Spring Fauna of Ceutorhynchinae (Coleoptera: Curculionidae) Weevils from the Southeast of Mediterranean Turkey

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ABSTRACT

Field investigations of the spring fauna of Ceutorhynchinae were carried out in Southeastern Mediterranean Turkey. A total of 27 species were collected, of which *Mogulones larvatus* (Schultze, 1896) is a new record for the Turkish fauna, and *Ceutorhynchus isatidis* Colonnelli, 2003 is a new record for the Mediterranean region of Turkey. Host plants of 24 species are determined and new host plants records are given.

Keywords: Ceutorhynchinae, Curculionidae, fauna, new record, new host plants, Turkey

INTRODUCTION

The subfamily Ceutorhynchinae contains over 1300 species and it is one of the most species rich groups in Curculionidea (Colonnelli, 2004). Although distributed almost worldwide, its maximum diversity is in the temperate regions of the Old World, primarily in the Palaearctic Region. In the fauna of Central and South America, ceutorhynchines are less abundant, and the Australian fauna comprises only slightly more than 10 endemic species (Korotyaev, 2008).

The host range of the subfamily Ceutorhynchinae is very wide. Ceutorhynchines are generally highly specialized phytophagous; in the relatively well-known Palaearctic fauna, narrowly oligophagous species are predominant, and several species are monophagous. The tribe Ceutorhynchini is the species rich in the Holarctic, with the genus *Ceutorhynchus* Germar, 1824 comprising over 300 species associated almost exclusively with Brassicaceae, the primarily western Palaearctic genus *Mogulones* Reitter, 1916 with 67 species developing on Boraginaceae, and *Thamiocolus* Thomson, 1859, also distributed mostly in the western Palaearctic (Korotyaev, 2008), with over 40 species on Lamiaceae.

Ceutorhynchinae are represend in Turkey by about 250 species (Colonnelli, 2004, 2005, 2013; Gültekin, 2001, 2005; Gültekin and Colonnelli, 2006; Lodos *et al.*, 1978, 2003; Korotyaev, 1997; Korotyaev *et al.*, 2002; Sert and Çağatay, 1999; Sert, 2009). According to a recent review on southern Turkey weevils by Avgin and Colonnelli (2011), Ceutorhynchinae number 41 species in this region. Sert (2009)

listed 29 species from Central Anatolia and Mediterranean region of Turkey. A recent comprehensive study on Ceutorhynchinae in northeastern Turkey revealed over 130 species (Gültekin, 2001).

MATERIAL AND METHODS

Two expeditions were conducted to collect spring-occurring Ceutorhynchinae (Coleoptera: Curculionidae) in the Southeastern Mediterranean region of Turkey provinces of Adana, Gaziantep, Hatay, Osmaniye (Fig. 1.) during April and May of 2001 and 2002. Specimens were collected by sweeping net, Japan umbrella, aspirator or hand-picked, then killed using ethyl acetate. Specimens were kept dry on a cotton layer in paper envelopes. For identification, dry adult samples were left in lukewarm water overnight, their genitalia were dissected when necessary allowing them to stay overnight in 10% KOH, then cleaning them with distilled water and 70% ethanol. Specimens were glued on pinned paper cards. Genitalia preparations were kept dry glued on a paper label pinned under the specimen from which they were dissected. Host plants were collected from the field and herbariums prepared for their identification.

All the specimens examined during the study are deposited in the Entomology Museum of Atatürk University. Host plants are deposited in the Herbarium of Plant Protection Department in the Atatürk University, Erzurum.

RESULTS

Ceutorhynchus anatolicus Schultze, 1900

Material examined: Turkey: Hatay Prov., 25 km N. of Yayladağı, 900 m, 28.4.2002, 3 33, 2 QQ, L. Gültekin leg.

Host plants: This species was collected on *Alyssum strigosum* Banks and Sol. (new record) and *Neslia paniculata* (L.) Desv. (new record), both Brassicaceae. No host plants are recorded by (Colonnelli, 2004).

Distribution: Lebanon, Syria, Turkey (Colonnelli, 2004, 2013).

Ceutorhynchus assimilis (Paykul, 1792)

Material examined: Turkey: Gaziantep Prov., 2 km North of İslahiye, 550 m 27. 4.2002, 1 d, L. Gültekin; Osmaniye Prov., 3 km West of Hasanbeyli, 700 m, 27.4.2002, 1 d, L. Gültekin leg.

