

**TURKISH RED LIST CATEGORIES OF
LONGICORN BEETLES (COLEOPTERA: CERAMBYCIDAE)
PART IV – SUBFAMILIES NECYDALINAE, ASEMINAE,
SAPHANINAE, SPONDYLIDINAE AND APATOPHYSEINAE**

Hüseyin Özdikmen*

* Gazi University, Faculty of Science, Department of Biology, 06500 Ankara, TURKEY. E-mail: ozdikmen@gazi.edu.tr

[Özdikmen, H. 2014. Turkish Red List Categories of Longicorn Beetles (Coleoptera: Cerambycidae) Part IV – Subfamilies Necydalinae, Aseminae, Saphaninae, Spondylidinae and Apatophyseinae. Munis Entomology & Zoology, 9 (1): 440-450]

ABSTRACT: The aim of this study is to create a Turkish Red List of the longicorn beetles. Moreover, presence such a Red List is necessary for Turkey. Even governmental evaluations could cause some erroneous decisions due to absence such a Red List. Since, governmental evaluations at the present time are based on the works that are realized with respect to the European Red List. Furthermore, Turkey appears a continental property changeable in very short distances in terms of climatical features and field structures. So, the status of European fauna and the status of Turkish fauna are not the same. Clearly, there is no any work that subjected to create a Turkish Red List except Part I-III. Hence, a series work is planned with this purpose. This type of study is the fourth attempt for Turkey.

KEY WORDS: Red List, Conservation, Cerambycidae, Turkey

The purpose of the current study was to create a Turkish Red List of longicorn beetles similarly to “European Red List of Saproxylic Beetles” that was compiled by Ana Nieto & Keith N. A. Alexander and published by IUCN (International Union for Conservation of Nature) in collaboration with the European Union in 2010. “European Red List of Saproxylic Beetles” includes 153 species within the subfamilies Prioninae, Cerambycinae and Lamiinae of the European Cerambycidae. So, it does not include any members of the subfamilies Necydalinae, Aseminae, Saphaninae, Spondylidinae and Apatophyseinae. In the future, I hope that the present work will be lead to preparation a more comprehensive “Turkish Red List”.

Hence, a series work is planned with this purpose. The present study is attempted as the fourth step of this aim. The previous works are Özdikmen (2014a,b,c). It should be noted that the using information at the present work on Turkish longicorn beetles are on the base of my personal database. The data of distribution are given on base of Löbl & Smetana (2010, 2011), Danilevsky (2010a,b, 2012a,b,c,d, 2013), Özdikmen (2011) and Miroshnikov (2011). Identification of chorotypes is based on the chorotype classification of the Anatolian fauna, proposed by Vigna Taglianti et al. (1999).

The evaluations of Turkish longicorn beetles at the present work based on “The IUCN Red List Categories” that was presented in Part I (Özdikmen, 2014a).

**TURKISH RED LIST FOR NECYDALINAE, ASEMINAE, SAPHANINAE,
SPONDYLIDINAE AND APATOPHYSEINAE**

SUBFAMILY NECYDALINAE Latreille, 1825: 401

TRIBE NECYDALINI Latreille, 1825: 401

GENUS *NECYDALIS* Linnaeus, 1758: 421

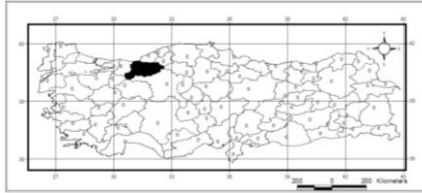
SUBGENUS *NECYDALIS* Linnaeus, 1758: 421

SPECIES *N. sabinelli* Sama, 1994: 10

The endemic species is known only from "Bolu prov." in NW Anatolia. Apparently is distributed only in a local area. So, Turkish Red List category of the species is **EN**.

Range: Turkey

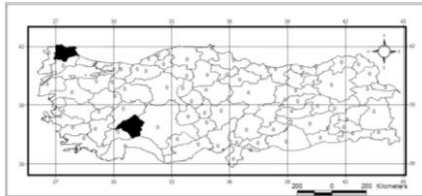
Chorotype: Anatolian

**SPECIES *N. ulmi* Chevrolat, 1838: unnumb. [NP]**

The species is known only from W half of Turkey. So, Turkish Red List category of the species is **DD**.

