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**SOUTHEASTERN ANATOLIA REGION INSECT FAUNA I  
(COLEOPTERA II: CURCULIONOIDEA, TENEBRIONOIDEA)  
OF TURKEY**

**SUMMARY**

The aim of this study was to determine Insect fauna Southeastern Anatolia Region. Surveys on insect species in various ecologies have been conducted in the provinces (Adıyaman, Batman, Gaziantep, Diyarbakır, Mardin, Siirt, Şanlıurfa, Şırnak) of Southeastern Anatolia region between the years 1948-2013. Almost 2600 species and subspecies among 180 families belonging to 13 insect orders are defined owing to these studies. Coleoptera species formed about 20% of the collected insects. Coleoptera included 32 families were recorded. During this study totally 248 species were found in 9 families and in 2 superfamilies of Coleoptera. Those superfamilies are Curculionoidea and Tenebrionoidea. The distribution of determined insect types according to the provinces, plant hosting and feeding type is also done. Information about their identification, host plants, and distribution in Southeastern Anatolia Region was presented as detailed.

**Keywords:** Insect Fauna, Coleoptera, Curculionoidea, Tenebrionoidea, Turkey.

**INTRODUCTION**

Insects (Insecta) are the most numerous group of animals in the world, with over one million species that have been described (Price, 1997). Insects are difficult to study because they represent the most species-rich, yet one of the least known, of all taxa of living organisms, a problem that is compounded by a dearth of skilled entomologists. Although the number of described insect species is uncertain due to synonyms and the lack of a global list, most authorities recognize 900 000–1 000 000 named morpho-species, representing 56% of all species known on Earth (Groombridge, 1992; Anonymous, 2003). Sensible estimates of the number of insects yet to be discovered range from another 1 million to 30 million species (Erwin, 1982; 1991), although most predict around 2–8 million more species (May, 1990; Gaston, 1991; Stork, 1997; Ødegaard, 2000).

Turkey in fact seems to be like a small continent in terms of biological diversity. Despite the Anatolia is not a continent alone, it contains all properties of a continent that should have an ecosystem and habitat. Each of seven geographical regions in Turkey has a distinguishable climate, flora and fauna.

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The aim of this study is to make contribution to some faunistical records of Coleoptera of the Southeastern Anatolia Region of Turkey.

### MATERIAL AND METHODS

Southeastern Anatolia Region (Adıyaman, Batman, Gaziantep, Diyarbakır, Mardin, Siirt, Şanlıurfa, Şırnak) entomology studies on insect species in different ecological provinces were made between the years 1948-2013 (Fig. 1).

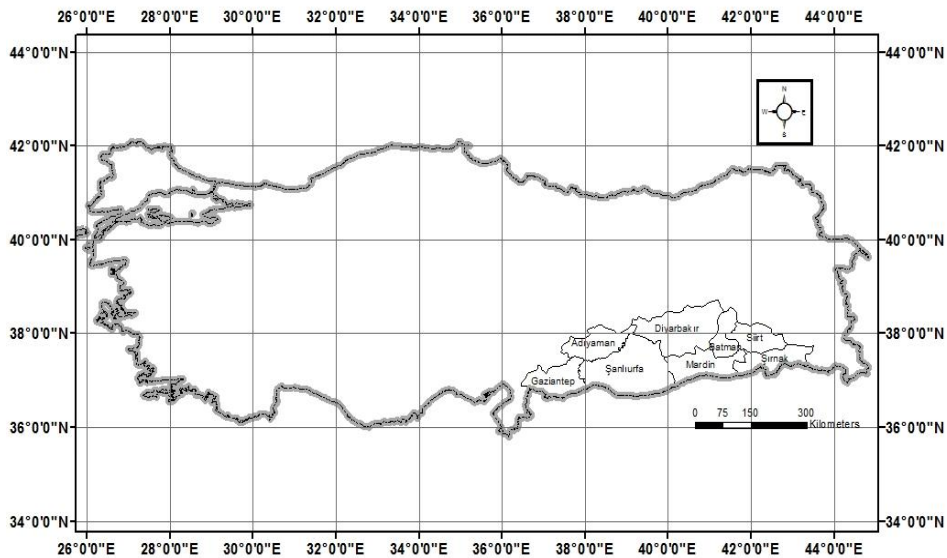


Figure 1. Sampling localities in Southeastern Anatolia Region of Turkey

In this study, the inventory has reached the major advantage of the waterways:

- Currently in Turkey, published or unpublished entomology journals related to scanning,
- Giving more weight to faunistic studies, and in the meantime, the insect fauna of our country foreign scientific journals that publishes articles about scanning,
- Faculty of Agriculture, Faculty of Science and Regional Plant Protection.

### RESULTS AND DISCUSSION

Surveys on insect species in various ecologies have been conducted in the provinces (Adıyaman, Batman, Gaziantep, Diyarbakır, Mardin, Siirt, Şanlıurfa, Şırnak) of Southeastern Anatolia region between the years 1948-2013. Almost 2600 species and subspecies almost 180 families belonging to 13 insect orders are defined owing to these studies. During this study totally 248 species were found in 9 families and in 2 superfamilies of Coleoptera. Those superfamilies are Curculionoidea and Tenebrionoidea. The number and percentages of the species of the families are given on table 1.

Table 1. Number of species of coleoptera on southeastern anatolia region

Superfamily	Family	Number Species	%
Curculionoidea	Curculionidae	171	68,95
	Brentidae	20	8,06
	Rhynchitidae	10	4,03
	Scolytidae	6	2,42
	Attelabidae	2	0,81
Tenebrionoidea	Meloidae	26	10,48
	Tenebrionidae	10	4,03
	Anthicidae	2	0,81
	Mycetophagidae	1	0,40
Total	9	248	100,00

The distribution of insect species in the Southeastern Anatolia Region as a result of studies carried out in different provinces ecology, information on the host status and feeding has been given below.

Order Coleoptera (beetles)  
Superfamily Curculionoidea  
Family Rhynchitidae

*Coenorrhinus aequatus* (Linnaeus, 1767) Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak Host plant: *Prunus avium* L.

*Epihynchites smyrnensis* (Desbrocher des Loges, 1869) Distribution: Adıyaman, Diyarbakır, Mardin, Siirt, Şanlıurfa Host plant: *Amygdalus communis* L.

*Involvulus hungaricus* (Herbst, 1784) Distribution: Adıyaman, Mardin Host plant: Weeds

*Rhynchites auratus* (Scopoli, 1763) Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak Host plant: *Prunus avium* L.

*Rhynchites aequatus* Linnaeus, 1767 Distribution: Mardin Host plant: *Prunus avium* L.

