

|                     |      |           |            |
|---------------------|------|-----------|------------|
| Linzer biol. Beitr. | 46/2 | 1491-1498 | 19.12.2014 |
|---------------------|------|-----------|------------|

## **Contribution to the knowledge of the Melanotinae (Coleoptera, Elateridae) fauna of Turkey**

N. GULPERCIN & S. TEZCAN

**A b s t r a c t :** This study is based upon material collected from different localities in Turkey between 1961 and 2005 on the material of Melanotinae. As a result, totally six species of *Melanotus* of Melanotinae subfamily were recorded. In addition, new localities have been found for some species which have already been reported in Turkey. For each species new distributional localities were also reported and given with attached maps.

**K e y   w o r d s :** Coleoptera, Elateridae, Melanotinae, Fauna, Turkey.

### **Introduction**

Elateridae fauna of Turkey is quite rich and the studies of SHALBERG 1912-1913, GUGLIELMI & PLATIA 1985, LODOS, 1998, GULPERCIN & TEZCAN 2006; 2009, KABALAK & SERT 2005; 2011, KESDEK et al. 2006, LÖBL & SMETANA 2007 and MERTLIK & PLATIA 2008 have great importance. Recently, the distributional catalogue of Turkish Elateridae (Coleoptera) fauna has been published (GULPERCIN & TEZCAN 2010). In this publication, a total of 23 species belonging to one genera of Melanotinae subfamily have been listed with their distributional data.

Data on some material of Melanotinae have been collected but have not been published up to now within the research projects by the researchers of Department of Plant Protection, Faculty of Agriculture, University of Ege, Izmir, Turkey, during 1961-2005 have been given in this paper. They were deposited in the collection of Lodos Entomological Museum, Turkey (LEMT) of the same department. The aim of the present study is to contribute to the knowledge of the Melanotinae fauna of the Turkey by evaluating the material deposited in this museum.

Provinces of the collected specimens are given in alphabetical order in the following list. Material have been determined by J.Chassain (France), C.M.F. Hayek (Austria), G. Platia (Italy), R. Preiss (England), N. Lodos and N. Gulpercinc (Turkey). Classification and nomenclature of the species of Melanotinae suggested by LÖBL & SMETANA 2007 have been followed in this study.

## Results

In this study, six species belonging to *Melanotus* were recorded. As a result a total 522 specimens from six species belonged to subfamily Melanotinae of the family of Elateridae were recorded in Turkey. Recent distribution of each species were also given with maps within the text.

### Family Elateridae LEACH, 1815

#### Subfamily Melanotinae CANDÉZE, 1859

##### Genus *Melanotus* (s.str.) *brunnipes* (GERMAR, 1824)

Material examined: Usak: Central province, 11.VI.1972, *Prunus domestica* LINNAEUS 1753, 1 ex., totally 1 specimen.

Distribution in Turkey: Turkey (LÖBL & SMETANA 2007; MERTLIK & PLATIA 2008) [as *Melanotus brunnipes fascicularis* KUSTER, 1851] (HEYDEN et al. 1906); Thrace and Aegean Region (LODOS 1998); Ağrı (Tahir Pass) (GUGLIELMI & PLATIA 1985); Erzurum [Hınıs (Söylemez), Palandöken Mountain] (KESDEK et al. 2006); İzmir (Selçuk) (GULPERCİN & TEZCAN 2009). Distributional map of *M. brunnipes* in Turkey is given on Fig. 1.

##### *Melanotus* (s.str.) *castanipes* (PAYKULL, 1800)

Material examined: İzmir: Çeşme, 03.V.2003, light trap, 2 exs., Kemalpaşa, 24.V.2005, sticky yellow trap, 2 exs.; Manisa: Muradiye, 17.VI.2004, *Gossypium hirsutum* LINNEUS 1763, 1 ex., totally 5 specimens.

Distribution in Turkey: Turkey (LODOS 1998; LÖBL & SMETANA 2007; MERTLIK & PLATIA 2008); İzmir (Çeşme) (GULPERCİN & TEZCAN 2009). Distributional map of *M. castanipes* in Turkey is given on Fig. 2.

