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On some Ceutorhynchinae (Coleoptera: Curculionidae) from Turkish Thrace Region, with New Records to Turkish Fauna

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ABSTRACT

The present note lists 21 Ceutorhynchinae species thus far unknown from Turkish Thrace. Among these species, *Ceutorhynchus pyrrhorhynchus* (Marsham, 1802), *Glocianus moelleri* (C. G. Thomson, 1868) and *Glocianus ragusae* (C. Brisout, 1884) are new records for Ceutorhynchinae fauna of Turkey.

Key words: Coleoptera, Curculionidae, Ceutorhynchinae, new records, Edirne province, Turkish Thrace, Turkey.

INTRODUCTION

Ceutorhynchinae is one of the most diverse subfamilies of Curculionidae, and has been recently listed in detail throughout the world with 1301 extant and 15 extinct species within 167 genera in 11 tribes by Colonnelli (2004). Ceutorhynchinae is currently represented by more than 1400 species with additional new records in the last decade, among which some were given by Colonnelli (2005, 2011), Białooki and Szypuła (2006), Korotyaev (2006), Huang *et al*. (2008), Korotyaev and Alonso-Zarazaga (2010), Kratky (2012) and Korotyaev and Nasreddinov (2013). These curculionids are also well represented in Palaearctic with 865 species of 104 genera belonging to 9 tribes (Colonnelli, 2004).

Ceutorhynchinae include economically important species whose larvae and adults sometimes heavily damage cultivated crops of Brassicaceae, whereas some other species of the subfamily are beneficial, being used as biocontrol agents against invasive weeds (Toshova *et al*., 2009).

Studies mainly focused on Ceutorhynchinae of Turkey were published by Avgın and Colonnelli (2011), Colonnelli (2004, 2005), Gözüaçık and Özgen (2005), Gültekin (2001, 2005, 2014), Gültekin and Colonnelli (2006), Korotyaev (1997), Korotyaev and Gültekin (2001), Korotyaev *et al*. (2002), Lodos *et al*. (1978, 2003), Sert and Çağatay (1999) and Sert (2004, 2005, 2009). The subfamily is currently represented in Turkey by about 250 species, of which 34 are only known from Turkey (Colonnelli, 2004, 2005, 2013; Gültekin and Colonnelli, 2006; Velázquez de Castro, 2013). Most of the records given in these studies were reported from Central, Mediterranean and

Northeastern Regions of Turkey. In recent comprehensive studies in these regions, 40 species of Ceutorhynchinae were reported from Central Anatolia by Sert (2005, 2009), 51 species were reported from Mediterranean Region by Avgın and Colonnelli (2011) and Gültekin (2014) and about half of the number known from Turkey so far from Northeastern Anatolia by Gültekin (2001).

Ceutorhynchinae is represented in Turkish Thrace Region where the study area is located by 25 species in 13 genera of 4 tribes (Lodos *et al*., 1978; Velázquez de Castro, 2013). When the species known from Bulgaria and Greece, both adjacent to Edirne province, and those which have not yet been recorded from Turkish Thrace and Turkey are taken into account, the actual number of species living in the region is expected to be higher than the one currently known.

The present study was carried out in order to study the poorly known Ceutorhynchinae fauna of Edirne province, located in Turkish Thrace region. The study also aims to reveal hitherto unrecorded Ceutorhynchinae from Turkish Thrace and to clarify their distributions in the region, and to obtain data for a possible use of some of the species as biocontrol agents by identifying species feeding on weedy plants. The results of the first part of our studies are presented and discussed in the present note.

MATERIAL AND METHODS

Ceutorhynchinae specimens were collected from March 2011 to June 2012 in 21 localities representing various habitats in Edirne Province of Turkish Thrace (Fig. 1, Table.1).