Range: Europe, Caucasus, Transcaucasia (Armenia, Azerbaijan, Georgia), Turkey, Iran.

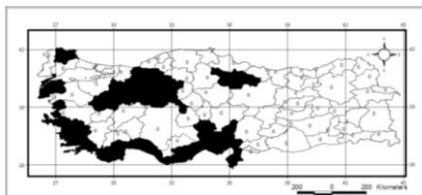
Chorotype: European

**SUBFAMILY ASEMINAE Thomson, 1861: 139****TRIBE ASEMINI Thomson, 1861****GENUS *ARHOPALUS* Audinet-Serville, 1834: 77****SPECIES *A. ferus* (Mulsant, 1839: 64)**

The species probably is widely distributed in both European Turkey and Anatolia for Turkey. So, Turkish Red List category of the species is **LC**.

Range: Europe, Siberia, Far East Russia, Kazakhstan, China, Caucasus, Transcaucasia (Armenia, Azerbaijan, Georgia), Turkey, Cyprus, Middle East (Syria, Israel, Jordan), North Africa (Algeria, Morocco, Madeira Archipelago, Tunisia), Australia (introduced).

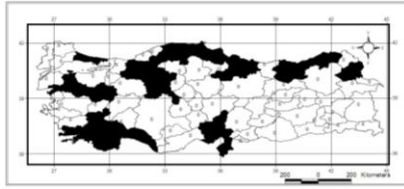
Chorotype: Palaearctic + Australian

**SPECIES *A. rusticus* (Linnaeus, 1758: 395)****SUBSPECIES *A. r. rusticus* (Linnaeus, 1758: 395)**

The species is represented only by the nominative subspecies in Turkey. It probably is widely distributed in both European Turkey and Anatolia for Turkey. So, Turkish Red List category of the species is **LC**.

Range: Europe, Siberia, Far East Russia, Japan, Kazakhstan, China, Korea, Caucasus, Transcaucasia (Armenia, Azerbaijan, Georgia), Turkey, North Africa (Morocco), Australia (introduced), Neotropical Region (introduced).

Chorotype: Palaearctic + Australian + Neotropical

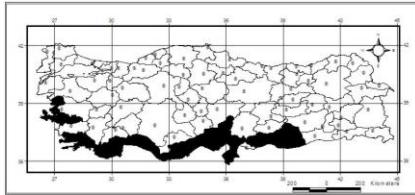


SPECIES *A. syriacus* (Reitter, 1895): 86

The species probably is widely distributed in S Anatolia for Turkey. So, Turkish Red List category of the species is **LC**.

Range: S Europe, Turkey, Cyprus, Middle East (Syria, Lebanon, Israel, Jordan), North Africa (Algeria, Canary Islands, Morocco, Tunisia), Australia (introduced), Neotropical Region (introduced).

Chorotype: Mediterranean + Australian + Neotropical



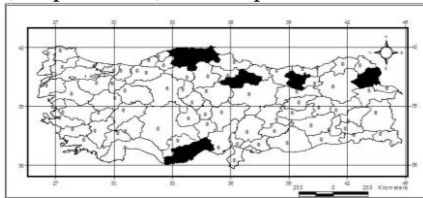
GENUS ASEMUM Eschscholtz, 1830: 66

SPECIES *A. striatum* (Linnaeus, 1758): 396

The species probably is widely distributed in Anatolia for Turkey. So, Turkish Red List category of the species is **LC**.

Range: Europe, Siberia, Far East Russia, Japan, Kazakhstan, Kirgizia, Mongolia, Korea, China, Caucasus, Transcaucasia (Armenia, Azerbaijan, Georgia), Turkey, Neartctic and Neotropical Regions.

Chorotype: Holarctic (except N Africa) + Neotropical

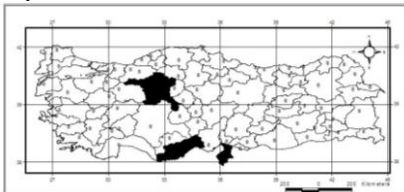


SPECIES *A. tenuicorne* Kraatz, 1879: 97

The very rare species with scattered distribution is known from Anatolia for Turkey only with a few records. So, Turkish Red List category of the species is **DD**.

Range: S and E Europe, Caucasus, Transcaucasia (Georgia), Turkey.

