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On the Curculionoidea (Coleoptera) fauna of Almond (*Amygdalus communis* L.) Orchards in South-eastern and Eastern Anatolia in Turkey

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This faunistic study on the Curculionoidea was conducted during 2002-04 in almond orchards in the South-eastern and Eastern Anatolia Regions of Turkey. Fifty four species from the superfamily Curculionoidea (Rhynchitidae - 2, Brentidae - 20, Curculionidae - 30 and Scolytidae - 2) were collected from almond trees. The majority of these species were found on almonds casually. Among these species, nine cause damage to almond trees. Of these nine species, four feed in fruit, two on wood and three feed on leaves of almond trees.

Key words: Curculionoidea, fauna, almond orchard, Turkey.

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INTRODUCTION

Almond cultivation is considered to have great economic importance in Turkey. Approximately 13% of the total almond production of Turkey is obtained from Diyarbakir, Elazığ and Mardin (Anonymous 2002).

One of the most important reasons for a recent decrease in almond production, is the problem of plant protection. The damage caused by pest species is one of the most important problems. Insects classified under the superfamily Curculionoidea Coleoptera in particular cause much damage. Members of the Curculionoidea feed on various parts of fruit trees, such as buds, fruit and leaves, and thus they cause reduction in both quality and yield.

After research in the Black Sea, Mediterranean and Aegean regions, Lodos (1981) reported that five species which belong to the Curculionidae family ar represented in almond cultivation areas. After research in Adıyaman, Diyarbakır, Elazığ,

Malatya, Mardin, Siirt and Şanlıurfa provinces, Maçan (1986), reported that, five species that belong to Curculionoidea family cause damage to almond trees. According to the other research conducted by Bolu and Özgen (2005), 43 species belonging to the superfamily Curculionoidea were determined on almond trees in the Mardin, Elazığ and Diyarbakır provinces in Turkey.

The aim of the present study is to contribute some records on the Curculionoidea fauna of almond orchards in Turkey.

MATERIAL AND METHODS

The present study aimed to determine the fauna of the superfamily Curculionoidea of almond orchards in the South-eastern and Eastern Anatolia Regions between 2002-2004. Samples were taken from the almond orchards in Diyarbakir, Elazığ and Mardin provinces by means of methods such as striking, burlap band traps, and visual examinations of leaves, fruits and other parts of the trees. Almond orchards in these provinces sampled periodically between March and November. The altitudes and coordinates of the surveyed areas are given below:

1. Eastern Anatolia Region, Elazığ [Center (998m 38°39´N, 39°15´E), Gezin (1256m 38°29´N, 39°20´E), Keban (1206m 38° 43´N, 53°53´E) and Sivrice (1280m 38°28´N, 39°18´E)] provinces.

2. Southeastern Anatolia Region, Diyarbakżr [Çermik (710m 38°15´N, 39°45´E), Ergani (1043m 38°17´N, 39°45´E)].

3. Southeastern Anatolia Region, Mardin [Akbağ (970m 37°22´N, 40°39´E), Center (853m 37°20´N, 40°46´E), Ömerli (1133m 37°24´N, 40°56´E) and Yesilli (1069m 37°22´N, 40°51´E)].

The survey areas are shown in Fig. 1. The material is held in the collections of the Dicle University (Agriculture Faculty, Department of Plant Protection, Diyarbakır), and Institute of Animal Systematics and Ecology (Siberian Branch of Russian Academy of Sciences, Novosibirsk) and Zoological Institute (Russian Academy of Sci-

Fig. 1. Surveyed areas in Elazığ (1), Diyarbakır (2) and Mardin (3).

ences, Saint-Petersburg). The systemics of the Curculionoidea is based on Legalovÿs (2006) revisions to Alonso-Zarazaga and Lyal (1999).

