



Contribution to the knowledge of darkling beetles from Türkiye, with four new country records (Coleoptera, Tenebrionidae)

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Abstract. – A selection of twelve rarely collected Tenebrionidae species, including new country records, coming from the Turkish Oak Habitat Project (TOHP), a large-scale study of the fauna of old oaks in Türkiye, is highlighted. *Pentaphyllus testaceus* (Hellwig, 1792), *Philhammus aharonii* (Reitter, 1910), *Stenosis fulvipes* (Reiche & Saulcy, 1857), and *Tenebrio punctipennis* Seidlitz, 1895, are reported from Türkiye for the first time. Occurrence in this country of *Pentaphyllus reibnitzii* Schawaller & Merkl, 2012, is confirmed. Other treated poorly known species are: *Adelostoma subtile subtile* Reitter, 1900, *Corticeus fasciatus* (Fabricius, 1790), *Cryphaeus cornutus* (Fischer von Waldheim, 1823), *Lyphia tetraphylla* (Fairmaire, 1856), *Metaclisa azurea* (Waltl, 1838), *Palorus ratzeburgii* (Wissmann, 1848) and *Tenebrio syriacus* Zoufal, 1892. Photos of the five species new or confirmed to Türkiye are presented.

Résumé. – **Contribution à la connaissance des Tenebrionidae de Turquie, avec quatre nouvelles espèces pour ce pays (Coleoptera).** Une sélection de douze espèces remarquables de Tenebrionidae observées en Turquie est présentée, incluant des espèces nouvelles pour ce pays, provenant d'échantillonnages dans le cadre du projet Turkish Oak Habitat Project (TOHP), une étude à grande échelle concernant la faune des vieux chênes de Turquie. *Pentaphyllus testaceus* (Hellwig, 1792), *Philhammus aharonii* (Reitter, 1910), *Stenosis fulvipes* (Reiche & Saulcy, 1857) et *Tenebrio punctipennis* Seidlitz, 1895, sont mentionnés pour la première fois de Turquie. La présence dans ce pays de *Pentaphyllus reibnitzii* Schawaller & Merkl, 2012, est confirmée. Les autres espèces traitées rarement collectées et peu connues sont les

suyvantes : *Adelostoma subtile subtile* Reitter, 1900, *Corticeus fasciatus* (Fabricius, 1790), *Cryphaeus cornutus* (Fischer von Waldheim, 1823), *Lyphia tetrephylla* (Fairmaire, 1856), *Metaclisa azurea* (Waltl, 1838), *Palorus ratzeburgii* (Wissmann, 1848) et *Tenebrio syriacus* Zoufal, 1892. Les photographies des cinq espèçes nouvelles ou confirmées pour la Turquie sont présentées.

Keywords. – Heteromera, hollow trees, *Quercus*, window and pitfall traps, Asia Minor, faunistics, new records.

In recent years, the studies of darkling beetles in Türkiye have been more intense but the information must be collected in many publications by various authors from different countries. Unfortunately, it does not exist a complete and recent catalog. However, a checklist can be compiled from IWAN *et al.* (2020). The number of Tenebrionidae species regularly increases in Türkiye with about 536 species according to CANPOLAT & HASBENLI (2012). If including species with no confirmed records or doubtful reports, we can estimate the number of known Tenebrionidae species in Türkiye to be more than 560. The main faunistic works were published by KASZAB (1939, 1940, 1960 & 1968), FERRER & SOLDATI (1999), LEO & FATTORINI (2000), TEZCAN *et al.* (2004a, b) and very recently by NABOZHENKO *et al.* (2022). For more detailed information on more restricted contributions see NABOZHENKO *et al.* (2022). However, some tenebrionid beetle genera have been intensively studied in Türkiye. GRIMM & SCHAWALLER (2000) for *Pedinus* Latreille, 1796, of the subgenus *Colpotus* Mulsant & Rey, 1853, CHIGRAY *et al.* (2015) on *Gnaptor* Brullé, 1832, NABOZHENKO *et al.* (2016a) and NABOZHENKO & YILDIRIM (2020) on *Ceratanisus* Gemminger, 1870, CHIGRAY *et al.* (2018) on *Calyptopsis* Solier, 1835, CHIGRAY *et al.* (2020) on *Dila* Fischer von Waldheim, 1844, SOLDATI *et al.* (2019) on *Corticeus* Piller & Mitterpacher, 1783, NABOZHENKO *et al.* (2020) on *Scaurus* Fabricius, 1775, and SCHAWALLER (2020) on *Laena* Dejean, 1821. The most elaborated taxonomic group is the tribe Helopini, particularly diversified in Türkiye and the Caucasus, by the world-renowned specialist M. V. Nabozhenko, sometimes in cooperation with B. Keskin. Taxonomic revisions of Helopini genera from Türkiye were published by NABOZHENKO (2015), NABOZHENKO *et al.* (2016b, 2021a), KESKIN & NABOZHENKO (2012, 2015), NABOZHENKO & KESKIN (2010, 2016 & 2017) and KESKIN *et al.* (2017a, b).

