

**Contributions to the knowledge of the
Tenebrionidae (Coleoptera) from Turkey
Part I. Lagriinae, Pimeliinae, Bolitophaginae,
Diaperinae**

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Summary

In this study, it has been determined that totally 42 species belonging to Lagriinae, Pimeliinae, Bolitophaginae and Diaperinae subfamilies of Tenebrionidae occurring in the collection of LEMT (Lodos Entomological Museum Turkey). Amongst those *Adelostoma subtle* Reitter, 1900 and *Ceratanitus tristis* (Faldermann, 1837) are the first reliable records from Turkey and 12 species are endemic.

Key words: Coleoptera, Tenebrionidae, fauna, new records, Turkey
Anahtar sözcükler: Coleoptera, Tenebrionidae, fauna, yeni kayıt, Türkiye

Introduction

Tenebrionidae fauna of Turkey is quite rich and the studies of Reitter (1892; 1900; 1903; 1915), Gebien (1910), Sahlberg (1912-1913), Winkler (1924-1932), Kaszab (1938; 1939; 1959; 1961), Gadeau de Kerville (1939), Bytinski-Salz (1956), Güll-Zümreoglu (1972), Tuatay et al. (1972), Schawaller (1996), Lodos (1998), Ferrer & Soldati (1999), Fattorini et al. (1999), Keskin (1999; 2003), Fattorini (2000), Grimm & Schawaller (2000) and Tezcan et al. (2000) have great importance.

Tenebrionid beetles have been collected from the different parts of Turkey, but the data of which have not been published yet. They have been preserved in the collection of LEMT (Lodos Entomological Museum Turkey) of Department of Plant Protection, Faculty of Agriculture, Aegean University, Bornova, Izmir, Turkey.

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The aim of this paper is to present the complete records of preserved four subfamilies of Tenebrionidae (Lagriinae, Pimeliinae, Bolitophaginae and Diaperinae) material to researchers and relevant people and to give a checklist of Turkish Lagriinae, Pimeliinae, Bolitophaginae and Diaperinae in the light of the above mentioned previous studies.

Material and Methods

Material have been collected under stones by hand and knock down, sweeping of vegetation and pitfall trap methods from the different parts of Turkey mainly by field studies of the projects (TUBITAK-TOAG/168, 336, 502; E.U.Rek./93 ZRF 001) during the years of 1967-1999. In addition to these, material collected and given as a gift to the museum by researchers of Plant Protection Research Institutes, amateurs, students have also been included in this study.

Subfamilies and tribus were given in phylogenetic order and species were listed alphabetically within each tribus. The information concerning specific name, describer and description date, locality, altitude (in brackets) and date of collection, place/ plant on which the species were collected, determinant and number of species (in brackets) was given.

Material have been determined by The Late Prof. Dr. N. Lodos (L.), Dr. E. Kweiton (K.), Dr. J. Picka (P.) and Dr. J. Ferrer (F.). The rest of the material have been determined by B. Keskin and abbreviation of which has not also been given. In this paper, classification and nomenclature of darkling beetles suggested by Lawrence & Newton (1995), Iwan (2001), Soldati & Soldati (2003) have been followed. Some recent revisions of taxa have also been taken into account.

Results

In this study, 42 species and subspecies of 21 genera belonging to four subfamilies of Tenebrionidae have been reported in Turkey.

Lagriinae: Cossyphini

Cossyphus Olivier, 1795

Cossyphus (s. str.) **tauricus** Steven, 1829

Material: **İzmir** (Bornova), 21.xii.1971, under stone, (L.) (26); 08.i.1972, under stone, (L.) (7); 11.i.1972, under stone, (L.) (2); 31.i.1972, under stone, (L.) (1); 25.ii.1972, under stone, (L.) (1); 27.ii.1972, under stone, (L.) (4); 20.iv.1972, weeds, (L.) (2); 26.v.1972, weeds, (L.) (1); (Menemen-Hatundere), 19.i.1972, under stone, (P.) (6); **Manisa** (Kula), 15.iv.1975, under stone, (L.) (1). Totally 51 specimens.

Belopini

Centorus Mulsant, 1854

Centorus turcicus (Kaszab, 1959)

Material: **Çorum** (Alaca), 07.viii.1979, under stone, (P.) (1). Totally 1 specimen. Endemic species.

Pimeliinae: Erodiini

Amnodeis Miller, 1858

Amnodeis grandis Miller, 1858

Material: **Diyarbakır** (Çınar-Akçomak), 16.iv.1972, (1); (Karacadağ), 21.iv.1972, (1); **Şanlıurfa** (Bozova), 19.iv.1972, (1); (Ceylanpınar), 05.vi.1976, weeds, (1). Totally 4 specimens.

Amnodeis milleri Reitter, 1914

Material: **Diyarbakır** (Karacadağ), 21.iv.1972, (1); **Gaziantep** (Central province), 07.vi.1985, ***Triticum*** sp., (1); 26.iv.1986, on the ground, (3); (Oğuzeli), 05.vi.1985, on the ground, (1); **Mardin** (Mazıdağı), 05.vi.1986, (1). Totally 7 specimens. Endemic species.

Erodius Fabricius, 1775

Erodius (Eodirosis) orientalis oblongus Solier, 1834

Material: **Adana** (Tuzla), 03.vi.1984, on the ground, (3); (Yumurtalık), 08.v.1985, on the ground, (5); **İzmir** (Bornova), 12.iv.1972, ***Triticum*** sp., (2); 14.iv.1984, on the ground, (1); (Gümüldür), 22.v.1976, ***Medicago maritima***, (22); **Mersin** (Central province), 27.iv.1985, ***Verbascum*** sp., (2); (Anamur-Bozyazı), 24.v.1984, ***M. maxitima***, (2); (Aydıncık-Ovacık), 23.iv.1985, weeds, (7); (Gülnar), 19.iv.1985, on the ground, (1); (Tarsus), 30.iv.1985, on the ground, (1); **Muğla** (Bodrum), 04.vi.1973, on the ground, (24); weeds, (7). Totally 77 specimens.

Zophosini

Zophosis Latreille, 1807

Zophosis (Oculosis) dilatata Deyrolle, 1867

Material: **Konya** (Çumra), 25.iv.1979, under stone, (1); **Niğde** (Bor), 30.iv.1979, under stone, (1); (Ulukışla), 28.iv.1979, under stone, (1). Totally 3 specimens.

Zophosis (Oculosis) punctata Brullé, 1832

Material: **Bitlis** (Central province), 12.vi.1979, weeds, (L.) (1); **Denizli** (Pamukkale), 15.iv.2004, on the ground, (1); weeds, (1); **İzmir** (Bornova), 18.iv.1992, ***Hordeum*** sp., (1); (Gümüldür), 22.v.1976, ***Medicago maritima***, (3); **Kayseri** (Himmetdede), 08.viii.1979, ***Astragalus*** sp., (P.) (1); **Konya** (Bozkr), 24.iv.1979, under stone, (P.) (1); **Niğde** (Bor), 30.iv.1979, on the ground, (L.) (1). Totally 10 specimens.