Chorotype: S and E European



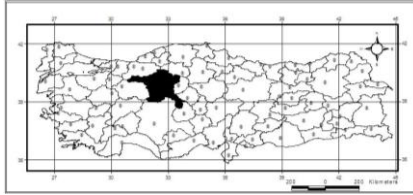
Moreover, the species is represented by two subspecies in Turkey as the nominative subspecies and *A. t. claricostulatum* Özdikmen & Aytar, 2012.

SUBSPECIES *A. t. tenuicorne* Kraatz, 1879: 97

The subspecies probably is distributed only in N Anatolia for Turkey. So, Turkish Red List category of the subspecies is **DD**.

Range: S and E Europe, Caucasus, Transcaucasia (Georgia), Turkey.

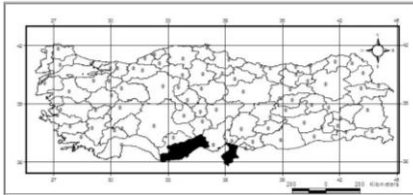
Chorotype: S and E European

**SUBSPECIES *A. t. claricostulatum* Özdikmen & Aytar, 2012: 1253**

The endemic subspecies probably is distributed only in SC Anatolia for Turkey. So, Turkish Red List category of the subspecies is **EN**.

Range: Turkey.

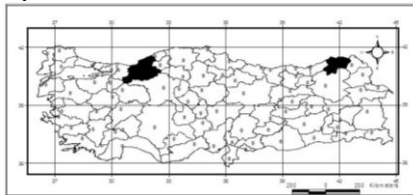
Chorotype: Anatolian

**GENUS *TETROPIUM* Kirby, 1837: 174****SPECIES *T. castaneum* (Linnaeus, 1758: 396)**

The species probably is distributed only in N Anatolia for Turkey. So, Turkish Red List category of the species is **NT**.

Range: Europe, Siberia, Far East Russia, Japan, Kazakhstan, Mongolia, Korea, China, Caucasus, Transcaucasia (Armenia, Azerbaijan, Georgia), Turkey.

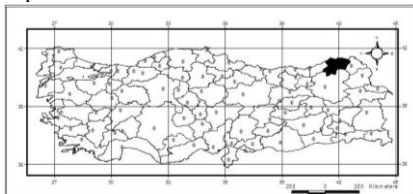
Chorotype: Sibero-European

**SPECIES *T. fuscum* (Fabricius, 1787: 154)**

The species probably is distributed only in NE Anatolia for Turkey. So, Turkish Red List category of the species is **VU**.

Range: Europe, Kazakhstan, China, Caucasus, Transcaucasia (Georgia), Turkey, Nearctic Region.

Chorotype: Asiatic-European + Nearctic

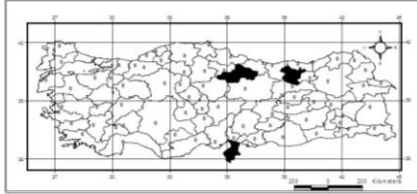


TRIBE NOTHORHININI Zagajkevich, 1991: 110**GENUS *NOTHORHINA* Redtenbacher, 1845: 109****SPECIES *N. punctata* (Fabricius, 1798: 149)**

The species probably is distributed only in Anatolia for Turkey. So, Turkish Red List category of the species is **DD**.

Range: Europe, W Siberia, Kazakhstan, Japan, Caucasus, Turkey.

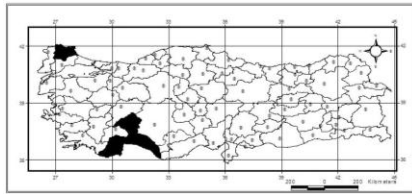
Chorotype: Sibero-European

**SUBFAMILY SAPHANINAE Gistel, 1848: [1]****TRIBE ANISARTHINI Mamaev & Danilevsky, 1973: 1260****GENUS *ALOCERUS* Mulsant, 1862: 127****SPECIES *A. moesiacus* (Frivadszky, 1837: 177)**

The species is distributed in both European Turkey and Anatolia for Turkey. However, Turkish Red List category of the species is **DD**.

Range: S Europe, Turkey, Iran, Cyprus, Middle East (Syria, Lebanon, Israel, Jordan, Iraq), North Africa (Algeria, Morocco, Tunisia).

