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Thrips coloratus Schmutz (Thysanoptera: Thripidae) from Iran

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ABSTRACT. The genus *Thrips* Linnaeus (Thysanoptera: Thripidae) with 37 species, is the largest genus in Thripinae from Iran. However, *Thrips coloratus* Schmutz was excluded from Iranian thrips because of its misidentification. Here, this species is recorded from Iran for the first time based on two specimens collected on the flowers of clover (Fabaceae) from Ilam province.

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Introduction

Thrips Linnaeus (Thripidae: Thripinae) is the largest genus in the Thysanoptera subfamily Thripinae, with about 300 described species in the world (ThripsWiki, 2021). Most species of *Thrips* are flower–living, although a few appear to breed mainly on leaves, and several species play an important role in the pollination of crops (Mound & Ng, 2009). Up to now, 37 species of the genus *Thrips* have been recorded in Iran (Mirab-balou, 2018; Alavi, 2021). Here, *T. coloratus* Schmutz that collected from Ilam province is newly recorded for fauna of Iran. Although, Minaei (2013) referred to the report of *T. coloratus* from Iran by Manzari (2004) as a doubtful report and excluded the species from his list, but Mirab-balou (2013, 2016, 2018) included "*T. coloratus*" in the list of *Thrips* species in Iran. Recently, this species was excluded from Iranian species of the genus *Thrips* by Alavi (2021: see page 103).

Material and methods

Specimens were collected on the flowers of clover, *Trifolium* sp. (Fabaceae) in Mishkhas Rural District (in the Sivan District of Ilam County), Ilam province, and prepared onto slides using Canada balsam. Specimens are deposited in the collection of Department of Plant Protection, College of Agriculture, Ilam University, Iran (**ILAMU**).

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Results

Thrips coloratus Schmutz

Thrips colorata Schmutz, 1913

Morphological description: Female macroptera (Fig. 1-A); body pale yellow, except last abdominal segment dark brown, abdominal tergites II–VIII with brown area medially (Fig. 1-B), and antennal segments IV–VII brown (Fig. 1-C); fore wings uniformly but weakly shaded.

Head with ocellar setae III situated outside ocellar triangle (Fig. 1-D), postocular setae I & III subequal, II scarcely half-length of I. Antennae 7-segmented (Fig. 1-B), with forked sense cones on antennal segments III and IV. Pronotum with two long posteroangulars and about 32 discal setae. Mesonotum with lines of sculpture close to anterior campaniform sensilla. Metanotum (Fig. 1-E) transversely striate on anterior half, with longitudinal striations, median setae behind anterior margin, metanotal campaniform sensilla present (absent in one examined specimen). Fore wing first vein with 7 basal and 3 distal setae (Fig. 1-F); scale with 5 setae. Abdominal tergite II with 4 lateral marginal setae; tergite VIII with poteromarginal comb complete (Fig. 2-A). Pleurotergites without discal setae. Abdominal sternites III–VII with 15–24 discal setae (Fig. 2-B), 3–4 on sternite II.

Male macroptera (examined specimens at SCAU): body yellow, abdominal tergite VIII without comb at posterior margin; abdominal sternites III–VII each with a transverse pore plate; tergite IX with S1 setae slightly longer than S2 and far apart, very close to S2.

Material examined: **IRAN**, Ilam province: 2♀♀, Mishkhas Rural District, on flowers of *Trifolium* sp. (Fabaceae), 17.V.2019, Leg. M. Mirab-balou.

Distribution: China, Korea, Japan, Nepal, India, Pakistan, Sri Lanka, Indonesia, New Guinea, Australia (Mirab-balou et al., 2011), and Iran (this study).

Discussion

Thrips coloratus is usually not found in large numbers, and is particularly variable in color and chaetotaxy (Bhatti, 1980). In females, the abdomen is generally yellow with a median brown mark on each tergite, but with the tenth tergite dark brown. Palmer (1992) mentioned that *T. coloratus* is very variable species, with antennal segments IV and V dark or bicolored and the median metanotal setae are usually behind the anterior margin but sometimes very close to it. *Thrips coloratus* is morphologically most similar to *T. hawiiensis* (Morgan) and *T. florum* Schmutz but the abdomen is never uniformly brown, the position of metanotal median setae, and the forewing is uniformly shaded not paler at the base.

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Conflict of Interests

The author declares that there is no conflict of interest regarding the publication of this paper.