Tentyriini

Calyptopsis Solier, 1835

Calyptopsis capnisiformis Reitter, 1903

Material: **Ankara** (Tuz Gölü), 02.v.1979, under stone, (1); **Eskişehir** (Sarıcakaya-Laçın), 04.viii.1976, (1); **Kayseri** (Himmetdede), 08.viii.1979, **Astragalus** sp., (3); (P.) (3); (İncesu), 13.viii.1979, on the ground, (L.) (3); **Nevşehir** (Derinkuyu), 14.viii.1979, under stone, (1). Totally 12 specimens. Endemic species.

Dailognatha Eschscholtz, 1829

Dailognatha caraboides Solier, 1835

Material: **Ağrı** (Hamur), 14.vi.1975, (1); (Tendürek Mountain), 07.viii.1977, under stone, (2); (Tendürek Mountain), (2600 m), 03.viii.1977, (1); **İzmir** (Belkahve), 07.v.1993, on the ground, (1); (Bornova), 28.v.1937, (1); 21.vii.1957, **Cucumis melo**, (1); 10.vi.1974, on the ground, (2); 13.v.1978, weeds, (1); 08.v.1992, **Malva** sp., (1); **Triticum** sp., (1); (Bozdağ), 13.iv.1978, on the ground, (L.) (1); (Foça), 01.v.1991, on the ground, (3); (Yamanlar), 30.vii.1973, pitfall trap, (L.) (22); **Karaman** (Central province), 26.iv.1979, under stone, (L.) (1); **Manisa** (Central province), 16.v.1977, weeds; (Muradiye), 20.xi.1973, under stone, (L.) (1); **Nevşehir** (Ürgüp), 15.viii.1979, under stone, (1); **Samsun** (Gelemen), 09.ix.1975, (1). Totally 43 specimens.

Dailognatha crenata Reiche et Saulcy, 1857

Material: **Mersin** (Güzeloluk), 25.iv.1985, **Astragalus** sp., (1). Totally 1 specimen.

Dailognatha pumila Baudi, 1874

Material: **Giresun** (Alucra), 11.vii.1978, **Euphorbia** sp., (1); **Kayseri** (Erciyes), 10.viii.1979, under stone, (1); (Erciyes), (2300 m), 28.vi.1980, under stone, (1); (P.) (1). Totally 4 specimens. Endemic species.

Dailognatha quadricollis Brullé, 1832

Material: **Adana** (Kozan), 04.vi.1984, weeds, (1); (Tufanbeyli), 05.vi.1984, under stone, (1); **Adıyaman** (Nemrut), 07.vi.1976, under stone, (1); **Ağrı** (Hamur), 10.viii.1974, under stone, (1); 14.vi.1975, (3); (Tendürek Mountain), 07.viii.1977, under stone, (1); **Antalya** (Central province), 12.iv.1984, under stone, (1); (Aspendos), 17.iv.1973, on the ground, (1); (Kaş), 07.iv.1984, under stone, (1); 02.viii.1985, dung, (1); (Olympos), 29.vii.1985, **Juniperus** sp., (1); (Saklikent), (1950 m), 17.iv.1984, **Onopordum** sp., (1); **Aydın** (Central province), 27.vii.1965, (1); (Kuşadası), 27.vii.1961, (1); (Mardan), 03.vi.1973, **Urtica** sp., (1); **Bitlis** (Central province), 12.vi.1976, weeds, (2); **Çanakkale** (Ayvacık-Ahmetçe), 14.v.1969, **Pistacia vera**, (1); (Gökçeada), 27.v.1975, on the ground, İmren, (2); **Eskişehir** (Sivrihisar), 05.v.1979, under stone, (1); **Gaziantep** (Yavuzeli), 07.vi.1985, **Verbascum** sp., (1); **Gümüşhane** (Central province), 10.vii.1978, weeds, (1); **Hakkari** (Çukurca), 11.vi.1975, **Irvingia** sp., (1); **Hatay** (Arsuz), 30.v.1985, on the ground, (1); (Dörtyol), 28.v.1985, weeds, (1); (Hassa-Akbez), 02.vi.1985, **Alkanna** sp., (1); **İzmir** (Central province), 01.vi.1962, on the ground, (1); (Balçova), 19.iv.1973, on the ground, (2); 25.i.1978, weeds, (1);

21.v.1978, weeds, (2); 20.v.1993, on the ground, (3); (Bayraklı), 30.vii.1962, (1); (Bornova), 20.iv.1962, (1); 25.iv.1962, (3); 15.v.1962, (2); 17.v.1962, (2); 09.viii.1963, on the ground, (2); July, 1964, (4); 11.i.1972, under stone, (1); 22.iv.1972, on the ground, (P.) (1); 10.vi.1973, pitfall trap, (4); 10.v.1974, ***Atropa belladonna***, (2); 18.v.1977, weeds, (1); 20.iv.1978, on the ground, (3); 13.v.1978, weeds, (2); 20.v.1978, weeds, (1); 25.vi.1978, weeds, (1); 12.vi.1981, on the ground, (1); (L.) (1). weeds, (1); 14.iv.1983, on the ground, (1); 27.v.1983, weeds, (1); 25.x.1983, under stone, (1); 11.xi.1983, on the ground, (1); 25.xii.1983, under stone, (1); 02.iv.1984, on the ground, (1); 08.iv.1984, on the ground, (1); 11.iv.1984, on the ground, (2); 13.iv.1984, on the ground, (1); 15.iv.1984, on the ground, (1); 18.iv.1984, on the ground, (1); 07.v.1984, weeds, (2); 14.v.1984, weeds, (1); 15.v.1984, ***Matricaria*** sp., (1); 12.iv.1992, ***Avena*** sp., (1); 04.iv.1993, on the ground, (1); 20.vi.1993, on the ground, (1); 08.v.1993, weeds, (1); 15.v.1994, weeds, (1); 05.v.2000, on the ground, (1); 22.iii.2002, (3) 17.v.2002, weeds, (1); (Bozdağı), 13.iv.1978, on the ground, (1); (Cumaovası), 01.v.1983, weeds, (1); (Çatalkaya), 16.viii.1971, on the ground, (1); (Çeşme), 12.xi.1973, under stone, (1); (Gaziemir), 10.vi.1978, ***Nicotiana tabacum***, (2); (Gümüşsu) 20.i.1972, ***Olea europaea***, (1); (Kemalpaşa), 23.v.1976, ***Prunus armeniaca***, (1); (Mordoğan), 15.vi.1971, on the ground, (3); 15.vii.1971, on the ground, (2); 02.viii.1971, ***P. amygdali***, (1); 20.v.1973, ***Solanum melongena***, (1); 13.viii.1976, ***P. armeniaca***, (3); 13.v.1984, on the ground, (2); (Narlıdere), 25.vi.1961, (1); (Ödemiş), 13.xi.1973, under stone, (2); (Seferihisar), 30.iv.1993, on the ground, (2); 04.v.1994, on the ground, (1); (Şemikler), 06.vi.1975, weeds, (1); (Urla), 26.ii.1984, on the ground, (1); (Yamanlar), 07.xii.1980, under stone, (1); ***Kahramanmaraş*** (Central province), 07.vi.1973, weeds, (1); (Nurhalı Mountain), (1480 m), 13.vi.1985, under stone, (1). (1); ***Karaman*** (Central province), 25.iv.1979, under stone, (2); (Bucaklısla), 26.iv.1979, under stone, (3); weeds, (1); (Ermenek), 27.iv.1979, under stone, (4); ***Kırıkkale*** (Keskin), 04.v.1979, under stone, (3); ***Konya*** (Bozkır), 24.iv.1979, under stone, (1); (Hadim), 27.iv.1979, under stone, (1); ***Manisa*** (Central province), July, 1962, (1); 16.v.1977, weeds, (2); 28.v.1978, weeds, (1); (Kula), 15.iv.1975, weeds, (1); (Salihli-Demirköprü), 19.xi.1973, under stone, (1); ***Mersin*** (Güzeloluk), 25.iv.1985, ***Astragalus*** sp., (F.) (1). (Uzuncaburç), 24.iv.1985, on the ground, (3); ***Muğla*** (Dalaman), 23.vi.1974, on the ground, (1); (Fethiye), 22.ii.2002, under stone, (3); (Göcek), 21.vi.1997, on the ground, (1); (Marmaris), 06.vi.1973, on the ground, (1); (Seki), 09.vi.1973, (1); ***Nevşehir*** (Avanos), 16.viii.1979, under stone, (2); (Ürgüp), 15.viii.1979, under stone, (2). ***Niğde*** (Bor), 30.iv.1979, under stone, (1); ***Tunceli*** (Pülümür), 04.viii.1977, under stone, (1). Totally 168 specimens.