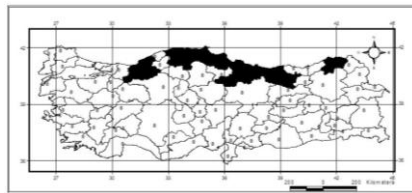
Chorotype: Mediterranean

**TRIBE SAPHANINI Gistel, 1848: [1]****GENUS *DRYMOCHARES* Mulsant, 1847: 518****SPECIES *D. cavazzutii* Sama & Rapuzzi, 1993: 288**

The species is known only from N Anatolia for Turkey. So, Turkish Red List category of the species is **LC**.

Range: Transcaucasia (Armenia, Georgia), Turkey.

Chorotype: SW-Asiatic



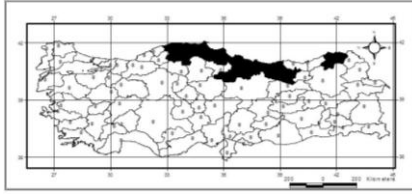
Moreover, the species is represented by two subspecies in Turkey as the nominative subspecies and *D. c. ivani* Sama & Rapuzzi, 1993.

SUBSPECIES *D. c. cavazzutii* Sama & Rapuzzi, 1993: 288

The subspecies probably is distributed only in N Anatolia for Turkey. So, Turkish Red List category of the subspecies is **LC**.

Range: Transcaucasia (Armenia, Georgia), Turkey.

Chorotype: SW-Asiatic

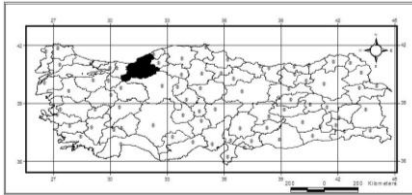


SUBSPECIES *D. c. ivani* Sama & Rapuzzi, 1993: 287

The endemic subspecies probably is distributed only in NW Anatolia for Turkey. So, Turkish Red List category of the subspecies is **VU**.

Range: Turkey.

Chorotype: Anatolian



GENUS *SAPHANUS* Audinet-Serville, 1834: 81

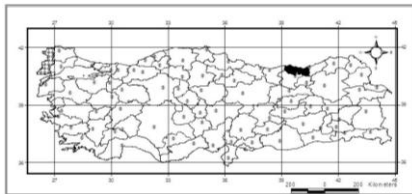
SPECIES *S. piceus* (Laicharting, 1784: 56)

SUBSPECIES *S. p. ganglbaueri* Brancsik, 1886: 71

The species is represented only by the subspecies *S. piceus ganglbaueri* in Turkey. It is known from both European Turkey and N Anatolia for Turkey. However, Turkish Red List category of the species is **DD**.

Range: SE Europe, Turkey.

Chorotype: Turano-Mediterranean (Balkano-Anatolian)



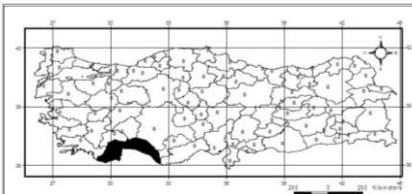
GENUS *OXYPLEURUS* Mulsant, 1839: 57

SPECIES *O. nodieri* Mulsant, 1839: 57

The species is known only from S Anatolia for Turkey. So, Turkish Red List category of the species is **DD**.

Range: S Europe, Transcaucasia (Georgia), Turkey, North Africa (Algeria, Canary Islands, Morocco, Madeira Archipelago, Tunisia).

Chorotype: Mediterranean

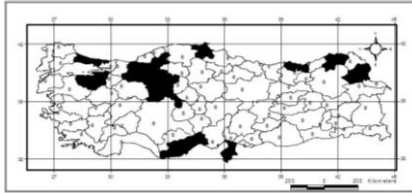


SUBFAMILY SPONDYLIDINAE Audinet-Serville, 1832: 123**TRIBE SPONDYLIDINI Audinet-Serville, 1832: 123****GENUS SPONDYLIS Fabricius, 1775: 159****SPECIES *S. buprestoides* (Linnaeus, 1758): 388)**

The species probably is widely distributed in Turkey. So, Turkish Red List category of the species is **LC**.

Range: Europe, Siberia, Far East Russia, Japan, Kazakhstan, Mongolia, Korea, China, Taiwan, Caucasus, Transcaucasia (Armenia, Azerbaijan, Georgia), Turkey, North Africa (Morocco).

