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Mehmet Kaplan
Plant Protection Research
Institue, Diyarbakir, Turkey

İnanç Özgen
Fırat University, Bioengineering
Department, Elazig, Turkey

A new record for turkish cleridae family (Insecta: Coleoptera) in the cherry agroecosystem : *Opilo tilloides* chevrolat, 1876

Mehmet Kaplan and İnanç Özgen

Abstract

This study was carried out in order to determine the harmful and beneficial insects found in the cherry orchards between 2016 to 2017 years in Mardin province. In order to determine the species caught in the wine feeding traps that are hanging on the cherry trees. It was determined as *Opilo tilloides* Chevrolat, 1876, (Coleoptera: Cleridae), when the collected samples are examined. Moreover, the species was found to be a new record for Turkey fauna in this study. This information is the first information about habitat preference.

Keywords: Cherry, fauna, new record, Cleridae, *Opilo tilloides*

Introduction

The family Cleridae (Coleoptera) is represented by approximately 350 genera and 3700 species (Bulak *et al.* 2012) [5]. Cleridae species are predators found in various ecological environments. Species are usually fed in wood textures under tree bark, carcasses and bees in termites, as well as in various stored products. In addition to the predator properties of the species, some Necrobia species are fed on stored products of animal origin. Some adults are also fed with pollen in flowers (Bulak *et al.*, 2012) [5]. Several faunistic studies have been carried out on the Cleridae family (Demir, 2008, Bulak *et al.*, 2012., Öncüer., 1991) [6, 5, 9]. There are about 100 species in the world belonging to the genus *Opilo* in this family (Anonymous, 2017a). From these species, *Opilo tilloides* (Chevrolat, 1876) species also spread in Syria and Israel (Anonymous, 2017 b). In our country this kind; was first discovered in this work which showed its spread in the cherry gardens of Mardin province.

Materials and Methods

In this study, a wine-water mixture of 1/100, 3/100, 5/100 and 10/100 mm was put into the funnel trap in the cherry garden between April and September in Koyunlu village of Ömerli district of Mardin province and it was checked weekly. Individuals falling into the trap were brought to the laboratory and examined and diagnosed. Samples have been photographed with the help of a Olympus SZX 51 model stereo binocular microscope.



Fig 1: Cherry orchards and wine fatening trap

Correspondence
Mehmet Kaplan
Plant Protection Research
Institue, Diyarbakir, Turkey.

Results and Discussion

It was determined as *Opilo tilloides* (1876) (Coleoptera: Cleridae), when the collected samples are examined. Moreover, the species was found to be a new record for Turkey fauna in this study (Figure 2).

Materyal: Mardin, Koyunlu village, 28.06.2016, 5 exc., 05.07.2016, 3 exc., Totally:8 exc.

Distribution: Syria, Israel (Anonymous, 2017 b,c).



Fig 2: Habitus of *Opilo tilloides*

There is no information about the choice of this habitat until the present. (Anonymous, 2017 d). Also species; The IUCN Red list is in threatened species. Therefore, agricultural ecosystems is the first record of this species in Turkey, it should be detailed in the behavioral characteristics of this type of cherry agroecosystems. It is important to monitor the orientations of the woody tissues that are decayed in the agroecosystem, as it is a species of saprophyllic (rotten nutrition). In addition, the findings regarding the tendency towards trained wine-based fat traps are the first.

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