*Rhynchites hajastanicus* Ter-Minassian, 1965 Distribution: Adıyaman Host plant: Weeds

*Rhynchites purpureipennis* Voss, 1973 Distribution: Gaziantep Host plant: Weeds

*Rhynchites smyrnensis* Desbrochers, 1869 Distribution: Adıyaman, Diyarbakır, Mardin, Siirt, Şanlıurfa, Host plant: *Amygdalus communis* L.

*Rhynchaenus subfarinus* (Klima, 1935) Distribution: Gaziantep Host plant: Weeds

*Tatianaerhynchites aequatus* (Linnaeus, 1767) Distribution: Adıyaman, Diyarbakır, Mardin, Siirt, Şanlıurfa Host plant: *Amygdalus communis* L.

#### Family Brentidae

*Alocentron curvirostre* (Gyllenhal, 1833) Distribution: Diyarbakır Host plant: *Amygdalus communis* L.

*Aspidapion radiolus* (Marsham, 1802) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Catapion pubescens* (Kirby, 1811) Distribution: Diyarbakır Host plant: *Amygdalus communis* L.

*Catapion burdigalense* (Wencker, 1859) Distribution: Mardin Host plant: *Amygdalus communis* L.

*Ceratapion basicorne* (Illiger, 1807) Distribution: Diyarbakır Host plant: *Amygdalus communis* L.

*Ceratapion beckeri* (Desbrochers, 1875) Distribution: Mardin Host plant: *Amygdalus communis* L.

*Ceratapion carduorum* (Kirby, 1808) Distribution: Diyarbakır Host plant: *Amygdalus communis* L.

*Ceratapion fremuthi* (Wanat, 1995) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Ceratapion gibbifrons* (Hustache, 1932) Distribution: Diyarbakır Host plant: *Amygdalus communis* L.

*Eutrichapion sp. pr. punctigerum* (Paykull, 1792) Distribution: Diyarbakır, Host plant: *Amygdalus communis* L.

*Malvapion malvae* (Fabricius, 1775) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Oxystoma ochropus* (Germar, 1818) Distribution: Mardin Host plant: *Amygdalus communis* L.

*Protapion trifolii* (Linnaeus, 1768) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Protapion truquii* (Reiche et De Sauley, 1858) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Protapion varipes* (Germar, 1817) Distribution: Mardin Host plant: *Amygdalus communis* L.

*Rhopalapion longirostre* (Olivier, 1807) Distribution: Diyarbakır Host plant: *Amygdalus communis* L.

*Squamapion atomarium* (Kirby 1808) Distribution: Mardin Host plant: *Amygdalus communis* L.

*Squamapion elongatum* (Germar, 1817) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Squamapion phocopus* (Eppelsheim, 1888) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Squamapion vicinum* (Kirby, 1808) Distribution: Mardin Host plant: *Amygdalus communis* L.

Family Attelabidae

*Coenorrhinus aequatus* (Linnaeus, 1767) Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak, Host plant: *Amygdalus communis* L., *Prunus avium* L.

*Lasiorrhynchites praeustus* (Voss, 1933) Distribution: Gaziantep Host plant: Weeds

Family Curculionidae

*Alocentron curvirostre* (Gyllenhal, 1833) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Anthonomus amygdali* Hustache, 1930 Distribution: Adıyaman, Diyarbakır, Gaziantep, Mardin, Şanlıurfa Host plant: *Amygdalus communis* L.

*Anthonomus baudueri* Desbrochers, 1875 Distribution: Diyarbakır, Gaziantep Host plant: *Amygdalus communis* L., *Prunus persica* (L.)

*Anthonomus bituberculatus* Thomson, 1868 Distribution: Diyarbakır, Mardin, Host plant: *Amygdalus communis* L.

*Anthonomus brunnipennis* Curtis, 1840 Distribution: Diyarbakır, Mardin, Host plant: *Amygdalus communis* L.

*Anthonomus rubripes* Gyllenhal, 1835 Distribution: Adıyaman, Mardin, Siirt, Şanlıurfa Host plant: *Amygdalus communis* L.

*Anthonomus variabilis* (Hoffman, 1963) Distribution: Diyarbakır, Mardin, Host plant: *Amygdalus communis* L.

*Apion aeneum* Fabricius, 1775 Distribution: Diyarbakır Host plant: Winter quarters

*Apion aestimatum* Faust, 1890 Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa Host plant: *Amygdalus communis* L., *Avena sativa* L., *Medicago sativa* L., *Onobrychis sativa* Lam., *Vicia sativa* L.

*Apion arrogans* (Wencker, 1858) Distribution: Adıyaman, Diyarbakır, Mardin, Şanlıurfa Host plant: *Zea mays* L., Winter quarters

*Apion apricans* Herbst, 1797 Distribution: Diyarbakır Host plant: Winter quarters

*Apion assimile* Kirby, 1808 Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa Host plant: *Amygdalus communis* L., *Avena sativa* L., Winter quarters

*Apion beckeri* Desbrochers, 1875 Distribution: Adıyaman, Diyarbakır Host plant: *Medicago sativa* L., *Onobrychis sativa* Lam., *Vicia sativa* L.

*Apion brenskei* Desbrochers, 1895 Distribution: Adıyaman Host plant: *Medicago sativa* L., *Onobrychis sativa* Lam., *Vicia sativa* L.

*Apion carduorum* Kirby, 1808 Distribution: Diyarbakır Host plant: Winter quarters

*Apion dissimile* Germar, 1817 Distribution: Diyarbakır Host plant: Winter quarters

*Apion jordanicum* (Voss, 1964) Distribution: Adıyaman, Host plant: *Medicago sativa* L., *Onobrychis sativa* Lam., *Vicia sativa* L.

*Apion longirostre* Olivier, 1807 Distribution: Gaziantep Host plant: Weeds

*Apion loti* Kirby, 1808 Distribution: Gaziantep Host plant: Weeds

*Apion marchicum* Herbst, 1797 Distribution: Gaziantep Host plant: Weeds

*Apion neorelictum* (Bajtenov & Lodos, 1977) Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak Host plant: *Amygdalus communis* L., *Medicago sativa* L.

*Apion (Kalcapion) pallipes* Kirby, 1808 Distribution: Diyarbakır, Mardin, Host plant: *Amygdalus communis* L.

*Apion persicum* (Desbrochers, 1893) Distribution: Adıyaman Host plant: *Medicago sativa* L., *Onobrychis sativa* Lam., *Vicia sativa* L.

*Apion scalptum* Mulsant & Rey, 1858 Distribution: Adıyaman Host plant: *Medicago sativa* L., *Onobrychis sativa* Lam., *Vicia sativa* L.

*Apion seniculus* Kirby, 1808 Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak Host plant: *Amygdalus communis* L., *Avena sativa* L.

