

Contribution to the Dermestidae (Coleoptera) fauna of Turkey alongwith new records

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Summary

In this study, it has been determined that totally 25 species/ subspecies belonging to Dermestidae have been preserved in the collection of LEMT (Lodos Entomological Museum Turkey), Department of Plant Protection, Faculty of Agriculture, University of Ege, Izmir, Turkey. Among those, *Attagenus* (s.str.) *brunneus* Faldermann, 1835, *Anthrenus* (s.str.) *flavipes* *flavipes* LeConte, 1854, *A.* (s.str.) *picturatus* *picturatus* Solsky, 1876 and *Phradonoma villosum* (Duftschmid, 1825) are the first reliable records from Turkey.

Key words: Coleoptera, Dermestidae, fauna, new records, Turkey

Anahtar sözcükler: Coleoptera, Dermestidae, fauna, yeni kayıt, Türkiye

Introduction

Dermestidae fauna of Turkey is quite rich. In the studies of Sahlberg (1912-1913), Gadeau de Kerville (1939), Tuatay et al. (1972) and Gül-Zümreoglu (1972) have recorded 10; 4; 2; 4 species from Turkey, respectively.

Species of *Anthrenus*, *Attagenus* and *Trogoderma* have been evaluated from the economical point of view in the studies of Keyder (1955), Esin (1955; 1959; 1967; 1968), Alkan (1956), Ertürk (1956), Kansu (1961; 1962), Özer (1962; 1963), Çakıllar (1963), Kalkan (1963), Özer and Kalkan (1963) and Bağcioğlu (1970)

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In recent studies, Lodos (1998) listed 54 species which belong to 7 genera of Dermestidae from Turkey. Finally, Háva (2000) described a new genus and species and Háva (2003) also catalogued 62 species of Dermestidae from Turkey.

The aim of this paper is to present the complete records of preserved Dermestidae material from the collection of LEMT (Lodos Entomological Museum Turkey) to researchers.

Material and Methods

Material have been collected from different parts of Turkey mainly by field studies of the projects (TOAG/ 168, 336, 502; DPT 98 K 121280) between 1967-1999. The specimens have been collected by hand and knock down, sweeping of vegetation and pitfall trap methods. In addition to these methods, material collected and given as a gift to the museum by researchers of Plant Protection Research Institutes, students and amateurs etc. have also been included in this study.

Material have been determined by J. Háva and deposited mostly in the collection of LEMT (Lodos Entomological Museum Turkey, Department of Plant Protection, Faculty of Agriculture, University of Ege, Izmir, Turkey) and a few in JHAC (Private collection of Jiri Háva, Prague, Czech Republic).

In this study, each species or subspecies have been listed in phylogenetic order within the family. The information on specific name, describer, and description date, locality and date of collection, place/plant on which the specimens have been collected, determinant, name of collection (in brackets), number of specimens (in brackets) have also been given.

Results

At the end of this study, 25 species/subspecies which belong to three subfamilies of Dermestidae have been determined.

Dermestinae Latreille, 1807

***Dermestes* (s.str.) *lardarius* Linnaeus, 1758**

Material: Artvin, 02.06.1973, from mill, Kalik det., Háva revid., (LEMT), (2); Háva det., (LEMT), (5). Totally 7 specimens.

Distribution: Europe, Africa, America, Asia, Australia (Háva, 2003). Cosmopolitan species. Recorded from Turkey by Lodos (1998).

***Dermestes (Dermestinus) coronatus* Steven in Schönherr, 1808**

Material: Erzurum, 15.06.1973, weed, Kalik det., Háva revid., (LEMT), (1). Totally 1 specimen.

Distribution: Turkey, Afghanistan, Caucasus, India, Iran, Mongolia, SE European part of Russia: Stavropol, Sinkiang (Háva, 2003).

Dermestes (Dermostinus) frischii Kugelan, 1792

Material: **Izmir** (Kemalpaşa-Ören), 03.08.1999, pitfall trap, Háva det., (LEMT), (2); 17.08.1999, pitfall trap, Háva det., (LEMT), (1). Totally 3 specimens.

Distribution: Europe, Africa, America, Asia, Australia (Háva, 2003). Cosmopolitan species. Recorded from Turkey by Lodos (1998).