The Turkish Oak Habitat Project (TOHP) is a large-scale study of the biodiversity of habitats with old oaks (*Quercus* L., Fagaceae) in Türkiye. It is mainly a collaboration between Linköping University (Sweden) and different universities and institutes in Türkiye. The aim of the project is to study and describe the fauna and flora living in oak habitats, making comparisons of the biodiversity in Turkish oak habitats with similar studies in other countries, informing the Turkish authorities about the biological value of these habitats for conserving the most valuable oak regions in Türkiye.

Many Tenebrionidae (excluding Alleculinae), about 60 species, mostly saproxylic, were identified by one of the authors (FS). While the ground fauna is relatively well studied in the Mediterranean countries, the saproxylic species are poorly known. Among the studied species, a selection of twelve very interesting or new to Türkiye (four species) are highlighted below.

MATERIAL AND METHODS

Sampling. – The studies of saproxylic beetles on old hollow trees in Türkiye were made between 2005 and 2017. In total 120 oaks and ten plane trees, spread over ten

different sites, have been studied. The trees were examined by using two different trap types for sampling saproxylic beetles: window traps on the tree trunk and pitfall traps in the wood mould inside the trunk cavities. Traps were baited with a mix of 50% water and 50% ethylene glycol (antifreeze) and visited on average every four weeks, from April to October. Individual trees used for trapping were randomly selected from the pool of suitable trees found (fig. 1). The window traps (W-trap) consisted of a 30 × 60 cm wide transparent plastic plate with a tray underneath (JANSSON & LUNDBERG, 2000). They were placed near the trunk, less than one-meter



Fig. 1-4. - Sampling. - 1, Suitable tree as used for trapping. - 2, Window trap on old hollow oak. - 3, Window trap placed on old oak in Kasnak Oak Forest Reserve (Isparta prov.). - 4, Pitfall trap in a cavity of old hollow oak

distance, beside or in front of the cavity entrance (fig. 2). Their positions were 1.5-5 m from the ground (fig. 3), depending on where the cavity entrance was situated on the studied tree. The pitfall traps (P-trap) were plastic cups with a top diameter of 6.5 cm. They were placed in the wood mould at the bottom of the cavity, with their openings on level with the wood mould surface (fig. 4).

Preparation of specimens and photos. – For making photos of specimens, they were placed for 24 hours in a solution of 5% detergent and 95% water and then cleaned with a set of different supple paintbrushes. They were glued and mounted on transparent cards.

Photographs of habitus were taken either on the image acquisition technical platform of the National Forest Entomology Laboratory of the ONF (Quillan, (France), with the Entovision multifocus system, or with a Sony DSC-W7 compact digital camera mounted on a Wild M5 stereomicroscope. The construction of sharp images from multifocal stacks (focus stacking), about 6-15 per figure, was carried out either with Cartograph software from Microvision Instruments (Évry, France) or using Combine ZM software. The infographic work was done with Adobe Photoshop CC 2018 software.

Material depositories. – Entomological Museum, Isparta University of Applied Sciences, Faculty of Forestry, Isparta, Türkiye; collection Nicklas Jansson, Linköping, Sweden; collection Fabien Soldati, Limoux, France.