Dailognatha rugipleuris Reitter, 1896

Material: **Antalya** (Elmalı) 08.iv.1984, under stone, (1); **İzmir** (Bornova), 23.iv.1978, weeds, (2); 07.v.1978, weeds, (1); **Muğla** (Dalaman), 23.vi.1974, on the ground, (2). Totally 6 specimens. Endemic species.

Tentyria Latreille, 1802

Tentyria cylindrica Solier, 1835

Material: **Mersin** (Aydınçık-Ovacık), 23.iv.1985, weeds, (1). Totally 1 specimen.

Tentyria rotundata Brullé, 1832

Material: **Adiyaman** (Nemrut Mountain), 13.vii.1983, weeds, (1); **Aksaray** (Central province), 01.v.1979, on the ground, (L.) (1); **Ankara** (Ayas), 10.vii.1979, weeds, (L.) (1); (Şereflikoçhisar), 02.v.1979, under stone, (L.) (1); **Antalya** (Kaş), 21.iv.1984, under stone, (2); on the ground, (1); **Aydın** (Davutlar), 25.iv.1993, weeds, (1); (Kuşadası), 15.iv.1993, weeds, (1); **Balıkesir** (Gönen), 14.x.1976, (1); **Bilecik** (Bozöyük), 23.v.1971, on the ground, (1); **Denizli** (Central province), 09.iv.1993, on the ground, (1); **Diyarbakır** (Karacadağ), 21.vii.1972, (2); 27.viii.1982, **Astragalus** sp., (4); **Elazığ** (Hazar), (1500 m), 08.viii.1971, (1); **İzmir** (Bayındır), 24.iv.1973, on the ground, (1); (Bornova), 18.iii.1962, (1); July, 1965, (2); 24.vi.1971, (1); 09.v.1975, (1); 30.v.1977, weeds, (1); 10.v.1980, weeds, (1); 02.iv.1984, on the ground, (1); 10.v.1984, weeds, (1); 14.v.1984, weeds, (1); 14.vi.1984, weeds, (1); 10.vi.1992, weeds, (3); 19.iv.1993, weeds, (1); 22.iv.1993, on the ground, (3); 18.v.1993, (1); 21.v.1993, on the ground, (1); (Bozdağ) 24.v.1972, (1); 11.xii.1975, **Astragalus** sp., (1); 24.vi.1977, weeds, (1); (Çeşmealtı), 22.vi.1982, weeds, (2); (Emiralem), 02.v.1993, on the ground, (1); (Gültepe), 16.v.1977, on the ground, (1); (Gürmüldür), 09.iv.1973, on the ground, (1); (Güzelbahçe), 25.iv.2002, **Triticum** sp., (2); (Hatundere), 29.v.1972, (4); (Karşıyaka), 10.iv.1984, under stone, (2); (Kemalpaşa), 14.iv.1972, on the ground, (2); (Menemen), 28.v.1976, **Vitis vinifera**, (L.) (1); 16.iv.1992, on the ground, (2); 16.iv.1993, weeds, (2); 24.iv.1993, **Vicia cracca**, (1); 18.v.1993, on the ground, (3); (Ödemiş), 24.iv.1973, **Populus** sp., (2); 14.v.1993, weeds, (1); 25.iv.1973, **Quercus** sp., (1); (Urla), 20.vii.1967, (2); (Yamanlar), 30.vii.1973, pitfall trap, (5); **Kahramanmaraş** (Ahır Mountain), (1550 m), 01.v.1986, on the ground, (1); (Elbistan), 08.v.1986, on the ground, (2); (Nurhak Mountain), 13.vi.1985, on the ground, (3); **Kayseri** (Himmetdede), 08.viii.1979, weeds, (1); 13.viii.1979, on the ground, (L.) (1); (İncesu), 27.vi.1980, on the ground, (2); (P.) (1); **Kırıkkale** (Keskin), 04.v.1979, under stone, (L.) (1); **Kırşehir** (Kaman), 25.vi.1980, weeds, (L.) (1); (Mucur), 17.viii.1979, on the ground, (L.) (2); **Konya** (Sarayönü), 16.iv.1984, on the ground, (2). **Manisa** (Kula), 15.iv.1975, under stone, (1); (Salihli), 06.vii.1991, poaceous plants, (1). **Nevşehir** (Avanos), 16.viii.1979, under stone, (L.) (1); (Derinkuyu), 14.viii.1979, under stone, (L.) (2); (Gülşehir), 16.viii.1979, weeds, (L.) (1); **Tokat** (Zile), 08.vii.1979, weeds, (L.) (1). Totally 102 specimens. Polytypic species. It was given at species level because of the problems on subspeciation.

Tentyria tessulata Tauscher, 1812

Material: **Adiyaman** (Nemrut Mountain), 09.viii.1977, on the ground, (1); **Van** (Başkale), 13.vi.1976, weeds, (1). Totally 2 specimens.

Tentyria wiedemannii Ménétries, 1838

Material: **Bilecik** (Bozöyük), 23.v.1971, on the ground, (1); **Kahramanmaraş** (Afsin), 13.v.1986, on the ground, (1). Totally 2 specimens. Endemic species.

Adesmiini

Adesmia Fischer de Waldheim, 1822

Adesmia (s. str.) *anthracina* Klug, 1830

Material: **Adiyaman** (Besni), 08.vi.1976, weeds, (1); **Batman** (Central province), 25.iv.1972, (1); **Diyarbakır** (Karacadağ), 07.viii.1971, (1); 21.iv.1972, (1); 27.viii.1982, *Astragalus* sp., (1); **Gaziantep** (Central province), 06.vi.1985, on the ground, (1); 25.iv.1986, on the ground, (1); (İslahiye), 03.vi.1985, on the ground, (9); (Nizip), 05.vi.1985, weeds, (1); (Yavuzeli), 07.vi.1985, on the ground, (2); **Hatay** (Hassa-Akbez), 02.vi.1985, on the ground, (2); 26.iv.1986, on the ground, (1); **Kahramanmaraş** (Nurhak Mountain), 03.v.1986, on the ground, (2); (Pazarcık), 07.vi.1985, under stone, (1); **Osmaniye** (Nur Mountain), 08.vi.1985, under stone, (1). Totally 26 specimens.