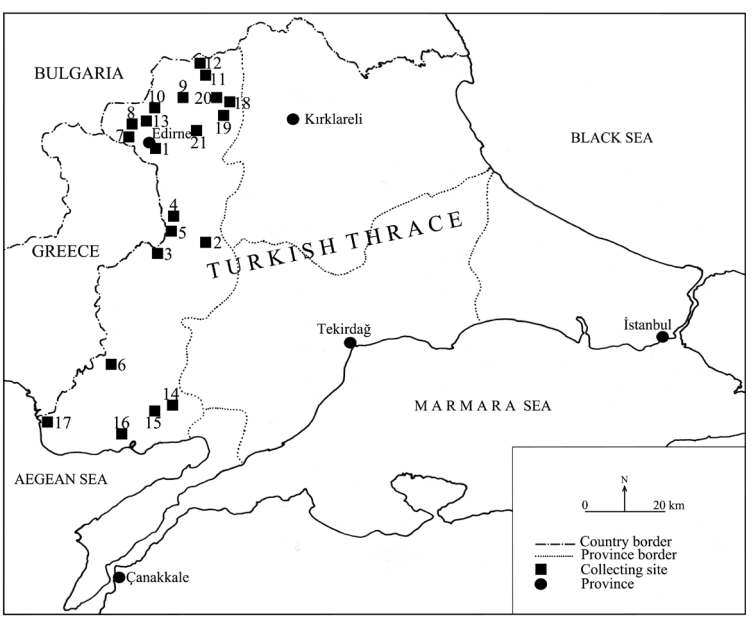

Fig. 1. Topographic positions of the localities studied in Turkish Thrace.

Table 1. List of localities and collecting dates.

Locality No.	Locality	Coordinates	Altitude (m)	Habitat characteristics	Date
1	Edirne–Center (T.Ü., Balkan Campus)	41°38′422″N 26°37′198″E	63	Pond environment, grassland and meadow	05.4.2011
					08.4.2011
					12.4.2011
					02.5.2011
					17.5.2011
					04.6.2011
2	Uzunköprü–Yeniköy	41°19′480″N 26°45′140″E	108	Vineyard (wild grasses, grassland, poppies)	02.5.2011
3	Uzunköprü–Gemici	41°19′719″N 26°33′745″E	25	River environment, poplar grove, grassland	23.4.2011
4	Orhaniye	41°30′227″N 26°38′736″E	63	Grassland-meadow	12.5.2011
5	Elçili	41°28′243″N 26°37′453″E	56	Grassland-meadow (poppy, chamomilla and butter cup)	13.5.2011
6	İpsala	40°53′557″N 26°23′131″E	60	Grassland-meadow	17.5.2011
7	Yenikadın	41°42′206″N 26°26′832″E	44	Wheat fields and grassland in its border	24.5.2011
8	Ekmekçi	41°44′704″N 26°27′422″E	147	Wheat fields and grassland in its border	24.5.2011
9	Lalapaşa	41°51′584″N 26°42′243″E	219	Wheat fields and grassland in its border	25.5.2011
10	Hatip	41°48′417″N 26°30′332″E	99	Canola fields and grasslands in its border	25.5.2011
11	Lalapaşa–Hacıdanişment	41°54′296″N 26°48′711″E	393	Grassland-meadow	26.5.2011
12	Lalapaşa–Kalkansöğüt	41°57′756″N 26°48′092″E	375	Grassland-meadow	26.5.2011
13	Büyükdöllük	41°45′165″N 26°39′831″E	91	Grassland-meadow	26.5.2011
14	Keşan–Bahçeköy	40°47′061″N 26°40′953″E	56	Grassland-meadow	27.5.2011
15	Keşan–Büyükdoğanca	40°45′401″N 26°34′940″E	30	Grassland-meadow	28.5.2011
16	Keşan–Koruklu	40°39′438″N 26°25′578″E	60	Grassland-meadow	29.5.2011
17	Enez	40°43′569″N 26°05′004″E	10	Grassland-meadow	30.5.2011
18	Süloğlu Dam	41°47′321″N 26°53′926″E	196	Wheat fields and grasslands in its border	31.5.2011
19	Süloğlu	41°43′700″N 26°53′932″E	142	Wheat and corn fields and grasslands in their border	31.5.2011
20	Süloğlu–Tatarlar	41°50′141″N 26°53′204″E	258	Grassland-meadow (shepherd's-purse, chamomilla, poppy)	23.3.2012
					26.4.2012
					01.5.2012
					08.5.2012
					09.5.2012
					15.5.2012
					16.5.2012
					22.5.2012
					18.6.2012
21	Süloğlu–Hacıumur	41°43′170″N 26°47′470″E	124	Field borders (poppy)	04.5.2012