##### *Melanotus* (s.str.) *crassicollis* (ERICHSON, 1841)

Material examined: Afyonkarahisar: Çay, 17.VI.1978, *Quercus* sp., 1 ex.; Bilecik: Söğüt, 02.VI.1975, *Quercus* sp., 1 ex.; İzmir: Bayındır, 14.V.1973, *Quercus* sp., 1 ex., Çeşme, 28.IV.1973, *Pyrus elaeagnifolia* PALLAS 1793, 1 ex., 28.IV.2003, light trap, 1 ex., 03.V.2003, light trap, 6 exs., 10.V.2003, light trap, 11 exs., 26.VII.2003, light trap, 2 exs., Ödemiş-Birgi, 07.VI.1972, weeds, 1 ex.; Kırklareli: Central province, 03.VI.1975, *Quercus* sp. 1 ex., Lüleburgaz, 08.V.1975, *Sinapis* sp., 1 ex.; Kütahya: Tavşanlı, 19.VI.1975, weeds, 1 ex.; Mersin: Silifke, 03.VI.1972, *Ceratonia siliqua* LINNAEUS 1753, 1 ex.; Tekirdağ: Central province, 21.V.1973, *Prunus* sp., 1 ex., 22.V.1973, *Prunus* sp., 1 ex., 23.V.1973, *Prunus* sp., 1 ex., 28.V.1973, *Elaeagnus angustifolia* LINNAEUS 1753, 1 ex., Şarköy, 23.V.1975, *E. angustifolia*, 1 ex., totally 34 specimens.

Distribution in Turkey: Turkey [as *Melanotus cranicollis* (ERICHSON 1841)] (LODOS 1998) Probably mistaken transcription of correct name (MERTLIK &

PLATIA 2008); Turkey (LODOS 1998; LÖBL & SMETANA 2007; MERTLIK & PLATIA 2008); West Anatolia, Denizli (Babadağ), İzmir (Yamanlar Mountain) (SHALBERG 1912-1913); İzmir [Bayındır, Ödemiş (Birgi)] (GULPERCİN & TEZCAN 2009). Distributional map of *M. crassicollis* in Turkey is given on Fig. 3.