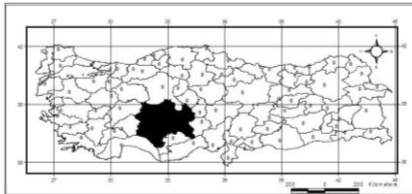
Chorotype: Palaearctic

**SUBFAMILY APATOPHYSEINAE Lacordaire, 1869: 234****TRIBE APATOPHYSEINI Lacordaire, 1869: 234****GENUS APATOPHYSIS Chevrolat, 1860: 95****SUBGENUS APATOPHYSIS Chevrolat, 1860: 95****SPECIES *A. anatolica* Heyrovsky, 1938: 93**

The endemic species is distributed only in CS Anatolia. So, Turkish Red List category of the species is **EN**.

Range: Turkey.

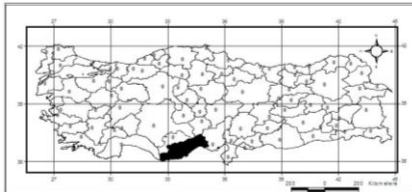
Chorotype: Anatolian

**SPECIES *A. kadleci* Danilevsky, 2008: 29**

The endemic species is distributed only in SC Anatolia. So, Turkish Red List category of the species is **EN**.

Range: Turkey.

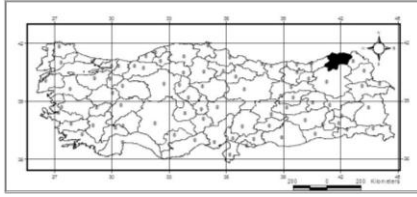
Chorotype: Anatolian

**SPECIES *A. karsica* Danilevsky, 2008: 28**

The endemic species is distributed only in NE Anatolia. So, Turkish Red List category of the species is **EN**.

Range: Turkey.

Chorotype: Anatolian

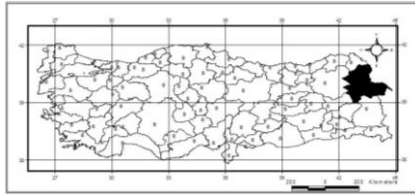


SPECIES *A. vedica* Danilevsky, 2008: 26

The species is distributed only in NE Anatolia for Turkey. So, Turkish Red List category of the species is **EN**.

Range: Transcaucasia (Armenia), Turkey.

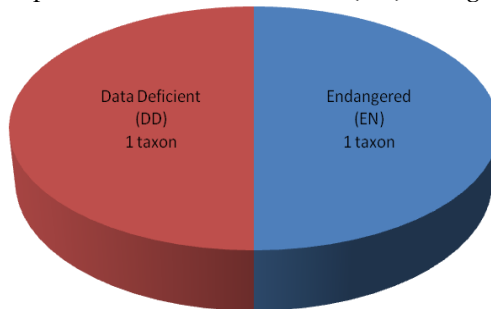
Chorotype: SW-Asiatic



CONCLUSION:

With the present work, “Turkish Red List Categories” for 21 Turkish species group taxa determined (Appendix 1).

For Turkish Necydalinae: The subfamily includes only 2 species in Turkey. Only 1 species is placed within “Endangered (EN)” Category. Only 1 species is placed within “Data Deficient (DD)” Category.



For Turkish Aseminae: The subfamily includes 9 species group taxa (6 species + 3 subspecies) in Turkey. Among them;

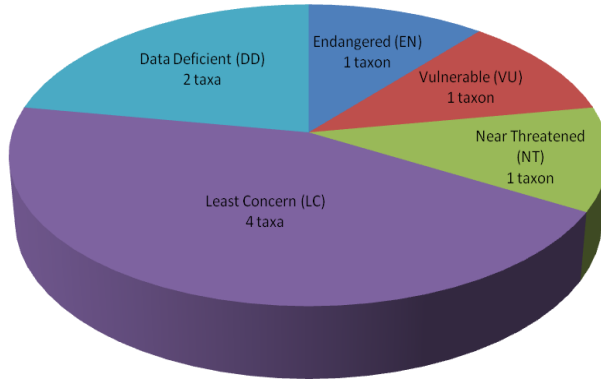
Only 1 subspecies is placed within “Endangered (EN)” Category.

Only 1 species is placed within “Vulnerable (VU)” Category.

Only 1 species are placed within “Near Threatened (NT)” Category.

3 species and 1 subspecies are placed within “Least Concern (LC)” Category.