Host plants: This species was collected on *Cardaria draba* (L.) Desv. Colonnelli (2004) indicates several species of Brassicaceae as host plants of this species.

Distribution: Algeria, Armenia, Austria, Azerbaijan, Belarus, Bulgaria, Czech Republic, Denmark, Egypt, Estonia, Finland, France, Germany, Georgia, Great Britain, Greece, Hungary, Iran, Iraq, Ireland, Italy, Kazakhstan, Latvia, Libya, Luxembourg, Moldavia, Morocco, Netherlands, Norway, Poland, Portugal, Romania, Russia (central, south and north European territory; west Siberia), Serbia, Slovakia, Spain, Sweden,





Fig. 1. Study area and distribution of Ceutorhynchinae species in the Southeastern Mediterranean region of Turkey. (1. Ceutorhynchus anatolicus Schultze, 1900, 2. Ceutorhynchus assimilis (Paykul, 1792), 3. Ceutorhynchus attilai Korotyaev, 1997, 4. Ceutorhynchus carinatus Gyllenhal, 1837, 5. Ceutorhynchus chalybaeus Germar, 1824, 6. Ceutorhynchus coarctatus Gyllenhal, 1837, 7. Ceutorhynchus constrictus (Marsham, 1802), 8. Ceutorhynchus contractus (Marsham, 1802), 9. Ceutorhynchus doganlari Gültekin, 2005, 10. Ceutorhynchus griseus Brisout, 1869, 11. Ceutorhynchus infermalis Schultze, 1900, 12. Ceutorhynchus isatidis Colonnelli, 2003, 13. Ceutorhynchus naus Gyllenhal, 1837, 14. Ceutorhynchus Schultze, 1903, 17. Calosirus terminatus (Herbst, 1795), 18. Sirocalodes depressicollis (Gyllenhal, 1813), 19. Sirocalodes mixtus (Mulsant and Rey, 1859), 20. Prisistus obsoletus (Germar, 1824), 21. Ethelcus denticulatus (Schrank, 1781), 22. Neoglocianus albovittatus Germar, 1824, 23. Hadroplontus trimaculatus (Fabricius, 1775), 24. Mogulones beckeri (Schultze, 1900), 25. Mogulones bernhaueri (Dieckmann, 1979), 26. Mogulones larvatus (Schultze, 1896).)

Ceutorhynchus attilai Korotyaev, 1997

Material examined: Turkey: Osmaniye Prov., 8 km South of Yarpuz, 900 m 20.5.2001, 1 $^\circ$, 1 $^\circ$, L. Gültekin leg.

Host plants: This species was collected on *Thlaspi oxyceras* (Boiss) Hedge (Brassicaceae).

Distribution: Southern Turkey (Colonnelli, 2004, 2013)

Ceutorhynchus carinatus Gyllenhal, 1837

Material examined: Turkey: Osmaniye Prov., 8 km South of Yarpuz, 900 m, 20.5.2001, 1&, L. Gültekin leg.

Host plants: Not determined.

Distribution: Algeria, Armenia, Austria, Azerbaijan, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, France, Georgia, Germany, Greece, Hungary, Iran, Italy, Jordan, Moldavia, Morocco, Romania, Russia (south European territory), Slovakia, Spain, Switzerland, Syria, Turkey, Ukraine (Colonnelli, 2004, 2013).

Ceutorhynchus chalybaeus Germar, 1824

Material examined: Turkey: Hatay Prov., 10 km North West of Yayladağı, Yeditepe Vill., env., 700 m, 28.4.2002, 333, 299, L. Gültekin leg.; Adana Prov., 19 km South East of Ceyhan, Sarımazı Vill. env., 80 m, 26.4.2002, 333, 399, L. Gültekin leg.

Host plants: This species was collected on *Isatis floribunda* Boiss. ex. Bornm. in Hatay, and *Hirschfeldia incana* (L.) Lagr.-Foss. (Brassicaceae) in Adana. Colonnelli (2004) just indicates Brassicaceae as host plants of this species.