### ***Melanotus (s.str.) fusciceps* (GYLLENHAL, 1817)**

**M a t e r i a l   e x a m i n e d :** Adana: Central province, 25.VII.1997, *Helianthus annuus* LINNAEUS 1753, 1 ex.; Ankara: Beypaşar, 09.VII.1979, light trap, 1 ex.; Antalya: Central province, 17.VIII.1991, on the ground, 1 ex., Alanya, 02.VII.1986, light trap, 1 ex., Güllük Dağı, 27.VII.1985, *Onopordum* sp., 2 exs.; Aydın: Kuyucak-Yaylali, 14.VII.1983, on the ground, 1 ex., Samsun Dağı, 14.VI.1977, weeds, 1 ex., Söke, 02.VI.1973, *Capparis* sp., 3 ex.; Balıkesir: Central province, 21.IV.1978, *Quercus* sp., 1 ex., Ayvalık-Sarımsaklı, 11.VIII.1979, light trap, 2 exs.; Bilecik: Gölpaşar, 15.VII.1972, weeds, 1 ex.; Diyarbakır: Central province, 23.IV.1977, light trap, 3 exs., 03.VII.1977, light trap, 1 ex., 16.VII.1977, light trap, 2 exs., 24.VII.1977, light trap, 4 exs., 26.VII.1977, light trap, 1 ex.; Elazığ: Central province, 31.VIII.1972, 1 ex.; Isparta: Gökcay, 09.VII.2003, 1 ex.; İstanbul: Central province, 23.VIII.1983, weeds, 1 ex., Erenköy, 07.VII.1975, weeds, 1 ex., Gümüşsu, 21.VI.1971, 1 ex., 19.VI.1974, *Eucalyptus* sp., 9 exs.; İzmir: Central province, 26.VI.1971, light trap, 1 ex., 26.VI.1977, light trap, 1 ex., 17.V.1978, light trap, 1 ex., 26.VI.1978, light trap, 1 ex., Bornova, 23.V.1961, 1 ex., 23.VI.1961, 1 ex., 19.VI.1974, 1 ex., 26.V.1975, poaceous plants, 1 ex., 06.VI.1975, *Populus* sp., 1 ex., 13.V.1977, weeds, 1 ex., 29.VI.1980, weeds, 1 ex., 10.VI.1983, weeds, 1 ex., 25.VII.1983, 2 exs., 11.X.1983, weeds, 1 ex., 20.VI.1984, 1 ex., 27.V.1986, weeds, 1 ex., 06.VII.2004, light trap, 1 ex., Çatalkaya, 22.VII.1969, 1 ex., Çeşme, 28.IV.1973, *P. elaeagnifolia*, 1 ex., 03.V.2003, light trap, 1 ex., 10.V.2003, light trap, 1 ex., 21.VI.2003, light trap, 8 exs., 28.VI.2003, light trap, 16 exs., 03.VII.2003, light trap, 1 ex., 05.VII.2003, light trap, 7 exs., 12.VII.2003, light trap, 4 exs., 19.VII.2003, light trap, 4 exs., 26.VII.2003, light trap, 1 ex., 03.VII.2004, light trap, 10 exs., 09.VII.2004, light trap, 1 ex., 10.VII.2004, light trap, 15 exs., 17.VII.2004, light trap, 4 exs., 26.VII.2004, light trap, 9 exs., 01.V.2005, light trap, 2 exs., pitfall trap, 1 ex., 02.VII.2005, light trap, 7 exs., 09.VII.2005, light trap, 12 exs., 10.VII.2005, light trap, 1 ex., 16.VII.2005, light trap, 7 exs., Doğanlar, VI.1975, light trap, 1 ex., Güzelbahçe, 03.VII.1983, on the ground, 1 ex., İnciraltı, 26.IV.1992, *Solanum lycopersicum* LINNAEUS 1753, 1 ex., Karaburun, 06.VII.1977, light trap, 20 exs., 26.VI.1978, light trap, 1 ex., 28.VI.1978, light trap, 1 ex., 05.VII.1978, light trap, 14 exs., 20.VII.1997, light trap, 5 exs., Karaburun-Mordoğan, 13.VII.1971, leguminoseous plants, 1 ex., 25.VII.1971, light trap, 2 exs., 20.VIII.1972, light trap, 1 ex., VII.1973, light trap, 7 exs., 25.V.1985, light trap, 1 ex., 09.VII.2003, light trap, 2 exs., Karşıyaka, 25.VI.1982, 1 ex., 28.VI.1982, 1 ex., Kemalpaşa-Armutlu, 27.IV.2004, *Prunus avium* LINNAEUS 1755, 1 ex., Kimlik, 11.VII.1965, *Pyrus communis* LINNAEUS 1752, 2 exs., Kemalpaşa-Ören, 17.VII.1998, bait trap, 1 ex., pitfall trap, 4 exs., 31.VII.1998, bait trap, 5 exs., pitfall trap, 1 ex., 08.VI.1999, bait trap, 1 ex., 25.VI.1999, pitfall trap, 4 exs., 03.VII.1999, pitfall trap, 1 ex., 20.VII.1999, bait trap, 16 exs., pitfall trap, 90 exs., 03.VIII.1999, bait trap, 1 ex., pitfall trap, 2 exs., 22.VI.2000, bait trap, 9 exs., Kimlik-Poyracık, 11.VII.1965, *P. communis*, 4 exs., Narlıdere, 02.VIII.1977, light trap, 2 exs., Ödemiş, 05.VI.1977, light trap, 2 exs., 25.IX.1977, light trap, 1 ex., Ödemiş-Bozdağ, 01.VII.2001, pitfall trap, 12 exs., 22.VII.2001, pitfall trap, 1 ex., Ödemiş-Hamamköy, 16.VIII.1984, *Castanea sativa* MILLER 1768, 1 ex., Selçuk, 20.VI.1971, *Citrullus lanatus* (THUNBERG 1774), 1 ex., 29.VI.1971, *C. lanatus*, 4 exs., Şirince, 25.VI.2003, weeds, 4 exs., Tire, 07.VIII.1984, *C. sativa*, 3 exs., Tire-Cambazlı, 07.VIII.1984, *C. sativa*, 1 ex., Yamanlar, VIII.1973, on the ground, 1 ex., Yeşilyurt, 10.VI.1999, *Vicia* sp., 1 ex.; Kastamonu: Taşköprü, 21.VII.1979, light trap, 1 ex.; Karaman: Central province, 05.VIII.1976, light trap, 5 exs., Ermenek, 09.VII.1980, *Tamarix* sp., 1 ex.; Kırklareli: Lüleburgaz, 25.VII.1973, *Fraxinus* sp., 1 ex.; Manisa: Central province, 03.VII.1998, bait trap, 2 exs., 17.VII.1998, bait trap, 3 exs., 31.VII.1998, bait trap, 5 exs., pitfall trap, 1 ex., 14.VIII.1998, bait trap, 1 ex., 31.V.1999, bait trap, 1 ex., 14.VI.1999, bait trap, 5 exs., pitfall trap, 1 ex., 28.VI.1999, bait trap, 1 ex., pitfall trap, 1 ex., 20.VII.1999, bait trap, 2 exs., pitfall trap, 5 exs., 03.VIII.1999, bait trap, 4 exs., pitfall trap, 1 ex., 17.VIII.1999, bait trap, 1 ex., 09.VII.2003, light trap, 1 ex., Akhisar,

