

**POORLY KNOWN TAXA FOR TURKISH LEAF BEETLES  
(COLEOPTERA: CHRYSOMELIDAE) WITH  
ZOOGEOGRAPHICAL REMARKS**

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[Özdikmen, H., Güven, M. & Turgut, S. 2007. Poorly known taxa for Turkish leaf beetles (Coleoptera: Chrysomelidae) with zoogeographical remarks. Munis Entomology & Zoology, 2 (2): 469-480]

**ABSTRACT:** Ten poorly-known taxa for Turkish leaf beetles, *Pachybrachys velarum* Warchałowski, 1998 and *Cryptocephalus paphlagonius* Sassi et Kismali, 2000 to subfamily Cryptocephalinae, *Bromius obscurus* (Linnaeus, 1758) to subfamily Eumolpinae, *Diorhabda persica* (Faldermann, 1837), *Galerucella tenella* (Linnaeus, 1761) and *Galeruca rufa* Germar, 1824 to subfamily Galerucinae, *Phyllotreta striolata* (Fabricius, 1803), *Altica lythri* Aube, 1843, *Dibolia rugulosa* Redtenbacher, 1849 and *Psylliodes chrysocephalus* ab. *collaris* Weise, 1888 to subfamily Alticinae are presented with zoogeographical remarks and chorotype information. All taxa except *Galeruca rufa* Germar, 1824 are secondly reported from Turkey after the first record or original description. *Galeruca rufa* Germar, 1824 is recorded for the first time with the exact locality in Turkey. *Pachybrachys velarum* Warchałowski, 1998 and *Cryptocephalus paphlagonius* Sassi et Kismali, 2000 are endemic to Turkey. So, many new data are contributed to information on range of these species in Turkey.

**KEY WORDS:** Clytrinae, Cryptocephalinae, Eumolpinae, Galerucinae, Alticinae, Chrysomelidae, Turkey.

With this work, nine species which were recently reported by the various authors as first record to the fauna of Turkey were investigated faunistically and zoogeographically. The samples were collected by different collectors also including the author, H. Özdkmen, from various parts of Turkey in 1964, 1966, 1988, 1990, 1994, 1997, 1999, 2001, 2003, 2004, 2006 and were deposited in Gazi University and Nazife Tuatay Plant Protection Museum (Ankara). All given species except *Galeruca rufa* in the present text are secondly reported from Turkey after the first record or original description.

Information in the present text is given in following order:

The data, Names, Material examined, Records in Turkey, Range, Remarks and Chorotype under the title for each species is given.

**Names.** In these parts, as possible as the whole other names including all infraspecific names are provided.

**Material examined.** Material examined covers the original records for Turkey.

**Records in Turkey.** These parts include previous records that have been given by various authors in different literatures. The whole records are evaluated as only concerning province and locality in related

reference. Each record is accompanied by the author's name and publication date of related reference.

**Range.** In these parts, the whole distribution areas in the world are provided for each taxon.

**Remarks.** In these parts, general distribution range is given in Turkey chiefly.

**Chorotype.** The present zoogeographical characterization is based on the chorotype classification of Anatolian fauna, recently proposed by Vigna Taglianti et al. (1999). In the text, one chorotype description identified for each taxon.

**Maps.** The maps are given in the plates. For each taxon, a map showing distribution patterns in the provinces of Turkey is used. The maps were prepared by used ArcView GIS Version 3.1.

## Subfamily CRYPTOCEPHALINAE

### ***Pachybrachys* Chevrolat, 1837**

Type species: *Cryptocephalus hieroglyphicus* Laicharting, 1781

### ***Pachybrachis* (s.str.) *velarum* Warchałowski, 1998**

**Material examined:** Ankara prov.: Kızılıcahamam, Soğuksu National Park, 1200m, 03.06.1990, leg. H. Özdi̇kmen, 1 specimen; Kızılıcahamam, Güvem, 1100m, 28.05.1997, leg. H. Özdi̇kmen, 3 specimens; Bolu prov.: Merkeşler, 14.06.1994, leg. A. Kalkandelen, 1 specimen.

**Records in Turkey:** Type loc.: Erzincan prov.: Refahiye (Warchałowski, 1998).

**Range:** Turkey (Anatolia) (Warchałowski, 1998).

**Remarks:** New to Ankara and Bolu provinces and endemic to Turkey. The first record of this species in Turkey was given by Warchałowski (1998). It is secondly reported from Turkey by our records after the original description. The presented records indicate that it may be distributed only in N Turkey.

**Chorotype:** This species has the Anatolian chorotype.

### ***Cryptocephalus* Geoffroy, 1762**

[Type species: *Chrysomela sericea* Linnaeus, 1758]

### ***Cryptocephalus* (s.str.) *paphlagonioides* Sassi et Kısmalı, 2000**

**Material examined:** Ankara prov.: Kızılıcahamam, Soğuksu National Park, 1500m, 07.08.1990, leg. H. Özdi̇kmen, 1 specimen; Kızılıcahamam, Soğuksu National Park, 1400m, 10.08.1990, leg. H. Özdi̇kmen, 1 specimen; Karabük prov.: Safranbolu, Hizar Yanı place, 740m, 14.05.2003, leg. H. Özdi̇kmen, 1 specimen; Safranbolu, Bulak village, Mağaradüzü district, 21.05.2004, leg. H. Özdi̇kmen, 1 specimen; Karaman prov.: Karaman-Mut, 1140-1430m, 30.06.2000, leg. H. Özdi̇kmen, 1 specimen; Kastamonu prov.: Kastamonu-Tosya road, Tosya-Ilgaz pass, 1650m, 16.06.2003, leg. H. Özdi̇kmen, 2 specimens; between Azdavay-Pınarbaşı, 885m, 18.06.2003, leg. H. Özdi̇kmen, 1 specimen; Doğanyurt-Dağyurdu, 727m, 18.06.2004, leg. H. Özdi̇kmen, 2 specimens; Küre, Masruf pass env., 1200m, 16.08.2003, leg. H. Özdi̇kmen, 1 specimen; Nevşehir prov.: Avanos, 1120m, 22.07.1992, leg. H. Özdi̇kmen, 1 specimen.