Orphilinae Le Conte, 1861

Orphilus beali Zhantiev, 2001

Material: **Ağrı**, 26.05.1974, weed, Kalik det., Háva revid., (LEMT), (1); **Izmir** (Çeşme), 18.06.1968, **Pimpinella anisum**, Háva det., (LEMT), (1); **Muğla** (Fethiye-Seki), 09.06.1973, **Triticum sativa**, Háva det., (LEMT), (1); **Crataegus** sp., Háva det., (LEMT), (1). Totally 4 specimens.

Distribution: Cyprus, France, Greece, Turkey, Israel, Lebanon, Syria (Háva, 2003).

Megatominae Leach, 1815

Attagenus* (s.str.) *bifasciatus (Olivier, 1790)

Material: **Izmir** (Bornova), 10.04.1970, **Pyrus communis**, Háva det., (LEMT), (1); 21.02.1975, museum material, Kalik det., Háva revid., (JHAC), (1); 01.05.1983, weed, Kalik det., Háva revid., (LEMT), (1); 10.05.1983, weed, Háva det., (LEMT), (1); (Karşıyaka), 15.05.1982, weed, Háva det., (LEMT), (2); 24.04.1983, **Calla** sp., Háva det., (LEMT), (1); (Kemalpaşa), 10.05.1974, weed, Háva det., (LEMT), (2); (Menemen), 07.04.1967, Kalik det., Háva revid., (LEMT), (1). Totally 10 specimens.

Distribution: S. Europe, Turkey, N. Africa, Afghanistan, Caucasus, Iran, Iraq, Israel, Lebanon, Palestina, Syria, Turkmenistan (Háva, 2003). Recorded from Turkey by Lodos (1998).

Attagenus* (s.str.) *brunneus Faldermann, 1835

Material: **Izmir** (Bornova), 09.10.1982, **Nicotiana tabacum**, Kalik det., Háva revid., (LEMT), (1). Totally 1 specimen.

Distribution: Europe, Algeria, Egypt, Morocco, Tunisia, Canada, U.S.A., Afghanistan, Pakistan, Kyrgyzstan, Turkmenistan, Uzbekistan (Háva, 2003). The first reliable record from Turkey.

Attagenus (s.str.) **orientalis** Reitter in Schneider et Leder, 1878

Material: Mardin, 03.06.1976, *Quercus* sp., Háva det., (LEMT), (1); (Nusaybin), 04.06.1976, fruit tree, Kalik det., Háva revid., JHAC (1); Siirt, 11.06.1976, Háva det., (LEMT), (1); Şanlıurfa (Siverek), 15.06.1972, *Pistacia vera*, Kalik det., Háva revid., (LEMT), (1). Totally 4 specimens.

Distribution: Tunisia, Caucasus, Iran, Iraq, Syria (Háva, 2003). Recorded from Turkey by Lodos (1998).

Attagenus (s.str.) **pantherinus** (Ahrens, 1814)

Material: Mersin (Namrun), 29.04.1985, *Quercus* sp., Kalik det., Háva revid., (LEMT), (1). Totally 1 specimen.

Distribution: Europe, Caucasus, Turkey (Háva, 2003).

Attagenus (s.str.) **quadrimaculatus** Kraatz, 1858

Material: Antalya (Gazipaşa), 23.08.1984, *Cistus* sp., Háva det., (LEMT), (2); Gaziantep, 23.05.1984, weed, Háva det., (LEMT), (1); Mersin (Gülnar), 28.05.1984, *Styrax* sp., Háva det., (LEMT), (1); (Silifke-Kirobaşı), 29.05.1984, *Juniperus* sp., Háva det., (LEMT), (1). Totally 5 specimens.

Distribution: Balkan peninsula, France, Turkey, Caucasus (Háva, 2003). Recorded from Turkey by Lodos (1998).

Attagenus (s.str.) **unicolor unicolor** (Brahm, 1791)

Material: Manisa (Demirci-Central province), 05.06.1968, Kalik det., Háva revid., (LEMT), (2). Totally 2 specimens.

Distribution: Europe, Africa, America, Asia, Australia (Háva, 2003). Cosmopolitan species.