11.VII.1983, light trap, 3 exs., Sultanyayası, 29.V.1970, *P. avium*, 1 ex.; Malatya: Central province, 28.VII.1972, weeds, 2 exs.; Mersin: Erdemli-Tarsus, 07.VII.1986, aerial collector, 1 ex.; Muğla: Bodrum, 04.VI.1973, *Avena sativa* LINNAEUS 1753, 1 ex., Fethiye, 08.VI.1973, *Triticum* sp., 1 ex.; Niğde: Central province, 30.VI.1980, light trap, 1 ex., totally 461 specimens.

Distribution in Turkey: Turkey [as *Melanotus robustus* ERICHSON 1841] (LODOS 1998); Turkey (LÖBL & SMETANA 2007; MERTLIK & PLATIA 2008); West, Central, East ve South Anatolia Region (LODOS 1998); İzmir (Selçuk-Efes-Meryemana, Menemen), Kocaeli (Karamürsel) [as *Melanotus robustus* ERICHSON 1841] (GUGLIELMI & PLATIA 1985); Diyarbakır (Central province), Çanakkale (Güzelyol, İntepe, Truva), İzmir (Menemen), Şanlıurfa (Karacadağ) (GUGLIELMI & PLATIA 1985); Adana [Central province, Balcalı, Ceyhan (Tatarlı), Kozan (Bağtepe)], Adiyaman (Besni), Ankara (Central province, Keçiören, Şereflikoçhisar), Antalya (Gazipaşa, Kumluca, Manavgat, Serik, Turunçova), Aydın (Yenihisar), Çankırı (Kentbağ), Denizli (Buldan), Elazığ, Erzincan (Kemaliye), Erzurum [Central province, İlca (Eğerti), Hatay (İskenderun, Kuşlak), Isparta [Eğirdir (Serpil), Sütçüler], İçel (Balandız, Çamlıayyla, Erdemli, Silifke, Tarsus], İstanbul, İzmir (Seferihisar), Kahramanmaraş (Afşin, Elbistan), Kars [Sarıkamış (Sünnetçi)], Kilis, Konya [Çumra, Güneyisnir (Gürağaç)], Kütahya, Malatya (Dam Province), Mardin [Midyat (Haberli)], Muğla [Central province, Datça (Kızlan), Muş, Niğde (Bor), Osmaniye (Central province, Kabayar), Şanlıurfa (Halfeti) (KESDEK et al. 2006); İzmir [Bornova, Karaburun (Mordoğan), Kemalpaşa] (GULPERCİN & TEZCAN 2009); İzmir (Kemalpaşa) (TEZCAN & GULPERCİN 2009; UZUM et al. 2009). Distributional map of *M. fusciceps* in Turkey is given on Fig. 4.