Specimens were obtained by using a sweeping net or a beating tray primarily in open fields. Collected specimens were killed with ethyl acetate and then glued on triangular labels for identifications. Male aedeagus was used for the identification of

species. For preparation of genitalia, samples were macerated in hot water for 5-10 min., then their genitalia were extracted and glued on cards pinned beneath the specimens. Dried specimens were labeled and are preserved in Zoological Museum of Biology Department of Trakya University.

All specimens were identified with the help of the relevant literature (Hoffmann,1954; Sert and Çağatay, 1999; Colonnelli, 2004 and Morris, 2008). Identification keys prepared by Zabaluev (2013) and Lompe (2012) on Coleoptera were also used.

Species are arranged alphabetically in the results section. The map showing the collecting localities in the study region is given in Fig. 1.

RESULTS

During our field trips in Edirne, five genera (Calosirus Thomson, Coeliastes Weise, Prisistus Reitter, Stenocarus Thomson and Zacladus Reitter) and 21 species within Ceutorhynchini tribe of Ceutorhynchinae were recorded for first time from Turkish Thrace. Among recorded species, *Ceutorhynchus pyrrhorhynchus*, *Glocianus moelleri* and *Glocianus ragusae* are new records for the Turkish fauna.

Tribe: CEUTORHYNCHINI Gistel, 1848

Calosirus terminatus (Herbst, 1795)

Material examined: loc.20: 23.3.2012, 1 ♀.

Distribution: Algeria, Austria, Azerbaijan, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, France, Georgia, Germany, Great Britain, Greece, Hungary, Ireland, Italy, Latvia, Luxembourg, Morocco, Netherlands, Poland, Portugal, Romania, Russia (South European Territory), Slovakia, Spain, Sweden, Switzerland, Syria, Turkey, Ukraine (Colonnelli, 2004; 2013).

Ceutorhynchus atomus Boheman, 1845

Material examined: loc.1: 05.4.2011, 1 ♂, 1 ♀.

Distribution: Algeria, Armenia, Austria, Belgium, Bosnia Herzegovina, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Hungary, Italy, Luxembourg, Morocco, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine (Colonnelli, 2004; 2013).

Ceutorhynchus chlorophanus Rouget, 1857

Material examined: loc.17: 1 ♀.

Distribution: Algeria, Armenia, Austria, Belgium, Bulgaria, Czech Republic, France, Germany, Greece, Hungary, Italy, Kazakhstan, Macedonia, Moldavia, Poland, Romania, Russia (South European Territory), Slovakia, Spain, Turkey, Ukraine (Colonnelli, 2004; 2013).

Ceutorhynchus fallax Boheman, 1845

Material examined: loc. 7: 1 ♀.

Distribution: Algeria, Armenia, Azerbaijan, Bulgaria, France, Georgia, Greece, Italy, Jordan, Moldavia, Morocco, Romania, Russia (South European Territory), Slovakia, Spain, Syria, Tunisia, Turkey (Colonnelli, 2004; 2013).

Ceutorhynchus nanus Gyllenhal, 1837

Material examined: loc.20: 26.4.2012, 1 ♀, 09.5.2012, 1 ♀.

Distribution: Armenia, Austria, Azerbaijan, Bulgaria, Cyprus, Czech Republic, France, Georgia, Germany, Greece, Hungary, Iran, Italy, Kazakhstan, Lebanon, Moldavia, Poland, Romania, Russia (Central and South European Territory), Slovenia, Slovakia, Turkey, Turkmenistan, Ukraine (Colonnelli, 2004; 2013).

