

Short communication

The first report of *Thrips praetermissus* (Thysanoptera: Thripidae) from Iran

Kambiz Minaei*, Afsaneh Afsharizadeh Bami, Faezeh Bagheri
& Maryam Zahedian Nezhad

Department of Plant Protection, College of Agriculture, Shiraz University, Shiraz, Iran.

*Corresponding author. Email: kminaei@shirazu.ac.ir.

اولین گزارش *Thrips praetermissus* (Thysanoptera: Thripidae) از ایران

کامبیز مینایی*، افسانه افشاری زاده، فائزه باقری و مریم زاهدیان نژاد

بخش گیاه‌پزشکی، دانشکده کشاورزی، دانشگاه شیراز، ایران.

*مسئول مکاتبات، پست الکترونیکی: kminaei@shirazu.ac.ir.

چکیده

گونه *Thrips praetermissus* Priesner برای نخستین بار از ایران گزارش می‌شود. نمونه‌های این گونه از روی گل‌های قاصد در منطقه باجگاه، شیراز، استان فارس جمع‌آوری شدند. ویژگی‌های ریختی همراه با شکل‌های مربوطه ارائه شده‌اند. این گونه شباهت زیادی با گونه *Thrips pillichii* Priesner دارد، اما با وجود موهای بلند روی پیش‌گرده و ترژیت بند نهم از آن جدا می‌شود.

واژگان کلیدی: گزارش جدید، تریپس، فارس.

دریافت: ۱۳۹۶/۱۰/۲۶، پذیرش: ۱۳۹۷/۲/۱۰.

In an online updated site (ThripsWiki, 2018) only 10 genera of the order Thysanoptera have more than 100 species of which the genus *Thrips* L. with 294 extant species is the largest one. Minaei *et al.*, (2007) provided an information on four genera of *Thrips* genus-group in Iran. An illustrated key to 33 species of the genus has recently been prepared by Mirab-balou (2016a). A total of 34 species of the genus *Thrips* have hitherto been recorded from Iran (Mirab-balou, 2016b) and another species of the genus is here newly recorded and illustrated.

Thrips specimens discussed in this paper were macerated in 5% NaOH solution for 4-5 hours. The specimens were then mounted onto slides in Hoyer's medium using the protocol described by Mound and Kibby (1998). The observations on structure were made using an Olympus BX51 phase-contrast microscope. Photomicrographs and measurements were made using this microscope with DP27 digital camera and cellSens software. Terminology follows that of Mound and Masumoto (2005). The slides are deposited in the Department of Plant Protection, College of Agriculture, Shiraz University, Shiraz, Iran.

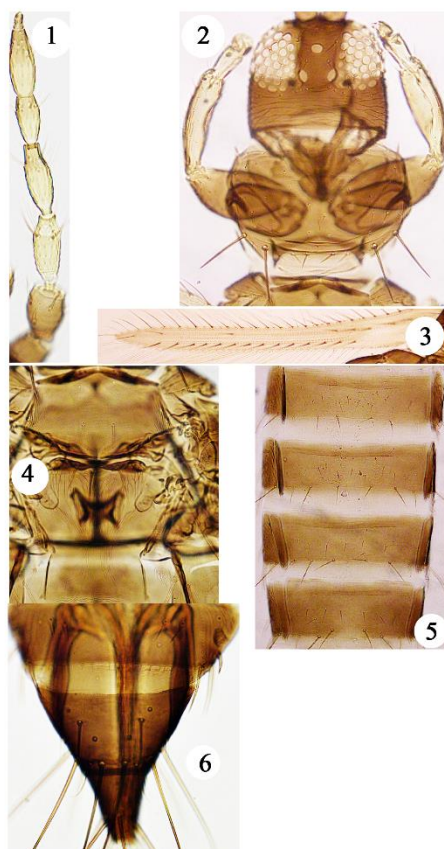
Thrips praetermissus* Priesner**Thrips praetermissus* Priesner, 1920: 58.*****Thrips montivagus* Priesner, 1923: 83.**

The species is originally described from Austria (Priesner, 1920) but now distributed around Europe (zur Strassen, 2003). This is the first record of the species in Iran. The species is listed as one of the threatened thrips species of middle-eastern Poland (Kucharczyk & Kucharczyk, 2008).

Material examined: 4 females, IRAN, Fars province, Bajgah, from *Taraxacum* sp. (Asteraceae), 3.x.2015 (A. Afsharizadeh Bami).

Distribution: Austria, Czech Republic, Germany, Mongolia, Poland, Rumania, Slovakia, Ukrain. (zur Strassen, 2003; Fedor *et al.*, 2004), Iran (this study).