#### *Melanotus (s.str.) punctolineatus* (PELERİN, 1829)

Material examined: Çanakkale: Gökcadea, 26-29.V.1975, weeds, 1 ex.; Elazığ: Hankendi, 31.VIII.1972, 1 ex.; İzmir: Çeşme, 28.IV.1973, *P. elaeagnifolia*, 3 exs., 03.V.2003, light trap, 1 ex., 10.V.2003, light trap, 1 ex., 10.VII.2005, light trap, 1 ex., 16.VII.2005, light trap, 1 ex., Ödemiş, 14.V.1973, *Ulmus* sp., 1 ex., 18.IV.1990, *Solanum tuberosum* LINNAEUS 1753, 4 exs., Ödemiş-Bozdağ, 14.V.1973, weeds, 2 exs., 29.V.2003, *Pelargonium* sp., 2 exs.; Kocaeli: İzmit-Gölcük, 19.VI.2003, *Populus* sp., 1 ex., totally 19 specimens.

Distribution in Turkey: Turkey (LODOS 1998; LÖBL & SMETANA 2007; MERTLIK & PLATIA 2008); Mersin (Silifke, Namrun-Çamlıayyla) (GUGLIELMI & PLATIA 1985); İzmir [Bornova, Ödemiş (Central province, Bozdağ)] (GULPERCİN & TEZCAN 2009). Distributional map of *M. punctolineatus* in Turkey is given on Fig. 5.

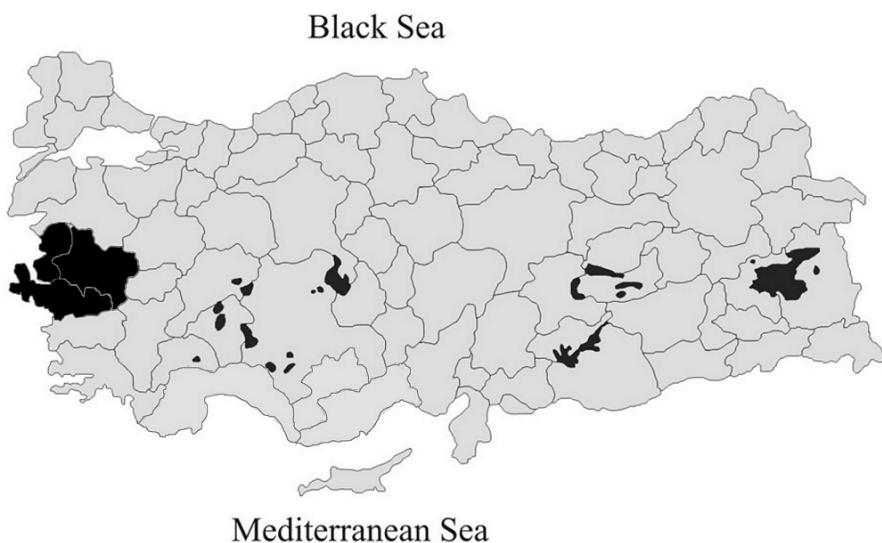
#### *Melanotus (Spheniscosomus) cuneiformis* (BAUDI DI SELVE, 1871)

Material examined: İzmir: Çeşme, 01.V.2005, *Pelargonium* sp., 1 ex., Ödemiş-Bozdağ, 01.VII.2001, pitfall trap, 1 ex., totally 2 specimens.

Distribution in Turkey: Turkey (LÖBL & SMETANA 2007; MERTLIK & PLATIA 2008). Distributional map of *M. cuneiformis* in Turkey is given on Fig. 6.

