

## SHORT COMMUNICATION

### ***Horia fabriciana* Betrem 1929 (Meloidae: Nemognathinae: Horiini), new record for Israel**

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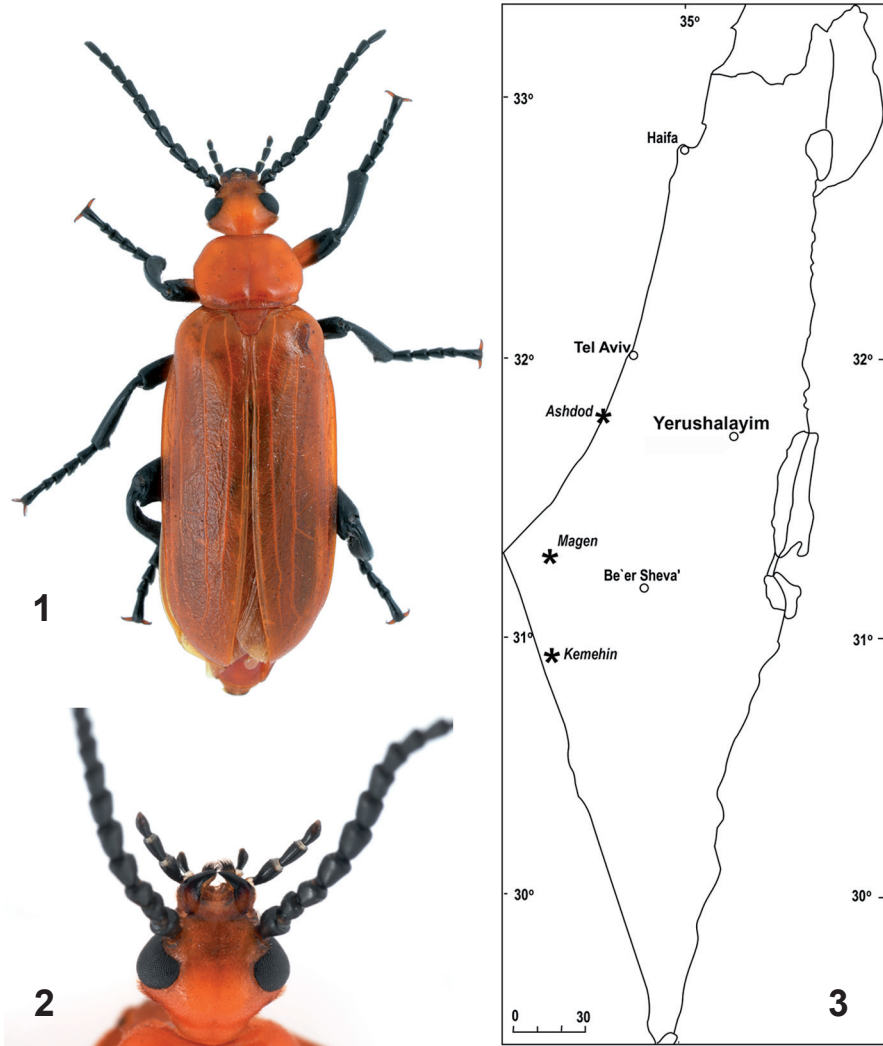
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A large and spectacular Afrotropical blister beetle *Horia fabriciana* Betrem, 1929, associated with the carpenter bee *Xylocopa pubescens* Spinola, 1838 (Hymenoptera: Apidae), is recorded here for the first time from Israel. This is the first record of the tribe Horiini and the genus *Horia* Fabricius, 1787 specifically from Israel, and the northernmost point of the distribution of these taxa.

The blister beetle subfamily Nemognathinae Laporte de Castelnau, 1840 comprises five tribes: Horiini Latreille, 1802, Nemognathini Laporte de Castelnau, 1840, Palaestrini (with a single genus *Palaestra* Laporte de Castelnau, 1840), Stenoderini Selander, 1991 (with a single genus *Stenoderia* Eschscholtz, 1818) and Zoltanzonitini Bologna & Pinto, 2023 (Bologna & Pinto 2002; Bologna *et al.* 2002; Bologna *et al.* 2013; Batelka & Bologna 2014; Riccieri *et al.* 2023). So far only Nemognathini (around 20 species), Palaestrini (one species) and Stenoderini (four species) have been recorded from Israel (Bologna *et al.* 2002; Bologna 2008; Batelka & Bologna 2014). The tribe Horiini is predominantly tropical (Bologna & Pinto 2002; Riccieri *et al.* 2023), comprising in the Palaearctic Region three species in two genera: *Horia* Fabricius, 1787, with two species, and *Synhoria* Kolbe, 1897, with one species (Bologna & Turco 2007; Bologna 2008), none of which have been previously recorded in Israel. *Horia fabriciana* occurs throughout the Afrotropical and at the southern edge of the Palaearctic Region: Egypt and Arabian Peninsula (Saudi Arabia, UAE and Yemen) (Cros 1924; Betrem 1929, 1932; Alfieri 1976; Bologna & Turco 2007; Bologna 2008).