1 species and 1 subspecies are placed within “Data Deficient (DD)” Category.

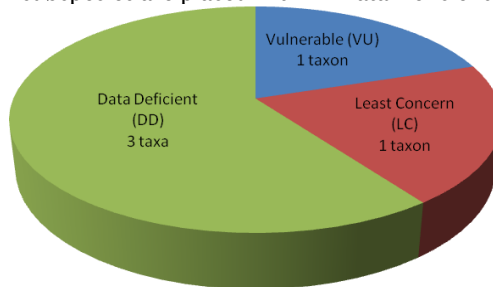


For Turkish Saphaninae: The subfamily includes 5 species group taxa (2 species + 3 subspecies) in Turkey. Among them;

Only 1 subspecies is placed within “Vulnerable (VU)” Category.

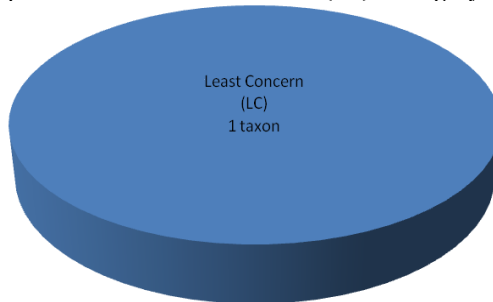
Only 1 subspecies are placed within “Least Concern (LC)” Category.

2 species and 1 subspecies are placed within “Data Deficient (DD)” Category.



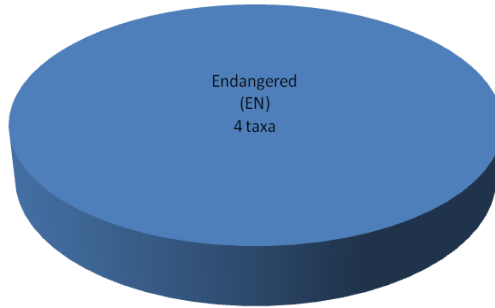
For Turkish Spondylidinae: The subfamily includes only 1 species in Turkey.

The species is placed within “Least Concern (LC)” Category.



For Turkish Apatophyseinae: The subfamily includes 4 species in Turkey. All of them;

4 species is placed within “Endangered (EN)” Category.



Consequently, “European Red List Saproxyllic Beetles” does not include any members of the subfamilies Necydalinae, Aseminae, Saphaninae, Spondylidinae and Apatophyseinae. So, any comparison with “Turkish Red List” is impossible.

LITERATURE CITED

Danilevsky, M. L. 2010. Additions and corrections to the new Catalogue of Palaearctic Cerambycidae (Coleoptera) edited by I. Löbl and A. Smetana, 2010. Russian Entomological Journal, 19: 215-239.

Danilevsky, M. L. 2011. Additions and corrections to the new Catalogue of Palaearctic Cerambycidae (Coleoptera) edited by I. Löbl and A. Smetana, 2010. Part. II. Russian Entomological Journal, 19: 313-324.

Danilevsky, M. L. 2012a. Additions and corrections to the new Catalogue of Palaearctic Cerambycidae (Coleoptera) edited by I. Löbl and A. Smetana, 2010. Part. III. Munis Entomology & Zoology, 7: 109-173.

Danilevsky, M. L. 2012b. Additions and corrections to the new Catalogue of Palaearctic Cerambycidae (Coleoptera) edited by I. Löbl and A. Smetana, 2010. Part. IV. Humanity Space. International Almanac, 1: 86-136.

Danilevsky, M. L. 2012c. Additions and corrections to the new Catalogue of Palaearctic Cerambycidae (Coleoptera) edited by I. Löbl and A. Smetana, 2010. Part. V. Humanity Space. International Almanac, 1: 695-741.

Danilevsky, M. L. 2012d. Additions and corrections to the new Catalogue of Palaearctic Cerambycidae (Coleoptera) edited by I. Löbl and A. Smetana, 2010. Part. VI. Humanity space. International Almanac, 1: 900-943.

Danilevsky, M. L. 2013. Additions and corrections to the new Catalogue of Palaearctic Cerambycidae (Coleoptera) edited by I. Loeb and A. Smetana, 2010. Part. VII. Humanity space. International almanac, 2: 170-210.