Adesmia (s. str.) *fischeri fischeri* Faldermann, 1837

Material: **Elazığ**, 24.iv.1982, *Astragalus* sp., (1); **Van** (Başkale), 08.viii.1977, on the ground, (2). Totally 3 specimens.

Adesmia (s. str.) *procera* Miller, 1861

Material: **Şanlıurfa** (Alaziyaret), 15.vi.1972, weeds, (K.) (1). Totally 1 specimen.

Eurychorini

Adelostoma Duponchel, 1827

Adelostoma subtile Reitter, 1900

Material: Niğde (Çiftehan), 29.iv.1979, under stone, (F.) (3). Totally 3 specimens. This species constitutes a new record for Turkey.

Stenosini

Eutagenia Reitter, 1886

Eutagenia smyrnensis (Solier, 1838)

Material: **İzmir** (Gümüşsu), 20.i.1972, *Olea europaea*, (L.) (2); (Hatundere), 19.i.1972, under stone, (1); (L.) (29); *Vitis vinifera* (L.) (4) (Ödemiş) 21.i.1972, *Ulmus campestris*, (35) 24.i.1972, *Platanus* sp., (P.) (6); (L.) (1); *U. campestris*, (56); (L.) (9); (Ödemiş-Gereli), 25.i.1972, *Cydonia vulgaris*, (L.) (2); **Kayseri** (Yeşilhisar), 14.viii.1979, weeds, (L.) (2); **Manisa** (Soma), 27.xi.1973, under stone, (2). Totally 149 specimens.

Stenosis Herbst, 1799

Stenosis dilutipes Reitter, 1887

Material: **Hatay** (Samandağ), 31.v.1985, on the ground, (F.) (1). Totally 1 specimen.

Stenosis orientalis Brullé, 1832

Material: **İzmir** (Bornova), 29.ii.1972, ***Olea europea***, (L.) (2); (Bozdağ), (1200 m), 30.xii.1971, (L.) (3); (İnciraltı), 24.ii.1972, under stone, (L.) (3); (Ödemiş), 24.i.1972, under stone, (L.) (11). Totally 19 specimens.

Stenosis sulcata Miller, 1861

Material: **Mersin** (Anamur), 24.v.1984, on the ground, (F.) (1); (Güzeloluk), 25.iv.1985, under stone, (2). Totally 3 specimens.

Ceratanisini

Ceratanisus Gemminger, 1870

Ceratanisus tristis Faldermann, 1837

Material: **Ankara** (Ayas), 10.vii.1979, weeds, (F.) (2); **Tokat** (Almus), 02.vii.1978, ***Quercus*** sp., (F.) (1). Totally 3 specimens. This species constitutes as a new record for Turkey.

Idastrandiella Strand, 1929

Idastrandiella mucoreus (Waltl, 1838)

Material: **İzmir** (Bozdağ), 30.vii.1975, ***Matricaria*** sp., (P.) 1987, (1); 30.vii.1975, ***Castanea*** sp., (L.) (7). Totally 8 specimens.

Pimeliini

Gedeon Reiche & Saulcy, 1837

Gedeon wernerii (Ganglbauer, 1905)

Material: **İzmir** (Tire), 03.ix.2001, on the ground, (1); **Kayseri** (Himmetdede), 08.viii.1979, ***Astragalus*** sp., (K.) (1); ***Astragalus*** sp., (L.) (1); under stone, (L.) (1); (İncesu), 13.viii.1979, on the ground, (L.) (4); (Yılan Mountain), 11.viii.1979, on the ground, (L.) (1); **Konya** (Central province), 28.viii.2001, on the ground, (1); **Nevşehir** (Ürgüp), 15.viii.1979, under stone, (L.) (2). Totally 12 specimens. Endemic species.

Graecopachys Skopin, 1968

Graecopachys quadricollis (Brullé, 1832)

Material: **Antalya** (Kaş), 07.iv.1984, under stone, (1); **Denizli** (Pamukkale), 15.iv.1973, on the ground, (1); 19.iv.1976, on the ground, (1); **Diyarbakır** (Karacadağ), 17.iv.1987, (1); 27.viii.1987, ***Astragalus*** sp., (1); **İzmir**, 03.iii.2002, on the ground, (3); (Alsancak), 03.v.1962, (1); (Bademler), 01.v.1976, weeds, (2); (Balçova), 19.iv.1973, on the ground, (1); (Bornova), 07.iv.1960, on the ground, (1); 03.iv.1962, (1); 17.iv.1962, (2); 11.v.1962, on the ground, (4); 01.vi.1962, (1); 02.xi.1963, on the ground, (1); 30.v.1977, weeds, (1); 26.vii.1982, on the ground, (1); 14.vi.1983, on the ground, (1); 16.vi.1983, on the ground, (1);

21.vi.1983, on the ground, (1); 07.xi.1983, on the ground, (1); 09.xi.1983, under stone, (1); 11.xi.1983, on the ground, (1); 11.xi.1983, on the ground, (1); 01.iv.1984, on the ground, (1); 05.iv.1984, on the ground, (1); 12.iv.1984, on the ground, (1); 25.iv.1984, weeds, (1); 10.v.1984, on the ground, (1); 14.v.1984, weeds, (1); 16.v.1984, on the ground, (1); 05.v.2002 on the ground, (8); 10.v.2002 on the ground, (2); 01.vi.2002 on the ground, (2); 03.vi.2002 on the ground, (6); 07.vi.2002 on the ground, (3); (Çeşme), 24.ii.1972, under stone, (1); 11.iv.1973, on the ground, (1); (Çığlı), 28.iv.2002, on the ground, (3); (İnciraltı), 15.iv.1984, on the ground, (1); (Karşıyaka), 02.v.2002, (4); (Kemalpaşa), 09.iv.1962, on the ground, (1); (Menemen), 28.v.1976, *Vitis vinifera*, (1); (Mordoğan), 15.v.1999, on the ground, (2); 16.v.2001, on the ground, (3); (Yamanlar), 30.vii.1973, pitfall trap, (36); (K.) (2); **Manisa** (Kula), 15.iv.1975, under stone, (3). Totally 117 specimens.

Pachyscelis Solier, 1836

Pachyscelis musiva Mènetries, 1832

Material: **Diyarbakır** (Karacadağ), 30.iii.1972, (F.) (2); 27.iii.1982, *Astragalus* sp., Kwitter det., (2); **Kayseri** (Yılan Mountain), 11.viii.1979, on the ground, (1). Totally 5 specimens.