RESULTS AND DISCUSSION

As indicated above, we highlight 12 rare and poorly known species from about 60 identified Tenebrionidae species (Alleculinae excluded), mainly saproxylic, including five new country records or confirmed species for Türkiye. Species are presented in alphabetical order. For each species, all localities are detailed, preceded by their administrative provinces.

Adelostoma subtile subtile Reitter, 1900

Material. – Adıyaman prov., Kömür, 3 km N Pınaryayla, 37°55'9.0"N, 38°28'35.2"E, 23.V.2011, window trap n°5 on hollow oak 1 ex., M. Coşkun, T. Kayış & N. Jansson.

The nominotypical form is only known from the Middle East: Iran, Israel, Jordan, Syria, and Türkiye (IWAN *et al.* 2020). A very rarely collected species, with two other subspecies occurring in Saudi Arabia.

Corticeus fasciatus (Fabricius, 1790)

Syn. *Corticeus rufobasalis* Pic, 1917.

Material. – Burdur prov., Gölhisar, 120 km W Antalya, 36°58'30.2"N, 29°28'07.6"E, 28.VI.2009, window trap n°8 on hollow oak (*Quercus trojana*), 1 ex., M. Avcı & N. Jansson. Isparta prov., Eğirdir, Yukarıgökdere, Kasnak forest nature reserve, 37°42'9.64"N, 30°49'8.99"E, 27.VI.2007, window trap n°4 on hollow oak (*Quercus cerris*), 1 ex., M. Avcı & N. Jansson. Muğla prov., Fethiye, Gökben, 36°34'18.8"N, 29°22'50.0"E, 9.VIII.2011, window trap n°11 on hollow oak (*Quercus ithaburensis*), 1 ex., M. Avcı & N. Jansson.

A rare but widely distributed species in nearly all of Europe, the Maghreb, Caucasus (Abkhasia), and Türkiye (ABDURAKHMANOV & NABOZHENKO, 2011; IWAN *et al.*, 2020; LILLIG & BREMER, 2021). It is related to oak stands with old trees. As about synonymy with *C. rufobasalis* (Pic, 1917) see SOLDATI *et al.* (2019).

Cryphaeus cornutus (Fischer von Waldheim, 1823)

Material. – Isparta prov., Eğirdir, Kovada National Park, 37°62'8.3"N, 30°87'3.7"E, 3.X.2015, window trap n°5 on hollow Plane tree (*Platanus orientalis*), 1 ex., M. Avcı & N. Jansson.

Rarely collected species reported in Türkiye from Bulghar Dagħ, today Bolkar Mountains (Mersin prov.), Kaç-Sinek Bali by FERRER & SOLDATI (1999), Şavşat (Artvin prov.) and Eğirdir (Isparta prov.) (LEO *et al.*, 2021). Reported from France, the Balkans, Hungary to Ukraine, the Caucasus, the Middle East and the Canary Islands (IWAN *et al.*, 2020). It was also recently reported from southern Slovakia (KRČMÁRIK *et al.*, 2020) and Italy (LEO *et al.*, 2021). The citation from the Canary Islands should be confirmed.

Lyphia tetraphylla (Fairmaire, 1856)

Material. – Muğla prov., Fethiye, Gökben, 36°34'18.8"N, 29°22'50.0"E, 9.VIII.2011, window trap n°16 on hollow oak (*Quercus ithaburensis*), 1 ex., M. Avcı & N. Jansson.

Only reported in Türkiye from Beşkonak (Antalya prov.) and Side (Antalya prov.) by FERRER & SOLDATI (1999), and from Antalya (Antalya prov.) and the surroundings of Posanti (Adana prov.) by FERRER (2007). A Mediterranean species whose adults and larvae are living in dead branches of oaks and fig trees (*Ficus carica*, *Quercus* spp.), or in old dry vineyard shoots, in galleries of Bostrichidae, e.g. *Sinoxylon sexdentatum* (Olivier, 1790) and *Amphicerus* (= *Schistoceros*) *bimaculatus* (Olivier, 1790) (FERRER, 2007; SOLDATI, 2007). It is known from southern Europe and the Middle East, introduced in North America and probably in the Czech Republic (ALIQUÓ & SOLDATI, 2010). Indeed, there is only one old finding in the Czech Republic (1934), and in Slovakia (1964), no recent data is available (NOVÁK, 2014). On the contrary, IWAN *et al.* (2020) indicated the species as introduced in Europe and the Middle East, originated from North America. Described from the surroundings of Pisa, in Tuscany (Italy) (FAIRMAIRE, 1856) this species, despite being rare, is widespread in the north Mediterranean countries, including many of their islands. Adventive species in North America, detected before the year 1902 (BOUSQUET *et al.*, 2018), the genus *Lyphia* Mulsant & Rey, 1852 originated from the Old World.