Anthrenus (s.str.) **delicatus** Kiesenwetter, 1851

Material: Adana, 02.05.1985, *Triticum sativa*, Háva det., (LEMT), (1); 09.05.1985, weed, Háva det., (LEMT), (1); (Kozan), 03.05.1985, weed, Háva det., (LEMT), (1); (Yumurtalık), 09.05.1985, weed, Háva det., (LEMT), (1); Antalya (Kaş), 06.04.1984, *Sinapis* sp., Kalik det., Háva revid., (JHAC), (1); Gaziantep, 05.06.1985, weed, Háva det., (LEMT), (1); Hatay (Dörtçöy), 29.05.1985, *Cirsium* sp., Háva det., (LEMT), (1); (Reyhanlı), 02.06.1985, weed, Háva det., (LEMT), (1); Karaman (Ermenek), 27.04.1979 weed, Kalik det., Háva revid., (JHAC), (1); Mersin (Anamur), 18.04.1985, *Viburnum* sp., Háva det., (LEMT), (9); weed, Háva det., (LEMT), (1); *Triticum sativa*, Háva det., (LEMT), (1); (Erdemli), 25.04.1985, weed, Háva det., (LEMT), (1); (Gülhar), 18.04.1985, weed, Háva det., (LEMT), (4); 23.04.1985, *Sinapis* sp., Kalik det., Háva revid., (LEMT), (3);

(Silifke-Kirobasi), 1440 m, 29.05.1985, weed, Kalik det., Háva revid., (JHAC), (1); **Osmaniye** (Düziçi), 07.05.1985, aerial collector, Háva det., (LEMT), (1); **Cistus** sp., Háva det., (LEMT), (1); (Karatepe), 06.05.1985, aerial collector, Háva det., (LEMT), (1); (Zorkun), 08.05.1985, aerial collector, Háva det., (LEMT), (1). Totally 33 specimens.

Distribution: S. Europe, Turkey, Algeria, Egypt, Morocco, Tunisia, Caucasus, Iran, Syria (Háva, 2003).

***Anthrenus* (s.str.) *flavipes flavipes* LeConte, 1854**

Material: **Izmir** (Bornova), 07.09.1971, on the carpet, Lodos determined as **A. vorax**, Háva det., (LEMT), (4); 10.09.1971, on the carpet, Háva det., (LEMT), (6); Háva det., (JHAC), (2). Totally 12 specimens.

Distribution: Europe, Africa, America, Asia, Australia (Háva, 2003). Cosmopolitan species. The first reliable record from Turkey.

***Anthrenus* (s.str.) *munroei* Hinton, 1943**

Material: **Izmir** (Bornova), 10.04.1970, **Pyrus communis**, Háva det., (LEMT), (1); Çeşmealtı, 08.05.1983, weed, Kalik, det., Háva revid., (LEMT), (3); **Mugla** (Dalaman), 04.05.1972, **Paliurus** sp., Kalik, det., Háva revid., (LEMT), (3). Totally 7 specimens.

Distribution: Bulgaria, Corsica, Crimea, Cyprus, France, Italia, Spain, Turkey, Algeria, Libya, Morocco, Israel, Syria (Háva, 2003).

***Anthrenus* (s.str.) *picturatus picturatus* Solsky, 1876**

Material: **Ağrı**, 26.05.1974, weed, Kalik det., Háva revid., (LEMT), (2); **Ankara** (Çubuk Dam), 03.05.1979, **Cedrus** sp., Háva det., (LEMT), (1). Totally 3 specimens.

Distribution: Afghanistan, Caucasus, Iran, Kyrgyzstan, Kazakhstan, Tadzhikistan, Turkmenistan, Uzbekistan (Háva, 2003). The first reliable record from Turkey.

***Anthrenus* (s.str.) *rotundulus rotundulus* Reitter, 1889**

Material: **Gaziantep**, 05.06.1985, weed, Háva det., (LEMT), (1); **Hakkari** (Çukurca), 14.08.1976, weed, Kalik det. as **A. simoni**, Háva revid., (LEMT), (1); **Hatay** (Reyhanlı), 02.06.1985, weed, Háva det., (LEMT), (1). Totally 3 specimens.

Distribution: Species known from Afghanistan, Caucasus, Iran, Turkmenistan (Háva, 2003). Recorded from Turkey by Lodos (1998).