*Apion urticarium* Herbst, 1784 Distribution: Gaziantep Host plant: Weeds

*Apion tenue* Kirby, 1808 Distribution: Gaziantep Host plant: Weeds

*Apion transversum* Bajt. et Lodos (1977) Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak Host plant: *Amygdalus communis* L., *Avena sativa* L., *Medicago sativa* L., *Onobrychis sativa* Lam., *Vicia sativa* L.

*Apion (Protapion) trifolii* (Linnaeus, 1768) Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak Host plant: *Amygdalus communis* L., *Avena sativa* L., *Medicago sativa* L., *Onobrychis sativa* Lam., *Vicia sativa* L.

*Apion (Protapion) truguii* Reiche, 1857 Distribution: Gaziantep Host plant: Weeds

*Aspidapion radiolus* (Marsham, 1802) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Bangasternus planifrons* (Brulle, 1882) Distribution: Gaziantep Host plant: Weeds

*Bangasternus orientalis* (Capiomont, 1873) Distribution: Diyarbakır, Gaziantep, Mardin Host plant: Weeds

*Calosirus ovulum* (Schultze, 1897) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Corimalia pallida* (Olivier, 1807) Distribution: Gaziantep Host plant: *Tamarix* sp.

*Catapion burdigalense* (Wencker, 1859) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Catapion pubescens* (Kirby 1811) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Ceratapion basicorne* (Illiger, 1807) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Ceratapion beckeri* (Desbrochers, 1875) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Ceratapion carduorum* (Kirby, 1808) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Ceratapion fremuthi* (Wanat, 1995) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Ceratapion gibbifrons* (Hustache, 1932) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Ceutorhynchus peyerimhoffi* Hustache, 1916 Distribution: Şanlıurfa Host plant: Weeds

*Ceutorhynchus abbreviatus* Redtenbacher, 1849 Distribution: Gaziantep Host plant: Weeds

*Ceutorhynchus trimaculatus* (Fabricius, 1775) Distribution: Diyarbakır Host plant: Winter quarters

*Ceutorhynchus angustus* Dieckmann & Smreczynski, 1972 Distribution: Diyarbakır Host plant: Winter quarters

*Ceuthorrhynchus caucasicus* Kirsch, 1877 Distribution: Diyarbakır Host plant: Winter quarters

*Ceuthorrhynchus deplanatus* Schultze, 1901 Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L., Winter quarters

*Ceuthorrhynchus sp. nr. suturalis* Fabricius, 1775 Distribution: Diyarbakır Host plant: Winter quarters

*Ceutorhynchus trimaculatus* (Fabricius, 1775) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Ceutorhynchus carinatus* Gyllenhal, 1837 Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Ceutorhynchus contractus* (Marsham, 1802) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Ceutorhynchus erysemi* Olivier, 1790 Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L., *Prunus avium* L.

*Ceutorhynchus sinapicola* Dieckmann, 1975 Distribution: Diyarbakır Host plant: *Amygdalus communis* L.

*Ceutorhynchus sophiae* (Gyllenhal, 1837) Distribution: Diyarbakır Host plant: *Amygdalus communis* L.

*Ceutorhynchus subpilosus* C.N.F. Brisout de Barneville, 1869 Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Ceutorhynchus sulcicollis* (Paykull 1800) Distribution: Diyarbakır, Gaziantep Host plant: Winter quarters

*Cionus merkli* Stierlin, 1882 Distribution: Gaziantep Host plant: Weeds

*Cionus olivieri* Rosenschold, 1838 Distribution: Gaziantep Host plant: Weeds

*Chlorophorus varius* (Müller, 1766) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Coeliodes rubricus* Gyllenhal, 1837 Distribution: Adıyaman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa Host plant: *Pistacia vera* L.

*Coenorrhinus aequatus* Voss, 1933 Distribution: Adıyaman, Diyarbakır, Mardin, Siirt, Şanlıurfa, Host plant: *Amygdalus communis* L.

*Coniatus splendidulus* Fabricius, 1781 Distribution: Gaziantep Host plant: *Tamarix* sp.

*Conioleonus nigrosuturatus* (Goeze, 1777) Distribution: Gaziantep Host plant: Weeds

*Curculio nucum* Linnaeus, 1758 Distribution: Mardin Host plant: *Prunus avium* L.

*Epirhynchites smyrnensis* (Desbrochers des Loges, 1869) Distribution: Diyarbakır, Mardin, Host plant: *Amygdalus communis* L.

*Eptacus arachnoides* (Stierlin, 1861) Distribution: Diyarbakır Host plant: Winter quarters

*Eusomus mniszechi* Hochhuth, 1851 Distribution: Gaziantep Host plant: Weeds

*Eusomus ovulum* Germar, 1824 Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak Host plant: *Amygdalus communis* L., *Avena sativa* L., *Medicago sativa* L., *Onobrychis sativa* Lam., *Vicia sativa* L.

*Eutrichapion* sp. pr. *punctigerum* (Paykull, 1792) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Gymnetron asellus* Schoenherr, 1838 Distribution: Gaziantep Host plant: Weeds

*Gymnetron germari* Faust, 1889 Distribution: Gaziantep Host plant: Weeds

*Gymnetron labile* Herbst, 1795 Distribution: Gaziantep Host plant: Weeds

*Gymnetron tetrum* (Fabricius, 1792) Distribution: Gaziantep Host plant: Weeds

*Gymnetron vittipenne* Marseul, 1876 Distribution: Gaziantep Host plant: Weeds

*Holotrichapion pisi* (Fabricius, 1801) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Hypera farinosa* (Boheman, 1842) Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak Host plant: *Amygdalus communis* L., *Avena sativa* L., *Medicago sativa* L., *Prunus avium* L., *Onobrychis sativa* Lam., *Vicia sativa* L.

*Hypera meles* (Fabricius, 1793) Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak Host plant: *Amygdalus communis* L., *Avena sativa* L.



*Hypera nigrirostris* (Fabricius, 1775) Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak Host plant: *Amygdalus communis* L., *Avena sativa* L., Winter quarters

*Hypera jucundus* Capiomont, 1868 Distribution: Diyarbakır Host plant: Winter quarters

*Hypera postica* (Gyllenhal, 1813) Distribution: Diyarbakır, Gaziantep Host plant: *Amygdalus communis* L., Winter quarters

*Hypera trilineata* Marsham, 1802 Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak Host plant: *Amygdalus communis* L., *Avena sativa* L.

*Hypera variabilis* (Herbst, 1795) Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak Host plant: *Amygdalus communis* L., *Avena sativa* L., *Medicago sativa* L., *Onobrychis sativa* Lam., *Prunus avium* L., *Vicia sativa* L.