Metaclisa azurea (Waltl, 1838)

Material. – Konya prov., Derbent, 30 km N Erdemli, 36°42'38.5"N, 34°09'58.3"E, alt. 1139 m, 17.VI.2005, pitfall trap n°18 on hollow oak (*Quercus cerris*), 1 ex., M. Coşkun, T. Kayış & N. Jansson.

A rare species, linked to wood pastures, especially to old oak stands, reported in Türkiye from Namrun (Çamlıyayla, Mersin prov.), close to Tarsus (KASZAB, 1968) and Gülnar (Mersin prov.) by FERRER & SOLDATI (1999). According to MERKL *et al.* (2010), this species seems to be associated with dead wood of large tree trunks standing in the open landscape, but also can be found in deep wet forests. The same authors indicate many specimens collected at night in Syria (Latakia province) from trunks of *Quercus coccifera* heavily damaged.

Described from Sicily, probably on mislabelling, the species has never been reported since from Italy or Sicily (ALIQUÓ & SOLDATI, 2010; MERKL *et al.*, 2010), it occurs in SE Europe, Transcaucasia, and the Middle East (IWAN *et al.*, 2020).

Palorus ratzeburgii (Wissmann, 1848)

Material. – Mersin prov., Köseçobanlı, 40 km N Gülnar, 36°30'22.5"N, 33°07'43.3"E, 26.VII.2006, pitfall trap n°14 on hollow oak (*Quercus* sp.), 1 ex., M. Coşkun, T. Kayış & N. Jansson.

Muğla prov., Fethiye, Gökben, 36°34'18.8"N, 29°22'50.0"E, 9.VIII.2011, window trap n°11 on hollow oak (*Quercus ithaburensis*), 1 ex., M. Avcı & N. Jansson. Isparta prov., Yukarıgökdere, Eğirdir, Kasnak forest nature reserve, 37°42'9.64"N, 30°49'8.99"E, 27.VI.2007, window trap n°4 on hollow oak (*Quercus cerris*), 1 ex., M. Avcı & N. Jansson.

A cosmopolitan species, rarely observed in nature, reported from Üzümlü (Fethiye) (KASZAB, 1968).

Pentaphyllus reibnitzii Schawaller & Merkl, 2012 (fig. 5)

Material. – Balıkesir prov., Ida Mountain, Ayi stream, 10 km N Edremit, 39°41'17.0"N, 26°56'15.0"E, 10.IX.2011, window trap n°10 on hollow oak (*Quercus frainetto*), 1 ex., T. Öncül, S. V. Varlı & N. Jansson.

Described from Kato Pafos, SW Cyprus (SCHAWALLER & MERKL, 2012), this species was recorded on other localities in this island (C. Makris, pers. comm.). The country code TR (= Türkiye) is given for this species in the Catalogue of Palaearctic Coleoptera (IWAN *et al.*, 2020), without other precisions, but we have not found the source or closer records from Türkiye in the literature. Our new record confirms the occurrence of this poorly known species in Türkiye.