RESULTS

Superfamily: Curculionoidea Latreille, 1802
Family: Rhynchitidae Gistel, 1848
Tribe: Rhynchitini Gistel, 1848

Genus: *Tatianaerhynchites* Legalov, 2002

***Tatianaerhynchites aequatus* (Linnaeus, 1767)**
Material examined: 4 ex., Keban, 3.6.2004; 6 ex., idem, 19.4.2004; 8 ex., Sivrice, 25.4.2002; 2 ex., idem, 30.5.2003; 4 ex., Gezin, 8.5.2002; 14 ex., idem, 18.5.2002; 2 ex., idem, 18.5.2003; 1 ex., idem, 29.4.2004; 1 ex., Mardin, 25.4.2004; 1 ex., idem, 3.5.2004.
Host plants of larva: *Mespilus, Prunus, Sorbus, Malus, Pyrus, Cerasus, Crataegus* (Legalov 2002a, 2003), *Amygdalus* (Bolu & Özgen, 2005).
Distribution: Europe to Urals Mountains, Caucasus, Asia Minor, Central Asia (Legalov 2002a, 2003, 2007a, 2007b).
Remarks: This species is obligate on almonds and Rosaceae.

Genus: *Epirhynchites* Voss, 1953

***Epirhynchites smyrnensis* (Desbrochers des Loges, 1869)**
Material examined: 13 ex., Elazığ, 25.4.2003; 4 ex., Keban, 19.4.2004; 1 ex., idem, 3.6.2004; 4 ex., Sivrice, 8.5.2002; 3 ex., idem, 29.4.2004; 4 ex., Gezin, 8.5.2002; 3 ex., idem, 9.5.2003; 5 ex., idem, 18.5.2003; 3 ex., idem, 19.4.2004; 3 ex., idem, 29.4.2004; 4 ex., idem, 3.6.2004; 1 ex., Mardin, 3.5.2004; 3 ex., Akbağ, 22.4.2002; 2 ex., Ömerli, 22.4.2003; 2 ex., idem, 12.5.2003; 9 ex., Ergani, 10.4.2002.
Host plants of larva: *Prunus, Pyrus* (Legalov, 2003), *Amyadalus* (Bolu & Özgen 2005).
Distribution: Iran, Israel, Jordan, Syria, Turkey, Turkmenistan (Legalov 2003).
Remarks: This species is obligate on almonds and Rosaceae.

Family: Brentidae Bilberg, 1820
Subfamily: Apioninae Schoenherr, 1823
Tribe: Ceratapiini Alonso-Zarazaga, 1991

Genus: *Ceratapion* Schilsky, 1901

***Ceratapion basicorne* (Illiger, 1807)**
Material examined: 1 ex., Keban, 7.10.2003; 1 ex., Ergani, 29.6.2004.
Host plants of larva: *Centaurea, Onopordum, Carduus, Arctium* (Wanat 1995).
Distribution: Europe, Caucasus, Asia Minor (Wanat 1995).
Remarks: An incidental species on almonds. Imago feed in addition on this plant

***Ceratapion carduorum* (Kirby, 1808)**
Material examined: 1 ex., Sivrice, 15.6.2004; 1 ex., idem, 24.6.2004; 1 ex., Gezin, 7.7.2004.
Host plants of larva: *Onopordum, Cirsium, Carduus* (Wanat 1995).
Distribution: North Africa, Europe, Caucasus, Asia Minor (Wanat 1995).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Ceratapion gibbifrons* (Hustache, 1932)**
Material examined: 3 ex., Elazığ, 21.7.2003; 1 ex., Gezin, 1.8.2003; 1 ex., Sivrice, 14.9.2004; 1 ex., Gezin, 18.3.2004.
Host plants of larva: Unknown (Wanat 1995).
Distribution: Lebanon, Syria, Turkey, Iran (Wanat 1995).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Ceratapion beckeri* (Desbrochers, 1875)**
Material examined: 1 ex., Keban, 7.9.2003; 1 ex., idem, 3.6.2004; 1 ex., idem, 15.9.2004; 1 ex., idem, 28.9.2004; 1 ex., Sivrice, 1.8.2003; 2 ex., idem, 6.10.2003; 2 ex., idem, 7.7.2004; 1 ex., Gezin, 11.6.2003; 1 ex., Mardin, 7.10.2004; 1 ex., Ömerli, 12.6.2002; 1 ex., idem, 3.9.2003; 13 ex.., idem, 7.6.2004; 2 ex., idem, 24.6.2004; 1 ex., idem, 7.10.2004; 2 ex., Harput, 7.10.2003.
Host plants of larva: Unknown (Wanat 1995).
Distribution: South and South-East Europe, Georgia, Armenia, Azerbaijan, Turkey, Lebanon, Iran, Afghanistan, Uzbekistan, Turkmenistan,