**Records in Turkey:** Type loc.: Sivas prov.: Çamlıbeli pass (Sassi & Kısmalı, 2000).

**Range:** Distributed in Asia Minor (Warchałowski, 2003); Anatolian, Sivas, Çamlıbeli Gecidi, Turkey (Borowiec, 2006).

**Remarks:** New to Ankara, Karaman, Karabük, Kastamonu and Nevşehir provinces and endemic to Turkey. The first record of this species in Turkey was given by Sassi & Kismali (2000). It is secondly reported from Turkey by our records after the original description. The presented records indicate that it may be distributed only in N Turkey especially in whole “*Paphlagonia refigium*” and Central Turkey.

**Chorotype:** This species has the Anatolian chorotype.

### Subfamily EUMOLPINAE

#### ***Bromius* Chevrolat, 1837**

Type species: *Chrysomela obscura* Linnaeus, 1758

#### ***Bromius obscurus* (Linnaeus, 1758)**

**Names:** *obscura* Linnaeus, 1758 (*Chrysomela*); *villosula* Schrank, 1781 (*Chrysomela*); *vitis* auct.; ab. *epilobii* Weise, 1882; ab. *weisei* Heyden, 1883; *concinus* Weise, 1998; *lewisi* Weise, 1998.

**Material examined:** Osmaniye prov.: Toprakkale, 75 m, 27.06.2006, leg. H. Özdkmen, 6 specimens; Fakıuşağı village, 218m, 26.06.2006, leg. H. Özdkmen, 1 specimen.

**Records in Turkey:** Erzurum prov.: İhica, Rizekent (Aslan & Özbek, 2000).

**Range:** Europe, Siberia, Japan (Winkler, 1924-1932); European part of Russia, Eastern Kazakhstan, Uzbekistan, Kirgizia, Northern China, Korea, Japan, Europe, North America (Lopatin, 1977); All Europe, The Urals, Kazakhstan, Central Asia, Siberia, Mongolia, North China, Japan, Kuril Islands (Aslan & Özbek, 2000); Distributed in almost whole Europe and Palaearctic part of Asia, introduced also to North America (Warchałowski, 2003); Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Danish mainland, Estonia, Finland, French mainland, Germany, Hungary, Italian mainland, Kaliningrad Region, Latvia, Liechtenstein, Lithuania, Macedonia, Norwegian mainland, Poland, Romania, Russia North, Russia Northwest, Slovakia, Slovenia, Spanish mainland, Sweden, Switzerland, ?The Netherlands, Ukraine, Yugoslavia (Incl. Serbia, Kosovo, Voivodina, Montenegro), East Palearctic, Nearctic region (Audisio, 2005); Palearctic Region; introduced to N America (Borowiec, 2006).

**Remarks:** New to Osmaniye province in S Turkey. The first record of this species in Turkey was given by Aslan & Özbek (2000). It is secondly reported from Turkey by our records. The presented records indicate that it may be rather widely distributed in Turkey from North to South. *C. villosula* Schrank, 1781 which is the Southern phenotype regarded by some authors as a distinct subspecies of the species.

**Chorotype:** This species has the Holarctic or Sibero-European + Nearctic chorotype.

### Subfamily GALERUCINAE

#### ***Diorhabda* Weise, 1883**

Type species: *Galeruca elongata* Brulle, 1832

#### ***Diorhabda persica* (Faldermann, 1837)**

**Names:** *persica* Faldermann, 1837 (*Galeruca*); *sareptana* Stierlin, 1863; *flaveola* Brancsik, 1899.

**Material examined:** Aksaray prov.: Zengen, Yukarı Göndelen, 1060m, 23.06.1997, leg. H. Özdkmen, 1 specimen; Ankara prov.: Şereflikoçhisar, Tuz Gölü, 980m, 03.06.1997, leg. H. Özdkmen, 2 specimens; Kayseri prov.: Yahyalı, Derebağı, Şelale district, 1280m, 25.06.1997, leg. H. Özdkmen, 4 specimens; Konya prov.: Kulu, Tavşançalı, 1000m, 31.05.1997, leg. H. Özdkmen, 1 specimen.

**Records in Turkey:** Ankara prov.: Şereflikoçhisar, Kars prov.: Yaylali (Aslan & Özbek, 2000).

**Range:** South of European Russia, Caspian area, Buchara (Winkler, 1924-1932); Kazakhstan, Central Asia, Iran, Syria (Lopatin, 1977); Distributed in Syria, Iran and Central Asia (Warchałowski, 2003); Syria, Iran, C Asia (Borowiec, 2006).

**Remarks:** New to Aksaray, Kayseri and Konya provinces in Turkey. The first record of this species in Turkey was given by Aslan & Özbek (2000). It is secondly reported from Turkey by our records. The presented records indicate that it may be rather widely distributed in Turkey except W and NW (European Turkey).

**Chorotype:** This species has the Turanian chorotype.

### ***Galerucella* Crotch, 1873**

Type species: *Chrysomela nymphaeae* Linnaeus, 1758

#### ***Galerucella (Neogalerucella) tenella* (Linnaeus, 1761)**

**Names:** *tenella* Linnaeus, 1761 (*Chrysomela*); *parva* Herbst, 1783 (*Chrysomela*); *semenovi* Rybakov, 1889 (*Lochmaea*); ab. *flavidula* Reitter, 1912; ab. *melanaria* Everts, 1920.

