

Short communication

First record of *Thrips juniperinus* (Thys.: Thripidae) from Iran

N. Gholami¹, L. Fekrat^{1&*} and S. Manzari²

1. Department of Plant Protection, Faculty of Agriculture, Ferdowsi University of Mashhad, Mashhad, Iran, 2. Insect Taxonomy Research Department, Iranian Research Institute of Plant Protection, P.O. Box 1454, Tehran 19395, Iran.

*Corresponding author, E-mail: fekrat@ferdowsi.um.ac.ir

چکیده

در بررسی فونستیک بال‌ریشک‌داران نیشابور و حومه، که در اواخر بهار و تابستان سال ۱۳۹۲ صورت گرفت، نمونه‌هایی متعلق به گونه *Thrips juniperinus* Linnaeus از ایران جمع‌آوری و شناسایی شد. این گونه برای اولین بار از ایران گزارش می‌شود. ویژگی‌های ریخت‌شناسی افراد ماده و نر نیز به اختصار ارائه شده است.

The family Thripidae includes more than 2000 species and 284 genera worldwide. This family is divided into four subfamilies, of which Thripinae with 1665 species and 235 genera is the largest subfamily (ThripsWiki, 2013). To date 110 species belonging to 35 genera of Thripinae have been reported from Iran (Minaei, 2013).

The genus *Thrips* Linnaeus is the largest genus in Thripinae and includes more than 280 species in the world (ThripsWiki 2013) and is the most diverse thripid genus (with 28 species) in Iran (Minaei, 2013). Several of these species, such as *T. hawaiiensis* (Morgan), *T. meridionalis* Priesner and *T. tabaci* Lindeman, are economically important (Minaei *et al.*, 2007; Alavi *et al.*, 2012). The latter species is well known for its direct and indirect damages on several crops around the world.

In the course of a faunistic survey on Thysanoptera of city of Neyshabour and its countryside, Khorasan-e Razavi province, in summer 2013, several specimens of the genus *Thrips* were collected and identified as *T. juniperinus* Linnaeus, which is a new record for Iran. This species is known as a monophagous species on common juniper, *Juniperus communis* (Mound *et al.*, 1976; zur Strassen, 2003). Although we collected the specimens of *T. juniperinus* on *Acanthophyllum* sp. (Caryophyllaceae), it should be noted that due to high behavioral diversity among Thysanoptera, it is not unusual to find the adults of many species on a wide range of non-host plants that they never breed or feed on them (Mound, 2013).

- *Thrips juniperinus* Linnaeus

Material examined – 3 ♀♀, IRAN: Khorasan-e Razavi province, Neyshabour, on *Acanthophyllum* sp. 14.vi.2013, Leg. N. Gholami.

Diagnosis – Female. Macropterous; body yellow or yellowish brown to brown; forewing light yellowish gray; antennal segment III light brown; metanotum without campaniform sensillae; first vein of forewing in distal half with three (1 + 2) bristles; setae S1 of proximal abdominal tergites small, shorter than discal bristles of pronotum; abdominal tergite II with 3 lateral marginal setae, tergite VIII with comb not developed medially; abdominal sternites without discal setae, sternite I with 2-3 minute setae between the hind coxae (these setae are very hard to see unless the specimen is well mounted); lines of sculpture on abdominal pleurotergites with ciliate microtrichia.

Male. Not examined. Macropterous; body yellow or yellowish brown; metanotum without campaniform sensillae; tergite IX with 4 anterior and 2 posterior dorsal setae; with glandular area on sternites III-VII (Mound *et al.*, 1976) and/or sternites III-VI (zur Strassen, 2003), glandular area on sternite V usually shorter than 10 µm (measured in the body longitudinal direction), abdominal sternites without discal setae.

Remarks – Metanotal sculpture in the collected specimens is slightly different from that of stated and illustrated by Mound *et al.* (1976), i.e. being "usually equiangular medially". Similar differences were even observed among the metanotal sculpture of the three examined specimens. These differences might be

intraspecific variations, the same as variations glandular area on abdominal sternites. mentioned above for males having different number of

References

- Alavi, J., Zibaei, K. & Sajjadi, M.** (2012) *Thrips meridionalis* (Thysanoptera: Thripidae) a pest of stone fruit trees in Fars province. *Proceedings of the 20th Iranian Plant Protection Congress, Volume I, Pests*, 196.
- Minaei, K.** (2013) Thrips (Insecta, Thysanoptera) of Iran: a revised and updated checklist. *Zookeys* 330, 53-74.
- Minaei, K., Azemayeshfard, P. & Mound, L. A.** (2007) The *Thrips* genus-group (Thysanoptera: Thripidae) in Iran. *Journal of Entomological Society of Iran* 27(1), 29-36.
- Mound, L. A.** (2013) Homologies and host-plant specificity: recurrent problems in the study of thrips. *Florida Entomologist* 96, 318-322.
- Mound, L. A., Morison, G. D., Pitkin, B. R. & Palmer, J. M.** (1976) *Handbooks for the identification of British insects, Thysanoptera*. Vol. 1, Part II, 79 pp. Royal Entomological Society of London.
- ThripsWiki** (2013) ThripsWiki - providing information on the World's thrips. Available from: <http://thrips.info/wiki/> (accessed 25 December 2013).
- zur Strassen, R.** (2003) *Die terebranten Thysanopteren Europas und des Mittelmeer-Gebietes*. Die Tierwelt Deutschlands, Part 74, 277 pp. Goecke & Evers, Keltern. [In German].

Received: 22 September 2013

Accepted: 3 March 2014