Distribution: Algeria, Armenia, Austria, Azerbaijan, Belgium, Bosnia-Herzegovina, Bulgaria, Belarus, Croatia, Czech Republic, Cyprus, Denmark, France, Georgia, Germany, Great Britain, Greece, Hungary, Ireland, Iran, Iraq, Israel, Italy, Jordan, Kazakhstan, Kirgizstan, Latvia, Luxembourg, Mongolia, Morocco, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russia (south European territory, east and west Siberia), Serbia, Slovakia, Spain, Switzerland, Syria, Tajikistan, Turkey, Turkmenistan, Ukraine, Uzbekistan (Colonnelli, 2004, 2013).

Ceutorhynchus coarctatus Gyllenhal, 1837

Material examined: Turkey: Hatay Prov., 25 km North of Yayladağı, 900 m, 28.4.2002, 6♂♂, 2♀♀, L. Gültekin leg.; Osmaniye Prov., 3 km West of Hasanbeyli, 700 m, 27.4.2002, 1♂, L. Gültekin leg.

Host plants: This species was collected on *Alyssum strigosum* Banks and Sol. (new record) and *Neslia paniculata* (L.) Desv. (Brassicaceae) (new record). In the catalogue by Colonnelli (2004), host plants listed are *Camelina*, *Lepidium* and *Sisymbrium*.

Distribution: Armenia, Austria, Azerbaijan, Bulgaria, Czech Republic, France, Georgia, Greece, Hungary, Iran, Kazakhstan, Moldavia, Montenegro Poland, Romania, Slovakia, Spain, Switzerland, Turkey, Turkmenistan, Ukraine (Colonnelli, 2004).

Ceutorhynchus constrictus (Marsham, 1802)

Material examined: Turkey: Osmaniye Prov.: 8 km SouthWest of Yarpuz, 900 m 27.4.2002, 229; 20.5.2001, L. Gültekin leg.

Host plants: This species was collected on *Alliaria petiolata* (Bieb.) Cav. et Gr. (Brassicaceae). This is the same host plant quoted by Colonnelli (2004).

Distribution: Armenia, Austria, Belgium, Bulgaria, Belarus, Czech Republic, Denmark, Finland, France, Georgia, Germany, Great Britain, Greece, Hungary, Italy, Luxembourg, Poland, Romania, Serbia, Slovenia, Slovakia, Spain, Sweden, Switzerland, Turkey, Ukraine (Colonnelli, 2004, 2013).

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Ceutorhynchus contractus (Marsham, 1802)

Material examined: Turkey: Hatay Prov., 10 km NW. of Yayladağı, Yeditepe Vill., env., 700 m, 28.4.2002, 1 \bigcirc , L. Gültekin leg.; 25 km N. of Yayladağı, 900 m, 28.4.2002, 1 \bigcirc , L. Gültekin leg.; Osmaniye Prov., Hasanbeyli, Nurdağı Pass, 1200 m, 20.5.2001, 1 \bigcirc , L. Gültekin leg.; 8 km South of Yarpuz, 900 m, 20.5.2001, 5 \Im Λ , 12 \bigcirc \heartsuit , L. Gültekin leg.

Host plants: This species was collected on *Arabis caucasica* Willd. (Brassicaceae). According to Colonnelli (2004), host plants are several Brassicaceae, Resedaceae and Capparidaceae.

Distribution: Armenia, Austria, Azerbaijan, Belgium, Belarus, Bulgaria, Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Georgia, Germany, Great Britain, Greece, Iceland, Iran, Ireland, Israel, Italy, Kazakhstan, Latvia, Libya, Luxembourg, Moldavia, Morocco, Netherlands, Norway, Poland, Portugal, Romania, Russia (central, south and north European territory; east and west Siberia, Far East), Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Syria, Turkey, Turkmenistan, Ukraine (Colonnelli, 2004, 2013).

Ceutorhynchus doganlari Gültekin, 2005

Material examined: Turkey: Hatay Prov., 27 km North East of Dörtyol, Üçgoz Yaylası, 1500 m, 14.VIII.2002, 58♂♂, 35♀♀ (types), L. Gültekin leg; 31 km North East of Dörtyol, Taşlıufacık Yaylası, 1650 m, 14.VIII.2002, 2♂♂, 2♀♀ (types), L. Gültekin leg.

Host plants: Alyssum murale Waldst. and Kit. (Brassicaceae) (Gültekin, 2005).

Distribution: Southeastern Mediterranean region of Turkey (Gültekin, 2005, 2013).

Ceutorhynchus griseus C. N. F. Brisout de Barneville, 1869

Material examined: Turkey: Osmaniye Prov., 8 km South of Yarpuz, 900 m, 20.5.2001, 1♂, 2♀♀, L. Gültekin leg.; West of Hasanbeyli, 700 m, 27.4.2002, 1♂, 1♀, L. Gültekin leg.