Ceutorhynchus pyrrhorhynchus (Marsham, 1802)

Material examined: loc.6: 1 ♂; loc.9: 1 ♀; loc.11: 3 ♂♂, 1 ♀; loc.13: 4 ♂♂, 3 ♀♀; loc.14: 1 ♀; loc.16: 1 ♂; loc.20: 09.5.2012, 7 ♂♂, 8 ♀♀. **New record for Turkey.**

Distribution: Algeria, Austria, Belarus, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Greece, Hungary, Ireland, Luxembourg, Morocco, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland, Ukraine (Colonnelli, 2004; 2013).

Notes: Length 2.1-2.3 mm. In males base of rostrum dark and prorostrum red, whereas in females the rostrum is uniformly black, blackish-brown and sometimes reddish. Antennae red. Lateral tubercles of pronotum, wanting or almost so. Elytral striae without hairs; elytral intervals covered with two rows of whitish scales. Tibiae red, rarely brown; femora brown or red.

Ceutorhynchus pyrrhorhynchus was found in seven localities located in both the northern (Büyük Döllük, Lalapaşa, Hacıdanişment, Tatarlar) and southern (İpsala, Bahçeköy, Koruklu) parts of Edirne Province, all with similar grassland-meadow habitats. *Sisymbrium officinale, S. loeselli* and *S. irio*, the known host plants of *C. pyrrhorhynchus*, are annual herbaceous plants which can be found in cultivated and uncultivated areas and along roadsides (Colonnelli, 2004; Tübives, 2013). Since these plants are known to occur in Turkish Thrace and Anatolia (Tübives, 2013), the presence of *C. pyrrhorhynchus* in Edirne province appears not so surprising, and makes presence of the species in other provinces of Turkish Thrace and Anatolia possible. The easternmost records of *C. pyrrhorhynchus* which has an Euromediterranean distribution, were Bulgaria and Greece close to Edirne, so the present record expanded its range slightly eastward in southeastern Europe.

Ceutorhynchus turbatus Schultze, 1903

Material examined: loc.2: 02.5.2011, 1 ♀; loc.7: 1 ♀.

Distribution: Afghanistan, Armenia, Austria, Azerbaijan, Belgium, Bulgaria, Czech Republic, Denmark, France, Germany, Georgia, Great Britain, Hungary, Iran, Italy, Kazakhstan, Moldavia, Poland, Romania, Russia (South European Territory, West Siberia), Serbia, Slovakia, Switzerland, Syria, Tajikistan, Turkey, Turkmenistan, Ukraine, Uzbekistan (Colonnelli, 2004; 2013).

***Ceutorhynchus viridipennis* C. Brisout, 1869**

Material examined: loc.4: 2 ♂♂, 1 ♀; loc.5: 6 ♂♂, 1 ♀; loc.6: 1 ♀; loc.13: 1 ♀.

Distribution: Algeria, Croatia, France, Greece, Italy, Portugal, Spain, Turkey (Colonnelli, 2004, 2013).

***Coeliastes lamii* (Fabricius, 1792)**

Material examined: loc.1: 05.4.2011, 1 ♂, 12.4.2011, 1 ♀.

Distribution: Algeria, Armenia, Austria, Belarus, Belgium, Bulgaria, Czech Republic, Denmark, France, Georgia, Germany, Greece, Hungary, Italy, Latvia, Luxembourg, Moldavia, Morocco, Netherlands, Poland, Romania, Russia (Central and South European Territory), Serbia, Slovakia, Slovenia, Spain, Tunisia, Turkey, Ukraine (Colonnelli, 2004; 2013).

***Glocianus fennicus* (Faust, 1895)**

Material examined: loc.1: 08.IV.2011, 3 ♀♀; loc.2: 02.V.2011, 1 ♀; loc.3: 1 ♀.

