

**A SHORT NOTE ON NON-TARGET LEPIDOPTERA SPECIES
COLLECTED BY PHEROMONE TRAPS OF *RHYNCHOPHORUS
FERRUGINEUS* (OLIVIER, 1790) (COLEOPTERA:
DRYOPHTHORIDAE) IN İZMİR PROVINCE OF TURKEY**

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ABSTRACT: Eight species belonging to two families of Lepidoptera were recorded as a non-target species from pheromone traps of the Red palm weevil, *Rhynchophorus ferrugineus* (Olivier, 1790) (Coleoptera: Dryophthoridae) in İzmir province of Turkey.

KEY WORDS: *Rhynchophorus ferrugineus*, Pheromone trap, Non-target species, Lepidoptera, Turkey.

The red palm weevil *Rhynchophorus ferrugineus* (Olivier, 1790) (Coleoptera: Dryophthoridae) is a devastating pests of palm species belonging to 18 different genera and three families. The weevil affects approximately 29 palm species and the spread of this species to all continents (Africa, Americas, Asia, Australia together with Oceania, and Europe) except Antarctica (Hussain et al., 2013). This species reported from Mersin, southern Turkey in 2005 (Karut & Kazak, 2005) and from Izmir in 2006 (Anonymous, 2013). Recently a general information is given on non-target fauna collected by pheromone traps of the Red palm weevil, *Rhynchophorus ferrugineus* in Izmir province of Turkey (Çıtırıkaya et al., 2014). In this paper, giving a short note on non-target Lepidoptera species collected by this pheromone traps was aimed at.

MATERIAL AND METHODS

Material were collected by pheromone traps in 12 locations of [Seferihisar: Doğanbey (3), Ürkmez (2); Menderes: Gümüldür (3), Özdere (4)] Izmir, western Turkey (Figure 1), during the years of 2010-2012. Containing 4-methyl-5-nonanol and 4-methyl-5-nonanone capsules known by the brand name RHYFER® were used in traps and they were cleared in two weeks intervals from March to November and monthly intervals from December to February (Çıtırıkaya et al., 2014).

RESULTS

At the end of this study, a total of eight species belonging to two families of Lepidoptera were recorded.

Crambidae

Spilomelinae

Palpita vitrealis (Rossi, 1794)

Note: This species reported from *Olea europaea* Linnaeus, 1753 in Aegean and the Marmara Regions, Antalya, Aydın (Kuşadası), Bursa, İzmir (Bergama, Bornova), Kocaeli (Darıca) and Muğla by Nizamhoğlu & Gökmen (1964). It was cited from *O.europaea* in Bursa [Mudanya (Kumyaka), Nilüfer (Gölyazı), Osmangazi (Gündoğdu)] by Kovancı et al. (2006). It was also collected from Kocaeli (Yuvacık Dam) by Beşkardeş (2012).

The larvae feed on *O. europaea*, *Arbutus unedo*, *Fraxinus* sp., *Jasminum* sp., *Ligustrum* sp.. Adults of this species collected by pheromone traps in October.

Noctuidae

Catocalinae

Catocala nymphagoga (Esper, 1787)

Note: This species listed from Güzelçamlı (Aydın) by Anonymous (2014).

The larvae live on *Quercus* spp.. Adults of this species collected by pheromone traps in this study in October.

Noctuinae

Agrochola lychnidis (Denis & Schiffermüller, 1775)

Note: This species was collected by bait traps and reported from organic cherry orchards in Muradiye (Manisa) and İzmir (Kemalpaşa, Ören) by Okyar & Tezcan (2001). Adults were collected by light traps from *Crataegus* sp., *Salix* sp., *Ranunculus* sp. and *Trifolium* sp. in Adana (Balcalı) by Demirezer (2006).

The larvae are polyphagous on herbs and also shrubs. Adults of this species were collected by pheromone traps in November.

Dryobota labecula (Esper, 1788)

Note: This species was collected by light traps and reported from *Q.ilex* in Adana (Balcalı) by Demirezer (2006).

The larvae live on *Quercus* spp. Adults of this species were collected by pheromone traps in November.