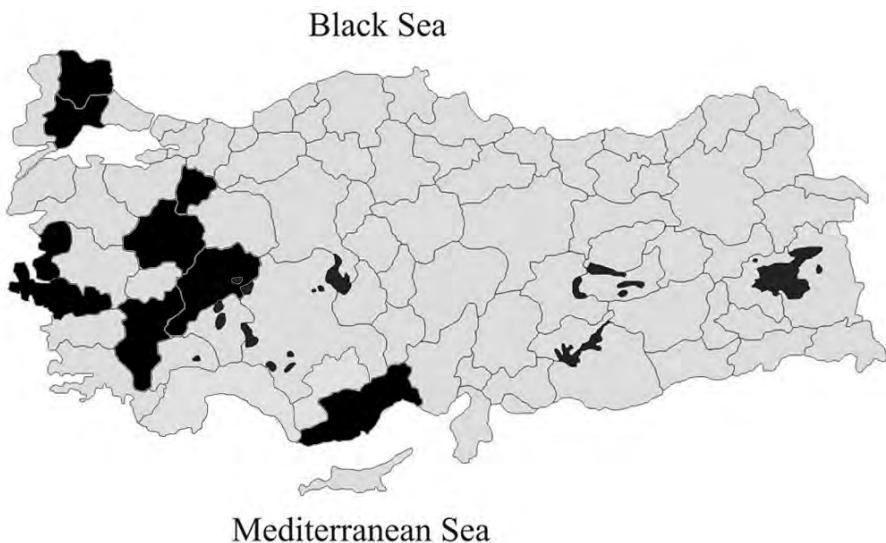


**Fig. 1:** Distribution of *Melanotus (s. str.) brunnipes* (GERMAR, 1824) in Turkey.



**Fig. 2:** Distribution of *Melanotus (s. str.) castanipes* (PAYKULL, 1800) in Turkey.

1496



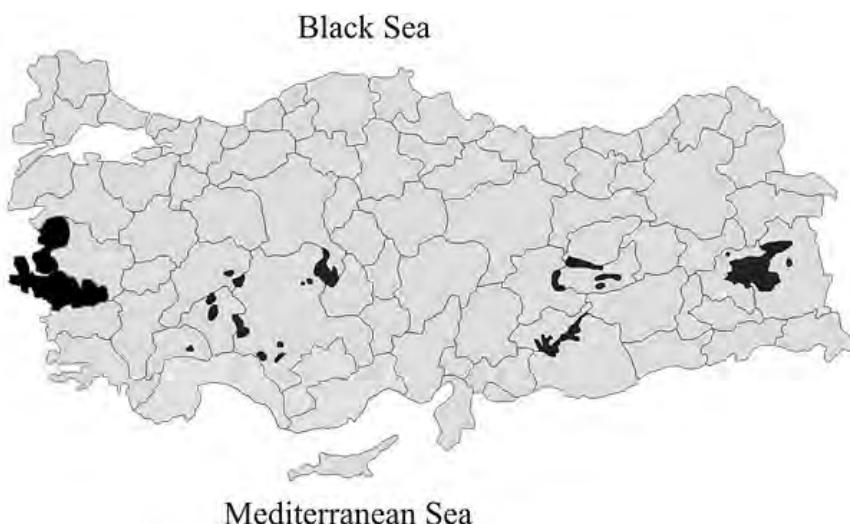
**Fig. 3:** Distribution of *Melanotus* (s. str.) *crassicollis* (ERICHSON, 1841) in Turkey.



**Fig. 4:** Distribution of *Melanotus* (s. str.) *fusciceps* (GYLLENHAL, 1817) in Turkey.



**Fig. 5:** Distribution of *Melanotus* (s. str.) *punctolineatus* (PELERIN, 1829) in Turkey.



**Fig. 6:** Distribution of *Melanotus* (*Spheniscosomus*) *cuneiformis* (BAUDI DI SELVE, 1871) in Turkey.

### Zusammenfassung

Vorliegende Arbeit behandelt Melanotinae-Material (Elateridae), das an verschiedenen Orten in der Türkei im Zeitraum 1961 bis 2005 aufgesammelt wurde. Sechs Arten aus der Gattung konnten nachgewiesen werden, die Funddaten nebst Verbreitungsangaben für die Türkei wurden festgehalten.