***Anthrenus* (s.str.) *scrophulariae scrophulariae* (Linnaeus, 1758)**

Material: **Ağrı**, 26.05.1974, weed, Háva det., (LEMT), (5); **Ankara** (Elmadağ), 04.05.1979, weed, Kalik det., Háva revid., (JHAC), (1); (Şereflikoçhisar),

02.05.1979, weed, Kalik det., Háva revid., (JHAC), (1); **Antalya** (Kaş), 06.04.1984, **Sinapis** sp., Háva det., (LEMT), (1); **Aksaray** (Koçbaşı), 30.05.1973, store-room, Háva det., (LEMT), (44); **Izmir** (Çeşme), 13.04.1984, weed, Kalik det., Háva revid., (JHAC), (1); (Balçova), 19.04.1973, **Quercus** sp., Kalik det., Háva revid., (JHAC), (1); (Bozdağ), 24.05.1972, **Rumex acetosella**, Háva det., (LEMT), (1); Umbelliferae, Háva det., (LEMT), (15); **Karaman** (Ermenek), 27.04.1979, weed, Háva det., (LEMT), (1); **Mersin** (Tarsus), 29.04.1985, weed, Háva det., (LEMT), (1). Totally 72 specimens.

Distribution: Holoarctic region, Australia (introduced), Tasmania (introduced) (Háva, 2003). Recorded from Turkey by Lodos (1998).

***Anthrenus* (s.str.) *scrophulariae albidos* Brullé, 1832**

Syn.: *Anthrenus scrophulariae* var. *proteus* Kraatz, 1864:133

***Anthrenus scrophulariae* var. *gravidus* Kraatz, 1864:133**

***Anthrenus scrophulariae* var. *albidus* Reitter, 1881:90**

***Anthrenus scrophulariae* var. *signatus* Reitter, 1881:90**

***Anthrenus scrophulariae* var. *senex* Reitter, 1881:90**

Material: Ankara (Elmadağ), 04.05.1979, weed, Háva dét., (LEMT), (1); (Şereflikoçhisar), 02.05.1979, weed, Háva det., (LEMT), (6); **Istanbul** (Göztepe), 16.04.1973, **Cerasus avium**, Kalik det., Háva revid., (LEMT), (3); **Izmir** (Balçova), 19.04.1973, **Quercus** sp., Háva det., (LEMT), (1); (Bornova), 28.05.1967, **Vibirnum** sp., Háva det., (LEMT), (1); 27.03.1970, Háva det., (LEMT), (1); 01.04.1970, weed, Háva det., (LEMT), (1); 10.04.1970, **Pyrus communis**, Háva det., (LEMT), (2); 10.04.1970, **Pyrus communis**, Háva det., (LEMT), (4); 11.04.1970, weed, Kalik det., Háva revid., (JHAC), (1); 02.06.1977, weed, Háva det., (LEMT), (1); 05.08.1981, **Olea europaea**, Háva det., (LEMT), (1); (Çeşme), 13.04.1974, weed, Háva det., (LEMT), (1); (Gültepe), 09.05.1974, **Citrus limonum**, Kalik det., Háva revid., (LEMT), (1); (Kemalpaşa), 30.04.1970, **Euphorbia** sp., Kalik det., Háva revid., (LEMT), (2); 30.04.1970, **Euphorbia** sp., Háva det., (LEMT), (2); (Zeytindağ), 14.05.1971, **Conium** sp., Háva det., (LEMT), (2). Totally 31 specimens.

Distribution: SE Europe, Turkey, Caucasus, Syria, Uzbekistan (Háva, 2003).

***Anthrenus* (s.str.) *simonis* Reitter, 1881**

Material: Diyarbakır, 28.05.1977, light trap, Kalik det., Háva revid., (LEMT), (1); (Çermik-Central province), 14.06.1972, **Amygdalus communis**, Kalik det., Háva revid., (JHAC), (1); **Hatay** (Reyhanlı), 02.06.1985, weed, Kalik det., Háva revid., (LEMT), (1). Totally 3 specimens.

Distribution: Tunisia, Iran, Israel, Syria (Háva, 2003). Recorded from Turkey by Lodos (1998).