**Material examined:** Bolu prov.: Akçakoca, 03.08.1999, leg. M. Özdemir, 2 specimens.

**Records in Turkey:** Artvin prov.: Şavşat, Karagöl, Kars prov.: Kağızman (Aslan & Özbek, 2000).

**Range:** Europe (Winkler, 1924-1932); European part of Russia, Kazakhstan, Northern Kirgizia, Siberia, Primor'e, Northern and Central Europe, Mongolia, Northwestern China (Lopatin, 1977); Europe, Central Asia, Mongolia (Aslan & Özbek, 2000); Distributed from Catalonia, East England and West Norway to basin of Amur and Ussuri (Warchałowski, 2003); Austria, Belgium, Britain I., Bulgaria, Czech Republic, Danish mainland, Estonia, Finland, French mainland, Germany, Hungary, Italian mainland, Latvia, Liechtenstein, Lithuania, Luxembourg, Norwegian mainland, Poland, Russia South, Slovakia, Spanish mainland, Sweden, Switzerland, The Netherlands, Ukraine, East Palaearctic, Near East (Audisio, 2005); Palaearctic Region from Catalonia to Ussuri (Borowiec, 2006).

**Remarks:** New to Bolu province in NW Turkey. The first record of this species in Turkey was given by Aslan & Özbek (2000). It is secondly reported from Turkey by our record. The presented records indicate that it may be distributed in N Turkey.

**Chorotype:** This species has the Sibero-European chorotype.

### ***Galeruca* Müller, 1764**

Type species: *Chrysomela taneceti* Linnaeus, 1758

#### ***Galeruca (Emarhopa) rufa* Germar, 1824**

**Material examined:** Mardin prov.: 03.03.1966, leg. N. Adıgüzel, 3 specimens.

**Records in Turkey:** Anatolia (no locality) (Gruiev & Tomov, 1979); Turkey (no locality) (Warchałowski, 1976) (Ex. Aslan, Warchałowski, Özbek, 2000).

**Range:** Europe, Balkans, European Russia (Winkler, 1924-1932); Europe, Turkey (Aslan, Warchałowski, Özbek, 2000); Distributed in South France, Italy, basin of Danube, Balkan Peninsula and Ukraine, to basin of lower Volga (Warchałowski, 2003); Austria, Bulgaria, Czech Republic, French mainland, Greek mainland, Hungary, Italian mainland, Sardinia, Sicily, Slovakia, Ukraine, Yugoslavia (Incl. Serbia, Kosovo, Voivodina, Montenegro), Near East (Audisio, 2005); S France, Italy, basin of Danube, Balkan Pen., Ukraina, basin of lower Volga (Borowiec, 2006).

**Remarks:** It is recorded for the first time from Turkey with exact locality.

**Chorotype:** This species has the European chorotype.

## Subfamily HALTICINAE

### ***Phyllotreta* Chevrolat, 1837**

Type species: *Chrysomela nemorum* Linnaeus, 1758

### ***Phyllotreta striolata* (Fabricius, 1803)**

**Names:** *striolata* Fabricius, 1803 (*Crioceris*); *vittata* Fabricius, 1801 (*Crioceris*); *sinuata* Redtenbacher, 1849 (*Haltica*); ab. *monticola* Weise, 1888; ab. *discedens* Weise, 1888.

**Material examined:** Düzce prov.: Akçakoca, Kirazlı, 30.08.1988, leg. Ö. Ataç, 1 specimen.

**Records in Turkey:** Erzurum prov.: Palandöken (Aslan et al, 1999).

**Range:** Balkan Peninsula, Holarctic Region, India, Nepal, Sikkim, Thailand, Vietnam, Hainan Island, Taiwan, Sumatra (Gruev, 1992); Europe (Mohr, 1966), Europe, Palearctic and Oriental Asia (Gruev & Döberl, 1997) (Aslan, 1997); General distribution: Europe, Palearctic and Oriental Asia, Sumatra (Aslan, Gruev, Özbeğ, 1999); Distributed in almost whole Palearctic Region from Portugal and the British Isles to Japan incl. Ryukyu, in Indomalayan Subcontinent and Sumatra, introduced in South Africa and North America (Warchałowski, 2003); Albania, Austria, Belarus, Belgium, Bosnia and Herzegovina, Britain I., Bulgaria, Crete, Czech Republic, Danish mainland, Estonia, European Turkey (Incl. Imroz I. - Gökçeada, but not those in the Sea of Marmara), Finland, French mainland, Germany, Greek mainland, Hungary, Italian mainland, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Norwegian mainland, Poland, Portuguese mainland, Romania, Russia Central, Russia North, Slovakia, Slovenia, Spanish mainland, Sweden, Switzerland, The Netherlands, Ukraine, Yugoslavia (Incl. Serbia, Kosovo, Voivodina, Montenegro), Afro-tropical Region (introduced to Southern Africa), East Palearctic, Nearctic region (introduced to Northern America), Oriental Region (Audisio, 2005); Whole Palearctic Region, great part of Oriental Region, introduced in RPA, N America (Borowiec, 2006).

**Remarks:** New to Düzce province in NW Turkey. The first record of this species in Turkey was given by Aslan, Gruev & Özbeğ (1999). It is secondly reported from Turkey by our record. The presented records indicate that it may be distributed at least in N Turkey.

**Chorotype:** This species has the Holarctic chorotype.

### ***Altica* Müller, 1764**

Type species: *Chrysomela oleracea* Linnaeus, 1758

### ***Altica lythri* Aube, 1843**

**Names:** *lythri* Aube, 1843; f. *coerulea* Aube, 1843; f. *viridis* Aube, 1843; f. *aenea* Aube, 1843; *epilobii* Allard, 1859 (*Graptodera*).

**Material examined:** İzmir prov.: Bergama, 11.05.1964, leg. Y. Sürmeli, 2 specimens.

**Records in Turkey:** Erzurum prov.: İlca (Athkonak), Oltu (Çamlıbel), Olur (Süngübayıar), Üniversite kampusu, Trabzon prov. (Aslan et al, 1999).

