

Short communication

First report of *Altenia mersinella* (Lep.: Gelechiidae: Gelechiinae: Litini), a pest of pistachio, from Iran

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چکیده

اولین گزارش *Altenia mersinella* (Lep.: Gelechiidae: Gelechiinae: Litini) آفت پسته از ایران

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در تحقیقی که روی آفات پسته در سال ۱۳۹۴ در اصفهان انجام شد، یک گونه لارو بال پولک داران در حال زندگی و تغذیه از سطح داخلی گال‌های شته چین‌دار برگ پسته *Forda hirsuta* Mordv. مشاهده شد. پس از پرورش لاروهای مذکور در آزمایشگاه، حشرات کامل توسط نگارنده سوم با عنوان *Altenia mersinella* (Staudinger) (Lep.: Gelechiidae) شناسایی شدند. گونه مذکور که قبلاً از ترکیه، سوریه، قبرس، لبنان و فلسطین گزارش شده است، برای اولین بار از ایران گزارش می‌شود. براساس منابع موجود میزبان این حشره نیز تاکنون ناشناخته بوده و برای اولین بار در دنیا گزارش می‌شود.

The Gelechiidae (Lepidoptera: Gelechioidea) is one of the largest families of microlepidoptera and includes 509 genera and 4570 described species in the world. The family Gelechiidae has been divided into four to six subfamilies, among which the Gelechiinae is the most diverse one with 480 genera and 3400 species (Pogue, 2009; Karsholt, *et al.* 2013). The Gelechiinae is currently divided into seven tribes, of which Litini (= Teleiodini) includes about 160 species in 24 genera in the Holarctic region (Lee & Brown, 2008). Larvae of Litini usually feed inside folded or rolled leaves. Some feed as leaf or needle miners, and some others on buds, flowers, stems, seeds, and cones (Huemer & Karsholt, 1999).

During a survey on pistachio, *Pistacia vera* L., pests in Isfahan, Iran, from May to August 2015, some lepidopteran larvae living and feeding inside galls of the wrinkling pistachio aphid, *Forda hirsuta* Mordv., were observed in Shahinshahr and Komshecheh (North-east of Isfahan). These larvae were reared in the laboratory until the emergence of adult moths. The moths were identified as *Altenia mersinella* (Staudinger, 1879) (Lep.: Gelechiidae:

Gelechiinae: Litini) by the third author after genitalia dissection (Fig. 1).

Synonyms of this species include *Telphusa melanostictella* Ragonot, 1895; *Stenolechia sagittella* Caradja, 1920; *Gelechia praedicta* Meyrick, 1923 and *Telphusa tribolopis* Meyrick, 1927 (Karsholt, 2013). This species has previously been reported from Turkey, Cyprus, Syria, Lebanon and Palestine but it is the first report of this species from Iran. In addition, it seems that this is the first record of a host plant for this species. Some of the morphological characteristics of *A. mersinella* are as follows:

The wingspan is about 13 mm. Head and thorax white. Palpi white. Basal half and subapical ring of the second joint and apex of the terminal joint greyish irrorated black. Forewings white, partially freckled greyish-ochreous; markings black with an elongate spot on the costa at the base, a semifusiform spot before the middle and a semi oval spot beyond the middle; trifurcate marks in the disc at 1/3 and 2/3, the second one connected with the third costal spot; a few blackish specks round the apical margin; cilia white speckled grey. Hindwings grey-whitish; cilia ochreous-whitish (Meyrick, 1969).

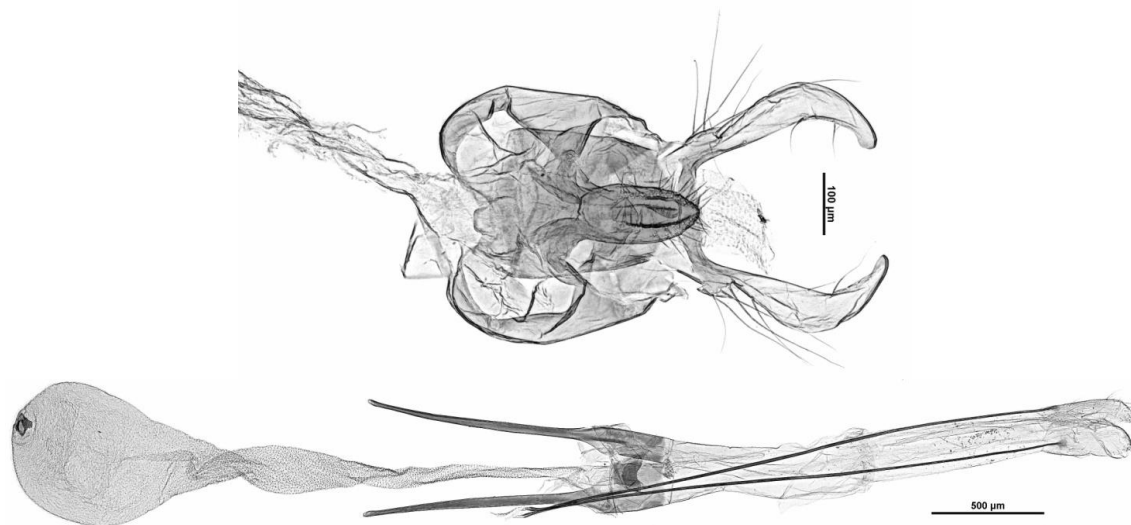


Fig. 1. *Altenia mersinella*: (A) Male genitalia, (B) Female genitalia.

References

- Huemer, P., & Karsholt, O.** (1999) Gelechiidae I (Gelechiinae: Teleiodini). pp. 35–104. in Huemer, P., Karsholt, O. & Lyneborg, L. (Eds), *Microlepidoptera of Europe*. Vol. 3, 356 pp. Apollo Books. Stenstrup.
- Karsholt, O.** (2013) Fauna Europaea. Available from: http://www.faunaeur.org/full_results.php?id=437202 (Accessed 15 September 2015).
- Karsholt, O., Mutanen, M., Lee, S., & Kaila, L.** (2013). A molecular analysis of the Gelechiidae (Lepidoptera, Gelechioidea) with an interpretative grouping of its taxa. *Systematic Entomology* 38, 334–348.
- Lee, S. M. & Brown, R. L.** (2008) Revision of Holarctic Teleiodini (Lepidoptera: Gelechiidae). *Zootaxa* 1818, 1–55.
- Meyrick, E.** (1969) *Exotic lepidoptera*. Vol. 3. 640 pp. Printed by Taylor and Francis.
- Pogue, M. G.** 2009. Biodiversity of lepidoptera. pp. 325–355 in Footitt, R. G., & Adler, P. H. (Eds). *Insect biodiversity: science and society*. 632 pp. Wiley-Blackwell, A John Wiley & Sons, Ltd., Publication.

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