*Hypera zoilus* Scopoli, 1763 Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak Host plant: *Amygdalus communis* L., *Avena sativa* L., *Medicago sativa* L., *Onobrychis sativa* Lam., *Vicia sativa* L.

*Larinus brenskei* Faust, 1900 Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Larinus curtus* Hochhuth, 1851 Distribution: Gaziantep Host plant: Weeds

*Larinus flavescens* Germar, 1824 Distribution: Gaziantep Host plant: Weeds

*Larinus jaceae* (Fabricius, 1775) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Larinus latus* (Herbst, 1784) Distribution: Diyarbakır Host plant: *Gundelia tournefortii* L.

*Larinus lucidirostris* Penecke, 1936 Distribution: Gaziantep Host plant: *Onopordum* sp.

*Larinus minutus* Gyllenhal, 1836 Distribution: Gaziantep Host plant: *Cirsium* sp., *Onopordum* sp., *Vitis vinifera* L.

*Larinus* sp.pr.nanus Lucas, 1846 Distribution: Southeastern Anatolia Region Host plant: Weeds

*Larinus onopordi* (Fabricius, 1787) Distribution: Gaziantep Host plant: Weeds

*Larinus orientalis* Capiomont, 1874 Distribution: Gaziantep Host plant: *Cirsium* sp., *Onopordum* sp. Weeds

*Larinus rudicollis* Petri, 1907 Distribution: Gaziantep Host plant: *Cirsium* sp., *Onopordum* sp., Weeds

*Larinus sibiricus* Gyllenhal, 1835 Distribution: Adıyaman Host plant: Weeds

*Larinus syriacus* Gyllenhal, 1835 Distribution: Gaziantep Host plant: Weeds

*Larinus turbinatus* Gyllenhal, 1835 Distribution: Diyarbakır Host plant: *Cirsium arvense* L.

*Lepidotychius winkleri* Franz, 1940 Distribution: Southeastern Anatolia Region Host plant: *Amygdalus communis* L.

*Limobius borealis* (Paykull, 1792) Distribution: Gaziantep Host plant: Weeds

*Lixus albomarginatus* Boheman, 1843 Distribution: Mardin Host plant: *Amygdalus communis* L.

*Lixus ascanii* (Linnaeus, 1767) Distribution: Diyarbakır Host plant: Winter quarters, Weeds

*Lixus cardui* Olivier, 1807 Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L., *Onopordum* sp. *Prunus avium* L.

*Lixus circumcinctus* Boheman, 1835 Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Lixus convexicollis* Petri, 1904 Distribution: Mardin Host plant: *Amygdalus communis* L., Weeds

*Lixus elegantulus* Boheman, 1843 Distribution: Diyarbakır, Gaziantep, Mardin Host plant: *Amygdalus communis* L., *Rhus* sp.

*Lixus junci* Boheman, 1836 Distribution: Southeastern Anatolia Region Host plant: Weeds

*Lixus iridis* Olivier, 1807 Distribution: Gaziantep Host plant: Weeds

*Lixus obesus* Petri, 1904 Distribution: Southeastern Anatolia Region Host plant: Weeds

*Lixus scolopax* Boheman, 1835 Distribution: Gaziantep Host plant: Weeds

*Lixus speciosus* Miller, 1861 Distribution: Gaziantep Host plant: *Prunus communis* L.

*Lixus subtilis* (Boheman, 1836) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Malvaption malvae* (Fabricius, 1775) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Mecaspis alternans* (Herbst, 1795) Distribution: Diyarbakır Host plant: Winter quarters

*Melanobaris dalmatina* (H. Brisout, 1870) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Microlarinus lypriformis* (Wollaston, 1861) Distribution: Gaziantep Host plant: Weeds

*Microtrogus cuprifer* (Panzer, 1799) Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak Host plant: *Amygdalus communis* L., *Avena sativa* L.

*Mylocherus damascenus* Miller, 1861 Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak Host plant: *Amygdalus communis* L., *Avena sativa* L.

*Otiorhynchus peregrinus* Stierlin, 1861 Distribution: Adıyaman, Diyarbakır, Mardin, Siirt, Şanlıurfa, Host plant: *Avena sativa* L., *Vitis vinifera* L., *Zea mays* L.

*Oxystoma ochropus* (Germar, 1818) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Pachytychius hordei* (Brullé, 1832) Distribution: Adıyaman, Diyarbakır, Mardin, Şanlıurfa, Host plant: *Amygdalus communis* L., *Cucurbita* spp., *Lens culinaris* Medic, *Pistacia vera* L., *Punica granatum* L., *Triticum* sp., Winter quarters

*Phyllobius fulvago* Gyllenhal, 1834 Distribution: Gaziantep, Mardin Host plant: *Pinus* sp.

*Polydrusus gracilicornis* Kiesenwetter, 1864 Distribution: Gaziantep Host plant: *Quercus* sp.

*Polydrusus ponticus* Faust, 1888 Distribution: Adıyaman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Host plant: *Amygdalus communis* L., *Pistacia vera* L.

*Polydrusus roseiceps* Pesarini, 1974 Distribution: Adıyaman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Host plant: *Amygdalus communis* L., *Pistacia vera* L.

*Protapion fulvipes* (Geoffroy, 1785) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Protapion trifolii* (Linnaeus, 1768) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Protapion varipes* (Germar, 1817) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Protapion truqui* (Reiche et De Sauley, 1858) Distribution: Mardin Host plant: Weeds

*Pseudocoeliodes rubricus* (Gyllenhal, 1837) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Rhinosoythrops serripes eibesensis* (Reitter) Distribution: Gaziantep Host plant: *Quercus* sp.

*Rhinusa* sp. Distribution: Diyarbakır Host plant: *Amygdalus communis* L.

*Rhopalapion longirostre* (Olivier, 1807) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Stenocarus cardui* (Herbst, 1784) Distribution: Diyarbakır Host plant: Winter quarters

*Sibinia arenariae* Stephens, 1831 Distribution: Gaziantep Host plant: Weeds

*Sibinia bipunctata* Kirsch, 1870 Distribution: Mardin Host plant: *Amygdalus communis* L.

*Sibinia femoralis* Germar, 1824 Distribution: Diyarbakır Host plant: Winter quarters

*Sibinia reitteri* Desbrochers, 1895 Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Sibinia subelliptica* (Desbrochers, 1873) Distribution: Gaziantep Host plant: Umbelliferous plants

*Sibinia subirrorata* Faust, 1885 Distribution: Mardin Host plant: *Amygdalus communis* L.

*Sibinia syriaca* Faust, 1890 Distribution: Gaziantep Host plant: *Onobrychis sativa* (Sainfoin)

*Sibinia phalerata* (Gyllenhal, 1836) Distribution: Mardin Host plant: *Amygdalus communis* L.