Diagnosis. Female macroptera. Body brown, antennal segments III-V yellow, IV and V slightly shaded distally, VI yellow but shaded at distal, VII shaded (Fig. 1), forewing uniformly dusky (Fig. 3).



Figs 1–6. *Thrips praetermissus*. Female: 1. Antenna; 2. Head and pronotum; 3. Forewing; 4. Meso and metanotum; 5. Abdominal sternites IV–VII; 6. Abdominal tergites VIII–X.

Head broader than long, ocellar setae III arising inside ocellar triangle behind first ocellus (Fig. 2); postocular setae I longer than setae II and III. Antennae 7-segmented (Fig. 1). Pronotum wider than long with faint transverse striations anteriorly and posteriorly and about 25 discal setae, posterior margin with 3 pairs of setae inner to major angulars (Fig. 2). Mesonotum with transverse lines, anterior campaniform sensilla present. Metanotum with longitudinal lines; median setae arising behind anterior margin; campaniform sensilla absent (Fig. 4). Fore wing first vein with 3 distal setae (Fig. 3); Abdominal tergite II with 3 lateral marginal setae; posteromarginal comb on VIII complete (Fig. 6); IX with two pairs of campaniform sensilla (Fig. 6) X with incomplete median split. Pleurotergites II - V with 2–3 discal setae. Sternites with discal setae (Fig. 5), III with 6 posteromarginal and 13 discal setae.

Measurements (a female in microns). Body length 1574. Head, length 129; width across eyes 174; ocellar setae III 19. Pronotum, length 144; width 205; outer (inner) posteroangular setae 72 (79). Fore wing length 900. Tergite IX S1 134. Antennal segments I-VII length 18, 35, 52, 50, 34, 50, 12.

Comment: *Thrips praetermissus* is similar to *T. pillichii* Priesner. The latter species was simultaneously recorded by Alavi and Kamali (1995) and Mortazaviha (1995) for the first time from Iran. These two species share the following characters: abdominal sternites as well as pleurotergites with accessory setae, antennae 7-segmented and forewing with 3 setae on distal half of first vein. However *T. praetermissus* differs from *T. pillichii* in having setae S1 on tergite IX longer (more than 100 microns versus less than 80 microns). Similarly the length of inner posteroangular setae is longer in *T. praetermissus* (57-76 microns versus 36-57) (zur Strassen, 2003).

References

- Alavi, J. & Kamali, K. (1995) A survey of phytophagous and predaceous Thysanoptera of Bojnourd. Proceedings of the 12th Iranian Plant Protection Congress, Junior College of Agriculture, Karaj, p. 340.
- Fedor, P. J., Sierka, W. & Majzlan, O. (2004) The thrips (Thysanoptera) of Slovakia. *Acta Phytopathologica et Entomologica Hungarica* 39, 301–309.
- Kucharczyk, H. & Kucharczyk, M. (2008) The red list of threatened thrips species (Thysanoptera, Insecta) of middle-eastern Poland. *Acta Phytopathologica et Entomologica Hungarica* 43(2), 297–305.
- Minaei, K., Azmayeshfard, P. & Mound, L. A. (2007) The *Thrips* genus-group (Thysanoptera: Thripidae) in Iran. *Journal of Entomological Society of Iran* 27, 29–36.
- Mirab-balou, M. (2016a) 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, 167–180.

-
- Mirab-balou, M.** (2016b) First report of *Thrips carthami* Shumsher (Thys.: Thripidae) from Iran. *Journal of Entomological Society of Iran* 36, 147–148.
- Mortazaviha, A.** (1995) Introduction of 15 species of thrips (Thysanoptera) collected in Iran. Proceedings of the 12th Iranian Plant Protection Congress, Junior College of Agriculture, Karaj, p. 341.
- Mound, L. A. & Kibby, G.** (1998) *Thysanoptera: an identification guide*. 70 pp. Cab International, Wallingford, UK.
- Mound, L. A. & Masumoto, M.** (2005) The genus *Thrips* (Thysanoptera, Thripidae) in Australia, New Caledonia and New Zealand. *Zootaxa* 1020, 1–64.
- Priesner, H.** (1920) Beitrag sur Kenntnis der Thysanopteren Oberösterreichs. *Jahresberichte Musem Francisco Carolinus* 78, 50–63.
- Priesner, H.** (1923) Neue europäische Thysanopteren (II). *Konowia* 2, 82–85.
- ThripsWiki** (2018) ThripsWiki-providing information on the World's thrips. Available from: <http://thrips.info/wiki/> (accessed 15 January 2018).
- zur Strassen, R.** (2003) Die terebranten Thysanopteren Europas und des Mittelmeer-Gebietes. *Die Tierwelt Deutschlands* 74, 1–271.
-