## References

- GUGLIELMI A. & G. PLATIA (1985): Contributio alla conoscenza oks Elateridi di Grecia e Turchia. — *Fragmenta Entomologica*, Roma **18** (1): 169-224.
- GULPERCIN N. & S. TEZCAN (2006): Contribution to the Elateridae (Coleoptera) fauna of cherry orchards in Izmir province of Turkey. — VIII<sup>th</sup> European Congress of Entomology, 17-22 September 2006, Izmir, Turkey. Abstract Book, 1-160, 120.
- GULPERCIN N. & S. TEZCAN (2009): Faunistic notes on the species of Elateridae (Coleoptera) in Izmir province of Turkey. — *Munis Entomology and Zoology* **4** (2): 519-526.
- GULPERCIN N. & S. TEZCAN (2010): Distributional Catalogue of Turkish Elateridae (Insecta: Coleoptera) Fauna. — Meta Basim, Bornova, Izmir, Turkey, 1-63.
- HEYDEN L.V., REITTER E. & J. WEISE (1906): Catalogus Coleopterorum Europae, Caucasi et Armeniae Rossicae. Berlin, 774pp.
- KABALAK M. & O. SERT (2005): Ankara İli Elateridae (Coleoptera) familyası türleri üzerinde faunistik çalışmalar. — *Türkiye Entomoloji Dergisi* **29** (1): 49-60.
- KABALAK M. & O. SERT (2011): Faunistic, ecological and zoogeographical evaluations on the Click-Beetles (Coleoptera: Elateridae) of Middle Part of the Blacksea Region of Turkey. — *Annales de la Societè entomologique de France* (N. S.): International Journal of Entomology **47**: 3-4.
- KESDEK M., PLATIA G. & E. YILDIRIM (2006): Contribution to the knowledge of clickbeetles fauna of Turkey (Coleoptera: Elateridae). — *Entomofauna* **35**: 417-432.
- LODOS N. (1998): *Türkiye Entomolojisi VI*. — Ege Üniversitesi Ziraat Fakültesi Yayınları No: 529, Bornova, Izmir, 2-50.
- LÖBL I. & A. SMETANA (2007): Catalogue of Palearctic Coleoptera. Volume 4. Elateroidea, Derodontoidea, Bostrichoidea, Lymexyloidea, Cleroidea, Cucujoidea. — Apollo Books, Stenstrup, 1-935.
- MERTLIK J. & G. PLATIA (2008): Catalogue of the family Cebrionidae, Elateridae, Lissomidae, Melasidae and Throscidae from Turkey. — *Elateridarium* **2**: 1-40.
- SAHLBERG J. (1912-1913): Coleoptera Mediterranean Orientalia, quae in Aegyptia, Palaestina, Syria, Caramania atque in Anatolia occidentali anno 1904. — *Ofversigt af Finska Vetenskaps-Societetens Förhandlingar* **60** (13): 127-132.
- TEZCAN S. & N. GULPERCIN (2009): Izmir yörensi entegre kiraz bahçelerinde ışık tuzaklarla yakalanan taklaböcekleri (Coleoptera: Elateridae). — Selçuk Üniversitesi, Ziraat Fakültesi Dergisi **23** (50): 41-45.
- UZUM A., GULPERCIN N., TEZCAN S. & R. TANYERI (2009): Organik bağ ve meyve bahçelerinde çukur tuzak ve besin tuzaklarla yakalanan Taklaböcekleri (Coleoptera: Elateridae). — *Tarım Türk Dergisi* **4** (19): 74-76.

Authors' addresses:

Dr. Nilay GULPERCIN  
 Ege University,  
 Natural History Application and Research Center  
 TR-Bornova-Izmir, Turkey  
 E-mail: nilay.gulpercinc@gmail.com

Prof. Dr. Serdar TEZCAN  
 Ege University, Faculty of Agriculture,  
 Department of Plant Protection  
 TR-Bornova-Izmir, Turkey  
 E-mail: serdar.tezcan@gmail.com

# ZOBODAT - [www.zobodat.at](http://www.zobodat.at)

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Linzer biologische Beiträge](#)

Jahr/Year: 2014

Band/Volume: [0046\\_2](#)

Autor(en)/Author(s): GÜLPERCİN NILAY, TEZCAN SERDAR

Artikel/Article: [Contribution to the knowledge of the Melanotinae \(Coleoptera, Elateridae\) fauna of Turkey 1491-1498](#)