

Records of the phytophagous ladybird *Henosepilachna elaterii orientalis* (Zimmerman, 1936) from the Al Ain/Buraimi area of the UAE and Oman (Coleoptera: Coccinellidae)

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Fig 1. Two examples of *Henosepilachna elaterii orientalis* from Al Ain. The ladybird on the left (7 mm) displays typical markings; that on the right (6 mm) shows four much reduced spots on the basal section of the elytra.

Ladybird beetles belong to the family Coccinellidae and of all the hundreds of thousands of different beetles, they are perhaps the best loved group. Their popular names in many European languages, not just in English, reflect this. There are probably several reasons that account for such fondness. Undoubtedly, one is the gay colouration of the more conspicuous ladybird species, although their bright and contrasting colour schemes of red, orange or yellow and black actually advertise the fact that these insects are poisonous.

Another major reason for the endearment of ladybirds is that they have long been recognised as friends of the gardener and the farmer, as both the adult and immature insects feed upon plant pests including scale insects, whiteflies and aphids (all insects of the order Homoptera). Not all ladybirds are brightly coloured and not all of them feed on homopterans. Some feed on spider mites and others on mildews and moulds and some, amongst the larger species of the family, are plant feeders and may be important agricultural pests themselves. The subfamily Epilachninae contains several phytophagous ladybird species, including the species *Henosepilachna elaterii orientalis* that is known from across Arabia (Fürsch, 1979; Raimundo and van Harten, 2000; Al-Houty, 2004).

This species is not mentioned in Volume 1 of the **Arthropod Fauna of the UAE**, which deals with the family Coccinellidae (Raimundo *et al.*, 2007), even though it has previously been recorded from the United Arab Emirates on a number of occasions (Gassouma, 2003; Gillett and Gillett, 2005) and is even given an entry in the synopsis of the insect records of the UAE published by Van Harten (2005). This apparent lack of acceptance of *Henosepilachna elaterii orientalis* as a *bone fide* UAE species may be because earlier records have been published without exact data. In order to

establish the fact that the species really does occur in the UAE, and also in Oman, where it has apparently not previously been recorded, the following records are presented and the beetle is illustrated (**Fig. 1**). Several other ladybird species found in the UAE, but not covered by Raimundo *et al.* (2007) will be the subject of future notes.

UAE – Jazirat al Harah sand dunes, Ra's al-Khaimah emirate, 1 ex., IV. 1993; Towayya (24°15.051'N 55°40.445'E), Al Ain, Abu Dhabi emirate, 25.III.2000, 1 ex., leg. MPT Gillett; Al Maqam camel race track (24°08.554'N 55°34.724'E), Al Ain, Abu Dhabi emirate, 11.IV.2000, 3 ex., on wild cucurbits, leg. MPT Gillett; Towayya (24°15.145'N 55°40.289'E), Al Ain, Abu Dhabi emirate, 19.V.2000, 1 ex., leg. MPT Gillett.

Oman – Buraimi, Fossil Valley (= Jebel Huwayya) (24°18.419'N 55°50.224'E), 17.III.2000, 1 ex., on desert squash, leg. MPT Gillett.

Henosepilachna elaterii has an enormous range from S. Europe and W. and N. Africa (nomotypical ssp.) to the Middle East, Iran, Afghanistan and the Indian Sub-continent (ssp. *orientalis*). It appears not to be common in Arabia with only about a dozen specimens previously recorded from Saudi Arabia, Yemen and Kuwait (Fürsch, 1979; Raimundo and van Harten, 2000; Al-Houty, 2004). The records given here significantly extend the species' range towards the south-east of the peninsula (**Fig. 2**). Across its global range, a variety of plants are associated with the beetle. The wild foodplants for ssp. *orientalis* in the UAE and neighbouring Oman include three local species of the family Cucurbitaceae (Jongbloed, 2003), but of these only two are common. They are the bitter gourd *Citrullus colocynthis*, which is widespread on both

sandy ground and on gravel and the wild cucumber *Cucumis prophetarum* found throughout the Hajar Mountains. Thus the beetle is likely to be found over most of the UAE's territory, except in the waterless sand dune wastes in western Abu Dhabi. Furthermore, Cucurbitaceae are widely cultivated in the UAE and plants such as cucumber, marrow and water melon could potentially be attacked. Indeed in some parts of its range, the beetle is considered a pest of these crops (Ali, 2009).

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Fig 2. Map of the Arabian peninsula showing the approximate locations where *Henosepilachna elaterii orientalis* has so far been recorded.