

Short communication

First report of *Anarsia (Ananarsia) eleagnella* (Lep.: Gelechiidae: Dichomeridinae) from Iran

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چکیده

در بررسی عوامل کنترل کننده علف های هرز ایران که طی سال های ۱۳۸۹ تا ۱۳۹۱ صورت گرفت، میوه های سنجد حاوی لارو یک گونه شب پره، در شهرستان های واقع در استان های خراسان شمالی، خراسان رضوی، خراسان جنوبی، آذربایجان شرقی، آذربایجان غربی و کردستان مشاهده و جمع آوری گردید. پس از پرورش لاروها در آزمایشگاه، حشرات کامل با نام علمی *Anarsia (Ananarsia) eleagnella* Kuznetsov شناسایی شدند که توسط نگارنده پنجم نیز مورد تأیید قرار گرفت. این گونه برای اولین بار از ایران گزارش می شود.

The plant species *Elaeagnus angustifolia* L. is native to western and central Asian countries including south of Russia, Kazakhstan as well as Turkey and Iran. It is considered as an invasive species in Europe and America (Christensen, 1963; Katz & Shafroth, 2003). *Anarsia eleagnella* Kuznetsov (fig. 1, A) is a widely distributed lepidopteran species being recorded from Romania, southern parts of Ukraine and European Russia, Transcaucasia, Turkmenistan, Kazakhstan, Afghanistan, Hungary and southern Siberia (Szabóky *et al.*, 2009). In addition to *E. angustifolia*, the plant species of the genus *Elaeagnus* and probably *Hippophae* of the family Elaeagnaceae are the hosts of *A. eleagnella* (Ponomarenko, 1997, 1999).

In a survey conducted on the identification of the biological control agents of weeds in Iran, from 2010 to 2012, the infested fruits of *E. angustifolia* containing moth larvae were collected from the provinces of Khorasan-e-Shomali, Khorasan-e-Razavi, Khorasan-e-Jonubi, Azarbaijan-e-Sharghi, Azarbaijan-e-Gharbi and Kordestan. The larvae (fig. 1, B) were reared in growth chamber until adult moths emerged. The attacking moth was identified as *Anarsia (Ananarsia) eleagnella* Kuznetsov, 1957 which was later confirmed by the fifth author. This species is a new record for the insect fauna of Iran. Previous to this record only a single pest species of the genus *Anarsia* Zeller, peach twig borer (*Anarsia lineatella* Zeller, 1839), had been reported

from Iran (Esmaili, 1997). The species *A. eleagnella* belongs to the tribe Ananarsiini and subfamily Dichomeridinae. The specimens are deposited in the insect collection of the Department of Agronomy, Faculty of Agriculture, Ferdowsi University of Mashhad, Iran.

The adult moth is grayish brown, about 4.5 mm long and an average wingspan of 11 mm (n = 7), marked with numerous brown spots on the forewing, especially at apex; hindwings with less markings, fringed with relatively long hairs in both front and hind margins; antenna gray, setiform, almost half of body length (fig. 1, A). Pupa 2.5-3.5 mm, brown, without a cocoon (n = 6) (fig. 1, F).

Preliminary biological studies indicate that *A. eleagnella* has two generations in Mashhad (Asadi *et al.*, unpublished data) where the first generation larvae feed on terminal shoots (fig. 1, C) and the second generation attack unripe fruit (fig. 1, D-E) causing heavily infested fruits fall off trees.

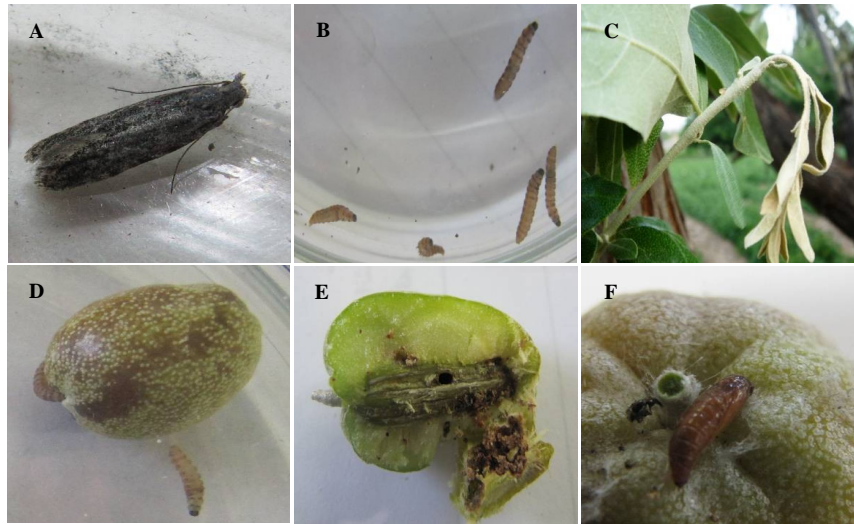


Fig. 1. *Anarsia eleagnella*: (A) adult, (B) larvae, (C) shoot strike damage caused by overwintered larvae, (D-F) damaged fruit caused by second generation larvae, (E) pupae.

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