Distribution: Armenia, Austria, Belarus, Czech Republic, Denmark, Finland, Georgia, Germany, Greece, Hungary, Kazakhstan, Latvia, Norway, Poland, Romania, Russia (North Europen Territory, East and West Siberia, Far East), Slovakia, Slovenia, South Korea, Spain, Sweden, Turkey, Ukraine (Colonnelli, 2004; 2013).

***Glocianus moelleri* (C. G. Thomson, 1868)**

Material examined: loc.12: 1 ♂. **New record for Turkey.**

Distribution: Albania, Austria, Belarus, Belgium, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Hungary, Italy, Kazakhstan, Netherlands, Poland, Romania, Russia (Central and North European Territory, West Siberia), Slovakia, Sweden, Switzerland, Ukraine, (Colonnelli, 2004; 2013).

Notes: Length about 2.5 mm. Pronotum rounded in sides; flat in base and hollow in middle. Elytra wide; elytral striae with a row of scales; elytral intervals with 2-3 rows of regular greyish thin scales; elytral suture with a patch formed a few pale scales in base.

Glocianus moelleri, another new record for Turkey, is a species with Eurosiberian distribution and its presence has not yet been quoted in Bulgaria and Greece, both countries close to Turkish Thrace Region (Colonnelli, 2004; 2013). *Crepis setosa*, which is one of the host plants of this species has an Eurosiberian distribution. It is an annual herbaceous plant found along roadsides in the north and the west of Turkey,

including Edirne province (Tübives, 2013), so one can expect to find *G. moelleri* also in eastern Black Sea and Aegean regions in Turkey.

Glocianus ragusae (C. Brisout, 1884)

Material examined: loc.20: 18.6.2012, 1 ♀. **New record for Turkey.**

Distribution: *Glocianus ragusae* was known only from Albania, Austria, Greece, Croatia, Italy (Colonnelli, 2004), and Macedonia (Colonnelli, 2013).

Notes: This species is smaller than *G. moelleri,* the other species of the genus recorded as new for Turkey in the present study. Length is about 2 mm. Pronotum covered with fine brown scales with rather sparse intermingled white ones, disc of pronotum with a line of white scales. Elytral striae with two rows of fine long brown scales and with scattered white scales which are wider at the base and narrower towards apex; elytral intervals with fine white scales.

Mogulones euphorbiae (C. Brisout, 1866)

Material examined: loc.11: 1 ♀.

Distribution: Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, France, Georgia, Germany, Great Britain, Greece, Hungary, Italy, Latvia, Moldavia, Netherlands, Norway, Poland, Romania, Russia (South European Territory), Serbia, Slovakia, Sweden, Turkey, Ukraine (Colonnelli, 2004; 2013).

Neoglocianus maculaalba (Herbst, 1795)

Material examined: loc.12: 1 ♂.

Distribution: Austria, Belgium, Bulgaria, Czech Republic, France, Germany, Hungary, Israel, Italy, Kazakhstan, Luxembourg, Moldavia, Netherlands, Poland, Portugal, Romania, Russia (South European Territory), Slovakia, Spain, Switzerland, Turkey, Turkmenistan, Ukraine (Colonnelli, 2004; 2013).

Prisistus obsoletus (Germar, 1824)

Material examined: loc.20: 22.5. 2012, 1 ♂.

Distribution: Algeria, Armenia, Austria, Bosnia Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Georgia, Germany, Greece, Hungary, Iran, Italy, Macedonia, Montenegro, Portugal, Romania, Serbia, Slovakia, Spain, Syria, Switzerland, Turkey, Ukraine (Colonnelli, 2004; 2013).

Sirocalodes mixtus (Mulsant and Rey, 1858)

Material examined: loc.10: 1 ♀.

Distribution: Algeria, Armenia, Belgium, Bulgaria, Croatia, Cyprus, Denmark, France, Georgia, Great Britain, Greece, Hungary, Iraq, Ireland, Israel, Italy, Lebanon, Morocco, Netherlands, Portugal, Romania, Slovenia, Spain, Syria, Tunisia, Turkey (Colonnelli, 2004; 2013).