Pentaphyllus testaceus (Hellwig, 1792) (fig. 6)

Material. – Antalya prov., Gölhisar, 120 km W Antalya, 36°58'30.2"N, 29°28'07.6"E, 28.VI.2009, window trap n°8 on hollow oak (*Quercus trojana*), 2 ex., M. Avcı & N. Jansson. *Idem*, 7 km SW Altınyayla, 36°57'40"N, 29°27'53"E, pitfall trap n°18, hollow oak (*Quercus trojana*), 28.VI.2009, 1 ex., N. Jansson & M. Avcı. Konya prov., Derbent, 30 km N Erdemli, alt. 1139 m, 17.VI.2005, 36°42'38.5"N, 34°09'58.3"E, pitfall trap n°18 on hollow oak (*Quercus cerris*), 1 ex., M. Coşkun, T. Kayış & N. Jansson. Adıyaman prov., Kömür, 3 km N Pınaryayla, 37°55'9.0"N, 38°28'3.52"E, 23.V.2011, window trap n°5 on hollow oak, 1 ex., M. Coşkun, T. Kayış & N. Jansson. Isparta prov., Eğirdir, Yukarıgökdere, Kasnak forest nature reserve, 37°42'9.64"N, 30°49'8.99"E, 27.VI.2007, window trap n°4 on hollow oak (*Quercus cerris*), 1 ex., M. Avcı & N. Jansson. Balıkesir prov., Ida Mountain, Ayi stream, 10 km N Edremit, 39°41'17.0"N, 26°56'15.0"E, 10.IX.2011, window trap n°3 on hollow oak (*Quercus frainetto*), 1 ex., T. Öncül, S. Varlı & N. Jansson. Balıkesir prov., Kapıdağı, 12 km NE Erdek, 40°28'17.1"N, 27°53'5.1"E, 16.VI.2012, window trap n°2 on hollow oak, 1 ex., A. Tüven, S. V. Varlı & N. Jansson.

This species is widely distributed in Europe, from Scandinavia to Spain, the Balkans, Russia, and the Caucasus, also cited from Algeria, Tunisia, Tajikistan (IWAN *et al.*, 2020; NABOZHENKO *et al.*, 2021b). It generally lives in the dried brown rotten wood of the broadleaved trees, more rarely in fungi (*Laetiporus sulphureus*). This species is simply reported from Derbent (ATAY *et al.*, 2012; JANSSON & COŞKUN, 2008) and Mersin area (GÖKTEPE *et al.*, 2023) without any comments in spite of being a new country record for Türkiye. Moreover, our numerous findings show that the species is widely distributed in Türkiye.

Philhammus aharonii (Reitter, 1910) (fig. 7)

Material. – Mersin prov., Gülnar, 12.VII.2017, window trap n°13, 1 ex., M. Avcı & N. Jansson.

A very rare species, in spite to be widely distributed, with very few localities. It is a new country record for Türkiye. Moreover, this genus was not known from Türkiye according to KOÇAK & KEMAL (2009). Being able to fly, this species can be probably attracted by UV lights.

There are many confusions between this species and the closely related *P. sericans* Fairmaire, 1871. So, *P. aharonii* distribution is not the same among authors. NASSERZADEH *et al.* (2019) cited *P. aharonii* from the Canary Islands, Morocco, Egypt, Israel, Jordan, Syria, Saudi Arabia, Sudan, and Iran. SCHAWALLER *et al.* (2014) cited the species from Egypt, Sudan, the Middle East, and Saudi Arabia only, and *P. sericans* from the Canary Islands, Spain, Morocco, and Egypt. According to IWAN *et al.* (2020), *P. aharonii* is known from Egypt, Morocco, Iran, Israel, Jordan, and Saudi Arabia while *P. sericans* is indicated from Spain, the Canary Islands, Egypt, and Morocco. In our opinion, *P. sericans* is probably a Betico-Riffian and Canarian species while *P. aharonii* is an eastern species from the Middle East.

