özdikmen & Kaya, 2013]

The new subgenus is essentially characterized by pronotum never clothed with a complete median band of condensed pubescence. So, the dimple on the median line of pronotum clearly visible, at most with very much sparse short pubescence. Moreover, elongated and subparallel or less distinctly elongated and more widened sides of elytra in $\sigma\sigma$ that have a composed coating of condensed showy white pubescence into bands or, more or less hairless bands. Bands of elytra not fused. Legs more or less reddish.

Etymology: The name derived from Anatolia that is distribution area of the taxa.

It is represented by two species as *M. glabrofasciatum* and *M. dombilicoides* now.

Megalodorcadion dombilicoides* Özdikmen & Kaya, 2013: 494*Orig. comb.:** *Dorcadion dombilicoides* Özdikmen & Kaya, 2013: 494**Type loc.:** Çorum (Turkey)**Records in Turkey:** Çorum.**Distribution:** Turkey.**Chorotype:** Anatolian.**Remarks:** This species is endemic to Turkey. It is distributed only in C part of Northern Anatolia for Turkey.***Megalodorcadion glabrofasciatum* Daniel, 1900: 140****Orig. comb.:** *Dorcadion glabrofasciatum* Daniel, 1900: 140**Type loc.:** Bithynia (Turkey)**Synonyms:** *Dorcadion glabrofasciatum* var. *imparivittatum* K. Daniel, 1900: 140 [Turkey]; *Dorcadion glabrofasciatum* m. *parivittatum* Breuning, 1946: 98 [Turkey: İzmir: Bozdağ]; *Dorcadion glabrofasciatum* m. *glabroseparatum* Breuning, 1962: 310 [Turkey: Eskişehir]**Records in Turkey:** Afyon, Bilecik, Eskişehir, İzmir, Uşak.**Distribution:** Turkey.**Chorotype:** Anatolian.**Remarks:** This species is endemic to Turkey. It is distributed in NW part of Central Anatolia, W part of Northern Anatolia, and W Anatolia for Turkey.

Besides, when the genus *Neodorcadion* Ganglbauer was erected included the species from Balkans and Asia. Then, the genus *Eodorcadion* Breuning was established for Asian species. So, the genus *Neodorcadion* Ganglbauer includes only the species from Balkans and Italy (Calabria) now. The genus has three different groups clearly. Therefore, we also propose two new subgenera for the genus.

Genus *NEODORCADION* Ganglbauer, 1884: 437[Type sp.: *Lamia bilineata* Germar, 1824]

The genus is essentially characterized by the shape of frons and clypeus. Frons with the clypeus are not melted in the members of the genus.

Subgenus *NEODORCADION* Ganglbauer, 1884: 437

(Fig. 2a)

[Type sp.: *Lamia bilineata* Germar, 1824]

The subgenus is essentially characterized by absence any sutural strip on elytra in $\sigma\sigma$, but always elytra with strips of condensed pubescence and also disc of pronotum and elytra with ground pubescence.

The subgenus is represented by eight species only in Balkans as *Neodorcadion bilineatum* (Germar, 1824); *Neodorcadion exornatoides* Breuning, 1962; *Neodorcadion exornatum* (Frivaldszky von Frivald, 1835); *Neodorcadion fallax* (Kraatz, 1873); *Neodorcadion laqueatum* (Waltl, 1838); *Neodorcadion orientale* Ganglbauer, 1884; *Neodorcadion pelleti* (Mulsant & Rey, 1863) and *Neodorcadion virleti* (Brullé, 1832). In Turkey, it is represented by six species as *Neodorcadion bilineatum* (Germar, 1824); *Neodorcadion exornatoides* Breuning, 1962; *Neodorcadion exornatum* (Frivaldszky von Frivald, 1835); *Neodorcadion laqueatum* (Waltl, 1838); *Neodorcadion orientale* Ganglbauer, 1884 and *Neodorcadion pelleti* (Mulsant & Rey, 1863).

Subgenus CALABRODORCADION subgen. n.

(Fig. 2b)

[Type sp.: *Neodorcadion calabricum* Reitter, 1889]

The subgenus is essentially characterized by present a distinct sutural strip of condensed pubescence on elytra in $\sigma\sigma$ and at least disc of pronotum (except median line) and elytra without ground pubescence.

The subgenus is represented only by one species in Italy as *Neodorcadion calabricum* Reitter, 1889.

Etymology: The name derived from Calabria in Italy that is type locality of the type species.

Subgenus VACARODORCADION subgen. n.