IUCN Red List. 2013. Guidelines for Using the IUCN Red List Categories and Criteria. Version 10.1 (September 2013). Available from: <http://jr.iucnredlist.org/documents/RedListGuidelines.pdf>

Löbl, I. & Smetana, A. 2010. Catalogue of Palaearctic Coleoptera, Volume 6, Chrysomeloidea. Apollo Books, Stenstrup, 924 pp.

Löbl, I. & Smetana, A. 2011. Errata for volume 6, pp. 35-61 [Cerambycidae, pp. 35-45]. In: I. Lobl & A. Smetana (ed.): Catalogue of Palaearctic Coleoptera, Vol. 7. Stenstrup: Apollo Books, 373 pp.

Miroshnikov, A. I. 2011. The longicorn beetles (Cerambycidae) in "Catalogue of Palaearctic Coleoptera. Stenstrup, 2010". Remarks and additions. Entomologia Kubanica, Supplement 1: 113 pp. [in Russian with English abstract]

Nieto, A. & Alexander, K. N. A. 2010. European Red List of Saproxyllic Beetles. Luxembourg: Publications Office of the European Union.

Özdikmen, H. 2011. Additions and corrections to the new Catalogue of Palaearctic Cerambycidae (Coleoptera) edited by I. Löbl and A. Smetana (2010) for Turkish taxa. *Munis Entomology & Zoology*, 6: 686-734.

Özdikmen, H. 2014a. Turkish Red List Categories of Longicorn Beetles (Coleoptera: Cerambycidae) Part I – Subfamilies Vesperinae and Prioninae. *Munis Entomology & Zoology*, 9 (1): 245-253.

Özdikmen, H. 2014b. Turkish Red List Categories of Longicorn Beetles (Coleoptera: Cerambycidae) Part II – Subfamily Lepturinae: Xylosteini, Enoploiderini, Rhannusiini, Oxymirini and Rhagiini. *Munis Entomology & Zoology*, 9 (1): 293-316.

Özdikmen, H. 2014c. Turkish Red List Categories of Longicorn Beetles (Coleoptera: Cerambycidae) Part III – Subfamily Lepturinae: Lepturini. *Munis Entomology & Zoology*, 9 (1): 388-421.

Vigna Taglianti, A., Audisio, P. A., Biondi, M., Bologna, M. A., Carpaneto, G. M., De Biase, A., Fattorini, S., Piattella, E., Sindaco, R., Venchi, A. & Zapparoli, M. 1999. A proposal for a chorotype classification of the Near East fauna, in the framework of the Western Palaearctic Region. *Biogeographia*, 20: 31-59.

Appendix 1. Red List Categories of Turkish longicorn beetles belonging to Necedalidae, Asemidae, Saphanidae, Spondylidae and Apatophyseidae.

TAXA	TURKISH RED LIST CATEGORY	EUROPEAN RED LIST CATEGORY	ENDEMISM FOR TURKEY
NECYDALINAE			
<i>Necydalis sabatinelli</i>	EN	---	YES
<i>Necydalis ulmi</i>	DD	---	---
ASEMINAE			
<i>Arhopalus ferus</i>	LC	---	---
<i>Arhopalus rusticus rusticus</i>	LC	---	---
<i>Arhopalus syriacus</i>	LC	---	---
<i>Asemum striatum</i>	LC	---	---
<i>Asemum tenuicorne</i>	DD	---	---
<i>A. tenuicorne tenuicorne</i>	DD	---	---
<i>A. tenuicorne claricostulatum</i>	EN	---	YES
<i>Tetropium castaneum</i>	NT	---	---
<i>Tetropium fuscum</i>	VU	---	---
<i>Nothorhina punctata</i>	DD	---	---
SAPHANINAE			
<i>Alocerus moesiacus</i>	DD	---	---
<i>Drymochares cavazzutii</i>	LC	---	---
<i>D. cavazzutii cavazzutii</i>	LC	---	---
<i>D. cavazzutii ivani</i>	VU	---	YES
<i>Saphanus piceus ganglbaueri</i>	DD	---	---
<i>Oxypleurus nodieri</i>	DD	---	---
SPONDYLIDINAE			
<i>Spondylis buprestoides</i>	LC	---	---
APATOPHYSEINAE			
<i>Apatophysis anatolica</i>	EN	---	YES
<i>Apatophysis kadleci</i>	EN	---	YES
<i>Apatophysis karsica</i>	EN	---	YES
<i>Apatophysis vedica</i>	EN	---	---