Host plants: This species was collected on *Alyssum murale* Waldst.et Kit. (Brassicaceae) (new record). In Colonnelli (2004), the host plants are *Arabidopsis*, *Armoracia*, *Lepidium* and *Sinapis*.

Distribution: Armenia, Austria, Azerbaijan, Belgium, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Georgia, Germany, Greece, Hungary, Italy, Macedonia, Poland, Romania, Russia (central, south and north European territory), Serbia, Slovakia, Spain, Sweden, Switzerland, Syria, Turkey, Turkmenistan, Ukraine (Colonnelli, 2004, 2013).

Ceutorhynchus infernalis Schultze, 1900

Material examined: Turkey: Osmaniye Prov.: Hasanbeyli, Nurdağı Pass, 1200 m, 20.5.2001, 4♂♂, 6♀♀, L. Gültekin leg.

Host plants: This species was collected on *Alyssum murale* Waldst. and Kit. (Brassicaceae) (new record). In Colonnelli (2004) the one host plant listed is *Arabis caucasica* Willd.

Distribution: Israel, Syria, Turkey (Colonnelli, 2004, 2013).

Ceutorhynchus isatidis Colonnelli, 2003

Material examined: Turkey: Osmaniye Prov., 3 km West of Hasanbeyli, 700 m, 27.4.2002, 1 $\vec{\triangleleft}$, L. Gültekin leg.

Host plants: This species was collected on *Cardaria draba* (Brassicaceae) (new record). Colonnelli (2004) reports *Isatis* as a host plant.

Distribution: Armenia, Northeastern Turkey (Colonnelli, 2004, 2013), new record for Mediterranean region of Turkey.

Ceutorhynchus nanus Gyllenhal, 1837

Material examined: Turkey: Adana Prov., 8 km W. of Ceyhan, Misis Mts., Yılankale env., 100 m, 29.4.2002, 1 $\stackrel{>}{_{\sim}}$, 1 $\stackrel{\bigcirc}{_{\sim}}$, L. Gültekin leg.

Host plants: This species was collected on *Alyssum strigosum* Banks and Sol. (Brassicaceae). Colonnelli (2004) also indicates *Alyssum* as host plant.

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, Switzerland, Turkey, Turkmenistan, Ukraine (Colonnelli, 2004, 2013).

Ceutorhynchus pallidactylus (Marsham, 1802)

Material examined: Turkey: Adana Prov., 19 km SE. of Ceyhan, Sarımazı Vill. env., 80 m, 26.4.2002, $3 \Im \Im$, $2 \Im \Im$, L. Gültekin leg.; Gaziantep Prov., İslahiye Distr., Ağabey Vill., 550 m, 21.5.2001, $2 \Im \Im$, L. Gültekin; Hatay Prov., Nurdağı, 7 km N. of Hassa, Akbez Vill., 650 m, 21.5.2001, $1 \Im$, L. Gültekin leg.; 5 km North of Dörtyol, Yeşilköy Vill., 25 m, 16.3.2001, $1 \Im$, L. Gültekin leg.; 8 km West of Samandağı, 300 m, 28.4.2002, $3 \Im \Im$, L. Gültekin leg.; 9 km N. of Erzin Distr., 50 m, a long the E5 Highway, 26.4.2002, $2 \Im \Im$, $4 \Im \Im$, L. Gültekin; 12 km S. of Belen, 350 m, 28.4.2002, $1 \Im$, L. Gültekin leg.

Host plants: This species was collected on *Hirschfeldia incana* (L.) Lagr.-Foss. (Brassicaceae). According to Colonnelli (2004), this species can be found on several Brassicaceae and Resedaceae.

Distribution: Algeria, Austria, Azerbaijan, Belgium, Bulgaria, Belarus, Canada, Canary Islands, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Great Britain, Greece, Hungary, Iran, Ireland, Israel, Italy, Jordan, Kazakhstan, Republic of Korea, Latvia, Lebanon, Libya, Luxembourg, Madeira Archipelago, Malta, Mexico, Moldavia, Mongolia, Montenegro, Morocco, Nepal, Netherlands, Norway, Poland, Portugal, Romania, Russia (central, south and north European territory), Serbia, Slovenia, Slovakia, Spain, Sweden, Switzerland, Syria, Tunisia, Turkey, Ukraine, United States (Colonnelli, 2004, 2013).