(Fig. 2c)

[Type sp.: *Dorcadion virleti* Brullé, 1832]

The subgenus is essentially characterized by only present ground pubescence on elytra, but also absence any strip of condensed pubescence on elytra in $\sigma\sigma$ and disc of pronotum and elytra with ground pubescence.

The subgenus is represented only by one species in Greece as *Neodorcadion virleti* (Brullé, 1832).

Etymology: The name derived from Latin word “vacare” (meaning in English “be vacant”).

A short key for the genus group taxa of Dorcadionini for Turkey

1. Frons with the clypeus melted.....**2**
 -. Frons with the clypeus not melted.....***Neodorcadion (s.str.)***
2. 3rd antennal segment longer than 4th, much shorter than 1st segment.....**3**
 -. 3rd antennal segment about as long as the 4th, much shorter than 1st segment.....**6**
3. The hind tibiae have a highly developed inner apical spine, approximately how long the thickness tibial apex, and strongly divergent (at nearly right angles) from the apical external spine, shorter but equally highly developed. Pronotum without any discal gibbosity.....
***Dorcadion (Cribridorcadion)***
 -. The hind tibiae have the two spines that are much smaller and less divergent. Pronotum with a discal gibbosity.....**4**
4. Pronotum clothed with a complete median band of condensed pubescence.....**5**
 -. Pronotum never clothed with a complete median band of condensed pubescence.....
***Megalodorcadion (Anatolodorcadion) subgen. n.***
5. Elongated and subparallel sides of elytra in $\sigma\sigma$ that have a composed coating of condensed showy white pubescence into bands; bands of elytra not fused; legs more or less reddish.....***Megalodorcadion (s.str.)***
 -. Particularly elongated and parallel sides of elytra in $\sigma\sigma$ that have a composed coating of condensed showy white pubescence into bands; bands of elytra fused; legs black.....
***Megalodorcadion (Fusodorcadion) subgen. n.***
6. Apical half of the 3-5 or 3-6th segments strongly thickened; Aedeagus broad basally, apical warts mid-grade narrowed, apical considerably broad rounded, lower lamella laterally flattened and very broadly rounded.....***Dorcadion (Maculatodorcadion)***
 -. Apical half of the 3-5 or 3-6th segments not strongly thickened; Aedeagus broad, apical warts no or only slightly narrowed, apical much rounded, lower lamella not flattened.....
***Dorcadion (Carinatodorcadion)***

CONCLUSION

After this work, the tribe Dorcadionini includes six genera and seventeen subgenera (including nominate subgenera) worldwide now. These are listed as follows:

Genus *Dorcadion* Dalman, 1817: 397 [type species *Cerambyx glycyrrhizae* Pallas, 1773]

Subgenus *Acutodorcadion* Danilevsky, Kasatkin & Rubenyan, 2005: 135 [type species *Dorcadion acutispinum* Motschulsky, 1860]

Subgenus *Carinatodorcadion* Breuning, 1943: 524 [type species *Cerambyx carinatus* Pallas, 1771]

Subgenus *Cribridorcadion* Pic, 1901: 12 [type species *Dorcadion mniszehi* Kraatz, 1873]

Pedestredorcadion Breuning, 1943: 526 [type species *Lamia pedestris* Poda von Neuhaus, 1761]

Autodorcadion Plavilstshikov, 1958: 45 [type species *Cerambyx arenarius* Scopoli, 1763]

Dzhungarodorcadion Danilevsky, 1993: 47 [type species *Dorcadion jacobsoni* Jakovlev, 1899]

Bergerianum Pesarini & Sabbadini, 2004: 150 [type species *Dorcadion chrysochroum* Breuning, 1943]

subgenus *Dorcadion* Dalman, 1817a: 397 [type species *Cerambyx glycyrrhizae* Pallas, 1773]

Compsodorcadion Ganglbauer, 1884: 437 [type species *Dorcadion gebleri* Kraatz, 1873]

subgenus *Maculatodorcadion* Breuning, 1943: 525 [type species *Dorcadion quadrimaculatum* Küster, 1848]

Genus *Eodorcadion* Breuning, 1947: 142 [type species *Lamia carinata* Fabricius, 1781]

Subgenus *Eodorcadion* Breuning, 1947: 142 [type species *Lamia carinata* Fabricius, 1781]

Subgenus *Humerodorcadion* Danilevsky, Kasatkin & Rubenian, 2005: 133 [type species *Dorcadion humerale* Gebler, 1823]

Subgenus *Ornatodorcadion* Breuning, 1947: 142 [type species *Dorcadion ornatum* Faldermann, 1833]

