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Short communication

A new record for Iran of *Dolichogenidea appellator* (Hym.: Braconidae: Microgastrinae), a larval endoparasitoid of diamondback moth, *Plutella xylostella* (Lep.: Plutellidae)

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چکیده

طی مطالعاتی که در سال ۱۳۹۰ روی بید کلم، *Plutella xylostella* (L.)، در استان اصفهان انجام شد، یک گونه زنبور پارازیتوئید به نام *Dolichogenidea appellator* (Telenga) از پرورش لاروهای بید کلم جمع‌آوری‌شده از مزارع کلم‌پیچ، واقع در مرکز تحقیقات کشاورزی و منابع طبیعی استان اصفهان به‌دست آمد که برای فون ایران جدید است. این زنبور، علاوه‌بر بید کلم، بال‌پولک‌داران دیگری از خانواده Gelechiidae، نظیر *Scrobipalpa salinella* (Zeller) و *Phthorimaea operculella* (Zeller)، را نیز پارازیته می‌کند.

Dolichogenidea appellator (Telenga) (= *litae* (Nixon)), a solitary endoparasitoid of diamondback moth, *Plutella xylostella* (L.), was reared in small numbers from the moth larvae collected in cabbage fields at the Isfahan Research Center for Agriculture and Natural Resources, Isfahan, central Iran between July and November 2011. This parasitoid is widespread in the South and Central Palaearctic (van Achterberg & Franquinho Aguiar, 2009), and is present in Afro-tropical region (Anonymous, 2012). It has been recorded in Europe (Bulgaria, Britain, Cyprus, Germany, Greece, Hungary, Russia, Spain, Switzerland, Ukraine and Yugoslavia) (Anonymous, 2012), Asia (Mongolia and Turkey) (Beyarslan, 1988; Avci & Özbek, 1990; Papp, 2009) and Africa (Egypt) (Abbas & Abdel-Samad, 2006). Some of the literature on this species appears under the generic name *Apanteles* Förster. This is the first record of *D. appellator* from Iran.

Dolichogenidea appellator has already been recorded as a parasitoid of *P. xylostella*, as well as other lepidopterans such as the gelechiids *Scrobipalpa salinella* (Zeller) and *Phthorimaea operculella* (Zeller) (see Yu *et al*., 2005). The present identification was by MRS (the second author) and specimens are deposited in the National Museums of Scotland, Edinburgh. Another solitary microgastrine endoparasitoid of *P. xylostella* larvae that, like *D. appellator*, has the areolet (2nd cubital cell) of the fore wing open is *Cotesia vestalis* (Haliday) (= *plutellae* (Kurdjumov)). The two species are easily separated on several characters: (1) the metacarp (the strong vein along the front edge of the fore wing beyond the pterostigma) in *D. appellator* is no longer than its distance from the apex of the radial cell that it partly goes along, but in *C. vestalis* is much longer; (2) there is a clear pale spot at the base of the pterostigma in *D. appellator*, but there is no real spot in *C. vestalis*; (3) the dorsal part of the abdomen, and the mesonotum are very different in the two species; in *C. vestalis* the sculpture is coarsely punctate-rugose; (4) the ovipositor is obviously exserted in *D. appellator*, but is hardly at all exserted in *C. vestalis*.

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