The circum-tropical genus *Horia* has been well known for 200 years for its association with *Xylocopa* spp. (Hymenoptera: Apidae) (Guilding 1825; Cros 1924, 1938). In the Palaearctic Region, *Horia fabriciana* was recorded as a parasitoid of *Xylocopa pubescens* in Egypt (mentioned erroneously under *Xylocopa aestuans* (Linnaeus, 1758) (Blair 1924; Cros 1924, 1927, 1929, 1938; Alfieri 1976; Bologna & Laurenzi 1994), and of an unknown species of *Xylocopa* in the UAE (Bologna & Turco 2007).

Two specimens of *Horia fabriciana* were collected in kibbutz Magen, N 31.300337 E 34.425813, in the north-western Negev (Figs 1–7). Both specimens were found



**Figs 1–3.** *Horia fabriciana*, habitus: (1) male, body, dorsal view, (2) male, head, dorsal view; (3) map of the records of *H. fabriciana* in Israel; the localities are shown with an asterisk (\*). Photos 1-2 courtesy Amir Weinstein.

on the same mulberry tree trunk, inhabited by *X. pubescens* (Fig. 5). The female was collected on 19.ix.2022, and brought to the author a few days later. It was kept alive for several weeks in order to observe oviposition and hatching of triangulins, but none were produced. On 21.v.2023, the male of *H. fabriciana* was photographed and later collected at the entrance of the hole of *X. pubescens*, remaining nearly

motionless at the same point for quite a long time (Figs 6, 7). Therefore, the author suspects that it was newly emerged from the *X. pubescence* nest. Similar looking beetles were observed by the local tenants from time to time in the recent years at the same place (near the mulberry tree); this probably confirms an existence of a stable population in recent years (M. Mekic, M. Dreszmann, R. Dreszmann, pers. comm.). An additional male was found in the same area, 43 km to the south, near Kemehin, N 30.908 E 34.430, on 7.viii.2023, walking on the ground at 21:49 (B. Negev Hag, pers. comm.) (Figs 3, 8). A male was found in Ashdod, N 31.784096, E 34.656821 in the middle of the town in a private household, on 30.iv.2023, in the nest of *X. pubescens*, inside the wooden beam of a shed (B. Perez, pers. comm.) (Figs 3, 9). The specimens from Ashdod and Kemehin were photographed, but not collected; however, the photographs were clear enough for identification (Figs 8, 9). The male and female from Magen are preserved in the Steinhardt Museum of Natural History, Tel Aviv University, Israel (SMNHTAU).

*Horia fabriciana* is easily recognized by the following combination of characters: body length 19–25 mm; body, elytra red to testaceous, femora red proximally and black distally, rest of appendages and eyes black; antenna sub-pectinate, antennal segments wide and flatten; head transverse; pronotum wide and flat (like in Cantharidae); male metafemora inflated, medially with thick pointed spurs (Figs 1, 2, 4–9).

The carpenter bees have been intensively studied in Israel; numerous bee nests were observed and studied externally and internally (e.g. Gerling *et al.* 1983; Gerling *et al.* 1989; Ionescu-Hirsch 2001; Guershon & Ionescu-Hirsch 2012). A large spectacular red-colored parasitoid beetle like *H. fabriciana* could not been overlooked for years. Therefore, it is assumed that *H. fabriciana* appeared in Israel recently, extending its distribution to the north. The reason for this expansion remains unclear, however, it is not impossible that this is one of the manifestations of the global warming.

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**Figs 4–9.** *Horia fabriciana*: (4), male, dorsal view, from Magen (photo courtesy Amir Weinstein); (5) Magen, the mulberry tree, housing the nest of *Xylocopa pubescens*, one of the holes shown with white arrow (photo by A.L.L. Friedman); (6) Magen, *H. fabriciana* sitting in the bark crevice, close to the entrance hole; (7) *ibidem*, enlarged (photos 6, 7 courtesy Meytal Mekic); (8) *H. fabriciana* male walking on the ground in Kemehin (photo courtesy Ben-Or Negev Hag); (9) *H. fabriciana* male found in the nest of *X. pubescens* in the shade beam in Ashdod (photo courtesy Ben Perez).



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