Pachyscelis villosa Drapiez, 1820

Material: **Aydın** (Central province), 27.iv.1984, on the ground, (1); 30.iv.1984, weeds, (1); (Kuşadası), 27.vii.1961, (1); **Çanakkale** (Gökçeada), 26.v.1975, on the ground, (1); 27.v.1975, on the ground, (1); **Diyarbakır** (Karacadağ), 30.iii.1972, (2); **Isparta** (Central province), 12.vi.1973, weeds, (1); **İzmir** (Central province), 25.v.1975, dung, (1); (Aliağa), 03.v.1983, dung, (1); (Balçova), 19.iv.1973, on the ground, (8); 19.v.1978, weeds, (1); (Bayraklı), May.1985, weeds, (1); (Bornova), 07.iii.1960, (L.) (1); 07.iv.1960, on the ground, (1); 18.vi.1961, (1); 01.v.1962, (1); 07.v.1962, (1); 10.v.1962, (1); 11.v.1962, on the ground, (1); 31.v.1962, (1); 20.v.1963, (1); August, 1963, (1); 20.x.1963, (3); 02.xi.1963, on the ground, (4); 11.v.1964, on the ground, (2); 16.v.1964, on the ground, (1); 02.xi.1969, on the ground, (1); 02.iv.1973, on the ground, (1); 05.vi.1975, weeds, (1); 28.xi.1975, detritus, (1); 06.v.1976, weeds, (1); April, 1977, weeds, (1); 20.v.1978, weeds, (1); 28.v.1978, poaceous plants, (1); 25.iv.1979, weeds, (1); 14.iv.1982, weeds, (2); 23.v.1982, on the ground, (1); 05.iv.1983, on the ground, (1); 05.v.1983, on the ground, (3); 07.vii.1983, on the ground, (2); 05.viii.1983, weeds, (1); 10.x.1983, on the ground, (1); 16.x.1983, under stone, (2); 10.iii.1984, dung (1); 15.iii.1984, on the ground, (1); 05.iv.1984, weeds, (1); 12.iv.1984, on the ground, (1); 13.iv.1984, on the ground, (1); 16.iv.1984, on the ground, (1); 18.iv.1984, weeds, (4); 02.v.1984, on the ground, (2); dung, (1); 05.v.1984, on the ground, (1); 10.v.1984, on the ground, (1); 14.v.1984, on the ground, (3); 18.v.1984, weeds, (1); on the ground, (1); 01.vi.1984, on the ground, (1); 30.xii.1991, on the ground, (2); 18.iii.1993, on the ground, (1); 04.iv.1993, on the ground, (1); 15.iv.1993, on the ground, (1); 01.v.1993, on the ground, (1); 15.v.1993, weeds, (1); 07.vi.1993, on the ground, (1); (Bostanlı), 14.iv.1984, under stone, (1); (Cumaovası), 09.xii.1971, under

stone, (7); 11.iv.1973, on the ground, (2); 12.xi.1973, under stone, (L.) (4); 27.iii.1993, on the ground, (1); (Emiralem), 23.iv.1993, on the ground, (1); 02.v.1993, on the ground, (1); (Gaziemir), 10.vi.1978, *Nicotiana tabacum*, (1); 11.vi.1979, *N. tabacum*, (3); (Hatay), 10.v.1978, weeds, (2); (Hatundere), 19.i.1972, under stone, (L.) (1); (İnciraltı), 15.iv.1984, on the ground, (1); (Kemalpaşa), 07.ii.1972, under stone, (L.) (3); 20.v.1993, weeds, (2); (Kiraz), 25.i.1972, under stone, (1); 01.vi.1962, (1); (Menemen), 16.iv.1992, on the ground, (1); 24.iv.1993, weeds, (1); (Mordoğan), 15.vii.1971, on the ground, (1); 15.vii.1972, on the ground, (L.) (2); 13.v.1984, weeds, (1); (Narlıdere), 05.v.1984, on the ground, (1); 01.iv.1993, on the ground, (2); (Seferihisar), 30.iv.1993, on the ground, (1); 05.v.1993, on the ground, (1); (Urla), 04.v.1984, on the ground, (1); (Yamanlar), 30.vii.1973, pitfall trap, (16); Kwieton det., (2); **Manisa** (Central province), 12.v.1973, on the ground, (1); 02.v.1993, on the ground, (1); 07.v.1993, (1); 15.v.1993, under stone, (2); **Muğla** (Bodrum), 04.vi.1973, weeds, (1); (Fethiye), 17.iv.1978, weeds, (1); (Marmaris), 06.vi.1973, on the ground, (1). Totally 161 specimens.

Pimelia Fabricius, 1775

Pimelia (Eurypimelia) akbesiana Fairmaire, 1834

Material: **Adana** (Tufanbeyli), 04.v.1986, on the ground, (6); **Aksaray** (Mamasın Dam), 01.v.1979, under stone, (1); **Ankara** (Central province), 12.iv.1962, *Triticum* sp., (1); 05.v.1979, under stone, (1); (Ayaş), 22.vi.1975, weeds, (1); 10.vii.1979, weeds, (2); (Kalecik), July, 1962, (2); (Sarıyer), 04.vii.1975, (3); **Antalya**, 21.iv.1984, on the ground, (6); **Aydın** (Central province), 09.xi.1983, on the ground, (1); (İsabeyli), 10.iv.1993, on the ground, (1); (Kuşadası), 12.v.1976, on the ground, (1); 18.v.1993, weeds, (1); (Selçuk), 17.v.1991, on the ground, (1); (Söke-Morali), 25.iv.1986, *Cucumis melo*, (1); on the ground, (1); (Yamalak), 27.iv.1984, on the ground, (1); **Balıkesir** (Bigadiç), 21.iv.1973, on the ground, (3); 21.iv.1975, under stone, (1); **Burdur** (Yeşilova), 29.iv.1974, *Triticum* sp., (1); **Bursa** (Mustafakemalpaşa), 20.iv.1962, (1); 20.iv.1962, (1); **Çanakkale** (Central province), 30.v.1975 on the ground, (1); (Gökçeada), 27.v.1975, on the ground, (1); 26.v.1975, weeds, (2); (İntepe), 22.v.1973, on the ground, (1); **Çorum** (İskilip), 03.vii.1978, on the ground, (2); **Denizli** (Central province), 20.iii.1993, on the ground, (1); 24.iii.1993, on the ground, (1); 02.iv.1993, on the ground, (1); 24.iv.1993, on the ground, (1); 10.v.1994, *Triticum* sp., (1); 25.v.2002 on the ground, (4); (Acıpayam), 30.v.1974, *Zea mays*, (5); (Pamukkale), 15.iv.1973, on the ground, (2); 30.iv.1992, on the ground, (3); **Elazığ** (Kovancı), 13.vi.1972, *Rosa* sp., (1); **Eskişehir** (Mihalıççık), 09.vii.1979, weeds, (1); **İzmir** (Bayındır), 24.iv.1973, on the ground, (5); weeds, (1); (Bornova), 01.vi.1959 (1); 10.iii.1962, (1); 12.iii.1962, (1); 02.iv.1962, (1); 03.iv.1962, (1); 09.iv.1962, (1); 13.iv.1962, (1); 30.iv.1962, (1); 11.v.1962, (1); 15.v.1962, (1); 19.v.1962, (1); 20.x.1963, on the ground, (1); 25.x.1963, (1); 04.iv.1964, (1); 04.vii.1964, (1); 12.iv.1975, weeds, (1); 10.v.1976, weeds, (1); on the ground, (3); 31.v.1976, (1); 12.vi.1976, on the ground, (1); 04.1977, weeds, (2); 01.v.1977, on the ground, (1); 15.v.1977, on the ground, (1); 26.v.1977, weeds, (1); 15.vi.1977, weeds, (3); 10.v.1978, (3); 20.v.1978, weeds,