***Stenocarus cardui* (Herbst, 1784)**

Material examined: loc.11: 1 ♀; loc.18: 1 ♀; loc.20: 01.5.2012, 1 ♀, 08.5.2012, 1 ♂, 2 ♀♀, 15.5.1012, 1 ♀, 16.5.2012, 1 ♀; loc.21: 1 ♀.

Distribution: Afghanistan, Algeria, Armenia, Austria, Azerbaijan, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, France, Georgia, Germany, Greece, Hungary, Iran, Italy, Kazakhstan, Kirgizstan, Malta, Morocco, Netherlands, Poland, Romania, Russia (West Siberia), Slovakia, Slovenia, Spain, Switzerland, Syria, Tunisia, Turkey, Turkmenistan, Ukraine, Uzbekistan (Colonnelli, 2004; 2013).

***Trichosirocalus horridus* (Panzer, 1801)**

Material examined: loc.5: 1 ♂, 1 ♀; loc.19: 1 ♂.

Distribution: Armenia, Australian Region, Austria, Azerbaijan, Belarus, Belgium, Bulgaria, Czech Republic, France, Georgia, Germany, Great Britain, Italy, Moldavia, Nearctic Region, Neotropical Region, Poland, Romania, Russia (South European Territory), Slovakia, Slovenia, Spain, Syria, Turkey, Ukraine, (Colonnelli, 2004; 2013).

***Trichosirocalus urens* (Gyllenhal, 1837)**

Material examined: loc.8: 1 ♀.

Distribution: Albania, Algeria, Bulgaria, Croatia, France, Greece, Israel, Italy, Lebanon, Morocco, Poland, Portugal, Spain, Syria, Turkey (Colonnelli, 2004; 2013).

***Zacladus asperatus* (Gyllenhal, 1837)**

Material examined: loc.8: 1 ♀.

Disribution: Armenia, Azerbaijan, Bulgaria, Georgia, Hungary, Iran, Kirgizstan, Romania, Russia (South European Territory), Turkey, Turkmenistan, Ukraine (Colonnelli, 2004; 2013).

***Zacladus exiguus* (Oliver, 1807)**

Material examined: loc.1: 04.6.2011, 3 ♀♀, 02.5.2011, 2 ♀♀, 17.5.2011, 1 ♂, 2 ♀♀; loc.8: 1 ♀; loc.15: 1 ♀.

Distribution: Albania, Algeria, Armenia, Azerbaijan, Austria, Bosnia-Herzegovina, Bulgaria, Czech Republic, France, Georgia, Germany, Great Britain, Hungary, Italy, Kazakhstan, Luxembourg, Netherlands, Romania, Russia (South European Territory), Serbia, Slovakia, Slovenia, Spain, Switzerland, Turkey, Ukraine, Uzbekistan (Colonnelli, 2004; 2013).

CONCLUSION

The number of species of Ceutorhynchinae known from Turkey was 258 so far (Colonnelli, 2013, Gültekin 2014) and this number was increased to 261 with the addition of three species for Turkey in the present study. In addition, 21 species recorded from Edirne province of Turkish Thrace were added to the species list

reported by Velázquez de Castro (2013) and Lodos *et al*. (1978). Five genera recorded in the present study, *Calosirus, Coeliastes*, *Prisistus, Stenocarus* and *Zacladus* are reported for first time from Turkish Thrace Region.

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REFERENCES

Avgın, S. S., Colonnelli, E., 2011, Curculionoidea (Coleoptera) from Southern Turkey. *African Journal of Biotechnology*, 10: 13555-13597.

Białooki, P., Szypuła, J., 2006, Review of *Ceutorhynchus canaliculatus* group, with description of a new species from Turkey (Coleoptera: Curculionidae: Ceutorhynchinae). *Genus*, 17(2): 269-272.