Tajikistan, Russia (Wanat 1995), Israel (Friedman & Freidberg 2007).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Ceratapion fremuthi* Wanat, 1995**
Material examined: 1 ex., Keban, 28.9.2004; 2 ex., Sivrice, 6.10.2003; 1 ex., idem, 14.9.2004; 2 ex., idem, 21.9.2004; 1 ex., Akbağ, 22.6.2004; 3 ex., Ömerli, 7.10.2004; 1 ex., Ergani, 1.6.2004; 1 ex., idem, 7.7.2004; 1 ex., idem, 18.8.2004; 3 ex., idem, 31.8.2004; 1 ex., idem, 8.10.2004.
Host plants of larva: Unknown (Wanat 1995).
Distribution: Turkey, Iran, Azerbaijan (Wanat 1995).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Tribe: Kalcapiini Alonso-Zarazaga, 1991

Genus: *Squamapion* Bokor, 1923

***Squamapion elongatum* (Germar, 1812)**
Material examined: 1 ex., Gezin, 7.7.2004; 1 ex., idem, 14.9.2004.
Host plants of larva: *Salvia* (Dieckmann 1977).
Distribution: South and South-East Europe, Turkey, Iran, (Dieckmann 1977), West Siberia (Legalov 2002b).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Squamapion phocopus* (Eppelsheim, 1888)**
Material examined: 1 ex., Keban, 7.10.2003; 1 ex., Sivrice, 7.7.2004; 1 ex., Gezin, 18.8.2003; 5 ex., idem, 7.7.2004; 1 ex., idem, 13.8.2004; 1 ex., idem, 31.8.2004; 3 ex., idem, 14.9.2004; 1 ex., idem, 21.9.2004; 1 ex., idem, 8.10.2004; 1 ex., Mardin, 22.10.2004; 1 ex., Akbağ, 1.10.2004; 1 ex., Ömerli, 7.10.2004; 1 ex., Ergani, 29.6.2004; 1 ex., idem, 28.7.2004.
Host plants of larva: *Salvia* (Friedman and Freidberg 2007).
Distribution: Turkey (Hayat *et al*. 2002), North Aegean Is. (Fauna Europea 2004), Asia Minor (Friedman & Freidberg 2007).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Squamapion vicinum* (Kirby, 1808).**
Material examined: 1 ex., Mardin, 1.7.2004.
Host plants of larva: *Mentha* (Dieckmann 1977).
Distribution: Algeria, Europe, Syria, Russia (Dieckmann 1977, Ehret 1990).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Squamapion ? atomarium* (Kirby, 1808)**
Material examined: 3 ex., Mardin, 1.7.2004; 1 ex., Harput, 7.10.2003.
Host plants of larva: *Thymus* (Dieckmann 1977).
Distribution: Europe, Algeria, Turkey, Russia, Mongolia (Dieckmann 1977).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Tribe: Malvapiini Alonso-Zarazaga, 1991

Genus: *Malvapion* Hoffmann, 1958

***Malvapion malvae* (Fabricius, 1775)**
Material examined: 1 ex., Sivrice, 1.8.2003; 1 ex., idem, 13.9.2003.
Host plants of larva: *Malva*, *Althea*, *Lavatera* (Dieckmann 1977).
Distribution: West and Central Palaearctic.
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Genus: *Rhopalapion* Schilsky, 1906