Genus *Iberodorcadion* Breuning, 1943: 524 [type species *Cerambyx fuliginator* Linnaeus, 1758]

Subgenus *Baeticodorcadion* Vives, 1976: 166 [type species *Dorcadion mus* Rosenhauer, 1856]

Subgenus *Hispanodorcadion* Vives, 1976: 166 [type species *Dorcadion hispanicum* Mulsant, 1851]

Subgenus *Iberodorcadion* Breuning, 1943: 524 [type species *Cerambyx fuliginator* Linnaeus, 1758]

Genus *Megalodorcadion* Pesarini & Sabbadini, 1999: 58 [type species *Dorcadion ledereri* J. Thomson, 1865]

Subgenus *Anatolodorcadion* subgen. n. [type species *Dorcadion dombilicoides* Özdikmen & Kaya, 2013]

Subgenus *Fusodorcadion* subgen. n. [type species *Dorcadion parallelum* Küster, 1847]

Subgenus *Megalodorcadion* Pesarini & Sabbadini, 1999: 58 [type species *Dorcadion ledereri* J. Thomson, 1865]

Genus *Neodorcadion* Ganglbauer, 1884: 437 [type species *Lamia bilineata* Germar, 1824]

Subgenus *Calabrodorcadion* subgen. n. [type species *Dorcadion calabricum* Reitter, 1889]

Subgenus *Neodorcadion* Ganglbauer, 1884: 437 [type species *Lamia bilineata* Germar, 1824]

Subgenus *Vacarodorcadion* subgen. n. [type species *Dorcadion virleti* Brullé, 1832]

Genus *Politodorcadion* Danilevsky, 1996: 407 [type species *Dorcadion politum* Dalman, 1823]

It is clear that this group is very problematic. Only two of six known genera of Dorcadionini were described as genera originally. These are *Dorcadion* Dalman, 1817 and *Eodorcadion* Breuning, 1947. The remaining genera were described as subgenera of *Dorcadion* Dalman. These are *Iberodorcadion* Breuning, 1943; *Megalodorcadion* Pesarini & Sabbadini, 1999; *Neodorcadion* Ganglbauer, 1884 and *Politodorcadion* Danilevsky, 1996.

The genus *Eodorcadion* Breuning includes only Asian species which were placed in the subgenus *Dorcadion* (*Neodorcadion*) Ganglbauer, 1884. So, the genus *Neodorcadion* Ganglbauer includes only the species from Balkans and Italy (Calabria) now. Frons with the clypeus not melted in both genera. So we agree with today's approach.

The genus *Iberodorcadion* Breuning is distributed only in Western Europe.

The genus *Megalodorcadion* Pesarini & Sabbadini stat. n. is distributed only in Turkey.

According to original description, the genus *Politorcadion* Danilevsky, 1996 that was described as a subgenus of *Dorcadion* Dalman, was separated from *Dorcadion* (s.str.) only by the usual absence of dark ground body pubescence, so head, thorax, elytra and abdomen are strongly shining with some rare exceptions. Therefore, this genus seems to be more closely related with *Dorcadion* (s.str.) from already subgenera in the genus *Dorcadion* Dalman (except only *Acutodorcadion* Danilevsky et al., 2005).

Consequently, this group has still many systematic problems. Other arrangements in the group needs detailed works in the future. For example, all subgenera (except *Acutodorcadion* Danilevsky et al.) which are accepted for the present day, of *Dorcadion* Dalman, 1817 seems to be sufficiently different from the "true" *Dorcadion* [*Dorcadion* (s.str.)].

Moreover, *Cribridorcadion* Pic that has very rich taxon, includes many different groups.

From point of view, we think that as a simple arrangement of the group can be given as follows:

Genus *Carinatodorcadion* Breuning, 1943: 524 [type species *Cerambyx carinatus* Pallas, 1771]

Genus *Cribridorcadion* Pic, 1901: 12 [type species *Dorcadion mniszehi* Kraatz, 1873]

Pedestredorcadion Breuning, 1943: 526 [type species *Lamia pedestris* Poda von Neuhaus, 1761]

Autodorcadion Plavilstshikov, 1958: 45 [type species *Cerambyx arenarius* Scopoli, 1763]

Dzhungarodorcadion Danilevsky, 1993: 47 [type species *Dorcadion jacobsoni* Jakovlev, 1899]

Bergerianum Pesarini & Sabbadini, 2004: 150 [type species *Dorcadion chrysochroum* Breuning, 1943]

Genus *Dorcadion* Dalman, 1817: 397 [type species *Cerambyx glycyrrhizae* Pallas, 1773]