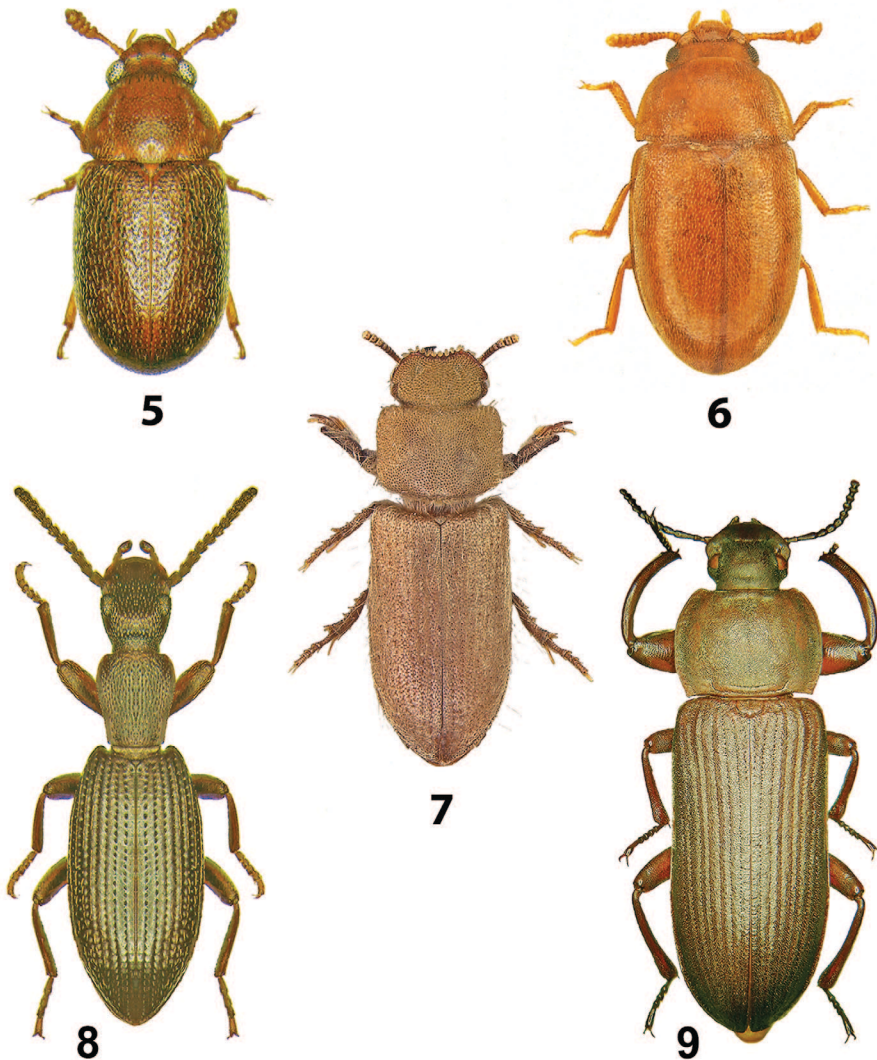


Fig. 5-9. - Habitus of species new to or confirmed in Türkiye. - 5, *Pentaphyllus reibnitzii* Schawaller & Merkl (2.3 mm). - 6, *Pentaphyllus testaceus* (Hellwig) (2.2 mm). - 7, *Philhammus aharonii* (Reitter) (3.4 mm). - 8, *Stenosis fulvipes* (Reiche & Saulcy) (5.9 mm). - 9, *Tenebrio punctipennis* Seidlitz (21 mm). The length of the photographed specimens is indicated in brackets.

Stenosis fulvipes (Reiche & Saulcy, 1857) (fig. 8)

Material. – Hatay prov., Antakya, Akdarı, 30 km S Airport, Akdarı village, 36°04'39"N, 36°14'20"E, 5.VII.2011, pitfall trap n°14 in hollow oak (*Quercus coccifera*), 1 ex., E. Atay & N. Jansson. *Idem*, 10.VII.2011, pitfall trap n°8 in hollow oak (*Quercus coccifera*), 1 ex., E. Atay & N. Jansson. *Idem*, 4.VII.2011, pitfall trap n°12 a in hollow oak (*Quercus coccifera*), 1 ex., E. Atay & N. Jansson. *Idem*, 5.VII.2011, pitfall trap n°7 in hollow oak (*Quercus coccifera*), 1 ex., E. Atay & N. Jansson. *Idem*, 30.VII.2011, pitfall trap n°15 in hollow oak (*Quercus coccifera*), 1 ex., E. Atay & N. Jansson. *Idem*, 28.V.2011, pitfall trap n°16 in hollow oak (*Quercus coccifera*), 1 ex., E. Atay & N. Jansson. *Idem*, 10.VII.2011, pitfall trap n°1 in hollow oak (*Quercus coccifera*), 1 ex., E. Atay & N. Jansson. *Idem*, 4.VII.2011, pitfall trap n°7 in hollow oak (*Quercus coccifera*), 8 ex., E. Atay & N. Jansson.