Anthrenus (Nathrenus) pubifer Reitter, 1899

Material: **Diyarbakır**, 03.05.1973 Kalik det., Háva revid., (JHAC), (1); 11.06.1976, weed, Kalik det., Háva revid., (LEMT), (1); **Siirt** (Baykan), 12.06.1976, Kalik det., Háva revid., (LEMT), (1). Totally 3 specimens.

Distribution: Iran, Syria (Háva, 2003). Recorded from Turkey by Lodos (1998).

Anthrenus (Nathrenus) verbasci (Linnaeus, 1767)

Material: **Adana**, 09.05.1985, weed, Háva det., (LEMT), (1); (Karaaisalı), 02.05.1985, aerial collector, Kalik det., Háva revid., (JHAC), (1); (Kozan), 03.05.1985, weed, Háva det., (LEMT), (3); (Seyhan Dam), 22.04.1969, weed, Háva det., (LEMT), (1); (Yumurtalık), 09.05.1985, weed, Háva det., (LEMT), (2); **Antalya**, 28.04.1972, **Armeniaca vulgaris**, Háva det., (LEMT), (1); **Aydın**, 25.04.1968, **Hordeum** sp., Háva det., (LEMT), (1); (Karacasu), 25.04.1968, **Vicia** sp., Háva det., (LEMT), (1); (Nazilli), 25.04.1986, **Hordeum** sp., Háva det., (LEMT), (1); **Batman** (Kozluk), 11.06.1976, weed, Háva det., (LEMT), (3); **Gaziantep**, 08.06.1972, **Armeniaca vulgaris**, Háva det., (LEMT), (1); 05.06.1985, weed, Háva det., (LEMT), (1); **Hatay** (Hassa-Akbez), 02.06.1985, weed, Háva det., (LEMT), (1); **Istanbul** (Göztepe), 16.04.1973, **Cerasus avium**, Kalik det., Háva revid., (LEMT), (3); **Izmir** (Bornova), 28.05.1967, **Viburnum** sp., Háva det., (LEMT), (26); 27.03.1970, Háva det., (LEMT), (1); 10.04.1970, **Pyrus communis**, Háva det., (LEMT), (14); 29.11.1977, museum material, Háva det., (LEMT), (2); 12.05.1978, weed, Kalik det., Háva revid., (LEMT), (2); 1979, museum material, Háva det., (LEMT), (1); 30.07.1982, Háva det., (LEMT), (1); 12.04.1984, weed, Háva det., (LEMT), (3); (Bornova-Doğanlar), 29.04.1971, **Euphorbia** sp., Háva det., (LEMT), (2); (Buca), 15.05.1982, weed, Háva det., (LEMT), (1); (Gültepe), 09.05.1974, **Citrus aurantium**, Háva det., (LEMT), (2); (Karşıyaka), 20.04.1983, **Calla** sp., Háva det., (LEMT), (3); (Kemalpaşa), 10.05.1974, weed, Háva det., (LEMT), (1); (Mordoğan), 16.05.1969, weed, Háva det., (LEMT), (1); (Şemikler), 09.04.1977, store-room, Háva det., (LEMT), (2); (Urla), 19.07.1982, **Olea europaea**, Háva det., (LEMT), (1); **Mersin** (Almanpinarı), 08.06.1972, **Linum** sp., Háva det., (LEMT), (1); (Anamur), 18.04.1985, **Viburnum** sp., Háva det., (LEMT), (8); (Tarsus), 27.04.1985, weed, Háva det., (LEMT), (1); 30.04.1985, weed, Háva det., (LEMT), (3); **Osmaniye** (Zorkun), 08.05.1985, weed, Kalik det., Háva revid., (LEMT), (1); **Şanlıurfa** (Ceylanpınar), 05.06.1976, weed, Háva det., (LEMT), (1); **Şırnak** (Uludere), 15.06.1976, weed, Háva det., (LEMT), (1); **Zonguldak** (Ereğli), 25.05.1980, aerial collector, Kalik det., Háva revid., (LEMT), (1). Totally 101 specimens.

Distribution: Europe, Africa, America, Asia, Australia (Háva, 2003). Cosmopolitan species. Reported from Turkey by Özer (1962).

Ctesias syriaca Ganglbauer, 1904

Material: Kahramanmaraş, 17.07.1984, *Verbascum* sp., Háva det., (JHAC), (1); (LEMT), (1); Pazarcık, 07.06.1985, *Paliurus* sp., Háva det., (LEMT), (3); (JHAC), (1). Totally 6 specimens.