Subgenus *Acutodorcadion* Danilevsky, Kasatkin & Rubenyan, 2005: 135 [type species *Dorcadion acutispinum* Motschulsky, 1860]

subgenus *Dorcadion* Dalman, 1817a: 397 [type species *Cerambyx glycyrrhizae* Pallas, 1773]

Compsodorcadion Ganglbauer, 1884: 437 [type species *Dorcadion gebleri* Kraatz, 1873]

Genus *Eodorcadion* Breuning, 1947: 142 [type species *Lamia carinata* Fabricius, 1781]

Subgenus *Eodorcadion* Breuning, 1947: 142 [type species *Lamia carinata* Fabricius, 1781]

Subgenus *Humerodorcadion* Danilevsky, Kasatkin & Rubenian, 2005: 133 [type species *Dorcadion humerale* Gebler, 1823]

Subgenus *Ornatodorcadion* Breuning, 1947: 142 [type species *Dorcadion ornatum* Faldermann, 1833]

Genus *Iberodorcadion* Breuning, 1943: 524 [type species *Cerambyx fuliginator* Linnaeus, 1758]

Subgenus *Baeticodorcadion* Vives, 1976: 166 [type species *Dorcadion mus* Rosenhauer, 1856]

Subgenus *Hispanodorcadion* Vives, 1976: 166 [type species *Dorcadion hispanicum* Mulsant, 1851]

Subgenus *Iberodorcadion* Breuning, 1943: 524 [type species *Cerambyx fuliginator* Linnaeus, 1758]

Genus *Maculatodorcadion* Breuning, 1943: 525 [type species *Dorcadion quadrimaculatum* Küster, 1848]

Genus *Megalodorcadion* Pesarini & Sabbadini, 1999: 58 [type species *Dorcadion ledereri* J. Thomson, 1865]

Subgenus *Anatolodorcadion* subgen. n. [type species *Dorcadion dombilicoides* Özdikmen & Kaya, 2013]

Subgenus *Fusodorcadion* subgen. n. [type species *Dorcadion parallelum* Küster, 1847]

Subgenus *Megalodorcadion* Pesarini & Sabbadini, 1999: 58 [type species *Dorcadion ledereri* J. Thomson, 1865]

Genus *Neodorcadion* Ganglbauer, 1884: 437 [type species *Lamia bilineata* Germar, 1824]

Subgenus *Calabrodorcadion* subgen. n. [type species *Dorcadion calabricum* Reitter, 1889]

Subgenus *Neodorcadion* Ganglbauer, 1884: 437 [type species *Lamia bilineata* Germar, 1824]

Subgenus *Vacarodorcadion* subgen. n. [type species *Dorcadion virleti* Brullé, 1832]

Genus *Politodorcadion* Danilevsky, 1996: 407 [type species *Dorcadion politum* Dalman, 1823]

Finally, even the tribe Dorcadionini can be divided at least four main groups.

Group I includes two genera as *Dorcadion* Dalman (the subgenera as *Acutodorcadion* Danilevsky et al. and s. str.) and *Politodorcadion* Danilevsky.

Group II includes four genera as *Carinatodorcadion* Breuning, *Cribridorcadion* Pic, *Iberodorcadion* Breuning (the subgenera as *Baeticodorcadion* Vives, *Hispanodorcadion* Vives and s. str.) and *Maculatodorcadion* Breuning.

Group III includes only one genus as *Megalodorcadion* Pesarini & Sabbadini (the subgenera as *Anatolodorcadion* subgen. n., *Fusodorcadion* subgen. n. and s. str.).

Group IV includes two genera as *Eodorcadion* Breuning (the subgenera as s. str., *Humerodorcadion* Danilevsky et al. and *Ornatodorcadion* Breuning) and *Neodorcadion* Ganglbauer (the subgenera as *Calabrodorcadion* subgen. n., s. str. and *Vicarodorcadion* subgen. n.).