**Range:** Europe (Winkler, 1924-1932); Balkan Peninsula, Europe (Gruev, 1992); Central Europe (Heikertinger & Csiki, 1940, Mohr, 1966), Europe (Gruev, 1992) (Aslan, 1997); Europe (Aslan, Gruev, Özbeğ, 1999); Distributed in Central and Southern part of Europe, from England and Spain to Greece, Ukraine and Caucasian countries (Warchałowski, 2003); Albania, Austria, Balearic Is., Belgium, Bosnia and Herzegovina, Britain I., Bulgaria, Croatia, Czech Republic, Danish mainland, Finland, French mainland, Germany, Greek mainland, Hungary, Italian mainland, Luxembourg, Macedonia, Poland, Romania, Russia Central, Sardinia, Slovakia, Slovenia, Spanish mainland, Switzerland, The Netherlands, Ukraine, Yugoslavia (Incl. Serbia, Kosovo, Voivodina, Montenegro), Near East (Audisio, 2005); Europe north to S Finland, east to Ukraine, Azerbaijan, Daghestan, Turkey (Borowiec, 2006).

**Remarks:** New to İzmir province in W Turkey. The first record of this species in Turkey was given by Aslan, Gruev & Özbek (1999). It is secondly reported from Turkey by our record. The presented records indicate that it may be distributed at least in N and W Turkey.  
**Chorotype:** This species has the European chorotype.

### ***Dibolia* Latreille, 1829**

Type species: *Haltica cynoglossi* Koch, 1803

### ***Dibolia rugulosa* Redtenbacher, 1849**

**Material examined:** İçel prov.: Fındıkpinar, 1035m, 31.05.2001, leg. H. Özdkmen, 1 specimen.

**Records in Turkey:** Erzurum prov.: Turtum (Yumaklı), Oltu (Çamlıbel) (Aslan et al., 1999).

**Range:** Central and East Europe (Winkler, 1924-1932); Mid Europe, N to Denmark; South Europe, Caucasus (Gruev, 1992); Central, Southern and Eastern Europe, Caucasus (Aslan, Gruev, Özdek, 1999); Distributed from France and Belgium to Russia, Ukraine and Caucasian countries (Warchałowski, 2003); Albania, Andora, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, French mainland, Germany, Greek mainland, Hungary, Italian mainland, Luxembourg, Slovakia, Slovenia, Spanish mainland, Switzerland, Ukraine, Yugoslavia (Incl. Serbia, Kosovo, Voivodina, Montenegro), Near East (Audisio, 2005); Europe except North, Turkey, Caucasus (Borowiec, 2006).

**Remarks:** New to İçel province in S Turkey. The first record of this species in Turkey was given by Aslan, Gruev & Özdek (1999). It is secondly reported from Turkey by our record. The presented records indicate that it may be rather widely distributed in Turkey.

**Chorotype:** This species has the European chorotype.

### ***Psylliodes* Berthold, 1827**

Type species: *Chrysomela cryptocephala* Linnaeus, 1758

### ***Psylliodes* (s.str.) *chrysocephalus* (Linnaeus, 1758)**

### ***Psylliodes chrysocephalus ab. collaris* Weise, 1888**

**Names:** ssp. *chrysocephalus* Linnaeus, 1758 (*Chrysomela*); ssp. *inops* Peyerimhoff, 1915; *anglicanus* Gmelin, 1790 (*Altica*); *nigricollis* Marsham, 1802 (*Chrysomela*); *cyanopterus* Illiger, 1807 (*Haltica*); *nuceus* Illiger, 1807 (*Haltica*); *sophiae* Illiger, 1807 (*Haltica*); *sordida* Stephens, 1831 (*Macrocnema*); *nigricornis* Leesberg, 1881; *atlanticus* Fauvel, 1897; *longipennis* Pic, 1903; *castanea* Abeille, 1907; ab. *erythrocephalus* Linnaeus, 1758 (*Chrysomela*); ab. *anglicus* Fabricius, 1775 (*Altica*); ab. *allardi* Bach, 1859; ab. *kunzei* Foudras, 1859; ab. *peregrinus* Weise, 1888; ab. *collaris* Weise, 1888; ab. *catinensis* Weise, 1888; ab. *sicardi* Weise, 1894; var. *angulicollis* Heikertinger, 1926; ab. *tristiculus* Csiki, 1953.

**Material examined:** Adana prov.: Ulukışla-Pozanti road, Tabaklı village, 1145m, 29.05.2001, leg. H. Özdkmen, 2 specimens; Pozanti-Mersin road, Çamliyayla turn, 690m, 30.05.2001, leg. H. Özdkmen, 3 specimens; Afyon prov.: Bayat, 10.06.1998, *Triticum* and *Papaver*, leg. M. Özdemir, 1 specimen; Sandıklı, Bozağaç, 1000m, 14.06.1998, *Malus*, leg. M. Özdemir, 1 specimen; Aksaray prov.: Exit of Ankara, 1020m, 20.05.1997, leg. H. Özdkmen, 2 specimens; Aksaray-Ulukışla road, 1135m, 29.05.2001, leg. H. Özdkmen, 8 specimens; Akçakent, 1280m, 01.06.1997, leg. H. Özdkmen, 3 specimens; Hasan Mountain, Aşağı Dikmen, 1100m, 01.06.1997, leg. H. Özdkmen, 87 specimens; Hasan Mountain, Aşağı Dikmen, 1100m, 01.06.1997, leg. H. Özdkmen, 1 specimen; Güzelyurt, Bağlık district, 1340m, 02.06.1997, leg. H. Özdkmen, 7 specimens; Gülağaç, Kızılıkaya, Aşaklı Höyük, 1100m, 03.06.1997, leg. H. Özdkmen, 3 specimens; Belisırma, 1280m, 03.06.1997, leg. H. Özdkmen, 13 specimens; Ağacıören, Yenişabanlı, Velipınarı, 1340m, 21.06.1997, leg. H. Özdkmen, 15 specimens; Aşağı Dikmen- Yukarı Dikmen, 1150m, 22.06.1997, leg. H. Özdkmen, 1 specimen; Ortaköy, Hocaveli village, 1260m, 22.06.1997, leg. H. Özdkmen, 13

