

SHORT COMMUNICATION

The first documented report of metalmark moths (Lepidoptera: Choreutidae) in Israel, with the first record of Oriental *Choreutis sexfasciella* (Sauber) in the Palearctic

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The family of the metalmark moths (Lepidoptera: Choreutidea)—excluding the Millieriinae that have been elevated to the family level (Rota 2011)—contains 413 species (Rota *et al.* 2014) in 19 genera (Nieukerken *et al.* 2011; Rota & Miller 2013), which are distributed worldwide.

Choreutis aegyptiaca (Zeller, 1867) was described from Cairo (Zeller 1867*a*) and since then recorded throughout the Afrotropics (incl. La Réunion and the Arabian Peninsula), India and Nepal (Meyrick 1914; Zachariades 1994; Gielis 2010; Gielis & Bippus 2016). Some authors (Koçak & Kemal 2012; Savela 2019*a*) have mentioned its presence in Israel, without, however, supporting their statements by actual records, or references to such records, of this species in the country. This situation might have been prompted by the title of the work (Zeller 1867*b*), where *Ch. aegyptiaca* was mentioned shortly after its description, and its occurrence in Israel has been taken for granted. The present note reports the first confirmed finding of *Ch. aegyptiaca* in Israel (Fig. 1), although this is neither unexpected nor surprising.

Choreutis sexfasciella (Sauber, 1902 in Semper 1896–1902) (Fig. 2) was described from the Philippines (Semper 1896–1902) and subsequently recorded from Sri Lanka (Meyrick 1912), Japan (Arita & Diakonoff 1979), Taiwan (Heppner & Inoue 1992) and Java (Savela 2019*b*). This is a small moth species with a wingspan measuring approximately 10 mm. In recent years it has been observed and collected in Israel in several localities, thus becoming the second species of metalmark moths in Israel. This is also the first report of *Ch. sexfasciella* outside the Oriental Region.

Choreutis sexfasciella moths display a characteristic behavior, which includes fast and erratic movements on top of leaves. The peak of their activity has been observed mainly during the afternoon and evening. The moths cling to the plants, which are believed to be their hosts, resting and mating on the foliage. If at all, they only occasionally rest on nearby plants and then return to the host plant (pers. observ.). Although neither egg laying nor caterpillars have been observed, the author strongly believes that the main host is *Ficus* sp. (Moraceae), on which adults



Figs 1, 2: The *Choreutis* metalmark moths in Israel: (1) *Ch. aegyptiaca*, Haruzzin Nature Reserve, 16.v.2010; (2) *Ch. sexfasciella*, Ramat HaSharon, 24.x.2019. (Photos © Oz Rittner)

were observed in most cases. *Ficus* spp. are known as hosts for a number of other species of *Choreutis* (Diakonoff 1986; Zachariades 1994; Rota *et al.* 2014; Gielis & Bippus 2016). At one locality the moths have been seen active on *Carissa* sp. (Apocynaceae) displaying the same behavior, i.e. clinging to the host plant, and fast and erratic movements (Ish-Shalom pers. comm.).

It is unknown when and how exactly *Choreutis sexfasciella* arrived in Israel, and it is quite possible that the species' distribution in Israel is wider than currently known. Import of *Ficus* plants from Asia may prove to be the sole source of this species in Israel. At the moment its presence does not seem to be alarming as no substantial damage to the host plants has been recorded, and there has been no report of any related observations of any kind so far. The fairly often occurrence of this species suggests that it was introduced to Israel at least several years ago and left unnoticed for a long period, most probably due to its small size and its presence in urban environments, which traditionally receive less attention of entomologists. The moths could also have been mistaken for flies due to their erratic behavior, for only a very close encounter reveals bright colors of these small lepidopterans.

The examined material is deposited in the Lepidoptera collection of the Steinhardt Museum of Natural History, Tel Aviv University, Israel.

Choreutis aegyptiaca (Zeller, 1867)

(Fig. 1)

Simaethis aegyptiaca Zeller, 1867a: 461, pl. 24, fig. 1.

Observation records (photographed): **Israel:** *Central Coastal Plain:* Bnei Zion, Haruzzin Nature Reserve [32°13'20"N 34°51'27"E], 16.v.2010, O. Rittner.

Choreutis sexfasciella (Sauber, 1902 in Semper 1896–1902)

(Fig. 2)

Choreutidia sexfasciella Sauber, 1902: Semper 1896–1902: 702.

Material examined: **Israel:** *Central Coastal Plain:* 1 ex., Tel-Aviv [32°04'N 34°47'E], 12.ix.2016, O. Rittner; 3 ex., Ramat HaSharon [32°08'N 34°50'E], 24.x.2019, O. Rittner; 1 ex., Tel-Aviv, Zoological Garden of Tel-Aviv University [32°06'45"N 34°48'30"E], 6.xi.2019, E. Morgulis.

Observation records (photographed): **Israel:** *Central Coastal Plain:* Herzliya [32°10'N 34°51'E], 13.ix.2015, O. Rittner; Tel-Aviv [32°04'N 34°47'E], 16.x.2016, O. Rittner; *Southern Coastal Plain:* Hulda [31°50'N 34°53'E], 27.x.2019, P. Ish-Shalom; Mazkeret Batya [31°51'N 34°50'E], 19.xi.2019, S. Tamir; *Judean Hills:* 'En Karem [31°46'N 35°10'E], 29.xi.2019, M. Laudon.

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