*Smicronyx* sp Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Sitona bicolor sub sp. concaviostris* Fähræus, 1840 Distribution: Diyarbakır Host plant: Winter quarters

*Sitona callosus* Gyllenhal, 1834 Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L., Winter quarters

*Sitona crinitus* (Herbst, 1795) Distribution: Adıyaman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Host plant: *Avena sativa* L., *Lens culinaris* L., *Medicago sativa* L., *Onobrychis sativa* Lam., *Pistacia vera* L., *Vicia sativa* L.

*Sitona humeralis* Stephens, 1831 Distribution: Adıyaman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa Host plant: *Amygdalus communis* L., *Pistacia vera* L., *Medicago sativa* L., *Onobrychis sativa* Lam., *Vicia sativa* L.

*Sitona lineata* (Linnaeus, 1758) Distribution: Gaziantep Host plant: Weeds

*Sitona lineellus* (Bonsdorff, 1785) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Sitona lividipes* Fahæus, 1840 Distribution: Diyarbakır Host plant: Winter quarters

*Sitona longulus* Gyllenhal, 1834 Distribution: Adıyaman, Diyarbakır, Mardin Host plant: *Amygdalus communis* L., *Medicago sativa* L., *Onobrychis sativa* Lam., *Vicia sativa* L.,

*Sitona macularius* (Marshall, 1802) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Sitona puncticollis* Stephens, 1831 Distribution: Adıyaman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa Host plant: *Pistacia vera* L., Winter quarters

*Sitophilus granarius* (Linnaeus, 1758) Distribution: Adıyaman, Diyarbakır, Mardin, Siirt, Şanlıurfa Host plant: *Cucurbita* spp., Storage pests, the pests of flour, *Triticum* spp.

*Sitophilus oryzae* (Linnaeus, 1763) Distribution: Adıyaman Host plant: Storage pests

*Squamapion atomarium* (Kirby, 1808) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Squamapion elongatum* (Germar, 1817) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Squamapion phocopus* (Eppelsheim, 1888) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Squamapion vivinum* (Kirby, 1808) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Stenocarus cardui* (Herbst, 1784) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Strophomorphus damaisoni* Desbrochers, 1875 Distribution: Gaziantep Host plant: Weeds

*Strophomorphus porcellus* (Schoenherr, 1832) Distribution: Gaziantep Host plant: Weeds

*Strophomorphus sublaevigatus* Desbrochers, 1875 Distribution: Gaziantep Host plant: Weeds

*Tanymecus dilaticollis* Gyllenhal, 1834 Distribution: Adıyaman Host plant: *Medicago sativa* L., *Onobrychis sativa* Lam., *Vicia sativa* L.

*Tychius aureolus* Kiesenwetter, 1852 Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak Host plant: *Amygdalus communis* L., *Avena sativa* L., *Medicago sativa* L., *Onobrychis sativa* Lam., *Vicia sativa* L.

*Tychius bicolor* (C. Brisout, 1862) Distribution: Adıyaman, Diyarbakır, Mardin Host plant: *Amygdalus communis* L., *Medicago sativa* L., *Onobrychis sativa* Lam., *Vicia sativa* L.

*Tychius callidus* Caldara, 1990 Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Tychius consputus* Kiesenwetter, 1864 Distribution: Southeastern Anatolia Region Host plant: Weeds

*Tychius meliloti* Stephens, 1831 Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak Host plant: *Amygdalus communis* L., *Avena sativa* L., *Medicago sativa* L., *Onobrychis sativa* Lam., *Vicia sativa* L.

*Tychius picirostris* (Fabricius, 1787) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Tychius tibialis* Boheman, 1843 Distribution: Mardin Host plant: *Amygdalus communis* L.

*Tychius quinquepunctatus* (Linnaeus, 1758) Distribution: Adıyaman, Batman, Diyarbakır, Gaziantep, Mardin, Siirt, Şanlıurfa, Şırnak Host plant: *Amygdalus communis* L., *Avena sativa* L., *Medicago sativa* L., *Onobrychis sativa* Lam., *Vicia sativa* L.

*Xenotychius strigicollis* Reitter, 1897 Distribution: Gaziantep Host plant: *Lens esculenta* Moench

#### Family Scolytidae

*Chaetoptelius vestitus* (Mulsant & Rey 1860) Distribution: Adıyaman, Batman, Diyarbakır, Siirt, Şanlıurfa Host plant: *Pistacia vera* L.

*Carphoborus perisi* Chapuis, 1873 Distribution: Adıyaman, Batman, Diyarbakır, Mardin, Siirt, Şanlıurfa Host plant: *Pistacia vera* L.

*Hylesinus vestitus* Mulsant & Rey, 1861 Distribution: Adıyaman, Gaziantep, Şanlıurfa Host plant: *Pistacia vera* L.

*Phloeotribus scarabaeoides* (Bernard, 1788) Distribution: Adıyaman, Gaziantep, Mardin, Şanlıurfa Host plant: *Olea europaea* L.

*Scolytus rugulosus* (Müller, 1818) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L., *Prunus avium* L.

*Scolytus amygdali* Guérin-Méneville, 1847 Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

#### Superfamily Tenebrionoidea

##### Family Anthicidae

*Notoxus appendicinus* Heberdey, 1936 Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

*Anthelephila caeruleipennis* (La Ferte-Senectere, 1847) Distribution: Diyarbakır, Mardin Host plant: *Amygdalus communis* L.

##### Family Meloidae

*Alosimus armeniacus* (Faldermann, 1837) Distribution: Diyarbakır, Siirt Host plant: Weeds

*Alosimus castaneus* Escherich, 1896 Distribution: Diyarbakır, Mardin, Siirt Host plant: Weeds

*Alosimus chalybaeus* (Tauscher, 1812) Distribution: Şanlıurfa Host plant: Weeds

*Alosimus decolor* (Abeille de Perrin, 1880) Distribution: Mardin Host plant: Weeds

*Alsimum luteus* (Waltl, 1838) Distribution: Adıyaman Diyarbakır, Siirt, Şanlıurfa Host plant: Weeds

*Alosimus syriacus* (Linnaeus 1758) Distribution: Şanlıurfa Host plant: Weeds

*Apalus necydalaeus* (Pallas, 1782) Distribution: Diyarbakır Host plant: Weeds

*Cerocoma dahli* Kraatz, 1863 Distribution: Adıyaman, Diyarbakır, Şanlıurfa Host plant: Weeds

*Cerocoma malatyensis* Kaszab, 1951 Distribution: Siirt Host plant: Weeds

*Cerocoma scovitzii intermedia* Mañan, 1944 Distribution: Gaziantep Host plant: Weeds