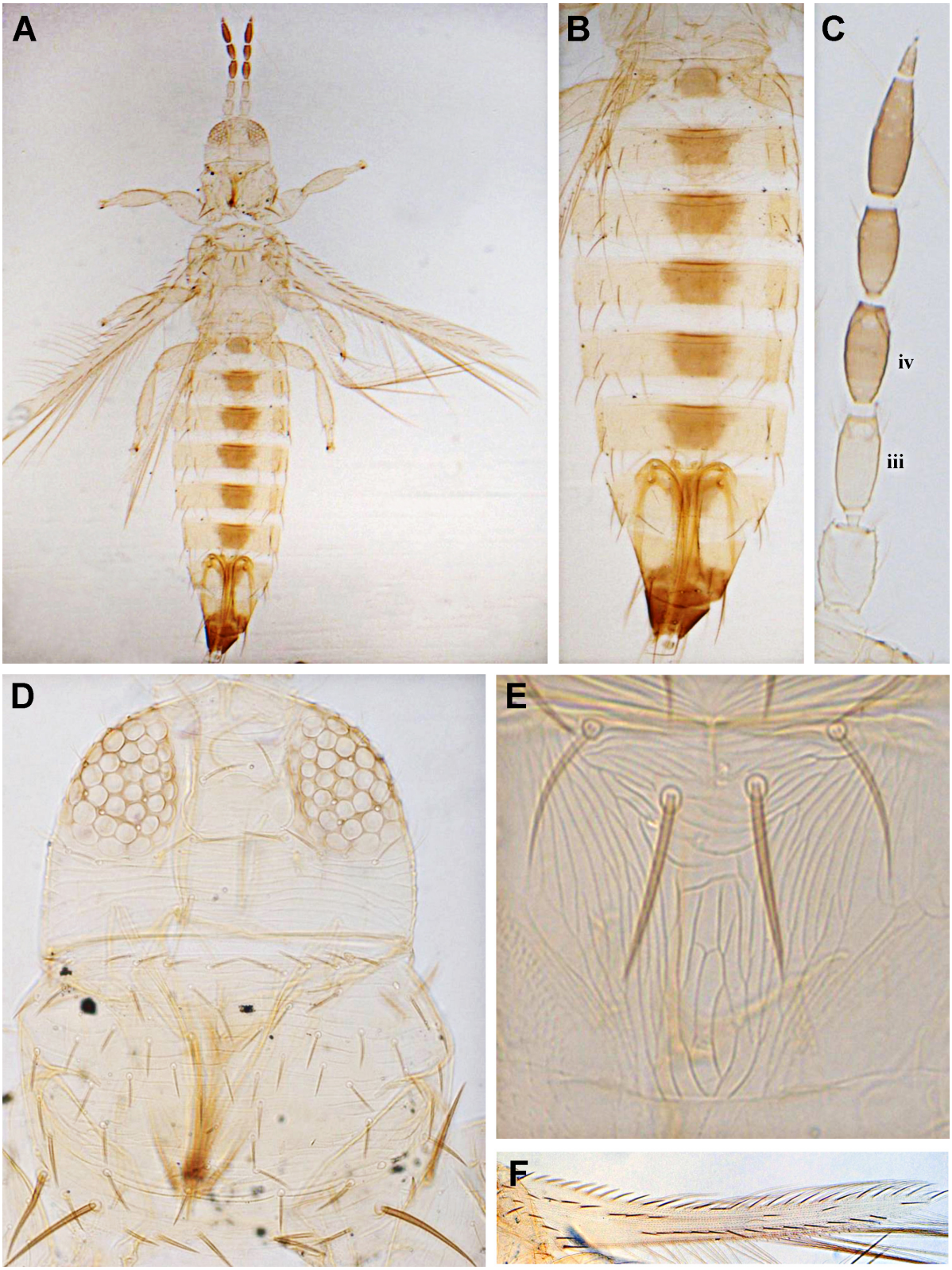

Figure 1. *Thrips coloratus*, **A.** Female; **B.** Abdomen, showing color; **C.** Antenna (right); **D.** Head and pronotum; **E.** Metanotum; **F.** Forewing.