This species is known only from the Middle East: Israel, Jordan, Lebanon, and Syria (IWAN *et al.*, 2020). The numerous collected specimens come from a locality close to the Syrian borders fully consistent with the known distribution of the species. It is a new country record for Türkiye.

Tenebrio punctipennis Seidlitz, 1895 (fig. 9)

Material. – Hatay prov., Antakya, Akdarı, 30 km S Airport, Akdarı village, 36°04'39"N, 36°14'20"E, 10.VII.2011, 7.X.2011, pitfall trap n°10 in hollow oak (*Quercus coccifera*), 3 ex., E. Atay & N. Jansson. *Idem*, 10.VII.2011, pitfall trap n°12b in hollow oak (*Quercus coccifera*), 1 ex., E. Atay & N. Jansson.

A rare and poorly known species often misidentified with *Tenebrio obscurus* Fabricius, 1792, reported from Albania, Austria, Bulgaria, Greece, Italy, and Tunisia (ALÍQUÓ & SOLDATI, 2010; IWAN *et al.*, 2020). In Akdarı, it was found together with *Tenebrio syriacus* Zoufal, 1892, and it is a new country record for Türkiye.

Tenebrio syriacus Zoufal, 1892

Material. – Adıyaman prov., Kömür, 3 km N Pınaryayla, 37°55'9.0"N, 38°28'35.2"E, 23.V.2011, window trap n°5 on hollow oak, 1 ex., M. Coşkun, T. Kayış & N. Jansson. Hatay prov., Antakya, Akdarı 30 km S Airport, Akdarı village, 36°04'39"N, 36°14'20"E, 10.VII.2011, pitfall trap n°10 in hollow oak (*Quercus coccifera*), 1 ex., E. Atay & N. Jansson.

Reported from Korkha, close to Üzümlü (Fethiye, Muğla prov.), as a species new to Türkiye (FERRER & SOLDATI, 1999) and from Bornova, Çamdibi (Izmir prov.) by NABOZHENKO *et al.* (2022). Rare species, cited from Egypt, Syria, and Türkiye (IWAN *et al.*, 2020).

CONCLUSION

Although the fauna of the Tenebrionidae of Türkiye is becoming better known, there are still many undiscovered species, including a number that are potentially new to science. Türkiye is a very large country (almost 800,000 km²), situated in a southerly position between 36° and 42° north latitude, partitioned by numerous high mountain ranges with a highest point at 5137 m, and located at the crossroads between Europe and Asia.

Of the 60 or so species of Tenebrionidae identified in this study, only 4.5% of the ground-dwelling species are common with France, whereas the saproxylic species have an affinity rate of 42.9%. That said, JANSSON & COŞKUN (2008) found only 8% of saproxylic beetle species in common between old oak sites in Sweden and Türkiye.

The bioclimatic nature of the region means that there are stronger affinities between Türkiye and France, which also has a fairly large Mediterranean area. However, saproxylic species are the most poorly known, especially in Mediterranean countries, and $\frac{3}{4}$ of the species covered in this work belong to this guild.

As a result, some saproxylophagous Tenebrionidae species, long time only known from a single locality, or a single country, have been discovered in many other places. For example, *Eledonoprius serrifrons* (Reitter, 1890), which was only reported from Azerbaijan, then mentioned in Italy (SCHAWALLER, 2002), is now has a much wider known distribution (KAKIOPOULOS & DEMETRIOU, 2022; SIVILOV & CVETKOVSKA-GORGIEVSKA, 2014), or *Alphitophagus obtusangulus* Müller, 1904, only reported from the island of Mljet in Croatia, then discovered in France and Greece (SOLDATI, 2008), is now considered as widely distributed in the western Mediterranean (SOLDATI, 2022). *Pentaphyllus reibnitzii* Schawaller & Merkl, 2012, described from Cyprus, is now confirmed in Türkiye (this work) and will probably be discovered in other Mediterranean countries.

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