specimens; Ortaköy-Aksaray road, 1400m, 22.06.1997, leg. H. Özdkmen, 11 specimens; Ortaköy, Çatalçeşme-Hocaveli village, 1360m, 22.06.1997, leg. H. Özdkmen, 3 specimens; Zengen, Yukarı Göndelen, 1060m, 23.06.1997, leg. H. Özdkmen, 1 specimen; Güzelyurt, Selime, 1240m, 27.06.1997, Leg. H. Özdkmen, 2 specimens; Güzelyurt, 1700m, 27.06.1997, Leg. H. Özdkmen, 1 specimen; Ulukışla junction 5. km, 1275m, 29.05.2001, leg. H. Özdkmen, 9 specimens; Aksaray-Ulukışla road, 1135m, 29.05.2001, leg. H. Özdkmen, 1 specimen; **Ankara prov.:** Eymir Lake, 30.06.1980, leg. Y. Özdemir, 2 specimens; Yenimahalle, Ballıkuyumcu village, 12.06.1990, leg. M. Aydemir, 1 specimen; Kızılıcahamam, Soğuksu National Park, 1500m, 21.06.1991, leg. H. Özdkmen, 1 specimen; Kızılıcahamam-Güvem, 07.07.1993, leg. H. Özdkmen, 1 specimen; Şereflikoçhisar, Hürev village, 990m, 20.05.1997, leg. H. Özdkmen, 1 specimen; Şereflikoçhisar, Tuz Gölü, 980m, 03.06.1997, leg. H. Özdkmen, 1 specimen; Şereflikoçhisar – Evren, Evren, 1220m, 21.06.1997, leg. H. Özdkmen, 7 specimens; Evren, Şereflikoçhisar – Evren road, 1000m, 21.06.1997, leg. H. Özdkmen, 2 specimens; Kızılıcahamam, Yenimahalle, 1100m, 21.08.1997, leg. H. Özdkmen, 1 specimen; Ayaş, 11.05.1999, *Orchard*, leg. Y. Özdemir, 1 specimen; **Eskişehir prov.:** Central, Çavlum village, 23.06.1997, *Malus*, leg. Y. Özdemir, 3 specimens; Kaymaz, 23.06.1997, *Medicago*, leg. Y. Özdemir, 1 specimen; **İçel prov.:** Mut-Karaman, 1140-1430m, 30.06.2000, leg. H. Özdkmen, 2 specimens; Mut, near Sason Bridge, 1275m, 01.06.2001, leg. H. Özdkmen, 9 specimens; Mut-Karaman road, 1345m, 02.06.2001, leg. H. Özdkmen, 3 specimens; **Kayseri prov.:** Yeşilhisar, Güzelöz, 1260m, 02.06.1997, leg. H. Özdkmen, 1 specimen; Yahyalı, Derebağı, Şelale district, 1280m, 02.06.1997, leg. H. Özdkmen, 2 specimens; Yeşilhisar, Güzelöz, 1260-1320m, 25.06.1997, leg. H. Özdkmen, 5 specimens; Yeşilköy-Yahyalı road, 1350m, 26.06.1997, leg. H. Özdkmen, 6 specimens; **Konya prov.:** Ereğli, Kutören village, 23.05.1971, leg. G. Altınayar, 2 specimens; Meram, Hatunsaray, 06.06.1991, leg. M. Aydemir, 1 specimen; Çumra, Kaşınhan, 06.06.1991, leg. M. Aydemir, 1 specimen; Kulu, Tavşançalı, 1000m, 31.05.1997, leg. H. Özdkmen, 38 specimens; Kulu, 1230m, 31.05.1997, leg. H. Özdkmen, 3 specimens; Kulu, 1100m, 21.06.1997, leg. H. Özdkmen, 9 specimens; Sultanhani, 920m, 27.06.1997, leg. H. Özdkmen, 4 specimens; 30. km of Ayrancı-Ereğli road, 1010m, 02.06.2001, leg. H. Özdkmen, 1 specimen; Exit of Ereğli, 960m, 03.06.2001, leg. H. Özdkmen, 1 specimen; **Nevşehir prov.:** Avanos, 25.08.1956, leg. S. Balamir, 1 specimen; Tilköy, 1270m, 25.06.1997, Leg. H. Özdkmen, 2 specimens; Avanos, 970m, 23.07.1997, leg. H. Özdkmen, 3 specimens; **Niğde prov.:** Aktaş, 05.06.1996, leg. Y. Özdemir, 3 specimens; Bor, Melendiz, Feslegen village, 03.07.1996, leg. H. Özdkmen, 3 specimens; Altunhisar, Akçaören, 1280m, 01.06.1997, leg. H. Özdkmen, 8 specimens; Ulukışla-Altunhisar, 1200m, 01.06.1997, leg. H. Özdkmen, 6 specimens; Bor, Üstünkayı, 07.06.1997, leg. H. Özdkmen, 23 specimens; Bor, Feslegen village, 08.06.1997, leg. H. Özdkmen, 3 specimens; Ulukışla-Exit of Adana, 1300m, 23.06.1997, leg. H. Özdkmen, 3 specimens; 5 km to Ulukışla, 1400m, 23.06.1997, leg. H. Özdkmen, 1 specimen; Değirmenli-Ovacık, E of Melendiz Mountain, 1500m, 24.06.1997, leg. H. Özdkmen, 8 specimens; Kayseri-Niğde road, Entry of Niğde, 1420m, 24.06.1997, leg. H. Özdkmen, 1 specimen; Çamardı, 1550m, 24.06.1997, leg. H. Özdkmen, 13 specimens; Çamardı, Bulduruş pass, 1720m, 24.06.1997, leg. H. Özdkmen, 1 specimen; Araplı-Höyük, 1360m, 26.06.1997, leg. H. Özdkmen, 2 specimens; Nevşehir road junction, 1380m, 26.06.1997, leg. H. Özdkmen, 2 specimens; Melendiz, Gölli mountain, 1680m, 27.06.1997, leg. H. Özdkmen, 1 specimen; Melendiz, Gölli mountain, 1580m, 27.06.1997, leg. H. Özdkmen, 3 specimens; Tepeköy, 02.07.1997, leg. H. Özdkmen, 1 specimen; Gebere dam, 02.07.1997, leg. H. Özdkmen, 3 specimens; Azatlı-Tepeköy road, Murozu dam, 02.07.1997, leg. H. Özdkmen, 3 specimens  
Niğde, 06-07.1997, leg. H. Özdkmen, 1 specimen; Akkaya dam, 06.07.1997, leg. H. Özdkmen, 2 specimens; Bor, Okçu village, 06.07.1997, leg. H. Özdkmen, 1 specimen; Gebere dam, 29.07.1997, leg. H. Özdkmen, 1 specimen.