Colonnelli, E., 2004, *Catalogue of Ceutorhynchinae of the World with a Key to Genera (Insecta: Coleoptera: Curculionidae)*. Argania Editio. Barcelona, 124 pp.

Colonnelli, E., 2005, New species of Ceutorhynchinae from Western Palearctic (Insecta, Coleoptera: Curculionidae). *Aldrovandia*, 1: 89-101.

Colonnelli, E., 2011, Four new species of Palaearctic Ceutorhynchinae, with a key to species of *Datonychus* Wagner, 1944 (Coleoptera: Curculionidae). *Caucasian Entomological Bulletin*, 7(2): 191-126.

Colonnelli, E., 2013, *Subfamily Ceutorhynchinae Gistel, 1848* (pp. 176-214). *In*: Löbl, I., Smetana, A. (eds): Catalogue of Palaeartic Coleoptera. Curculionoidea II. Brill, Leiden, Boston, 8: 700 pp.

Gözüaçık, C., Özgen, İ., 2005, Türkiye faunası için yeni bir kayıt: *Ceutorhynchus peyerimhoffi* Hustache, 1916 (Coleoptera: Curculionidae*). Türkiye Entomoloji Dergisi*, 29: 237-239.

Gültekin, L., 2001, *Kuzeydoğu Anadolu Bölgesi Ceutorhynchinae (Coleoptera, Curculionidae) Türleri Üzerinde Faunistik ve Sistematik Çalışmalar*. Ph. D. Dissertation, Atatürk Üniversitesi, Fen Bilimleri Enstitüsü, Bitki Koruma Anabilim Dalı, Erzurum, 185 pp.

Gültekin, L., 2005, A new species of the weevil genus *Ceutorhynchus* Germar from Eastern Mediterranean Turkey (Coleoptera: Curculionidae). *Zootaxa*, 883: 1-5.

Gültekin, L., 2014, Spring fauna of Ceutorhynchinae (Coleoptera: Curculionidae) weevils from the Southeast of Mediterranean Turkey. *Journal of the Entomological Research Society*, 16: 49-59.

Gültekin, L., Colonnelli, E., 2006, A new species of *Mogulones* from Northeastern Turkey, with revision of the *Abshasicus* group (Insecta, Coleoptera: Curculionidae). *Aldrovandia*, 2: 15-22.

Hoffmann, A., 1954, *Faune De France, 59. Coléoptères Curculionides (deuxième partie)*. Lechevalier, Paris, 487-1207.

Huang, J., Yoshitake, H., Zhang, R., Ito, M., 2008, Two new species of *Hainokisaruzo* Yoshitake and Colonnelli from China, with a checklist of the species of the genus (Coleoptera: Curculionidae: Ceutorhynchinae). *Zootaxa*, 1776: 59-68.

Korotyaev, B. A., 1997, Material on weevils of the subfamily Ceutorhynchinae (Coleoptera, Curculionidae) of Palearctic. *Entomological Review*, 77: 445-485.

Korotyaev, B. A., 2006, A review of the weevil genus *Rhinoncomimus* Wagner (Coleoptera: Curculionidae: Ceutorhynchinae). *Entomologische Abhandlungen*, 63(1-2): 99-122.

Korotyaev, B. A., Alonso-Zarazaga, M. A., 2010, A new species of the weevil genus *Theodorinus* Korotyaev, 1982 (Coleoptera: Curculionidae: Ceutorhynchinae) from Spain. *Zoosystematica Rossica,* 19(2): 347-353.

Korotyaev, B. A., Gültekin, L., 2001, A new weevil species of the *Ceutorhynchus inaffectatus* group from North-Eastern Turkey (Coleoptera, Curculionidae). *Revue française d'Entomologie*, 23(1): 119-123.

Korotyaev, B. A., Gültekin, L., Colonnelli, E., 2002, A new species of the weevil genus *Coeliastes* (Coleoptera, Curculionidae) from Turkey. *Entomological Review*, 82(4): 500-505.