*Cerocoma syriaca* Abeille de Perrin, 1880 Distribution: Diyarbakır, Siirt Host plant: Weeds

*Lydus gibbiger* Escherich, 1896 Distribution: Adıyaman, Şırnak Host plant: Weeds

*Micromerus bitlisensis* Kaszab, 1958 Distribution: Diyarbakır Host plant: Weeds

*Micromerus dersinensis* Kaszab, 1968 Distribution: Diyarbakır Host plant: Weeds

*Mylabris apicenigra* Sumacov, 1924 Distribution: Adıyaman Host plant: Weeds

*Mylabris ciliciensis* (Escherich, 1899) Distribution: Diyarbakır Host plant: Weeds

*Mylabris fabricii* Sumakov, 1924 Distribution: Mardin Host plant: Weeds

*Mylabris fusca* (Olivier, 1811) Distribution: Diyarbakır, Mardin, Siirt Host plant: Weeds

*Mylabris humerosa* (Escherich, 1899) Distribution: Mardin Host plant: Weeds

*Mylabris quadripunctata* (Linnaeus, 1767) Distribution: Mardin, Şanlıurfa Host plant: Weeds

*Mylabris zebraea* (Marseul, 1870) Distribution: Adıyaman, Gaziantep, Mardin Host plant: Weeds

*Meloe cicatricosus* Leach, 1815 Distribution: Diyarbakır Host plant: Weeds

*Meloe deflexus* Reitter, 1889 Distribution: Adıyaman Host plant: Weeds

*Meloe mediterraneus* Müller, 1925 Distribution: Diyarbakır Host plant: Weeds

*Stenoderus caucasicus* (Pallas, 1781) Distribution: Diyarbakır Host plant: Weeds

*Stenoderus puncticollis* (Chevrolat, 1829) Distribution: Adıyaman Host plant: Weeds.

#### Family Tenebrionidae

*Blaps tibialis* Reiche, 1857 Distribution: Diyarbakır Host plant: Weeds

*Dailognatha quadricollis* (Brullé, 1832) Eschschaltz Distribution: Adıyaman, Gaziantep Host plant: Weeds

*Dendarus (Pandarinus) tenellus* Mulsant & Rey, 1854 Distribution: Southeastern Anatolia Region Host plant: Weeds

*Gonocephalum costatum* (Brullé, 1832) Distribution: Southeastern Anatolia Region Host plant: Weeds

*Gonocephalum (s. str.) granulatum pusillum* (Fabricius, 1791) Distribution: Weeds Host plant: Weeds

*Palorus subdepressus* (Wollaston, 1864) Distribution: Adıyaman Host plant: Storage pests

*Pedinus (s. str.) strabonis* Seidlitz, 1893 Distribution: Diyarbakır Host plant: Weeds

*Tribolium confusum* Jacquelin du Val, 1868 Distribution: Adıyaman, Diyarbakır, Mardin, Siirt, Şanlıurfa Host plant: *Amygdalus communis* L., *Cucurbita* spp., Storage pests

*Tribolium castaneum* (Herbst, 1797) Distribution: Adıyaman, Diyarbakır, Mardin, Siirt, Şanlıurfa, Host plant: *Amygdalus communis* L., *Cucurbita* spp.

*Opatroides punctatus* Brullé, 1832 Distribution: Adıyaman, Diyarbakır, Mardin, Siirt Host plant: *Nicotiana tabacum* L.

#### Family Mycetophagidae

*Typhae stercorea* (Linnaeus, 1758) Distribution: Adıyaman, Diyarbakır, Mardin, Siirt, Şanlıurfa Host plant: *Amygdalus communis* L., *Cucurbita* spp.

The aim of this study is to make contribution to some faunistical records of Coleoptera of the Southeastern Anatolia Region of Turkey. This region has different climatic conditions and contains different habitats. Coleoptera contains both important phytophagous and also zoophagous insects.

### REFERENCES

- Akkaya, A., 1995, Güneydoğu Anadolu Bölgesinde Baklagil Yem Bitkilerinde Entomolojik Sorunlar ve Çözüm Önerileri. GAP Bölgesindeki Bitki Koruma Sorunları ve Çözüm Önerileri Sempozyumu, Şanlıurfa, S:304-316.
- Akkaya, A., Uygun, N., 1996, Diyarbakır ve Şanlıurfa İlleri Yazlık Sebze Ekosistemindeki Insecta Faunası. Türkiye 3. Entomoloji Kongresi Bildirileri, S: 423-430.
- Anonymous, 2003, Measuring biodiversity for conservation, The Royal Society, London.
- Bingöl, M., C., 1978, Güneydoğu Anadolu Bölgesinde Kültür Yem Bitkilerinde (Yonca: *Medicago sativa* L., Korunga: *Onobrychis sativa* Lam., Fiğ: *Vicia sativa* L.) Zarar Yapan Miridae ve Curculionidae Familyalarına Ait Böcek Türleri, Tanınmaları ve Zararları Üzerinde Araştırmalar. Diyarbakır Bölge Zirai Mücadele Araştırma Enstitüsü (Basılmamış uzmanlık Tezi), S: 80.
- Bolu, H., 2002, Güneydoğu Anadolu Bölgesi Antepfıstığı Alanlarındaki Böcek ve Akar Faunasının Saptanması. Türkiye Entomoloji Dergisi, S: 197-208.
- Bolu, H., 2006, A New Host [*Tatianaerhynchites aequatus* (L.) Coleoptera: Rhynchitidae] Record for *Bracon pectoralis* Wesm., *Baryscapus bruchidii* (Erdős), *Eupelmus urozonus* Dalman and *Exopristus trigonomerus* (Masi) from Turkey. Journal of the Entomological Research Society, Cilt:8, No: 3, S: 51-62.
- Bolu, H., Çınar, M., Özgen, İ., 2005, Diyarbakır, Elazığ, Mardin Bademlerinde Zararlı ve Yararlı Böcek Türlerinin Belirlenmesi ve Önemli Türlerin Populasyon Değişimleri Üzerinde Araştırmalar. Tubitak Proje No:TOGTAG-2886. S. 93.
- Bolu, H., Legalov A., A., 2008, On the Curculionoidea (Coleoptera) fauna of *Amygdalus communis* L. (*Amygdalus communis* L.) Orchards in South-eastern and Eastern Anatolia in Turkey. Baltic Journal of Coleopterology, Vol.: 8. No: 1. P: 75-85.
- Bolu, H., Özgen, İ., 2007, Diyarbakır, Elazığ ve Mardin İlleri Badem Ağaçlarında Zararlı *Anthonomus* Türleri (Col: Curculionidae)'nin Belirlenmesi ve *Anthonomus amygdali* Hustache' nin Populasyon Değişimi. Türk. entomol. derg., Cilt:31. No: 3, S: 189.
- Bolu, H., Özgen, İ., Ayaz, T., 2011, GAP İlleri Badem Ağaçlarında Zararlı Böcek Türleri Üzerinde Bir Değerlendirme. Türkiye IV. Bitki Koruma Kongresi Bildirileri, S: 295.
- Bolu, H., Özgen, İ., Bayram, A., 2006, Diyarbakır, Elazığ ve Mardin İlleri Badem Ağaçlarında Zararlı *Epirhynchites (colonnellinus) smyrnensis* (Desbrochers des Loges) (Coleoptera: Rhynchitidae)'nin Populasyon Değişimi. Harran Ziraat Fakültesi Dergisi, Cilt: 10, No: 3-4, S: 79-85.
- Bolu, H., Özgen, İ., Bayram, A., Çınar, M., 2007, Güneydoğu ve Doğu Anadolu Bölgelerinde Antepfıstığı, Badem ve Kiraz Bahçelerindeki Avcı Coccinellidae