**Records in Turkey: As *P. chrysoccephalus*:** Turkey (Anonymous, 1907); European Turkey: İstanbul prov. (Gruev, 1992); Asian Turkey: İstanbul prov.: Haydarpaşa, Kocaeli prov.: Sapanca, Bilecik prov., İzmir prov. (Bodemeyer, 1900; Ganglbauer, 1905); Hatay prov.: Akbaş, Adana prov. (Heikertinger, 1916); Asia Minor (Heikertinger, 1926; Csiki & Heikertinger, 1940); Eskisehir prov., İstanbul prov.: Küçük Çekmece (Tölg, 1938); İçel prov.: Erdemli, Kavallıdere, Hatay prov.: Antakya, Urabat (Medvedev, 1970); İzmir prov.: Kemalpaşa, Ödemiş, Selçuk, Karaburun, Menemen (Kısmalı, 1973); Balıkesir prov.: Manyas Kuş Cenneti, İzmir prov., Ankara prov.: Lalahan, Adana prov.: Balcalı (Gruev & Kasap,

1985); Antalya prov.: Gündoğmuş, Erzurum prov.: Oltu (Zerdenes), Tortum, İçel prov.: Silifke, Hatay prov.: Yeşilköy (Dörtçöy) (Aslan & Warchalowski, 2001). **As *Psylliodes chrysocephalus* ab. *collaris*:** Ankara prov.: Şereflikoçhisar (Aslan & Warchalowski, 2001).

**Range:** Europe, Madeira (Winkler, 1924-1932); Balkan Peninsula, Europe, Sicily, Caucasus, Turkey, Rhodes, Syria, Jordan, Lebanon, Israel, Cyprus, Morocco, Algeria, Tunisia, Azores, Madeira, Canary Islands (Gruev, 1992); General distribution: Europe, Caucasus, Turkey, Iran, Eastern Mediterranean, Northwest Africa (Aslan, Gruev, Özbeğ, 1999); As *Psylliodes chrysocephalus* ab. *collaris* Wesie, 1888: World distribution: Western Palearctic (Gruev, 1992) (Aslan & Warchalowski, 2001); Distributed in whole Mediterranean area, almost whole Europe, Asia Minor and Caucasian countries (Warchalowski, 2003); Albania, Austria, Azores, Balearic Is., Belarus, Belgium, Bosnia and Herzegovina, Britain I., Bulgaria, Corsica, Crete, Croatia, Cyclades Is., Cyprus, Czech Republic, Danish mainland, Dodecanese Is., Estonia, European Turkey (Incl. Imroz I. - Gökçeada, but not those in the Sea of Marmara), Finland, Franz Josef Land (Not incl. Ushakova I. and Vize I.), French mainland, Germany, Greek mainland, Hungary, Italian mainland, Kaliningrad Region, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Madeira, Malta, Moldova, Republic of, Norwegian mainland, Novaya Zemlya, Poland, Portuguese mainland, Romania, Russia Central, Russia East, Russia North, Russia Northwest, Russia South, Sardinia, Sicily, Slovakia, Slovenia, Spanish mainland, Sweden, Switzerland, The Netherlands, Ukraine, Yugoslavia (Incl. Serbia, Kosovo, Voivodina, Montenegro), Near East, North Africa (Not including Sinai Peninsula) (Audisio, 2005); Europe, Mediterranean Subregion, Asia Minor, Caucasus (Borowiec, 2006).

**Remarks:** New to Adana, Afyon, Eskişehir, İçel, Kayseri, Konya, Nevşehir and Niğde provinces in Turkey as *Psylliodes chrysocephalus* ab. *collaris*. The first record of it in Turkey was given by Aslan & Warchalowski (2001). It is secondly reported from Turkey by our records. The presented records indicate that it may be rather widely distributed in Turkey.

**Chorotype:** This species has the West Palearctic chorotype.

## ACKNOWLEDGEMENTS

The authors wish to thank Dr. Yasemin Özdemir for the permission of studying on specimens in Nazife Tuatay Plant Protection Museum (Ankara, Turkey).

## LITERATURE CITED

- Anonymous.** 1907. Collections du Musée d'Histoire Naturelle de Son Altesse Royale Ferdinand I Prince de Bulgarie, Par la Direction. Sophia Imprimerie de l'Etat., 337-343, 1907.
- Aslan, İ.** 1997. Erzurum ili Alticinae (Coleoptera, Chrysomelidae) türleri üzerinde faunistik ve sistematik bir araştırma. Atatürk Üniversitesi, Fen Bilimleri Enstitüsü, Bitki Koruma Anabilim Dalı, Doktora Tezi, 214 ss.
- Aslan, İ., Gruev, B. and H. Özbeğ.** 1999. A Preliminary Review of the Subfamily Alticinae (Coleoptera, Chrysomelidae) in the Turkey. Turkish Journal of Zoology 23 (4): 373-414.
- Aslan, İ. and H. Özbeğ.** 2000. New Records of Leaf-Beetles, Chrysomelidae (Coleoptera) from Turkey. J. Ent. Res. Soc. 2(1): 1-7.
- Aslan, İ., Warchalowski, A. and H. Özbeğ.** 2000. A Preliminary Review of the Subfamily Galerucinae (Coleoptera, Chrysomelidae) in Turkey. J. Ent. Res. Soc. 2(2): 27-42.