***Rhopalapion longirostre* (Olivier, 1807)**
Material examined: 2 ex., Elazığ, 15.6.2004; 1 ex., idem, 7.7.2004.
Host plants of larva: *Alcea*, *Gossypium*, *Malva* (Ter-Minnasian 1972, Ehret 1990).
Distribution: Europe, North America (Dieckmann, 1977), Asia Minor (Friedman & Freidberg 2007).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Tribe: Aspidapiini Alonso-Zarazaga, 1991

Genus: *Aspidapion* Schilsky, 1901

***Aspidapion radiolus* (Marsham, 1802)**
Material examined: 1 ex., Gezin, 3.6.2004.
Host plants of larva: *Malva*, *Lavacera*, *Althea*

(Dieckmann 1977).
Distribution: Palaearctic.
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Genus: *Alocentron* Schilsky, 1901

***Alocentron curvirostre* (Gyllenhal, 1833)**
Material examined: 1 ex., Gezin, 1.8.2003; 1 ex., Mardin, 1.7.2004.
Host plants of larva: *Lavacera* (Solodovnikova 1963), *Alcea*, *Malva* (Dieckmann 1977).
Distribution: North Africa, Europe, Turkey, Georgia, Armenia, Asia Minor, Russia (Ter-Minassian 1972, Dieckmann 1977, Friedman & Freidberg 2007).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Tribe: Piezotrachelini Voss, 1959

Genus: *Protapion* Schilsky, 1908

***Protapion trifolii* (Linnaeus, 1768)**
Material examined: 1 ex., Sivrice, 24.6.2004; 2 ex., Ömerli, 7.6.2004; 5 ex., idem, 12.6.2002; 1 ex., Çermik, 6.6.2003.
Host plants of larva: *Trifolium* (Dieckmann 1973).
Distribution: North Africa, Europe, Asia Minor, Russia (Dieckmann 1973, Arzanov 1990).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Protapion varipes* (Germar, 1817)**
Material examined: 1 ex., Ömerli, 12.6.2002.
Host plants of larva: *Coronilla*, *Trifolium* (Solodovnikova 1963).
Distribution: Palaearctic.
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Protapion truqui* (Reiche et De Sauley, 1858)**
Material examined: 1 ex., Mardin, 25.4.2004; 1 ex., Akbağ, 13.5.2004; 1 ex., idem, 3.6.2003; 1 ex., idem, 3.3.2004; 1 ex., idem, 7.6.2004; 2 ex., Ömerli, 12.6.2002; 5 ex., idem, 24.5.2003; 1 ex., idem, 7.6.2004; 1 ex., Çermik, 6.6.2003.
Host plants of larva: *Trifolium* (Friedman & Freidberg 2007).
Distribution: Balkan Peninsula, Syria, Israel, Jordan, Turkey (Wagner 1910, Friedman & Freidberg 2007).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Tribe: Oxystomatini Alonso-Zarazaga, 1991

Genus: *Catapion* Schilsky, 1906

***Catapion pubescens* (Kirby, 1811)**
Material examined: 1 ex., Sivrice, 1.8.2003.
Host plants of larva: *Trifolium*, *Coronilla* (Ehret 1990).
Distribution: West Palaearctic.
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Catapion burdigalense* (Wencker, 1858)**
Material examined: 1 ex., Ömerli, 7.6.2004.
Host plants of larva: *Ononis* (Ehret 1990); *Medicago* (Ter-Minassian 1972).
Distribution: West Palaearctic.
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Genus: *Oxystoma* Dumeril, 1806

***Oxystoma ochropus* (Germar, 1818)**
Material examined: 1 ex., Mardin, 1.7.2004.
Host plants of larva: *Lathyrus*, *Vicia* (Ehret 1990).
Distribution: West Palaearctic.
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Genus: *Eutrichapion* Reitter, 1916