Korotyaev, B. A., Nasreddinov, Kh. A., 2013, A new species of the weevil genus *Trachelanthus* Korotyaev, 1980 (Coleoptera: Curculionidae: Ceutorhynchinae) from Tajikistan. *Caucasian Entomological Bulletin*, 9(1): 141-143.

Krátký, J., 2012, A new species of *Ceutorhynchus* (Coleoptera: Curculionidae: Ceutorhynchinae) from the Tatra Mountains in Slovakia. *Acta Entomologica Musei Nationalis Pragae*, 52(1): 259-265.

Lodos, N., Önder, F., Pehlivan, E., Atalay, R., 1978, *Ege ve Marmara Bölgesinin Zararlı Böcek Faunasının Tespiti Üzerine Çalışmalar.* T.C. Gıda, Tarım ve Hayvancılık Bakanlığı, Zirai Mücadele ve Zirai Karantina Genel Müdürlüğü Yayınları, Ankara, 301.

Lodos, N., Önder, F., Pehlivan, E., Atalay, R., Erkin, E., Karsavuran, Y., Tezcan, S., Aksoy, S., 2003, *Faunistic studies on Curculionidae (Coleoptera) of Western Black Sea, Central Anatolia and Mediterranean Regions of Turkey*. Meta Basım Matbaacılık Hizmetleri, Bornova, İzmir, 83.

Lompe, A., 2012, Coleoptera-Curculionidae, Unterfamilie Ceutorhynchinae. [Von Arved Lompe (n.G.A. Lohse)]. *In*: Die Käfer Europes. Ein Bestimmungswerk im Internet. Available from: http://coleo-net.de/coleo/texte/ceutorhynchinae.htm (Accessed 03.01.2013)

Morris, M. G., 2008, *True Weevils (Part II) (Coleoptera: Curculionidae, Ceutorhynchinae)*. Royal Entomological Society, London, 129 pp.

Sert, O., 2004, Türkiye faunası için Ceutorhynchinae (Coleoptera: Curculionidae) altfamilyasından yeni bir kayıt. *Türkiye Entomoloji Dergisi*, 228: 205-206.

Sert, O., 2005, Akdeniz ve İç Anadolu Bölgesi'nde *Ceutorhynchus* Germar, 1824 ve *Tychius* Germar, 1817 (Coleoptera: Curculionidae) cinslerine bağlı türler üzerinde faunistik çalışmalar. *Türkiye Entomoloji Dergisi*, 29(2): 135-149.

Sert, O., 2009, Faunistic studies on some genera of the subfamily Ceutorhynchinae (Coleoptera: Curculionidae) from the Central Anatolian and the Mediterranean regions of Turkey. *Turkish Journal of Zoology*, 33: 439-446.

Sert, O., Çağatay, N., 1999, İç Anadolu Bölgesi Ceutorrhynchinae (Coleoptera: Curculionidae) altfamilyasından *Ceutorrhyncidius*, *Ceutorrhynchus* ve *Zacladus* türleri üzerinde taksonomik çalışmalar. *Turkish Journal of Zoology,* 23: 545-563.

Toshova, T., Subchev, M., Tóth, M., 2009, The diversity of species of Ceutorhynchinae captured in traps in the region of Sofia, Bulgaria. *Bulletin of Insectology*, 62: 27-33.

TÜBİVES, 2013, Turkish Plants Data Service (TÜBİVES). Version 2.0 Beta. Available from: http://www.tubives.com/ (Accessed 03.01.2013).

Velázquez de Castro, A. J., 2013, Fauna Europaea. Curculionidae. Available from: http://www.faunaeur.org/ (Accessed 03.01.2013).

Zabaluev, I. A., 2013, Order: Beetles (Coleoptera), Family-weevils (Curculionidae), Determination of weevils (Coleoptera: Curculionidae). Available from: http://coleop123.narod.ru/key/opredslon/opred_slon.html (Accessed 03.01.2013) [in Russian].

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