Peridroma saucia (Hübner, 1808)

Note: This species was collected by bait traps and reported from organic cherry orchards in Muradiye (Manisa) by Okyar & Tezcan (2001). It was cited from *Abies* sp., *Pinus* sp., meadow in Kastamonu (Şenpazar-Isırganlı Mountain-950 m) by Okyar (2012). It was collected from Kocaeli (Yuvacık Dam) by Beşkardeş (2012).

The larvae are polyphagous on herbs and also shrubs and trees. Adults of this species were collected by pheromone traps in October.

Spodoptera littoralis (Boisduval, 1833)

Note: This species was collected by bait traps and reported from organic cherry orchards in İzmir (Kemalpaşa, Ören) by Okyar & Tezcan (2001). Adults of this species were collected by light traps and reported from herbaceous plants and vegetables in Adana (Balcalı) by Demirezer (2006).

The larvae are polyphagous. Adults of this species were collected by pheromone traps in October.

***Xylena exsoleta* (Linnaeus, 1758)**

Note: This species cited from *Rheum ribes* and *Euphorbia* sp., in Adana, Amasya, Ankara, Aydın, Burdur, Eskişehir, Kahramanmaraş, Kars, Manisa, Mersin, Van (Erek Mountain, Sarnaç 2200 m), Yozgat (Kemal et al., 2008).

The larvae are polyphagous on herbs and also shrubs and deciduous trees. Adults of this species were collected by pheromone traps in March.

Plusiinae

***Chrysodeixis chalcites* (Esper, 1789)**

Note: This species was reported from Istanbul by Graves (1925), Istanbul (Çıldır Lake) by De Lattin (1951), Izmir by Zümreoğlu (1972), Istanbul, Sakarya, Kocaeli by Keyder (1978), Tekirdağ (Malkara) by Hacker (1987), Ankara by Ronkay et al. (1990), Edirne (Thrace University Merkez Campus, 41 m), Kırklareli (Demirköy, İğneada) by Okyar & Kornoşor (1997), Kocaeli (Yuvacık Dam) by Beşkardeş (2012). It was collected by bait traps in organic cherry orchards in Muradiye (Manisa) by Okyar & Tezcan (2001). It was collected by light traps and reported from *Convolvulus* sp., *Cytisus* sp., *Heliotropium* sp., *Parietaria* sp., *Solanum* sp. and *Urtica* sp. in Adana (Balcalı) by Demirezer (2006), and cited from *Pinus* sp. and graminaceous plants in Bolu (Gölcük, Aladağ, 1250 m) by Okyar (2012).

The larvae are polyphagous on herbs, fruits, ornamental plants and vegetables. Adults of this species were collected by pheromone traps in this study in October.

At the end of this study a total of eight species were collected as a non-target Lepidoptera species by pheromone traps of the Red palm weevil. They are not known as pests of palm trees. Generally, their larvae are polyphagous on herbs, fruits, ornamental plants and vegetables.

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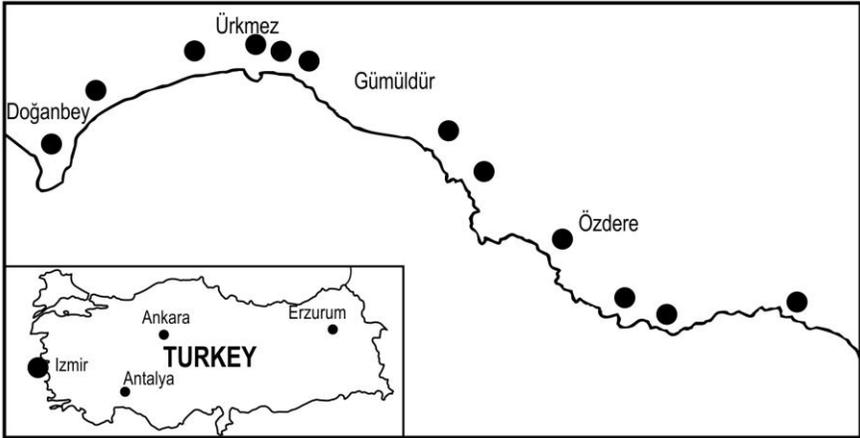


Figure 1. Map of studied area.