Distribution: Turkey, Israel, Syria (Háva 2003). This species described from Syria, the first reliable records from Turkey published by Háva (2000).

Note: The specimens mentioned above are collected on *Verbascum* sp. and *Paliurus* sp. The specimens from *Paliurus* sp. differs from other specimens from *Verbascum* sp. of the variable terminal segment of antenna. The status of this specimens will stay doubtful until a more extensive material can be studied.

Globicornis* (s.str.) *picta (Küster, 1851)

Material: Hatay (Kırkhan), 11.07.1984, Umbelliferae, Kalik det., Háva revid., (LEMT), (1); Muğla (Fethiye-Seki), 09.06.1973, *Crataegus* sp., Kalik det., Háva revid., (LEMT), (2). Totally 3 specimens.

Distribution: Balkan peninsula, Cyprus, Italy, Sardinia, Sicily, Slovakia, Turkey (Háva, 2003).

Phradonoma* sp. nr. *nobile

Material: Kahramanmaraş (Elbistan), 22.07.1984, weed, Háva det., (LEMT), (1); (Göksun), 22.07.1984, weed, Háva det., (LEMT), (1). Totally 2 specimens.

Note: The mentioned specimens probably belonging to new species. The status of this specimens doubtful until a more extensive material can be studied.

Phradonoma villosulum (Dufschmid, 1825)

Material: Hatay (Kırkhan), 11.07.1984, weed, Kalik det., Háva revid., (LEMT), (1). Totally 1 specimen.

Distribution: Europe, Iran, Syria (Háva, 2003). The first reliable record from Turkey.

Trogoderma granarium Everts, 1898

Material: Izmir (Bornova), 03.06.1969, Kalik det., Háva revid., (LEMT), (3). Totally 3 specimens.

Distribution: Europe, Africa, America, Asia, Australia (Háva, 2003). Cosmopolitan species. Recorded from Turkey by Esin (1955; 1959; 1967; 1968), Alkan (1956), Ertürk (1956), Kansu (1961; 1962), Çakıllar (1963), Kalkan (1963), Özer and Kalkan (1963) and Lodos (1998).

Discussion

As a consequence of this study, it has been determined that totally 25 species/subspecies belonging to Dermestidae which have been preserved in the collection of LEMT. Among those *Attagenus* (s.str.) *brunneus* Faldermann, 1835, *Anthrenus* (s.str.) *flavipes* *flavipes* LeConte, 1854, *A.* (s.str.) *picturatus* *picturatus* Solsky, 1876 and *Phradonoma villosulum* (Duftschmid, 1825) are the first reliable records from Turkey.