Ceutorhynchus sulcicollis (Paykul, 1800)

Material examined: Turkey: Hatay Prov., 10 km North West of Yayladağı, Yeditepe Vill., env., 700 m, 28.4.2002, 8♂♂, 6♀♀, L. Gültekin leg.; Osmaniye Prov., 8 km South West of Yarpuz, 900 m, 27.4.2002, 1♀, L. Gültekin leg.

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Host plants: This species was collected on *Alliaria petiolata* (Bieb.) Cavara and Grande (Brassicaceae) in Osmaniye and, on *Velarum officinale* (L.) Rchb. and on *Nasturtium officinale* L. (Brassicaceae) in Hatay. This species is known to occur on several Brassicaceae and on *Reseda luteola* L. (Colonnelli, 2004).

Distribution: Albania, Algeria, Armenia, Austria, Azerbaijan, Belgium, Belarus, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Great Britain, Greece, Hungary, Iran, Iraq, Israel, Italy, Kazakhstan, Latvia, Luxembourg, Moldavia, Morocco, Netherlands, Norway, Poland, Portugal, Romania, Russia (south European territory; east and west Siberia), Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Syria, Tunisia, Turkey, Turkmenistan, Ukraine (Colonnelli, 2004, 2013).

Ceutorhynchus turbatus Schultze, 1903

Material examined: Turkey: Osmaniye Prov., 3 km W. of Hasanbeyli, 700 m, 27.4.2002, 3 \bigcirc L. Gültekin leg.; Gaziantep Prov., 2 km N. of İslahiye, 550 m, 27.4.2002, 1 $\stackrel{2}{\rightarrow}$ L. Gültekin leg.

Host plants: This species was collected on *Cardaria draba* (Brassicaceae), the same plant quoted by Colonnelli 2004.

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

Calosirus terminatus (Herbst, 1795)

Material examined: Turkey: Hatay Prov., 16 km E. of Dörtyol, Topaktaş Yaylası, 1200 m, 25.5.2001, 2, 2, 2, 2, 2, L. Gültekin leg.; Osmaniye Prov., Hasanbeyli, Nurdağı Pass, 1200 m, 20.5.2001, 3, 1, L. Gültekin leg.; 8 km S. of Yarpuz, 900 m, 20.5.2001, 3, 1, L. Gültekin leg.

Host plants: Not determined.

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).

Sirocalodes depressicollis (Gyllenhal, 1813)

Material examined: Turkey: Gaziantep Prov., 2 km N. of İslahiye, 550 m, 27.4.2002, 1♂, L. Gültekin leg.

Host plants: Fumaria sp. (Papaveraceae).

Distribution: Albania, Algeria, Armenia, Austria, Azerbaijan, Belgium, Belarus, Bosnia-Herzegovina, Bulgaria, China (northwest territory), Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Great Britain, Greece, Hungary, Iran, Italy, Kirgizstan, Kazakhstan, Latvia, Luxembourg, Macedonia, Moldavia, Netherlands, Norway, Poland, Portugal, Romania, Russia (central, south and north European territories), Serbia, Slovakia, Slovenia, Spain, Sweden, Syria, Tajikistan, Turkey, Turkmenistan, Ukraine, Uzbekistan (Colonnelli, 2004, 2013).

Sirocalodes mixtus (Mulsant and Rey, 1859)

Material examined: Turkey: Adana Prov., 19 km SE. of Ceyhan, Sarımazı Vill. env., 80 m, 26.4.2002, 233, L. Gültekin leg.; Hatay Prov., 16 km E. of Dörtyol, Topaktaş Yaylası, 1200 m, 25.5.2001, 1, L. Gültekin leg.; Osmaniye Prov., 8 km S. of Yarpuz, 900 m, 20.5.2001, 633, 1, L. Gültekin leg.

Host plants: Fumaria sp. (Papaveraceae).

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).

Prisistus obsoletus (Germar, 1824)

Material examined: Turkey: Osmaniye Prov., 8 km N. of Yarpuz, 1100 m, 20.5.2001, 1∂, L. Gültekin leg.

Host plants: Unknown.

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

Ethelcus denticulatus (Schrank, 1781)

Material examined: Turkey: Osmaniye Prov., 8 km SW. of Yarpuz, 900 m, 27.4.2002, 1♀, L. Gültekin leg.

