Short communication

First report of Thrips carthami Shumsher (Thys.: Thripidae) from Iran

Majid Mirab-balou

Department of Plant Protection, College of Agriculture, Ilam University, 69315–516, Ilam, Iran *Corresponding author, E-mail: majid.mirab@gmail.com, m.mirabbalou@ilam.ac.ir

چکیدہ

اولین گزارش گونهی (Thrips carthami Shumsher (Thys.: Thripidae از ایران

مجيد ميراب بالو

Thrips carthami در بررسی فونستیک بالریشکداران استان ایلام طی سالهای ۱۳۹۵–۱۳۹۶، نمونههای متعلق به گونه Shumsher, 1946 اونه از روی برگهای درختان بادام کوهی واقع در جنگلهای زاگرس (کوه گچان) جمع آوری و شناسایی شد. این گونه برای اولین بار از ایران گزارش میشود و به این ترتیب تعداد گونههای جنس Thrips در ایران به ۳۶ گونه میرسد. ویژگیهای ریختشناسی و دامنه انتشار جغرافیایی رکورد جدید نیز ارایه می شود.

The genus Thrips Linnaeus is the largest in the subfamily Thripinae, with 293 described species in the world (ThripsWiki, 2016). An illustrated key to the Iranian Thrips species with a checklist of 33 species has been recently published by Mirab-balou (2016). The record of Thrips albopilosus Uzel in Iran (Khanjani and Mirab-balou, 2007) is considered doubtful due to unavailability of the specimens and excluded from the list (see also Mirab-balou, 2013). During the faunistic study of thrips in Ilam province (west of Iran) between 2015 and 2016, several specimens of the species Thrips carthami Shumsher were identified. The specimens are prepared onto slides using the method of Mirab-balou and Chen (2010) and are deposited at the Collection of Department of Plant Protection, College of Agriculture, Ilam University, Iran (ILAMU). The specimens were also compared with the material of T. carthami of the Collection of Aquatic Insects and Soil Animals, Department of Entomology at South China Agricultural University (SCAU), Guangzhou, China.

The genus Thrips Linnaeus is the largest in the subfamily Thripinae, with 293 described species in the world (ThripsWiki, 2016). An illustrated key to the Iranian Thrips species with a checklist of 33 species has been recently published by Mirab-balou (2016). The record of Thrips albopilosus Uzel in Iran (Khanjani and Mirab-balou, 2007) is considered doubtful due to unavailability of the specimens and excluded from the list (see also Mirab-balou, 2013). During the faunistic study of thrips in Ilam province (west of Iran) between 2015 and 2016, several specimens of the species Thrips carthami Shumsher were identified. The specimens are prepared onto slides using the method of Mirab-balou and Chen (2010) and are deposited at the Collection of Department of Plant Protection, College of Agriculture, Ilam University, Iran (ILAMU). The specimens were also compared with the material of T.

carthami of the Collection of Aquatic Insects and Soil Animals, Department of Entomology at South China Agricultural University (SCAU), Guangzhou, China. *Thrips carthami* Shumsher, 1946: 184.

Material examined – 7 , 1 ,IRAN: Ilam Province, Ilam (Gachan Mt.), on leaves of almond trees, 20.iv.2015, leg. M. Mirab-balou (at ILAMU).

Diagnosis –Female macroptera. Body and legs yellow, with brown markings anteriorly on abdominal tergites II-VII (fig. 1, C), segments VIII-X dark brown; antennal segment I pale, II light brown, III-VII dark brown (fig. 1, E); forewings pale (fig. 1, H). Head wider than long (fig. 1, A); pair III situated outside ocellar triangle; postocular setae I about as long as ocellar setae III. Antennae 7-segmented (fig. 1, E), with forked sense cones on antennal segments III & IV. Pronotum wider than long, with two pairs of long posteroangular setae; two pairs of setae present at posterior margin (fig. 1, B). Metanotum with longitudinal sculpture; median metanotal setae arising behind anterior margin, with a pair of metanotal campaniform sensilla(fig. 1, D). Forewing first vein with 3 distal setae (fig. 1, H), second vein with a row of about 13-15 setae. Abdominal tergite II with 3 lateral setae (fig. 1, G); tergite VIII with complete and slender comb on posterior margin (fig. 1, F); tergite X with a complete median longitudinal split; abdominal pleurotergites and sternites without discal setae.

Male–Body yellow, smaller and paler than female; forewing unicolorous, unshaded; antennae 7-segmented, segments III–VI completely dark brown. Pronotum without especially developed setae. Abdominal tergite VIII without comb on posterior margin; pore plates only present on abdominal sternites III & IV (fig. 1, I).

Distribution -India, Kashmir, Pakistan, Bhutan (Bhatti, 1980; Palmer, 1992), and China (Mirab-balou *et al.*, 2011).



Fig.1. (A–F: female). *Thrips carthami*, female: A. head, B. pronotum, C. abdominal tergites V & VI, D. meso- & metanotum, E. antenna, F. abdominal tergite VIII, showing comb at posterior margin, G. lateral of tergite II, showing three lateral setae, H. forewing, showing three distal setae. I. Pore plate on abdominal sternite IV (male).

References

Bhatti, J. S. (1980) Species of the genus Thrips from India. Systematic Entomology 5: 109–166.

Mirab-balou, M. (2013) A checklist of Iranian thrips (Insecta: Thysanoptera). Far Eastern Entomologist 267: 1–27.

- Mirab-balou, M. (2016) An illustrated key to species of the genus *Thrips* Linnaeus (Thysanoptera: Thripidae) from Iran, with an updated checklist. *Journal of Insect Biodiversity and Systematics* 2(1): 167–180.
- Mirab-balou, M. & Chen, X. X. (2010) A new method for preparing and mounting thrips for microscopic examination. Journal of Environmental Entomology 32: 115–121.
- Khanjani, M. & Mirab-balou, M. (2007) Study on biology of walnut leaf gall mite (*Eriophyes tristriatus* Nalepa) in western Iran. *Journal of Biological Society of Iran* 19(4): 464–474.
- Mirab-balou, M., Tong, X. L., Feng, J. N. & Chen, X. X. (2011) Thrips (Insecta: Thysanoptera) of China. Check List 7(6): 720–744.

Palmer, J. M. (1992) Thrips (Thysanoptera) from Pakistan to the Pacific: a review. Bulletin of the British Museum (Natural History) (Entomology) 61(1): 1–76.

Shumsher, S. (1946) Studies on the systematics of Indian Terebrantia. *Indian Journal of Entomology* 7: 147–188. **ThripsWiki**. (2016) ThripsWiki - providing information on the World's thrips.<u>thrips.info/wiki/</u>[2016-08-08].

Received: 11July 2016 *Accepted:* 17 September 2016