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A SHORT NOTE ON THE NOCTUIDAE (LEPIDOPTERA) FAUNA COLLECTED BY BAIT TRAPS IN POMEGRANATE ORCHARD OF HAVRAN (BALIKESIR PROVINCE) OF TURKEY

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ABSTRACT: In this study, information is given on 12 species belonging to Noctuidae (Lepidoptera) fauna collected by bait traps in pomegranate orchard in Havran (Balıkesir province) of Western Turkey.

KEY WORDS: Noctuidae, Fauna, Bait trap.

Pomegranate (*Punica granatum* Linnaeus, 1758) (Mytales: Lythraceae) is an important fruit tree in Turkish agriculture. In the previous studies (Mart & Altın, 1992; Öztop et al., 2002; Öztürk et al., 2005; Tezcan, 2008; Yıldırım & Başpınar, 2011), important pests and natural enemies of pomegranate orchards of Turkey were evaluated.

In order to supply an additional information on the biodiversity of these agroecosystems this paper was prepared. In this paper, materials belonging to Noctuidae (Lepidoptera) family collected in pomegranate orchard in Havran (Balıkesir province) of Western Turkey were evaluated.

MATERIAL AND METHODS

This study was conducted in pomegranate (*Punica granatum*) orchard in Havran (Balıkesir province) of Western Turkey during the months of June-October in 2009. Noctuids were collected by bait traps. A total of ten bait traps containing 100 ml wine, 900 ml water, 25 gr sugar and 25 ml vinegar per litre were hung for monitoring the adults of noctuids (Lepidoptera: Noctuidae). The traps were emptied at two-week intervals from June to October in 2009. This paper deals with the noctuids which were captured as a by-catch. The material was collected by second author and was determined by the first author. Material is deposited in the Museum of Biology Department, Faculty of Arts and Sciences, Trakya University, Edirne, and the Prof. Dr. Niyazi Lodos Museum (LEMT) of Plant Protection Department, Faculty of Agriculture, Ege University, Izmir, Turkey. As some of the material was damaged in the liquid of the bait trap, which resulted in the loss of some taxonomic characters, identification was based on genital characteristics. This was done using papers by Pierce (1967, 1978), Fibiger

(1997), Hacker (1989), Hacker et al. (2002), Ronkay et al. (2001), Goater et al. (2003), Fibiger & Hacker (2007).

RESULTS

Material evaluated in this study is listed below in alphabetical order, by subfamilies and by genera within each subfamily (Fibiger, 1997; Hacker et al., 2002; Fibiger & Hacker, 2007).

Acronictinae

Acronicta psi (Linnaeus, 1758)

Note: This species collected by bait traps and reported from organic cherry orchards in Muradiye (Manisa) and Ören (İzmir) by Okyar & Tezcan (2001).

It is a polyphagous species on deciduous trees. Adults of this species collected by bait traps in this study in June, July and August.

Noctuinae

Agrotis ipsilon (Hufnagel 1766)

Note: This species collected by bait traps and reported from organic cherry orchards in Muradiye (Manisa) and Ören (İzmir) by Okyar & Tezcan (2001).

It is a polyphagous species. Adults of this species collected by bait traps in this study in June and October.

Agrotis segetum ([Denis & Schiffermüller], 1775)

Note: This species collected by bait traps and reported from organic cherry orchards in Muradiye (Manisa) and Ören (İzmir) by Okyar & Tezcan (2001) and cited from organic vineyard, pear, plum and peach orchards in Kemalpaşa (İzmir) by Tanyeri et al. (2010).

It is a polyphagous species. Adults of this species collected by bait traps in this study in June and September.

Noctua orbona (Hufnagel, 1766)

Note: This species collected by bait traps and reported from organic cherry orchards in Muradiye (Manisa) and Ören (İzmir) by Okyar & Tezcan (2001) and cited from organic vineyard, pear, plum and peach orchards in Kemalpaşa (İzmir) by Tanyeri et al. (2010).

It is a polyphagous species. Adults of this species collected by bait traps in this study in September and October.

Noctua pronuba (Linnaeus, 1758)

Note: This species collected by bait traps and reported from organic cherry orchards in Muradiye (Manisa) and Ören (İzmir) by Okyar & Tezcan (2001) and cited from organic vineyard and peach orchards in Kemalpaşa (İzmir) by Tanyeri et al. (2010).

It is a polyphagous species on grasses and herbaceous plants. Adults of this species collected by bait traps in this study in September.

Xestia xanthographa ([Denis & Schiffermüller], 1775)

Note: This species collected by bait traps and reported from organic cherry orchards in Muradiye (Manisa) and Ören (İzmir) by Okyar & Tezcan (2001) and cited from organic vineyard, plum and peach orchards in Kemalpaşa (İzmir) by Tanyeri et al. (2010).

It is a graminivorous species on grasses. Adults of this species collected by bait traps in this study in September and October.

Hadeninae

Mythimna congrua (Hübner, [1817])

Note: This species collected by bait traps and reported from organic vineyard, pear and peach orchards in Kemalpaşa (İzmir) by Tanyeri et al. (2010).

It is a graminivorous species on grasses. Adults of this species collected by bait traps in this study in September.

Mythimna unipunctata (Haworh, 1809)

Note: This species collected by bait traps and reported from organic cherry orchards in Muradiye (Manisa) and Ören (İzmir) by Okyar & Tezcan (2001) as *Pseudaletia unipuncta* and cited from organic vineyard, pear, plum and peach orchards in Kemalpaşa (İzmir) by Tanyeri et al. (2010).