Host plants: Papaver rhoeas L. (Papaveraceae).

Distribution: Armenia, Austria, Belgium, Bulgaria, Czech Republic, France, Georgia, Germany, Greece, Hungary, Iran, Macedonia, Moldavia, Montenegro, Luxembourg, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Switzerland, Syria, Turkey, Ukraine (Colonnelli, 2004, 2013).

Neoglocianus albovittatus Germar, 1824

Material examined: Turkey: Gaziantep Prov., 2 km N. of İslahiye, 550 m, 27.4.2002, 1 \bigcirc , L. Gültekin leg.; Osmaniye Prov., Nurdağı, 10 km E. of Yarpuz, 1000 m, 20.5.2001, 1 \bigcirc , L. Gültekin leg.; 8 km SW. of Yarpuz, 900 m, 27.5.2002, 1 \bigcirc , L. Gültekin leg.

Host plants: Specimens were collected on *Papaver rhoeas* L. (Papaveraceae). According to Colonnelli (2004), host plants are *Papaver hybridum* L., *P. rhoeas* L., and *P. somniferum* L.

Distribution: Armenia, Austria, Bulgaria, Czech Republic, France, Georgia, Greece, Hungary, Iran, Israel, Italy, Romania, Russia (southern European territory), Slovakia, Syria, Turkey (Colonnelli, 2004, 2013).

Hadroplontus trimaculatus (Fabricius, 1775)

Material examined: Turkey: Hatay Prov., 25 km S. of Antakya, a long the Yayladağı road, 500 m, 28.4.2002, 1♀, L. Gültekin leg.

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Host plants: According to Colonnelli (2004), host plants of this species are *Carduus*, *Cirsium*, *Galactites*, *Onopordum* and *Sylibum marianum* L. The above specimen was collected on *Echinops* sp. (Asteraceae) (new record).

Distribution: Albania, Algeria, Armenia, Austria, Azerbaijan, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, France, Georgia, Germany, Great Britain, Greece, Hungary, Iran, Iraq, Israel, Italy, Luxembourg, Moldavia, Montenegro, Morocco, Netherlands, Poland, Portugal, Romania, Russia (southern European territory), Serbia, Slovakia, Slovenia, Spain, Switzerland, Syria, Tunisia, Turkey, Ukraine (Colonnelli, 2004, 2013).

Mogulones beckeri (Schultze, 1900)

Material examined: Turkey: Adana Prov., 19 km S. of Ceyhan Distr., Sarımazı Vill., env., 80 m, 26.4.2002, 6 3, 5 9 2, L. Gültekin leg.; 8 km West of Ceyhan, Misis Mts., Yılankale env., 100 m, 26.4.2002, 1 3, L. Gültekin leg.; Gaziantep Prov., İslahiye Distr., Ağabey Vill., 550 m, 21.5.2001, 1 2, L. Gültekin leg.; 27.4.2002, 1 3, L. Gültekin leg.; Hatay Prov., 25 km West of Erzin Distr., Burnaz Beach, 5 m, 24.5.2001, 1 3, L. Gültekin leg.; 26.4.2002, 1 2, L. Gültekin leg.; 7 km North of Hassa, Akbez Vill., 650 m, 21.5.2001, 2 2, L. Gültekin leg.

Host plants: Echium sp. (Boraginaceae).

Distribution: Albania, Bulgaria, Croatia, Cyprus, France, Greece, Israel, Italy, Montenegro, Serbia, Syria, Turkey (Colonnelli, 2004, 2013).

Mogulones bernhaueri (Dieckmann, 1979)

Material examined: Turkey: Gaziantep Prov., 8 km S. of İslahiye Distr., Ağabey Vill., 550 m, 21.5.2001, 1♂, L. Gültekin leg.; 27.4.2002, 1♀ L. Gültekin leg.

Host plants: Anchusa sp. (Boraginaceae).

Distribution: Jordan, Turkey (Colonnelli, 2004, 2013)

Mogulones larvatus (Schultze, 1896)

Material examined: Turkey: Hatay Prov., 8 km West of Samandağı, 300 m, 28.4.2002, 1♀, L. Gültekin leg.; Osmaniye Prov., 8 km South of Yarpuz, 900 m, 20.5.2001, 1♀, L. Gültekin leg.

