# CONTRIBUTION TO KNOWLEDGE TO COLEOPTERA (INSECTA) FAUNA IN KIRKLARELI PROVINCE OF TURKEY

# Levent Efil 1

Original scientific paper

Paper presents results of studies of Coleoptera fauna in the Kırklareli province of Turkey. Studies were carried between years 2014-2015 in four localities (Dupnisa, İğneada, Demirköy, Dereköy). Twent three (23) species of the Coleoptera ordo (Elateridae, Staphylinidae, Coccinellidae, Curculionidae, Cerambycidae, Tenebrionidae, Carabidae, Histeridae, Mordellidae, Chrysomelidae, Buprestidae families) are recorded from Kırklareli (Turkey). The most abundant species was *S. conglobata* 

Keywords: Coleoptera, Fauna, Kırklareli, Turkey

#### 1 Introduction

Coleoptera order is an order including the most abundant species in the insect kingdom [1]. Several studies have been performed with the purpose of determining these species in Kırklareli [2, 3, 4, 5, 6]. Most of the studies include records of studies determining the insect species in agricultural ecosystems. Results of the present study include some Coleoptera species found in field surveys carried out in Kırklareli Province in the years 2014 and 2015.

## 2 Material and Methods

Material of the present study includes insect species of the Coleoptera order. Study consists of samplings collected in different dates between the years 2014 and 2015 in Kırklareli Province. Stepping stone sampling, trap and "sweep net" methods were used for sampling in the study. The samples collected were carried to the laboratory, and were sorted according to families, then they were sent to the specialist of the area for diagnosis.

### 3 Results and Discussion

Twenty-three species were found in this study. List of these species and numbers are given in Table 1 together with the location of findings. The family containing the biggest number of species within the species found is the Staphylinidae family

As regards the habitats of the species found in the study, species belonging to Elateridae and Tenebrionidae families were found in sandy areas, species belonging to Staphylinidae family were found in locations close to humid and wet areas, species belonging to Coccinellidae family were found in woodlands and oak barrens, and other species were collected from areas close to agricultural ecosystems with intense foreign weed populations. Among the species found, the *Paederus fuscipes*. Has the potential of causing skin irritation in humans in relation with its capability of causing dermatitis (7). Therefore, human activities in places where this species is found requires attention. This species was found for the first time in the fauna of this province (8). Again, the species found including A. tristis, S. binotatus, O. picipennis and O. punctatus were also found for the first time in the fauna of the province. Among the species found, endemicity pf D. anatolicum and detection in Middle Anatolia (9) and its detection also in Kırklareli in this study shows that the distribution of this species is expanding. It has been found in previous studies that A. roscidus found among the species detected cause significant damages on several plants including apricot and almond trees (10), and also causes significant damages in almond plantations in Southeastern and Eastern Anatolia (11). Therefore, status of this species in fruit plantations in Kırklareli must be assessed in future studies. It is considered that the number of species belonging to Coleoptera order detected in the province will increase with detailed studies to be carried out particularly in river banks and humid areas in future.

Table 1. The species of Coleoptera in Kırklareli Province of Turkey

Species	Date	Location	Number
Elateridae			
Drasterius bimaculatus Rossi, 1790	01.05.2014	Dupnisa, Evrenli	15 exx.
Agriotes proximus Schwarz, 1891	11.04.2015	İğneada Longoz	2 exx
Agriotes sputator Linnaeus,1758	15.05.2014	İğneada Longoz	2 exx
Staphylinidae			
Aleochara tristis Gravenhorst, 1806	07.05.2015	Evrenli	2 exx
Ocypus curtipennis Motschulsky, 1849	01.05.2014	Dupnisa	2 exx
Ocypus picipennis picipennis Fabricius, 1793	11.04.2014	Demirköy	4 exx
Othius punctatus Bernhauer, 1923	05.05.2015	Dereköy	3 exx
Stenus binotatus Ljung, 1804	11.04.2014	Demirköy	2 exx
Paederus fuscipes Curtis, 1826	11.04.2014	Demirköy	4 exx

Species	Date	Location	Number
Coccinellidae			•
Scymnus apetzii Mulsant	07.05.2015	Evrenli	5 exx
Synharmonia conglobataLinnaeus, 1758	07.05.2015	Evrenli	45 exx
Hyperaspis quadrimaculata Redtenbacher, 1843	01.05.2014	Dupnisa	11 exx
Adalia bipunctata Linnaeus,1758	15.05.2014	İğneada Longoz	4 exx
Curculionidae			
Polydrosus roseiceps Pes.	05.05.2015	Dereköy	2 exx
Sitophilus granarius Linnaeus, 1875	05.05.2015	Dereköy	11 exx.
Hypera postica Gyllenhal, 1813	05.05.2015	Dereköy	2 exx.
Cerambycidae			
Dorcadion anatolicum Pic, 1900	05.05.2015	Dereköy	1 exx
Tenebrionidae			
Blaps lethifera Marsham, 1802	05.05.2015	Dereköy	2 exx
Carabidae			
Carabus pachytus	11.04.2014	Demirköy	3 exx
Histeridae			
Hister bimaculatus Linnaeus, 1758	11.04.2014	Demirköy	2 exx
Mordellidae			
Stenalia testacea Fabricius, 1787	15.05.2014	İğneada Longoz	2 exx
Chrysomelidae			
Chyrsomela populi Linnaeus, 1758	11.04.2014	Demirköy	3 exx
Buprestidae			
Agrilus roscidus Kiesenwetter, 1857	11.04.2014	Demirköy	2 exx
TOTALLY			131 exx.

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