It is a graminivorous species on grasses. Adults of this species collected by bait traps in this study in October.

Mythimna vitellina (Hübner, 1808)

Note: This species collected by bait traps and reported from organic cherry orchards in Muradiye (Manisa) and Ören (İzmir) by Okyar & Tezcan (2001) and cited from organic vineyard, pear and peach orchards in Kemalpaşa (İzmir) by Tanyeri et al. (2010).

It is a graminivorous species on grasses. Adults of this species collected by bait traps in this study in October.

Xyleninae

Anthracia eriopoda (Herrich-Schaffer, [1851])

Note: This species collected by bait traps and reported from organic cherry orchards in Muradiye (Manisa) and Ören (İzmir) by Okyar & Tezcan (2001).

The larvae which are full grown in March-April feed by night on leaves *Salix* spp., *Rubia olivieri*, *Ephedra campyloda, Caprifolium* spp. and *Rosmarius* spp. (Fibiger & Hacker, 2007). Adults of this species collected by bait traps in this study in June and October.

Caradrina clavipalpis (Scopoli, 1763)

Note: There is not any previous record on collection of this species from vineyards or orchards in Turkey.

It is a polyphagous species. Adults of this species collected by bait traps in this study in September.

Mesapamea secalella Remm, 1983

Note: There is not any previous record on collection of this species from vineyards or orchards in Turkey.

It is a graminivorous species on grasses. Adults of this species collected by bait traps in this study in October.

At the end of this study a total of twelve species were evaluated. In the following studies, it is hoped that further studies on the feeding habits of species and their roles in pomegranate orchards will be realised.

LITERATURE CITED

Fibiger, M. 1997. Noctuidae Europaeae, Genitalia And Supplement To Noctuinae III, Vol. 3:. 418 pp., Entomological Press.

Fibiger, M. & Hacker, H. 2007. Noctuidae Europaeae Amphipyrinae, Condicinae, Eriopinae, Xyleninae, Vol. 9, 410 pp., Entomological Press.

Goater, B., Ronkay, L. & Fibiger, M. 2003. Noctuidae Europaeae, Catocalinae & Plusiinae. Vol. 10: 452 pp, Entomological Press.

Hacker, H. 1989. Die Noctuidae Griechenlands. Mit einer Übersicht über die fauna des Balkanraumes (Lepidoptera, Noctuidae). Herbipoliana, Marktleuthen, Deutschland, 2:1-589 pp.

Hacker, H., Ronkay, L. & Hreblay, M. 2002. Noctuidae Europaeae, Hadeninae I. Vol. 4, 419 pp., Entomological Press.

Mart, C. & Altın, M. 1992. Güneydoğu Anadolu Bölgesi nar alanlarında belirlenen böcek ve akar türleri. Türkiye II. Entomoloji Kongresi Bildirileri, 28-31 Ocak 1992, Adana, 725-735.

Okyar, Z. & Tezcan, S. 2001. On the noctuid fauna (Lepidoptera: Noctuidae) of ecological cherry orchards in western Turkey. Zoology in the Middle East, 22**:** 95-102.

Öztop, A., Kıvradım, M. & Tepe, S. 2002. Antalya İli nar üretim alanlarında bulunan zararlılar ile bunların parazitoitlerinin ve predatörlerinin belirlenmesi ve populasyon değişiminin izlenmesi. T. C. Tarım ve Köyişleri Bakanlığı, Tarımsal Araştırmalar Genel Müdürlüğü, BS-99-06-09-130 No'lu Project Final Report, 16 pp.

Öztürk, N., Ulusoy, M. R. & Bayhan, E. 2005. Doğu Akdeniz Bölgesi nar alanlarında saptanan zararlılar ve doğal düşman türleri. Türkiye Entomoloji Dergisi, 29 (3): 225-235.

Pierce, F. N. 1967. The Genitalia of The Group Noctuidae of Lepidoptera of the British Island. Hon. Librarion of the Lancanshire and Cheshire Entemological Society; Vice-President of the Liverpool Microscopical Society, 88 pp.

Pierce, F. N. 1978. The Genitalia of The Group Noctuidae of the Lepidoptera of the British Islands. An accaont of morphology of the female reproductory organs. Faringdon, Oxon, 62 pp.

Ronkay, L., Yela, J. L. & Hreblay, M. 2001. Noctuidae Europaeae, Hadeninae II. Vol. 5: 454 pp., Entomological Press.

Tanyeri, R., Üzüm, A., Tezcan, S., Keskin, B. & Gülperçin, N. 2010. Notes on pitfall trap collected Tenebrionidae (Coleoptera) species in organic vineyard and orchards of Kemalpaşa (Izmir) province of western Turkey. Munis Entomology & Zoology, 5, Supplement, 917-919.

Tezcan, S. 2008. Batı Anadolu nar üretim alanlarında önem kazanan bir böcek türü: İkilekeli kubbeliböcek (*Schistoceros bimaculatus*) (Coleoptera: Bostrichidae). Hasad, 24 (277): 80-84.

Yıldırım E. M. & Başpınar H. 2011. Aydın ili nar bahçelerinde saptanan zararlı ve predatör türler, yayılışı, zararlı türlerden önemlilerinin popülasyon değişimi ve zararı. Türkiye Entomoloji Bülteni, 1 (3): 169-179.

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