Host plants: Specimens were collected on *Echium* sp. (Boraginaceae).

Distribution: Algeria, Austria, Belarus, Bulgaria, Czech Republic, Denmark, Egypt, Finland, France, Germany, Greece, Hungary, Italy, Kazakhstan, Moldavia, Montenegro, Morocco, Poland, Portugal, Romania, Russia (East and West Siberia), Serbia, Slovakia, Spain, Switzerland, Tunisia, Ukraine (Colonnelli, 2004, 2013), Turkey (new record).

Mogulones rheophilus Colonnelli, 2005

Material examined: Turkey: Osmaniye Prov., 8 km South of Yarpuz, 900 m, 20.5.2001, 233, L. Gültekin leg.; 27.4.2002, 1, 13, L. Gültekin leg.

Host plants: Symphytum sp.nr. tuberosum L. (Boraginaceae).

Distribution: Syria, Turkey (Southeastern Mediterranean) (Colonnelli, 2005, 2013)

DISCUSSION

Most Ceutorhynchinae are active from early spring in the field. A total of 27 species (totally 260 specimens) in eight genera were collected in spring in southeastern Mediterranean region of Turkey. Of these, 16 species belong to the genus *Ceutorhynchus* Germar, 1824, one species each to the genera *Calosirus* Thomson, 1859, *Prisistus* Reitter, 1916, *Ethelcus* Reitter, 1916, *Neoglacianus* Dieckmann, 1972 and *Hadroplontus* Thomson, 1859, two species to *Sirocalodes* Voss, 1958 and four species to *Mogulones* Reitter, 1916. *Mogulones* larvatus is a new record for the Turkish fauna, and *Ceutorhynchus isatidis* is a new record for the Mediterranean region of Turkey.

Twenty species of the collected Ceutorhynchinae are more or less widely distributed: Ceutorhynchus pallidactylus, C. sulcicollis, C. assimilis, C. coarctatus, C. griseus, C. nanus, C. chalybaeus, C. contractus, C. turbatus, C. constrictus, C. carinatus, Ethelcus denticulatus, Hadroplontus trimaculatus, Sirocalodes depressicollis, S. mixtus, Calosirus terminatus, Prisistus obsoletus, Neoglocianus albovittatus, Mogulones beckeri. Ceutorhynchus anatolicus, C. infernalis and Mogulones bernhaueri are distributed in the Middle East (Colonnelli, 2004) including southeastern Mediterranean region of Turkey. Three species, Ceutorhynchus attilai, C. doganlari, and Mogulones rheophilus are endemic to the southeast of Mediterranean region of Turkey (Colonnelli, 2004, 2005; Gültekin, 2005, Korotyaev, 1997). Ceutorhynchus isatidis was known only from Northeastern Turkey (Colonnelli, 2004).

According to the present results, 24 species of weevils use 16 plant species as food plants, of which Alyssum murale, Alyssum strigosum, Cardaria draba, Hirschfeldia incana, Neslia paniculata and Velarum officinale are rather common in the surveyed area, whereas Thlaspi oxyceras and Symphytum sp.nr. tuberosum are quite rare. Of these, Alliaria petiolata harbors Ceutorhynchus constrictus and C. sulcicollis which were in found also on Nasturtium officinale and Velarum officinale. Alyssum murale is a food plant for C. doganlari, C. infernalis and C. griseus being a new host for the last two ones. Alyssum strigosum harbors C. nanus, C. anatolicus and C. coarctatus, a new food plant for the two last species. On Arabis caucasica was found C. contractus. Cardaria draba is a food plant for C. assimilis, C. turbatus and C. isatidis, a new host plant for the last species. On Hirschfeldia incana were collected C. pallidactylus and C. chalybaeus, and the latter was also found on Isatis floribunda. Neslia paniculata is newly recorded as food plant of C. anatolicus and C. coarctatus. Ceutorhynchus attilai was collected on Thlaspi oxyceras. Coming to the Papaveraceae, Ethelcus denticulatus and Neoglocianus albovittatus feed on Papaver rhoeas, and Sirocalodes depressicollis and S. mixtus on Fumaria sp. Echinops is a new host record for Hadroplontus trimaculatus. On the Boraginaceae of the genus Echium were found Mogulones beckeri and M. larvatus; the genus Anchusa is the food plant of *M. bernhaueri*, and *Symphytum* sp. nr. tuberosum of *M. rheophilus*.

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