(1); 02.vi.1981, on the ground, (1); 03.iv.1983, on the ground, (1); 05.v.1983, on the ground, (2); 05.vi.1983, on the ground, (1); 14.vi.1983, on the ground, (1); 05.viii.1983, weeds, (3); 07.iv.1984, on the ground, (1); 19.iv.1984, on the ground, (1); 02.v.1984, on the ground, (1); 14.v.1984, weeds, (2); 13.iv.1985, on the ground, (1); 17.iv.1993, weeds, (2); 23.iv.1993, on the ground, (1); 28.iv.1993, on the ground, (1); 11.v.1993, weeds, (1); 18.v.1993, weeds, (1); 20.v.1993, weeds, (3); 01.vi.2002 on the ground, (1); (Buca), 01.v.1962, (2); (Cumaovası), 15.v.1984, on the ground, (1); 08.iv.1993, on the ground, (2); (Çeşme), 11.iv.1973, on the ground, (1); (Çığlı), 28.iv.2002 on the ground, (1); (Emiralem), 23.iv.1993, on the ground, (1); 02.v.1993, *Vicia cracca*, (1); (Gaziemir), 10.vi.1978, *Nicotiana tabacum*, (1); 11.vi.1978, *N. tabacum*, (2); (Güzelbahçe), 03.viii.1991, on the ground, (2); (Hatundere), 29.v.1972, (1); (Karşıyaka), 23.iv.1993, weeds, (1); 24.iv.1993, weeds, (1); (Kemalpaşa), 09.iv.1962, *Triticum* sp., (1); poaceous plants, (1); 09.iv.1962, (9); April, 1962, (1); 19.v.1987, (2); (Kinik), 23.vi.1973, *N. tabacum*, (1); (Menemen), 07.iv.1975, *Vitis vinifera*, (1); 10.v.1975, on the ground, (1); 07.iv.1977, *V. vinifera*, (1); 18.vi.1978, (1); 05.v.1983, *Medicago sativa*, (3); 09.iv.1992, on the ground, (1); 10.iv.1992, *Lepidium* sp., (2); 16.iv.1992, on the ground, (2); 16.iv.1992, (1); 17.iv.1992, on the ground, (2); 22.iv.1992, on the ground, (3); 16.iv.1993, weeds, (4); 18.iv.1993, on the ground, (2); 21.iv.1993, on the ground, (1); 26.iv.1993, weeds, (1); pasture, (1); on the ground, (5); 28.iv.1993, on the ground, (1); 18.v.1993, on the ground, (2); 20.v.1993, (1); May, 1993, weeds, (3); 13.v.1994, *Triticum* sp., (1); 18.iii.1999, on the ground, (1); 27.iii.2002, under stone, (4); (Mordoğan), 30.v.1982, on the ground, (1); (Narlıdere), 05.v.1984, on the ground, (3); (Seferihisar), 10.iv.1993, weeds, (1); (Tire), 23.iv.2002 on the ground, (3); (Yamanlar), 30.vii.1973, pitfall trap, (11); 23.iv.1993, on the ground, (1); **Kahramanmaraş** (Afşin), 02.v.1986, on the ground, (5); (Ahır Mountain), 10.vi.1985, on the ground, (1); (Ahır Mountain), (1550 m), 01.v.1986, on the ground, (9); *Cirsium* sp., (1); (Elbistan), 28.iv.1973, weeds, (1); 03.v.1986, on the ground, (4); (Nurhak Mountain), 03.v.1986, on the ground, (1); **Kayseri** (İncesu), 27.vi.1980, on the ground, (2); **Manisa** (Central province), 01.vi.1972, (7); (Akkısar), 29.iv.1974, *Triticum* sp., (1); (Kula), 15.iv.1975, under stone, (1); (Salihli), 18.ii.1976, weeds, (2); (Turgutlu), 15.iv.1983, weeds, (1); **Mersin** (Mut), 21.iv.1985, on the ground, (1); **Niğde** (Bor), 29.iv.1979, on the ground, (1); 30.iv.1979, under stone, (2); **Uşak** (Sivaslı), 11.vi.1972, *Salix* sp., (1); on the ground, (1). Totally 270 specimens.

Pimelia (Eury)pimelia) lendli Kaszab, 1938

Material: **Kayseri** (Erciyes), 10.viii.1979, *Verbascum* sp., (1); (Erciyes), (2300 m), 28.vi.1980, under stone, (1). Totally 2 specimens. Endemic species.

Pimelia (Eury)pimelia) subglobosa Pallas, 1781

Material: **Ankara** (Kalecik), June, 1962, (K.) 1983, (1); (Sarıyer), 04.vii.1975, (1); **İzmir** (Bergama), 20.v.1983, on the ground, (1); (Bornova) 14.iv.1983, weeds, (1); 15.iv.1984, on the ground, (2); (Bozdağ), 20.v.1970, on the ground, (1); (Cumaovası), 15.v.1984, on the ground, (1); (Güzelbahçe),

06.v.1993, on the ground, (1); (Menemen), 26.iv.1993, weeds, (2); (Mordoğan), 13.v.1984, on the ground, (1); (Narlıdere), 09.vii.1979, weeds, (1); (Tire), 23.iv.1990, ***Cucumis sativus***, (L.) (2); (Yamanlar), 30.vii.1973, pitfall trap, (1); (L.) (1); **Kayseri** (Erciyes), (2300 m), 28.vi.1980, under stone, (K.) (1); **Konya** (Sarayönü), 16.iv.1984, under stone, (3); **Manisa** (Salihli), 19.v.1976, on the ground, (L.) (2); 23.v.1976, weeds, (1). Totally 24 specimens. Polytypic species. It was given at species level because of the problems on subspeciation.

Pimelia (Euryptimelia) testudo Kraatz, 1865

Material: **Bilecik** (Bozöyük), 27.v.1971, (1). Totally 1 specimen. Endemic species.

Pimelia (Euryptimelia) timarchoides Ménétries, 1836

Material: **Aksaray** (Central province), 01.v.1979, Kwieton det., (1). Totally 1 specimen. Endemic species.

Pimelia (Melanostola) bajula Klug, 1830

Material: **Diyarbakır** (Karacadağ), 10.iv.1967, (1); 27.viii.1982, ***Astragalus*** sp., (K.) (1); **Gaziantep**, 06.vi.1985, on the ground, (1); 24.iv.1986, on the ground, (L.) (1); 26.iv.1986, on the ground, (L.) (1); **Kahramanmaraş** (Ahır Mountain), 10.vi.1985, ***Onopordum*** sp., (1); weeds, (1); 01.v.1986, on the ground, (1); **Sanlıurfa** (Central province), 14.viii.1977, on the ground, (1); (Akçamescit), 20.iv.1972, (L.) (3); (Ceylanpinar), 07.vii.1977, (1); (Central province-Kürdik), 19.iv.1972, (L.) (1). Totally 14 specimens.

Pimelia* (s. str.) *robusta Kraatz, 1865

Material: **Adıyaman** (Nemrut Mountain), 09.viii.1977, weeds, (F.) (2); **Çağrı** (Tendürek Mountain 2600 m), 07.viii.1977, (1). Totally 3 specimens. Endemic species.

Trachyderma Latreille, 1829

Trachyderma lima (Petagna, 1819)

Material: **İzmir** (Bornova), 29.v.1962, (1); 25.v.1972, (K.) (1). Totally 2 specimens.

Bolitophaginae: Bolitophagini

Bolitophagus Zetterstedt, 1840

Bolitophagus reticulatus (Linnaeus, 1767)

Material: **Bartın** (Ulus), 29.v.1980, ***Equisetum*** sp., (L.) (1); **Bolu** (Abant Lake), 15.vii.1979, ***Pinus*** sp., (P.) (1). Totally 2 specimens.