***Eutrichapion* sp. pr. *punctigerum* (Paykull, 1792)**
Material examined: 1 ex., Elazığ, 15.6.2004.
Host plants of larva: Fabaciae.
Distribution: Turkey.
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Family: Curculionidae Latreille, 1802
Subfamily: Lixinae Schoenherr, 1823
Tribe: Rhinocyllini Lacordaire, 1863

Genus: *Bangasternus* Gozis, 1886

***Bangasternus orientalis* (Capiomont, 1873)**
Material examined: 1 ex., Sivrice, 21.9.2004.
Host plants of larva: *Centaurea* (Ter-Minassian 1967).
Distribution: South-East Europe, Armenia, Azerbaijan, Turkey (Ter-Minassian 1967).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Tribe: Lixini Schoenherr, 1823

Genus: *Larinus* Dejean, 1921

***Larinus* sp.**
Material examined: 4 ex., Ergani, 17.6.2003.
Host plants of larva: Unknown.
Distribution: Turkey.
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Genus: *Lixus* Fabricius, 1801

***Lixus convexicollis* Petri, 1904**
Material examined: 1 ex., 2 ex., Sivrice, 20.8.2003; 1 ex., Gezin, 18.8.2003; 1 ex., idem, 7.8.2004; 1 ex., idem, 31.8.2004; 1 ex., idem, 7.9.2004; 2 ex., idem, 3.9.2003; 1 ex., Mardin, 22.10.2004; 4 ex., Akbağ, 3.9.2003; 1 ex., idem, 1.7.2004; 1 ex., idem, 7.10.2004; 1 ex., idem, 1.10.2004; 3 ex., 5 ex., Ömerli, 14.8.2003; 1 ex., 2 ex., idem, 24.8.2003; 1 ex., 1 ex., idem, 3.9.2003; 1 ex., idem, 24.6.2004; 1 ex., idem, 7.10.2004; 1 ex., Ye°illi, 2.7.2003; 1 ex., Ergani, 14.10.2004; 1 ex., Çermik, 18.7.2003.
Host plants of larva: Unknown (Ter-Minassian 1967).
Distribution: Armenia, Syria (Ter-Minassian 1967), Asia Minor.
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Lixus albomarginatus* Boheman, 1843**
Material examined: 1 ex., Sivrice, 24.6.2004.
Host plants of larva: *Reseda*, *Erysimum*, *Rorippa* (Dieckmann 1980a).
Distribution: North-West Africa, Europe, Asia Minor, Central Asia, Siberia (Dieckmann 1980a).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Subfamily: Ceutorhynchinae Gistel, 1848
Tribe: Ceutorhynchini Gistel, 1848

Genus: *Ceutorhynchus* Germar, 1824

***Ceutorhynchus sinapicola* Dieckmann, 1975**
Material examined: 1 ex., Sivrice, 3.6.2004.
Host plants of larva: *Sisymbrium* (Colonnelli 2004).
Distribution: East Europe, Asia Minor (Colonnelli 2004).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Ceutorhynchus sophiae* Gyllenhal, 1837**
Material examined: 1 ex., Gezin, 3.6.2004.
Host plants of larva: *Descurainia*, *Sisymbrium* (Colonnelli 2004).
Distribution: Eurasia (Korotyaev 1980, Colonnelli 2004).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Ceutorhynchus deplanatus* Schultze, 1901**
Material examined: 1 ex., Mardin, 25.4.2004; 1 ex., Gezin, 3.6.2004.
Host plants of larva: Unknown
Distribution: Uzbekistan, Tajikistan (Korotyaev 1980), Asia Minor (Colonnelli 2004).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Ceutorhynchus carinatus* Gyllenhal, 1837**
Material examined: 1 ex., Sivrice, 3.6.2004.
Host plants of larva: *Berteroa*, *Erysimum*, *Isatis*, *Lepidium*, *Thlaspi* (Colonnelli 2004).
Distribution: Algeria, Europe, Caucasus (Korotyaev 1980), Asia Minor (Colonnelli 2004).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Ceutorhynchus sulcicollis* (Paykull, 1800)**
Material examined: 1 ex., Sivrice, 3.6.2004; 2 ex., Gezin, 3.6.2004.
Host plants of larva: Brassicaceae (Colonnelli 2004).
Distribution: Palaearctic (Colonnelli 2004).

Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Subfamily: Curculioninae Latreille, 1802
Tribe: Mecinini Gistel, 1856

Genus: *Rhinusa* Stephens, 1831

***Rhinusa* sp.**
Material examined: 1 ex., Çermik, 2.5.2004.
Host plants of larva: Unknown.
Distribution: Turkey.
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Tribe: Tychiini Thomson, 1859

Genus: *Tychius* Germar, 1817

***Tychius consputus* Kiesenwetter, 1864**
Material examined: 1 ex., Elazığ, 15.6.2004; 1 ex., Gezin, 11.6.2003.
Host plants of larva: Unknown (Caldara 1990).
Distribution: North Africa, South Europe, Asia Minor (Caldara 1990).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Tychius tibialis* Boheman, 1843**
Material examined: 1 ex., Sivrice, 24.6.2004; 2 ex., Mardin, 22.6.2004; 7 ex., Akbağ, 22.6.2004.
Host plants of larva: *Trifolium* (Caldara 1990).
Distribution: South Europe, Turkey (Caldara 1990).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Genus: *Lepidotychius* Penecke, 1922

***Lepidotychius winkleri* (Franz, 1940)**
Material examined: 1 ex., Mardin, 7.6.2004.
Host plants of larva: Unknown.
Distribution: Russia, Armenia, Azerbaijan, Uzbekistan, Turkmenistan, Tajikistan, Turkey, Iran, Afghanistan, Egypt (Caldara 1986).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Genus: *Sibinia* Germar, 1817

***Sibinia bipunctata* Kirsch, 1870**
Material examined: 1 ex., Keban, 28.9.2004; 1 ex., Sivrice, 3.6.2004; 1 ex., Gezin, 18.8.2004; 1 ex., Mardin, 3.7.2003.
Host plants of larva: Unknown.
Distribution: North Africa, South-East Europe, Turkey, Central Asia (Caldara 1979).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Sibinia subirrorata* Faust, 1885**
Material examined: 10 ex., Mardin, 7.6.2004.
Host plants of larva: Unknown.
Distribution: Turkey, Russia, Central Asia (Caldara 1979).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Sibinia phalerata* (Gyllenhal, 1836)**
Material examined: 1 ex., Gezin, 1.8.2003; 1 ex., idem, 7.7.2004; 1 ex., Mardin, 3.7.2003; 3 ex., Akbağ, 3.7.2003; 1 ex., idem, 7.10.2004; 1 ex., Ergani, 28.7.2004.
Host plants of larva: *Cerastium*, *Petrophagia*, *Arenaria*, *Silene* (Caldara 1985).
Distribution: Central, South-East Europe, Scandinavia, Turkey, Caucasus, Central Asia (Caldara 1985).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Tribe: Smicronychini Seidlitz, 1891

Genus: *Smicronyx* Schoenherr, 1843
***Smicronyx* sp.1**
Material examined: 1 ex., Sivrice, 14.9.2004; 2 ex., Gezin, 18.8.2004; 2 ex., idem, 21.9.2004; 1 ex., idem, 8.10.2004; 1 ex., Akbağ, 3.3.2004.

***Smicronyx* sp.2**
Material examined: 1 ex., Gezin, 21.9.2004.

***Smicronyx* sp.3**
Material examined: 1 ex., Ergani, 8.8.2004.

***Smicronyx* sp.4**
Material examined: 1 ex., Gezin, 7.7.2004; 2 ex.,

idem, 31.8.2004; 1 ex., idem, 8.9.2004.