At the end of this study, the number of the species of Turkish dermestids rises up to 70. Those are: *Dermestes ater* Degeer, 1774, *D. bicolor* Fabricius, 1781, *D. coronatus* Steven in Schönherr, 1808, *D. erichsoni* Ganglbauer, 1904, *D. frischii* Kugelann, 1792, *D. fuliginosus* Rossi, 1792, *D. gyllenhalii* *gyllenhalii* Castelnau de Laporte, 1840, *D. intermedius* *intermedius* Kalík, 1951, *D. kaszabi* Kalík, 1950, *D. laniarius* *laniarius* Illiger, 1801, *D. lardarius* Linnaeus, 1758, *D. leopardinus* Mulsant et Godart, 1855, *D. maculatus* Degeer, 1774, *D. murinus* *murinus* Linnaeus, 1758, *D. olivieri* Lepesme, 1939, *D. sardous* *asiaticus* Háva, 2002, *D. sibiricus* Erichson, 1848, *D. undulatus* Brahm, 1790, *Thorictus dimidiatus* Peyron, 1857, *T. grandicollis* *grandicollis* Germar, 1842, *T. orientalis* Peyron, 1857, *T. pilosus* Peyron, 1857, *Orphilus beali* Zhantiev, 2001, *O. niger* (Rossi, 1790), *Attagenus aurantiacus* *aurantiacus* Reitter, 1900, *A. bifasciatus* (Olivier, 1790), *A. brunnescens* (Pic, 1904), *A. brunneus* Faldermann, 1835, *A. cyphonoides* Reitter, 1881, *A. dispar* (Redtenbacher, 1843), *A. fasciatus* (Thunberg, 1795), *A. lobatus* Rosenhauer, 1856, *A. obtusus* (Gyllenhal in Schönherr, 1808), *A. orientalis* Reitter in Schneider et Leder, 1878, *A. pantherinus* (Ahrens, 1814), *A. pellio* (Linnaeus, 1758), *A. quadrimaculatus* Kraatz, 1858, *A. unicolor* *unicolor* (Brahm, 1791), *Anthrenus amoenulus* Reitter, 1896, *A. armstrongi* Mroczkowski, 1952, *A. bulirschi* Háva, 2000, *A. coloratus* Reitter, 1881, *A. delicatus* Kiesenwetter, 1851, *A. flavidus* Solsky, 1876, *A. flavipes* *flavipes* LeConte, 1854, *A. goliath* Saulcy in Mulsant et Rey, 1868, *A. minutulus* Reitter, 1899, *A. munroi* Hinton, 1943, *A. museorum* (Linnaeus, 1761), *A. picturatus* *picturatus* Solsky, 1876, *A. pimpinellae* *incertus* Mulsant et Rey, 1868, *A. prudeki* Háva, 2002, *A. pubifer* Reitter, 1899, *A. rotundulus* *rotundulus* Reitter, 1889, *A. scrophulariae* *albidus* Brullé, 1832, *A. scrophulariae* *scrophulariae* (Linnaeus, 1758), *A. signatus* Erichson, 1846, *A. simonis* Reitter, 1881, *A. verbasci* (Linnaeus, 1767), *Ctesias syriaca* Ganglbauer, 1904, *Globicornis bodemeyeri* (Ganglbauer in Bodemeyer, 1900), *G. breviclavis* (Reitter in Schneider et Leder, 1878), *G. picta* (Küster, 1851), *Megatoma ruficornis* Aubé, 1866, *Phradonoma nobile* (Reitter, 1881), *P. villosulum* (Duftschmid, 1825), *Trogoderma granarium* Everts, 1898, *T. inclusum* Le Conte, 1854, *T. versicolor* (Creutzer, 1799) and *Turcicornis kopeckyi* Háva, 2000.

Özet

Türkiye Dermestidae (Coleoptera) faunasına katkılar ve yeni kayıtlar

Bu çalışmada, Ege Üniversitesi, Ziraat Fakültesi, Bitki Koruma Bölümü'ndeki Lodos Entomoloji Müzesi (LEMT)'nde Dermestidae familyasına bağlı 25 türün korunmaka olduğu belirlenmiştir. Bunlardan *Attagenus* (s.str.) *brunneus* Faldermann, 1835, *Anthrenus* (s.str.) *flavipes* *flavipes* LeConte, 1854, *A.* (s.str.) *picturatus* *picturatus* Solsky, 1876 ve *Phradonoma* *villosum* (Dufschmid, 1825) Türkiye'den ilk kez bildirilmiş olup, Türkiye'de bulunan bu familyaya bağlı tür sayısı 70'e ulaşmıştır.