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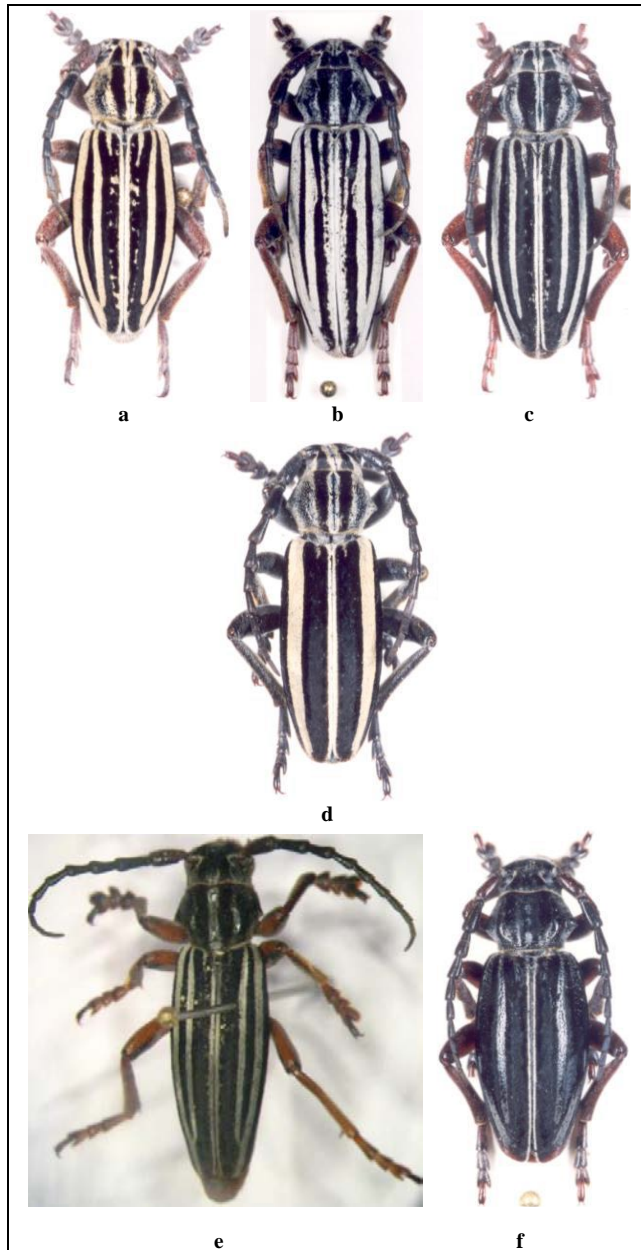


Figure 1. *Megalodorcadion* Pesarini & Sabbadini, 1999 stat. n., a) *Megalodorcadion* (s.str.) *escherichi* (Ganglbauer, 1897), b) *Megalodorcadion* (s.str.) *ledereri* (Thomson, 1865), c) *Megalodorcadion* (s.str.) *walteri* (Holzschuh, 1991), d) *Megalodorcadion* (*Fusodorcadion*) *parallelum* (Küster, 1847), e) *Megalodorcadion* (*Anatolodorcadion*) *dombilicoides* (Özdikmen & Kaya, 2013), f) *Megalodorcadion* (*Anatolodorcadion*) *glabrofasciatum* (Daniel, 1900) [*M. dombilicoides* from Özdikmen & Kaya (2013) and the remaining figures from <http://www.zin.ru/Animalia/Coleoptera/eng/megalodn.htm>].

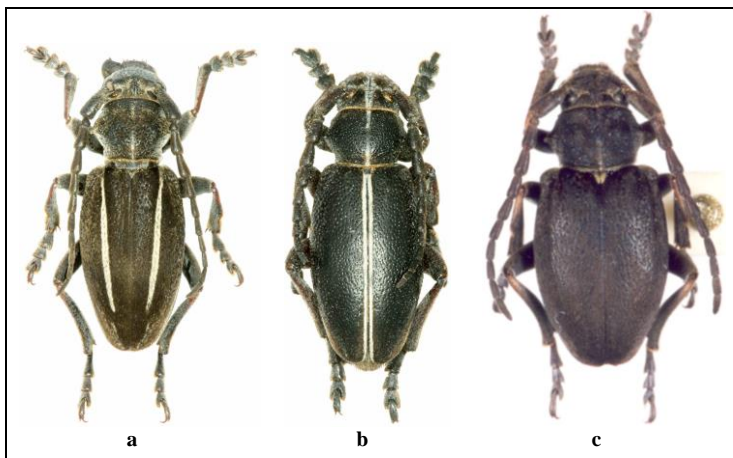


Figure 2. *Neodorcadion* Ganglbauer, 1884, a) *N.* (s.str.) *bilineatum* (Germar, 1824) [from <http://r.a.r.e.free.fr/dorcadion/bilineatum%20M%2014.jpg>], b) *N.* (*Calabrodorcadion*) *calabricum* (Reitter, 1889) [from <http://r.a.r.e.free.fr/dorcadion/calabricum%20M%2014.jpg>], c) *N.* (*Vacarodorcadion*) *virleti* (Brullé, 1832) [from <http://www.zin.ru/Animalia/Coleoptera/>].