Tribe: Anthonomini Thomson, 1859

Genus: *Anthonomus* Germar, 1817

***Anthonomus amygdali* Hustache, 1930**
Material examined: 1 ex., Keban, 3.6.2004; 1 ex., Sivrice, 25.4.2002; 2 ex., Gezin, 3.6.2004; 2 ex., Mardin, 25.4.2004; 4 ex., idem, 3.5.2004; 1 ex., Akbağ, 8.3.2004; 2 ex., idem, 23.4.2004; 3 ex., Yeşilli, 2.4.2002; 1 ex., Ergani, 28.4.2004; 11 ex., idem, 6.5.2004; 5 ex., Çermik, 12.4.2004; 2 ex., idem, 29.4.2003.
Host plants of larva: *Amygdalus* (Dieckmann 1968).
Distribution: North Europe, South and South-East Europe, Turkey (Dieckmann 1968).
Remarks: This species is obligate on almonds.

***Anthonomus variabilis* (Hoffman, 1963)**
Material examined: 1 ex., Sivrice, 6.10.2003; 8 ex., Mardin, 25.4.2004; 3 ex., idem, 3.5.2004; 1 ex., Akbağ, 3.6.2003; 2 ex., idem, 3.3.2004; 6 ex., idem, 23.4.2004; 1 ex., idem, 13.5.2004; 1 ex., Yeşilli, 2.4.2002; 7 ex., Ergani, 16.5.2002; 1 ex., idem, 28.4.2004; 10 ex., idem, 6.5.2004; 5 ex., Çermik, 29.4.2003; 10 ex., idem, 12.4.2004; 4 ex., idem, 28.4.2004; 1 ex., Harput, 7.10.2003.
Host plants of larva: *Amygdalus* (Dieckmann 1968).
Distribution: Iran, Turkey (Dieckmann 1968).
Remarks: This species is obligate on almonds.

Subfamily: Hyperinae Marseul, 1863
Tribe: Hyperini Marseul, 1863

Genus: *Hypera* Germar, 1817
***Hypera postica* (Gyllenhal, 1813)**
Material examined: 1 ex., Sivrice, 15.6.2004.
Host plants of larva: *Medicago* (Zaslavskij 1961).
Distribution: West Palaearctic, North America (Zaslavskij 1961).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Hypera nigrirostris* (Fabricius, 1775)**
Material examined: 1 ex., Mardin, 7.6.2004.
Host plants of larva: *Trifolium* (Zaslavskij 1961).
Distribution: Holarctic (Zaslavskij 1961).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Subfamily: Entiminae Schoenherr, 1823
Tribe: Sitonini Gistel, 1856

Genus: *Sitona* Germar, 1817

***Sitona macularius* (Marsham, 1802)**
Material examined: 1 ex., Mardin, 24.5.2003; 2 ex., Akbağ, 3.6.2003; 11 ex., Ömerli, 24.5.2003; 3 ex., Ergani, 17.6.2003.
Host plants of larva: *Vicia, Trifolium, Astragalus, Coronilla, Pisum, Phaseolus, Lens, Medicago, Lupinus, Onobrychis* (Dieckmann 1980b).
Distribution: Holarctic.
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Sitona puncticollis* Stephens, 1832**
Material examined: 1 ex., Elazığ, 21.7.2003; 1 ex., Sivrice, 15.6.2004.
Host plants of larva: *Trifolium* (Dieckmann 1980b).
Distribution: Europe, M, C Asia (Dieckmann 1980b).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

***Sitona callosus* Gyllenhal, 1834**
Material examined: 1 ex., Sivrice, 24.6.2004; 1 ex., Gezin, 25.7.2004; 1 ex., idem, 7.9.2004; 1 ex., Mardin, 10.10.2004.
Host plants of larva: *Onobrychis* (Dieckmann 1980b).
Distribution: South and South-East Europe, Asia Minor, Central Asia, India (Dieckmann 1980b), Siberia (Legalov & Opanassenko 2000).
Remarks: An incidental species on almonds. Imago feed in addition on this plant.