- Türleri, Yayılış Alanları ve Avları. Harran Üni. Ziraat Fakültesi Dergisi, Cilt:11 No: 1-2 S: 39-47.
- Bolu, H., Yücel, A., Özgen, İ., 2005, GAP Alanındaki İllerde Meyve Ağaçlarında Zararlı Curculionidae (Coleoptera) Türleri Üzerinde Bir Değerlendirme. GAP IV. Tarım Kongresi, 2. Cilt, S:280-283.
- Çınar, M., Çimen, İ., Bolu, H., 2004, Elazığ ve Mardin İlleri Kiraz Ağaçlarında Zararlı Olan Türler, Doğal Düşmanları ve Önemlileri Üzerinde Gözlemler. Türk. entomol. derg., 28 (3): 213-220.
- Ergül, C., Dörtbudak, N., Akülke, A., 1972, Doğu ve Güneydoğu Anadolu Bölgesindeki Hububat ve Mamulleri ile Bakliyat Anbar Zararlılarının Yayılışı ve Zararı Üzerinde Araştırmalar. Bitki Koruma Bülteni, Cilt: 12, No: 2, S:129.
- Erwin, T.L., 1982, Tropical forests: their richness in Coleoptera and other arthropod species. Coleopterists Bulletin, 36, 74-75.
- Erwin, T. L., 1991, How many species are there? Revisited Conservation Biology, 5, 1-4.
- Gaston, K. J., 1991, The magnitude of global insect species richness. Conservation Biology, 5: 283-296.
- Gözüağık, C., Özgen, İ., 2005, Türkiye Faunası için Yeni Bir Kayıt Ceutorhynchus peyerimhoffi Hustache, 1916 (Coleoptera: Curculionidae). Türkiye Entomoloji Dergisi, Cilt: 29, No: 3, S: 237-239.
- Günaydın, T., 1972, Güneydoğu ve Doğu Anadolu Bölgelerinde Bağ Zararlıları Üzerinde Sürvey Çalışmaları. Zirai Mücadele Araştırma Yıllığı, No: 6, S: 42.
- Günaydın, T., 1978, Güneydoğu Anadolu Bölgesinde Antepfistıklarında Zarar Yapan Böcek Türleri, Tanınmaları, Yayılışları ve Ekonomik Önemleri Üzerinde Araştırmalar.
- Günaydın, T., Eşim, Ü., Alkan, B., 1987, Güneydoğu Anadolu Bölgesi Antepfistıklarında Hylesinus vestitus Muls.ve Diğer Fıstık Zararlıları Üzerinde Araştırmalar. Diyarbakır Zirai Mücadele Araştırma Enstitüsü.
- Işıkber, A. A., Özdamar, H. Ü., Karcı, A., 2005, Kahramanmaraş ve Adıyaman İllerinde Depolanmış Buğdaylar Üzerinde Rastlanan Böcek Türleri ve Bulaşma Oranları. KSÜ Fen ve Mühendislik Dergisi, Cilt:8, No:1, S: 107-113.
- Karaat, Ş., 1986, Doğu ve Güneydoğu Anadolu Bölgelerinde Tütün (Nicotianat tabacum L.)'de Zararlı Olan Böcek Türleri, Tanınmaları Yayılış Alanları ve Zararları Üzerinde Araştırmalar. Diyarbakır Zirai Mücadele Araştırma Enstitüsü Araştırma Eserleri Serisi, No: 4.
- Karaat, Ş., Göven, M.A., Mart, C., 1986 Güneydoğu Anadolu Bölgesinde Bazı Yabancı Otların Zararına Yaşayan Böcek Türleri Üzerinde İlk İncelemeler. Türkiye I. Biyolojik Mücadele Kongresi Bildirileri, S: 186.
- Karaat, Ş.,Göven, M.A., Mart, C., 1986, Güneydoğu Anadolu Bölgesinde Pamuk Ekim Alanlarında Yararlı Türlerin Genel Durumları. Türkiye I. Biyolojik Mücadele Kongresi Bildirileri, S: 162.