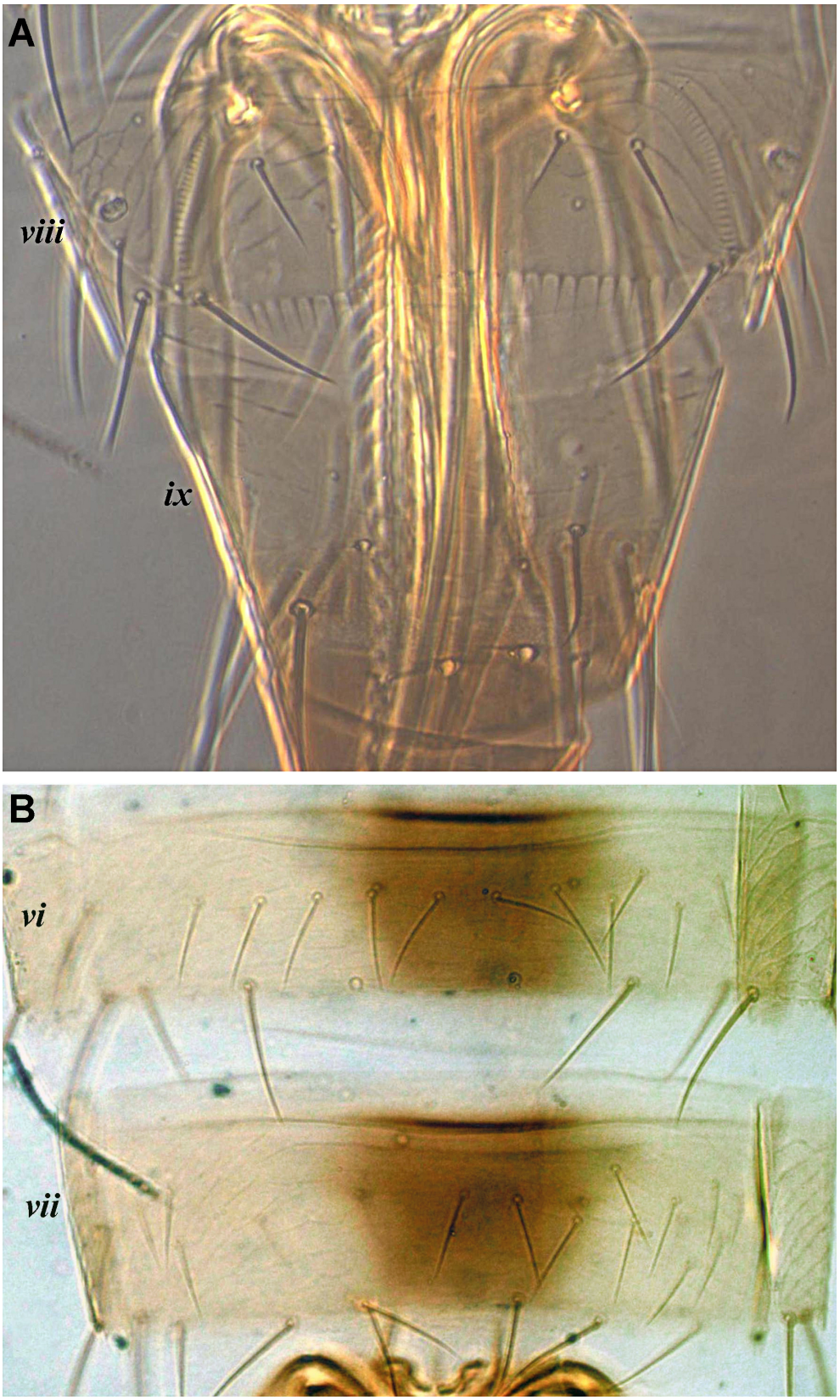

Figure 2. *Thrips coloratus* (female), **A.** Abdominal tergites VIII & IX; **B.** Abdominal sternites VI & VII, showing discal setae.

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تریپس *Thrips coloratus* Schmutz (Thysanoptera: Thripidae) از ایران

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چکیـده: جنس *Thrips* Linnaeus (Thysanoptera: Thripidae) با ۳۷ گونه، یکی از بزرگ‌ترین جنس‌های زیرخانواده‌ی Thripinae در ایران است. اگرچه *Thrips coloratus* Schmutz به دلیل شناسایی اشتباه، از لیست تریپس‌های ایران حذف شده است، در اینجا، این گونه براساس دو نمونه که از روی گل‌های شبدر (لگومینوز) در استان ایلام جمع‌آوری شده است، برای اولین بار از ایران گزارش می‌شود.

واژگـان کلیدی: بال‌ریشکداران، *Thrips coloratus*، گزارش جدید، ایران