Diaperinae: Crypticini

Crypticus Latreille, 1817

Crypticus (s. str.) ***castaneus*** Baudi, 1876

Material: **İzmir** (Mordoğan), 13.vii.1971, ***Olea europaea***, (1); 16.vii.1971, ***Prunus amygdali***, (1). Totally 2 specimens. Endemic species.

Crypticus (s. str.) **quisquilius** (Linnaeus, 1761)

Material: **Bursa** (Uludağ), 22.vii.1978, dung, (F.) (1). Totally 1 specimen.

Discussion

At the end of this study, it has been determined that totally 42 species belonging to 21 genera of the four subfamilies (Lagriinae, Pimeliinae, Bolitophaginae, Diaperinae) of Tenebrionidae have been preserved in the collection of LEMT. Among these two species are the first reliable records from Turkey and 12 species are endemic.

At the end of this study, the number of species of Turkish tenebrionids belonging to Lagriinae, Pimeliinae, Bolitophaginae, Diaperinae rose to 104. The names of those belonging to the subfamily of Lagriinae are **Cossyphus tauricus** Steven, 1829 (Cossyphini); **Centorus procerus** (Mulsant, 1854), **C. turcicus** (Kaszab, 1959) (Belopini); those belonging to the subfamily of Pimeliinae are **Amnodeis asiaticus** Miller, 1858, **A. grandis** Miller, 1858, **A. intermedius** Reitter, 1914, **A. milleri** Reitter, 1914, **Erodius (Eodirosis) fabricii** Solier, 1834, **E. (Eodirosis) orientalis oblongus** Solier, 1834, **Iranerodius semenovi** (Bogacev, 1949) (Erodiini); **Zophosis (Oculosis) dilatata** Deyrolle, 1867, **Z. (Oculosis) punctata** Brullé, 1832, **Z. (Septentriophosis) oblonga** Solier, 1834, **Z. (Septentriophosis) rugosa** Faldermann, 1837 (Zophosini); **Calyptopsis capnisiformis** Reitter, 1903, **C. capnisoides** Reitter, 1896, **C. deplanata** Faust, 1875, **C. escherichi** Reitter, 1900, **C. pandaroides** Reitter, 1896, **C. solieri** Reiche, 1857, **Dailognatha caraboides** Solier, 1835, **D. crenata** Reiche et Saulcy, 1857, **D. minuscula** Desbrochers, 1881, **D. planata** Miller, 1861, **D. pumila** Baudi, 1874, **D. quadricollis** Brullé, 1832, **D. rugipleuris** Reitter, 1896, **Dichomma dardanum** (Steven, 1829), **Stegastopsis microderoides** Reitter, 1898, **Tentyria cylindrica** Solier, 1835, **T. cypria** Kraatz, 1865, **T. rotundata** Brullé, 1832, **T. taurica** Tauscher, 1812, **T. tessulata** Tauscher, 1812, **T. wiedemannii** Ménétries, 1838 (Tentyriini); **Adesmia** (s. str.) **anthracina** Klug, 1830, **A. (s. str.) fischeri fischeri** Faldermann, 1837, **A. (s. str.) gibbula** Reitter, 1916, **A. (s. str.) procera** Miller, 1861, **A. (Macradesmia) servillei** Solier, 1835, **A. (Oteroscelis) audouini** Solier, 1835, **A. (Oteroscelis) carinata** Miller, 1861 (Adesmiini); **Adelostoma ovalipenne** Chevrolat, 1878, **Adelostoma subtile** Reitter, 1900, **Adelostoma sulcatum** Duponchel, 1827 (Eurychorini); **Dichillus (Dichillinus) cylindricus** Baudi, 1874, **D. (Dichillinus) duricornis** Reitter, 1886, **D. (Dichillocerus) araxidis** Reitter, 1889, **D. (Dichillocerus) pertusus** Kiesenwetter, 1861, **D. (s. str.) carinatus** (Küster, 1884), **D. (s. str.) iranicus** Kaszab, 1963, **D. (s. str.) subsetulosus** Reitter, 1886, **Eutagenia smyrnensis** (Solier, 1838), **Stenosis comata** Reiche et Saulcy, 1857, **S. dianae** C. A. et Sahlberg, 1907-1908, **S. dilutipes** Reitter, 1887, **S. esau** Sahlberg, 1908, **S. orientalis** Brullé, 1832, **S. punctiventris** Eschscholtz, 1831, **S. quadraticollis** Desbrochers, 1881, **S. silvestrii schusteri** Koch, 1935, **S. sulcata** Miller, 1861 (Stenosini); **Akis elongata opaca** Heyden, 1897, **A. latreillei** Solier, 1836, **Cyphogenia (Lechiromus) lucifuga** (Adams, 1817) (Akidini); **Ceratanisus**

funebris (Reitter, 1898), *C. tristis* (Faldernann, 1837), *Idastrandiella mucoreus* (Waltl, 1838) (Ceratanisini); *Gedeon wernerii* (Ganglbauer, 1905), *Graecopachys quadricollis* (Brullé, 1832), *Pachyscelis musiva* Ménétriés, 1832, *P. villosa* Drapiez, 1820, *Pimelia (Euryplimelia) akbesiana* Fairmaire, 1884, *P. (Euryplimelia) anatolica* Reitter, 1915, *P. (Euryplimelia) lendli* Kaszab, 1938, *P. (Euryplimelia) repleta* Reitter, 1915, *P. (Euryplimelia) subglobosa* Pallas, 1781, *P. (Euryplimelia) testudo* Kraatz, 1865, *P. (Euryplimelia) timarchoides* Ménétriés, 1836, *P. (Melanostola) bajula* Klug, 1830, *P. (s. str.) robusta* Kraatz, 1865, *Sternoplax (Pachysternoplax) nicomedia* (Reitter, 1832), *Trachyderma lima* (Petagna, 1819), *T. philistina* Reiche et Saulcy, 1857, *T. setosa* (Fischer, 1819) (Pimeliini); *Cnemeplatia atropos* Costa, 1847 (Cnemeplatini); those belonging to the subfamily of Bolitophaginae are *Bolitophagus reticulatus* (Linnaeus, 1767), *Eledona agaricola* (Herbst, 1784) (Bolitophagini); and those belonging to the subfamily of Diaperinae are *Phaleria acuminata* Küster, 1852, *P. bimaculata* (Linnaeus, 1767), *Phtora reitteri* (Seidlitz, 1894) (Phaleriini); *Alphitophagus bifasciatus* (Say, 1823), *A. convexicollis* Reitter, 1911, *Diaperis boleti* (Linnaeus, 1758), *Gnathocerus cornutus* (Fabricius, 1798), *Platydema europaeum* (Laporte de Castelnau et Brulle, 1831) (Diaperini); *Crypticus* (s. str.) *castaneus* Baudi, 1876, *C. (s. str.) gibbulus* (Quensel, 1806), *C. (s. str.) pentheri* Reitter, 1906, *C. (s. str.) pettersoni* Ferrer et Soldati, 1999, *C. (s. str.) quisquilius* Linnaeus, 1761, *C. (s. str.) tauri* Pic, 1907, *Oochrotus glaber* Demaison, 1904 (Crypticinae) and *Trachyscelis aphodioides* Latreille, 1809 (Trachyscelini).