- Kılıç, A.U., Çatalpınar, A. & Adıgüzel, N., 1968, Mercimek Hortum Böceği (*Sitona crinitus*)'nin BiyoeKOlojisi ve Mücadele Metodları Üzerine Araştırmalar. Diyarbakır Ziraî Mücadele Araştırma Enstitüsü.
- Lodos, N., Önder, F., Adıgüzel, N., Şimşek, Z., 1984, Diyarbakır (Karacadağ) 'da Süne'lerin Ovalara Göç Etmeye Başladığı Dönemde, Kışlak Böcek Faunasını Tespit ile Bazı Böcek Türlerinin Kışlak Yerlerinden Çıkış ve Davranışları Üzerinde Araştırmalar. Türkiye Bitki Koruma Dergisi, Cilt: 8, No: 1, S: 45.
- Lodos, N., 1986, Türkiye Entomolojisi (Genel, Uygulamalı, Faunistik). Cilt: 2.
- Maçan, S., 1984, Güneydoğu Anadolu Bölgesi'nde Bağlarda Zarar Yapan Böcek Türleri, Önemlilerinin Tanınmaları, Yayılışları ve Ekonomik Önemleri Üzerinde İncelemeler. Tarım Orman ve Köyişleri Bakanlığı Diyarbakır Bölge Ziraî Mücadele Araştırma Enstitüsü Müdürlüğü Araştırma Eserleri, No: 3, S: 47.
- Maçan, G., 1986, Güneydoğu Anadolu Bölgesi'nde Bademlerde Zarar Yapan Böcek Türleri, Önemlilerinin Tanınmaları, Yayılışları ve Ekonomik Önemleri Üzerinde Araştırmalar. Tarım ve Köyişleri Bakanlığı Diyarbakır Bölge Ziraî Mücadele Araştırma Enstitüsü Müdürlüğü, Araştırma Eserleri Serisi, No: 5, S: 82.
- Mart, C., Karaat, Ş., 1990, Güneydoğu Anadolu Bölgesi Antep Fıstığı Alanlarında Entomolojik Sorunlar. Türkiye 1. Antepfıstığı Sempozyumu Bildiriler, 11-12 Eylül, Gaziantep, S: 160.
- May, R. M., 1990, How many species? Philosophical Transactions of the Royal Society B, 330, 292-304.
- Moore, B., Allard, G., 2008, Climate change impacts on forest health. Forest Health and Biosecurity Working Paper FBS/34E. Rome, FAO.
- Özbek, H., Szaloki, D., 1998, A contribution to the knowledge of the Meloidae (Coleoptera) fauna of Turkey along with new records. Turkish Journal of Zoology, 22: 23-40
- Özar, A.İ., Yücel, A., 1982, Güneydoğu Anadolu Bölgesi'nde Ambarlanan Hububat Ürün Zararlıları Üzerinde Sürvey Çalışmaları. Bitki Koruma Bülteni, Cilt: 22, No: 2.
- Özpınar, A., Yücel, A., 2002, Güneydoğu Anadolu Projesi (GAP) alanındaki pamuklarda zararlı ve avcı böcek türlerinin belirlenmesi. Türkiye 5. Biyolojik Mücadele Kongresi, 4-7 Eylül, Erzurum, S: 247.
- Price, P. W., 1997, Insect Ecology. John Wiley & Sons Inc. New York, 874.
- Ødegaard, F., 2000, How many species of arthropods? Erwin's estimate revised. Biological Journal of the Linnean Society, 71: 583-597.
- Serel, İ., 1978, Güneydoğu Anadolu Bölgesi Çeltiklerinde (*Oryza sativa* L.) Zarar Yapan Böcekler, Tanınmaları, Yayılışları ve Ekonomik Önemleri Üzerinde Araştırmalar. Diyarbakır Bölge Ziraî Mücadele Araştırma Enstitüsü (Yayınlanmamış Uzmanlık Tezi), S: 89.
- Stork, N., 1997, How many species are there? Biodiversity and Conservation, 2: 215-232.
- Şimşek, Z., 1985, Güneydoğu Anadolu Bölgesi'nde Hububat Alanlarında Zararlı Hububat Hortumlu Böceği (*Pachytychius hordei* Brulle) (Col: Curculionidae)'ne

- Karşı Uygun Mücadele Zamanının ve İlaçların Belirlenmesi Üzerinde Çalışmalar. Diyarbakır Bölge Zirai Mücadele Araştırma Enstitüsü.
- Şimşek, Z., 1988, Doğu ve Güneydoğu Anadolu Bölgelerinde Mısır ve Darılarda Zararlı Olan Böcek Türleri, Tanınmaları, Yayılışları Alanları ve Zararları Üzerinde Araştırmalar. Araştırma Eserleri Serisi, No: 6, S: 1-84.
- Şimşek, Z., 1994, Güneydoğu Anadolu Bölgesinde Hububat Alanlarında Hububat Hortumluböceği (*Pachytichius hordei* (Brulle) (Coleoptera: Curculionidae)'ne Karşı En Uygun Mücadele Zamanı ve İlaçlarının Belirlenmesi Üzerinde Araştırmalar. Zirai Mücadele Araştırma Yıllığı, No: 24-25, S: 14.
- Şimşek, Z., 1995, Güneydoğu Anadolu Bölgesinde Hububat Alanlarında Hububat Hortumlu Böceği (*Pachytichius hordei* Brulle) (Coleoptera: Curculionidae)'nin Mücadelesine Esas Biyolojik Kriterler ile En Uygun Mücadele Zamanı ve İlaçların Belirlenmesi Üzerinde Araştırmalar. Bitki Koruma Bülteni, Cilt: 33, No: 3-4. S: 167.
- Şimşek, A., 2012, Diyarbakır İli Antepfıstığı (*Pistacia vera* L.) Alanlarındaki Böcek Faunasının Belirlenmesi. Yüksek Lisans Tezi.
- Türkmen, Ş., Akkaya, A., Yücel, A., 1994, Güneydoğu Anadolu Bölgesinde Mercimeklerde Zararlı Apion (*Apion Arrogans* Wench.) (Col.: Curculionidae)'un Uygun Mücadele Zamanının ve Etkili İlaçların Belirlenmesi Üzerinde Araştırmalar. Zirai Mücadele Araştırma Yıllığı, No: 24-25, S: 36.
- Türkmen, Ş., Göven, M.A., Akkaya, A., 1992, Güneydoğu Anadolu Bölgesinde Mercimek Ekim Alanlarında Bulunan Böcek Türleri ile Önem Durumlarının Tesbiti Üzerinde Çalışmalar. Türkiye II. Entomoloji Kongresi Bildirileri, S: 715-724.
- Yanık, E., 1997, Sanliurfa İlinde Saptanan Antepfıstığı Zararlıları, Populasyon Gelişmeleri ve Zarar Durumları. Yüksek Lisans Tezi.
- Yaşarakıncı, N., 1991, Güneydoğu Anadolu Bölgesinde Mercimek ve Nohut Alanlarında Zararlı Olan *Heliothis* Ochs. (Lep.: Noctuidae) Türleri ve Yayılış Alanları; Nohut Yeşilkurdu (*Heliothis virescens* (Hufnagel)'nın Biyolojisi, Konukçuları ve Doğal Düşmanları. Diyarbakır Zirai Mücadele Araştırma Enstitüsü. Araştırma Eserleri Serisi No: 8, Ankara, S: 79.
- Yücel, A., 1988, Güneydoğu Anadolu Bölgesinde Un Fabrikaları ve Un Değirmenlerinde Bulunan Zararlılar ve Zarar Durumları Üzerinde Ön Çalışmalar. Bitki Koruma Bülteni, Cilt: 28, No: 1-2, S: 57.
- Yücel, A., 1991, Güneydoğu Anadolu Bölgesinde Mercimeklerde Zararlı *Apion arrogans* Wencker (Col: Curculionidae)'nin Morfolojisi. Biyolojisi ve Zararı Üzerinde Araştırmalar. Türkiye Entomoloji Dergisi, Cilt: 15, No: 4, S:223.
- Zeren, O., Yabaş, C., Ulubilir, A., 1992, Gaziantep İlinde *Apion arrogans* Wenk ve *Sitona crinitus* Hbst. (Coleoptera: Curculionidae) 'un Populasyon Değişimi ve Zarar Durumları. Türkiye II. Entomoloji Kongresi Bildirileri, S:513-524.