Tribe: Polydrusini Schoenherr, 1823

Genus: *Phyllobius* Germar, 1824
***Phyllobius* sp.**
Material examined: 1 ex., Mardin, 25.4.2004.
Remarks: This species is a polyphage of various tree species, including almond.

Genus: *Polydrusus* Germar, 1817

***Polydrusus roseiceps* Pesarini, 1974**
Material examined: 4 ex., Elazığ, 15.6.2004; 3 ex., Keban, 3.6.2004; 8 ex., Mardin, 3.5.2004; 3 ex., Ergani, 17.6.2004; 1 ex., Gezin, 3.6.2004; 4 ex., idem, 25.4.2004; 2 ex., idem, 7.6.2004; 10 ex., Akbağ, 2.4.2002; 16 ex., idem, 23.4.2004; 3 ex., idem, 13.5.2004; 4 ex., Ömerli, 7.6.2004; 3 ex., Yeºilli, 2.4.2002; 5 ex., Ergani, 16.5.2002; 2 ex., idem, 28.4.2004; 12 ex., idem, 6.5.2004; 7 ex., idem, 1.6.2004; 2 ex., Çermik, 6.6.2003.
Host plants: Unknown.
Distribution: Asia Minor.
Remarks: This species is a polyphage of various tree species, including almond.

Tribe: Cyphicerini Lacordaire, 1863

Genus: *Myllocerus* Schoenherr, 1823

***Myllocerus damascenus* Mille, 1861**
Material examined: 4 ex., Mardin, 22.6.2003; 8 ex., Akbağ, 1.7.2004; 7 ex., Ergani, 28.7.2004; 1 ex., idem, 8.8.2004.
Host plants: Unknown.
Distribution: Asia Minor.
Remarks: This species is a polyphage of various tree species, including almonds.

Family: Scolytidae Latreile, 1807
Subfamily: Scolytinae Latreile, 1807
Tribe: Scolytini Latreile, 1807

Genus: *Scolytus* Geoffroy, 1762
***Scolytus rugulosus* (Mueller, 1818)**
Material examined: 9 ex., Ömerli, 3.4.2003.
Host plants of larva: fruit- trees of Rusaceae (Stark 1952).
Distribution: Europe, Caucasus, Asia Minor, North America (Stark 1952).
Remarks: This species is obligate on Rosaceae, including almond.

***Scolytus amygdali* Guérin-Méneville, 1847**
Material examined: 4 ex., Çermik, 9.6.2003.
Host plants of larva: *Amygdalus*, *Prunus*, *Melanchier*, *Mespilus* (Stark 1952).
Distribution: North Africa, South Europe, Caucasus, Asia Minor (Stark 1952).
Remarks: This species is obligate on Rosaceae, including almond.

As a result 54 species from the superfamily Curculionoidea (Rhynchitidae - 2, Brentidae - 20, Curculionidae - 30 and Scolytidae - 2) have been collected from almond (*Amygdalus communis*). Even though 54 species are found on almond trees, most of these do not feed on almond. Only nine of these species feed on almond trees, and among these nine species, four feed on the fruit (*Tatianaerhynchites aequatus*, *Epirhynchites smyrnensis*, *Anthonomus amygdale*, *A. variabilis*), two on the wood (*Scolytus rugulosus* and *S. amygdali*) and three on the leaves (*Phyllobius* sp., *Polydrusus roseiceps*, *Myllocerus damascenus*).

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The Seventh Symposium of Baltic Coleopterologists

The Seventh Symposium of Baltic Coleopterologists will be held at the Hyytiälä Forestry Research Station, in Central Finland. The dates of the Symposium will be wed. 3rd - sat 6th September 2008. The programme will include plenary presentations from prominent Finnish entomologists, poster and oral presentations, barbecue party, Symposium dinner, an excursion to a variety of regionally typical habitats and an opportunity to visit the SMEAR-II station (Measuring Forest Ecosystem - Atmosphere Relations). A book or abstracts will be provided for participants and all those who present papers (either oral or poster) will be invited to submit a paper for publication in the proceedings.

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