Material housed in LEMT constitute 40.38% of Turkish known species belonging to the above mentioned four subfamilies. It is hoped that further studies will continue in the field of Turkish Tenebrionids in future. Among the housed material *Pimelia akbesiana* (270), *Dailognatha quadricollis* (168), *Pachyscelis villosa* (161) are the most common species and *Pimelia subglobosa* and *Tentyria rotundata* are polytypic and further studies are expected in the resolution of the problems on subspeciation in future.

Özet

Türkiye Tenebrionidae (Coleoptera) faunasına katkılar Kısim I. Lagriinae, Pimeliinae, Bolitophaginae, Diaperinae

Bu çalışmada Lagriinae altfamilyasından iki, Pimeliinae altfamilyasından 37, Bolitophaginae altfamilyasından bir ve Diaperinae altfamilyasından iki olmak üzere toplam 42 türün LEMT (Lodos Entomoloji Müzesi, Bomova, İzmir)'nde bulunduğu ortaya konmuştur.

Bu türlerden *Adelostoma subtile* Reitter, 1900 ve *Ceratanisus tristis* (Faldernann, 1837) Türkiye faunası için ilk kayittır. Ayrıca 12 türün endemik olduğu anlaşılmıştır.

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References

- Bytinski-Salz, H., 1956. Anadolu'da bir seyahatte toplanan Koleopter ve Himenopterler. 1. İ.
Ü. **Fen Fak. Mec. Ser. B. nat.**, **21** (4): 211-219.
- Fattorini, S., P. Leo & L. Salvati, 1999. Biogeographical observations on the Darkling beetles
of the Aegean Islands (Coleoptera: Tenebrionidae). **Fragmenta entomologica**,
31 (2): 339-375.
- Fattorini, S., 2000. Dispersal, vicariance and refuges in the Anatolian Pimeliinae (Coleoptera,
Tenebrionidae): remarks on some biogeographical tenets. **Biogeographia**, **21**:
355-398.
- Ferrer, J. & L. Soldati, 1999. Contribution a l'étude des Tenebrionidae de Turquie (Insecta:
Coleoptera). **Entomofauna**, **20** (4): 53-62.
- 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.
- Gebien, H., 1910. Tenebrionidae I-II-III (Ed.: W. Junk), Coleopterorum Catalogus, Pars 15;
Pars 22, Berlin, 1-740.
- Grimm, R. & W. Schawaller, 2000. The genus **Colpotus** Muisant & Rey (Coleoptera:
Tenebrionidae) in the Eastern Mediterranean Region, with Descriptions of Two New
Species. **Stuttgarter Beitr. Naturk.**, **615**: 1-15.
- Gül-Zümreoğlu, S., 1972. İzmir Bölge Zirai Mücadele Araştırma Enstitüsü Böcek ve Genel
Zararlılar Kataloğu, 1928-1969 (I. Kısım). İstiklal Matbaası, İzmir, 1-119.
- Iwan, D., 2001. A comparative study of male genitalia in Opatrinae sensu Medvedev (1968)
(Coleoptera, Tenebrionidae) with notes on the tribal classification. Part I. **Annales
Zoologici (Warszawa)**, **51** (3): 351-390.
- Kaszab, Z., 1938. Beiträge zur Kenntnis der Tenebrioniden-Fauna Kleinasiens. **Folia
Entomologica Hungarica**, **5** (1-4): 2-7.
- Kaszab, Z., 1939. Zoologische Ergebnisse der ersten (VI.-X. 1936.) und zweiten (V.-
VIII.1937) Forschungreise N. Vasvri's in Kleinasien. **Matematikai es
természettudományi Értesítő**, **58**: 581-590.
- Kaszab, Z., 1959. Wissenschaftliche Ergebnisse der zoologischen Expedition des National
Museum in Prag nach der Türkei. 534. **Acta Ent. Musei Nat. Pragae**, **32**: 69-
82.
- Kaszab, Z., 1961. Zwei neue Tenebrioniden (Coleoptera) aus Arabien und Kleinasien.
Entom. Abh. Ber. Mus. Tierk. Dresden, **26** (20): 169-175.
- Keskin, B., 1999. Balçova Barajı (İzmir) civarı Tenebrionidae (Coleoptera) faunası. **Türk.
entomol. derg.**, **23** (3): 211-224.
- Keskin, B., 2003. Erstnachweis von **Tentyria cypria** Kraatz, 1865 (Coleoptera:
Tenebrionidae) für die Türkei. **Zoology in the Middle East**, **29**: 116-117.
- Lawrence, J. F. & A. F. Newton, 1995. "Families and subfamilies of Coleoptera with selected
genera, notes, references and data on family-group names. 779-1006". In: Biology,
Phylogeny and Classification of Coleoptera. Papers celebrating the 80th birthday of
Prof. Roy A. Crowson (Eds. J. Pakaluk & S. A. Slipinsky). PAN, Museum and
Institute of Zoology, Warszawa, 1092 pp.
- Lodos, N., 1998. Türkiye Entomolojisi VI (Genel, Uygulamalı, Faunistik). E. Ü. Ziraat
Fakültesi Yayın No: 529, 300 pp.

- Reitter, E., 1892. Bestimmungs-Tabelle der unechten Pimeliden aus der palaearctischen Fauna. **Verhandlungen des naturforschenden Vereins in Brünn**, **31**: 201-250.
- Reitter, E., 1900. Bestimmungs-Tabelle der der Tenebrioniden-Abteilungen: Tentyriini und Adelostomini aus der Europa und angrenzenden Ländern. **Verhandlungen des naturforschenden Vereins in Brünn**, **39**: 82-197.
- Reitter, E., 1903. Bestimmungs-Tabelle der Tenebrioniden-Unterfamilien: Lachnogyini, Akidini, Pedinini, Opatrini und Trachyscelini aus der Europa und angrenzenden Ländern. **Verhandlungen des naturforschenden Vereins in Brünn**, **39**: 25-189.
- Reitter, E., 1915. Bestimmungs-Tabelle der echten Pimeliden aus der paläarktischen Fauna. **Wien. Ent. Zeitung**, **34** (74): 1-63.
- Sahlberg, J., 1912-1913 Coleoptera mediterranea orientalia, quae Aegyptia, Palaestina, Syria, Caramania atque in Anatolia occidentali anno 1904 **Ofversigt af Finsha Vetenskaps Sacleteitens Förhandlingar, LV, Afd. A.**, **19**: 1-281
- Schawaller, W., 1996 Tenebrionidae (Coleoptera) aus Nord-Griechenland: Habitate, Artengesellschaften und Verbreitung **Ent. Bl.**, **92**: 3-18.
- Soldati, F. & L. Soldati, 2003. Réactualisation de la liste systématique des Coléoptères Tenebrionidae (Alleculinae exclus) de France continentale et de Corse. **Bulletin Mensuel de la Société Linnéenne de Lyon**, **72** (10): 331-349.
- Tezcan, S., J. Ferrer & B. Keskin, 2000. Contribution to the study of tenebrionid beetles (Coleoptera: Tenebrionidae) in ecological cherry orchards in İzmir and Manisa provinces of Turkey **Türk. entomol. derg.**, **24** (4): 243-248.
- 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., 1-119
- Winkler, A., 1924-1932 Catalogus Coleopterorum Regionis Palearcticae. XVIII. Dittesgasse II Wien, 663 pp