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References

- Alkan, B., 1956. Türkiye'de hububatın danelerinde zarar yapan *Trogoderma granarium* Everst haşeresi üzerine bir açıklama. *Tomurcuk*, **5** (60): 6-7.
- Bağcıoğlu, E., 1970. Marmara Bölgesindeki *Anthrenus* ve *Attagenus* Türlerinin Tespiti ile En Önemlisinin Bio-ekolojisi ve Mücadele Metodları. A. Ü. Zir. Fak. Ent. Kürs. Uzmanlık Tezi. Erenköy Böl. Zir. Muc. Ar. Enst. Yay., 63 pp.
- Çakıllar, M., 1963. *Trogoderma granarium* Everst. *Koruma*, **4** (32): 10-11.
- Ertürk, H., 1956. Ambarlanmış mahsüller üzerinde önemli bir zararlı *Trogoderma granarium*. *Tomurcuk*, **5** (50): 16-17.
- Esin, T., 1955. Khapra haşeresi, *Trogoderma granarium* Everst. Yayılışı, Morfolojis, Biyolojisi ve Mücadelesi. T. M. O. Um. Md. Yay. Kars Matbaası, Ankara, 24 pp.
- Esin, T., 1959. *Trogoderma granarium* larvalarına ve *Tribolium castaneum* erginlerine karşı Malathion Em. ile yapılan laboratuvar denemeleri. *Bit. Kor. Bült.*, **1** (1): 20-23.
- Esin, T., 1967. Untersuchung über die Verwendung von Phostoxin zur Bekämpfung von Khaprakäferlarven (*Trogoderma granarium* Everst.). *Anz. schädl.*, **40** (1): 9-12.
- Esin, T., 1968. Control of stored grain insects with special references to *Trogoderma granarium* Everst. in Turkey, 125-132. Report of the International Conference on the Protection of Stored Products, Lisbon – Oeiras, November 27-30 1967. *Eur. Mediterr. Pl. Prot. Org.*, Ser.A, No: 46 E, 171 pp.
- Gadeau, de Kerville, H. 1939. Récit sommaire du voyage et liste méthodique des invertébrés récoltés en Asie-Mineure. Voyage Zoologique D'Henri Gadeau de Kerville en Asie-Mineure (Avril-Mai, 1912), Tome I. Paul LeChevalier, Paris, 148 pp.
- Gül-Zümreoğlu, S., 1972. İzmir Bölge Zirai Mücadele Araştırma Enstitüsü Böcek ve Genel Zararlilar Kataloğu, 1928-1969 (I. Kısım). İstiklal Matbaası, İzmir, 119 pp.
- Háva, J., 2000. *Turcicornis kopeckyi* gen. n., sp. n. (Coleoptera: Dermestidae: Megatominae) from Turkey. *Folia Heyrovskiana*, **8**: 115-118.

- Háva, J., 2003. World Catalogue of the Dermestidae (Coleoptera). **Studie a zprávy Oblastního Muzea Praha-východ v Brandýse nad Labem a Staré Boleslaví, Supplementum 1**, 196 pp.
- Kalkan, M., 1963. Türkiye'de *Trogoderma* türleri, *Trogoderma granarium* Everst.'in laboratuvara kisa biyolojisi ve mücadeleşi üzerinde incelemeler. Tar. Bak. Zir. Muc. Enst. Sayı: 37, 54 s.
- Kansu, I. A., 1961. Preliminary experiments on the sterilization on the Kharpa beetle. **Z. Angew. Ent.**, 1873-1876.
- Kansu, I. A., 1962. Kapra böceği pupalarının gamma ışıklarına maruz bırakılmak suretiyle kısırlaştırılması üzerine ilk denemeler. **Bit. Kor. Bült.**, 2 (11): 59-64.
- Keyder, S., 1955. *Anthrenus scrophulariae* (Col.: Dermestidae). **Tomurcuk**, 4 (42): 13.
- Lodos, N., 1998. Türkiye Entomolojisi VI (Genel, Uygulamalı, Faunistik). E. Ü. Ziraat Fakültesi Yayın No: 529, 300 s.
- Özer, M., 1962. *Anthrenus verbasci* L.'nin morfolojis, kısa biyolojisi ve zararları üzerinde araştırmalar. **A. Ü. Zir. Fak. Yill.**, 3-4: 227-237.
- Özer, M., 1963. *Anthrenus pimpinellae* F.'in morfolojis ve biyolojisi üzerinde araştırmalar. **A. Ü. Zir. Fak. Yill.**, 1: 73-78.
- Özer, M. & M. Kalkan, 1963. *Trogoderma versicolor* (Creutzer)'un morfolojis ve biyolojisi üzerinde araştırmalar. **Bit. Kor. Bült.**, 3 (3): 188-194.
- Sahlberg, J., 1912-1913. Coleoptera mediterranea orientalia, quae Aegyptia, Palaestina, Syria, Caramania atque in Anatolia occidentali anno 1904. Ofversigt af Finsha Vetenskaps Sacleteitens Förhandlingar Bd. LV (3): 127-132.
- Tuatay, N., A. Kalkandelen & N. Aysev, 1972. Nebat Koruma Müzesi Kataloğu (1961-1971). T. C. Tar. Bak. Zir. Muc. Zir. Kar. Gn. Md. Yay. Mes. Kit. Ser., 119 pp.