- Aslan, İ. & Warchałowski, A.** 2001. New records of the subfamily Alticinae (Coleoptera, Chrysomelidae) for the Turkish fauna. *J. Ent. Res. Soc.* 3 (1-2): 1-4.
- Audisio,** 2005. Fauna Europaea. Last update 7 March 2005. Version 1.2. Available from: [http://www.faunaeur.org/full\\_results.php?id=11097](http://www.faunaeur.org/full_results.php?id=11097)
- Bodemeyer, H. E.** 1900. Quer durch Klein Asien in der Bulghar Dagh. Eine Naturwissenschaftliche Studienreise, 169 pp.
- Borowiec, L.** 2006. Chrysomelidae. The Leaf Beetles of Europe and the Mediterranean Subregion (Checklist and Iconography). Last modification: 25 August 2006. Available from: <http://culex.biol.uni.wroc.pl/cassidae/European%20Chrysomelidae/index.htm>
- Csiki, E. & Heikertinger, F.** 1940. Chrysomelidae, Halticinae, in: Junk, W. and Schenckling, S., Coleotterorum catalogus, 's-Gravenshage (1911-1940), pars 59: 1-215.
- Ganglbauer, K. L.** 1905. Ergebnisse einer naturwissenschaftlichen Reise zum Erdschias Dagh (Klein Asien). Ausgeführt Dr. A. Penther und Dr. E. Lederbauer. Ann. Nat- thst Wien, 20. Coleoptera, p. 246-290.
- Gruev, B.** 1992. Geographical distribution of the leaf beetle subfamilies Lamprosomatinae, Eumolpinae, Chrysomelinae, Alticinae, Hispinae and Cassidinae (Coleoptera: Chrysomelidae) on the Balkan Peninsula. Plovdiv University Press, Plovdiv, 510+IV pp.
- Gruev, B. A. and V. Tomov.** 1979. Zur Kenntnis einiger in der Türkei, Jugoslawien und Griechenland vorkommender Arten der Familie Chrysomelidae (Coleoptera) aus der zoologischen Staatssammlung München. *Spixiana* 2(3): 259-267.
- Heikertinger, F.** 1916. Zur Kenntnis der Halticinengattung Psylliodes (Coleoptera, Chrysomelidae). *Ant. Blätter*, 1-3: 29-47.
- Heikertinger, F.** 1926. Bestimmungstabelle der Halticinengattung Psylliodes aus dem palaearktischen Gebiete. II. Die hellfarbigen Arten. *Kol. Rundschau*, 12: 101-138.
- Kısmalı, S.** 1973. Izmir İli ve Çevresinde Kültür Bitkilerinde Zarar Yapan Chrysomelinae ve Halticinae (Chrysomelidae: Coleoptera) Altfamilyalarına ait türler, Tanımları, Konukçuları, Yayılışları ve Kısa Biyolojileri Üzerine Araştırmalar. E.Ü. Ziraat. Fak. Derg. Seri A, 10 (2): 341-378.
- Lopatin, I.** 1977. Leaf beetles (Chrysomelidae) of Middle Asia and Kazakhstan. Nauka, Leningrad, 268p.
- Medvedev, L.** 1970. A List of Chrysomelidae collected by Dr. W. Wittmer in Turkey (Coleoptera). *Rev. Suisse de Zool.*, 77: 309-319.
- Sassi, D. and S. Kısmalı.** 2000. The Cryptocephalinae of Turkey, with Informations on their Distribution and Ecology. *Mem. Soc. Ent. Ital.* 78 (1): 71-129.
- Taglianti, A. V., Audisio, P. A., Biondi, M., Bologna, M. A., Carpaneto, G. M., De Biase, A., Fattorini, S., Piattella, E., Sindaco, R., Venchi, A. and M. Zapparoli.** 1999. A proposal for a chorotype classification of the Near East fauna, in the framework of the Western Palaearctic Region. *Biogeographia* 20: 31-59.
- Tölg, F.** 1938. Feststellungen von Nahrungspflanzen kleinasiatischer Halticinen und Ceuthorrhynchinen. *Kol. Rundschau*, 24 (6): 234-241.
- Warchałowski, A.** 1976. Biogeographische Studien über die Blattkäfer der Pontischen Provinz (Coleoptera: Chrysomelidae). *Polskie Pismo Entomologiczne* 46: 29-94.

**Warchałowski, A.** 1998. Über einige kleinasiatische Arten der Gattung *Pachybrachis* Chevrolat, 1837 (Coleoptera: Chrysomelidae: Cryptocephalinae). Annales Zoologici, 48: 85-90.

**Warchałowski, A.** 2003. Chrysomelidae. The Leaf Beetles of Europe and the Mediterranean area. Warszawa.

**Winkler, A.** 1924-1932. Catalogus Coleopterorum regionis palaearcticae, Verlag von Albert Winkler, Wien, Austria, 1204-1205.

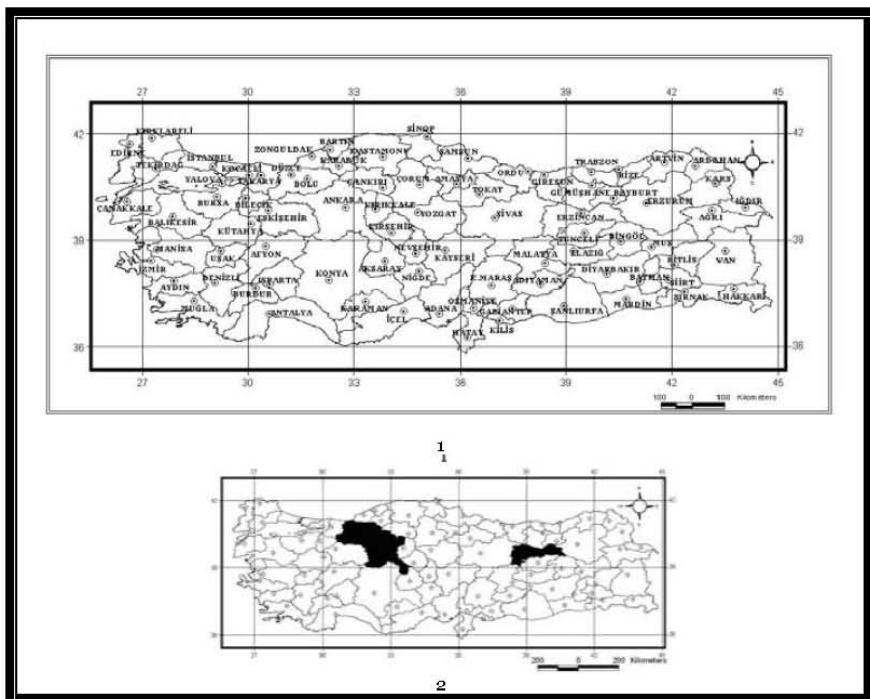


Plate I. Figures 1-2. (1) The provinces in Turkey (2) Distributional patterns in Turkey of *Pachybrachys velarum* Warchałowski, 1998.

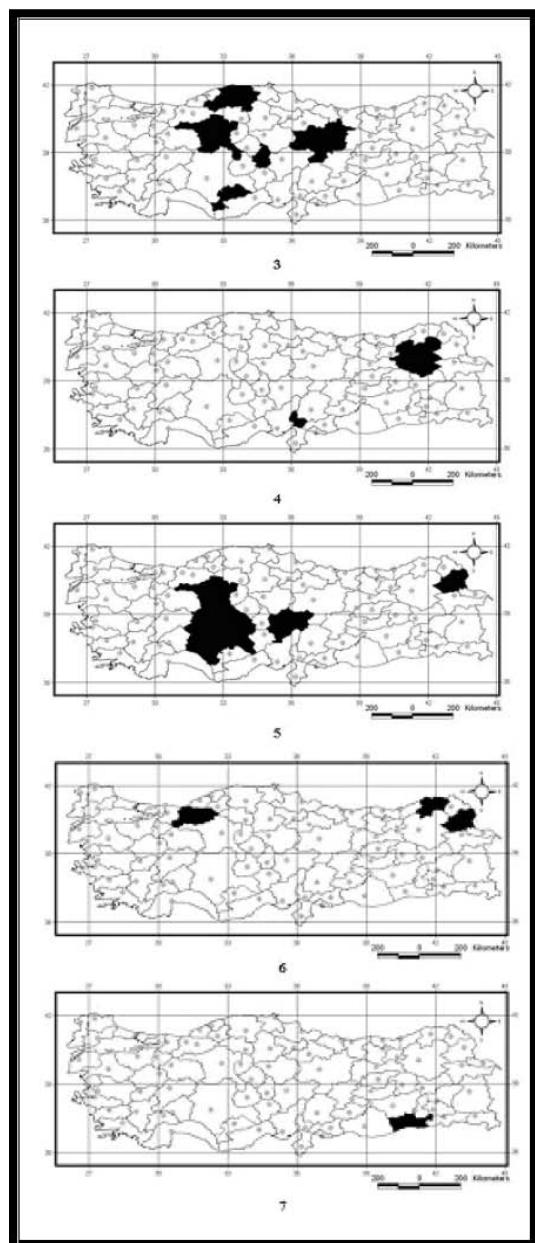


Plate II. Figures 3-7. Distributional patterns in Turkey of (3) *Cryptocephalus paphlagonius* Sassi et Kismalı, 2000 (4) *Bromius obscurus* (Linnaeus, 1758) (5) *Diorhabda persica* (Faldermann, 1837) (6) *Galerucella tenella* (Linnaeus, 1761) (7) *Galeruca rufa* Germar, 1824.

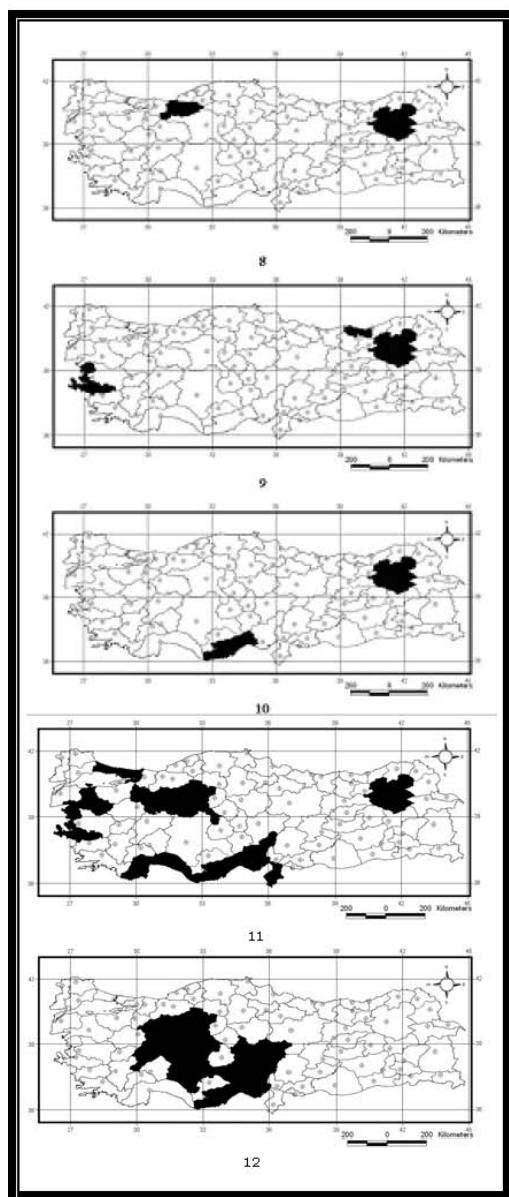


Plate III. Figures 8-12. Distributional patterns in Turkey of (8) *Phyllotreta striolata* (Fabricius, 1803) (9) *Altica lythri* Aube, 1843 (10) *Dibolia rugulosa* Redtenbacher, 1849 (11) *Psylliodes chrysocephalus* (Linnaeus, 1758) (12) *Psylliodes chrysocephalus* ab. *collaris* Weise, 1888.