

SHORT COMMUNICATION

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M. Mirab-balou^{1,2*}, X. X. Chen²⁾. TWO NEW RECORDS OF SERICOTHIRIPINAE (THYSANOPTERA: THIRIPIDAE) FOR IRAN. – Far Eastern Entomologist. 2013. N 260: 12-16.

Summary. The genus *Hydatothrips* Karny and two species, *H. abdominalis* (Kurosawa) and *Neohydatothrips gracilipes* (Hood) (Thripidae: Sericothripinae), are newly recorded for Iran.

Key words: Thysanoptera, Sericothripinae, *Hydatothrips*, *Neohydatothrips*, fauna, new records, Iran.

М. М. Мираб-балу^{1,2*)}, С. С. Чень²⁾. Два новых для Ирана трипса подсемейства Sericothripinae (Thysanoptera: Thripidae) // Дальневосточный энтомолог. 2013. N 260. С. 12-16.

Резюме. Впервые для фауны Ирана указаны род *Hydatothrips* Карну и два вида: *H. abdominalis* (Kurosawa) и *Neohydatothrips gracilipes* (Hood) (Thripidae: Sericothripinae).

INTRODUCTION

The Sericothripinae (Thysanoptera: Terebrantia) is one of the four subfamilies recognized in the family Thripidae (Bhatti, 1979). This subfamily is a group of about 150 flower- and leaf-feeding species whose larvae have fringed or trumpet-shaped major setae (Kudô, 1998). They are remarkable amongst the Thripidae for their complex body sculpture and striking color patterns (Mound & Tree, 2009). Of the three recognized genera in this subfamily, *Sericothrips* Haliday comprises eight species (Mirab-balou *et al.*, 2011a, 2013a), and the other two genera are widespread around the world in tropical and subtropical countries, *Hydatothrips* with 40 species, and *Neohydatothrips* with 100 species (Mound, 2013; Mirab-balou *et al.*, 2013b).

The members of this subfamily have legs covered with annulated microtrichial rows; pronotum has a large blotch area medially near the posterior margin; and fore wing first vein with setal row complete, but second vein usually without setae (sometimes with one or two setae near wing apex apparently displaced from first vein) (Kudô, 1991; Mound & Tree, 2009; Mirab-balou *et al.*, 2011a).

Up to now, two species of the genus *Neohydatothrips* has been recorded from Iran (Bhatti *et al.*, 2009; Mirab-balou, 2011). In this study, the genus *Hydatothrips* Karny is newly recorded for fauna of Iran; and *Neohydatothrips gracilipes* is recorded from Iran for the first time.

MATERIALS AND METHODS

The specimens were collected from different sites in Iran, and prepared and mounted on slide following Mirab-balou and Chen (2010). All descriptions, measurements and photos were made with a Leica DM IRB microscope, with a Leica Image 1000 system. The specimens are deposited in the Institute of Insect Sciences, Zhejiang University, Hangzhou, China (ZJUH).

ORDER THYSANOPTERA

Family Thripidae

Subfamily Sericothripinae

Key to genera of Iranian Sericothripinae

1. Metasternum forming two arms with a median V-shaped apodeme *Hydatothrips*
– Metasternum connected in the middle with a T-shaped or Y-shaped apodeme
..... *Neohydatothrips*

Genus *Hydatothrips* Karny, 1913

Hydatothrips Karny, 1913: 281.

DIAGNOSIS. Head much wider than long. Antennae 7- or 8-segmented, with forked sense cones on antennal segments III and IV. Pronotum with a blotch; head and pronotum covered with transverse or reticulated striae; metasternum divided into 2 plates by a V-shaped apodeme; wings usually fully developed in both sexes, fore wing first vein setal row complete, second vein with 0–2 distal setae. Abdominal tergites I–VII laterally with dense microtrichia; tergites II–VII with posterior marginal comb, longer laterally, short or lacking medially; posterior marginal comb on tergite VIII complete. Median paired setae on tergites II–IV close to each other, more widely separated on tergites V–VIII.

COMPOSITION. This genus includes 40 species in the world (Mound, 2013), and here is newly recorded for Iran.

Hydatothrips abdominalis (Kurosawa, 1973)

Sericothrips abdominalis Kurosawa, 1973: 115.

MATERIAL EXAMINED. **IRAN:** Kordestan province: Kordestan, 1 ♀, Marivan, from grasses (Poaceae), 12.VII 2009, M. Mirab-balou (ZJUH).

DISTRIBUTION. Iran: Kordestan province; Japan, Korea, China, India (Mirab-balou *et al.*, 2011a,b).

NOTES. This species was fully described by Mirab-balou *et al.* (2011a: 60), and here is newly recorded for the fauna of Iran.

Genus *Neohydatothrips* John, 1929

Neohydatothrips John, 1929: 33.

DIAGNOSIS. Head wider than long; postoccipital apodeme situated variously, marking off a wide, crescentic postocciput. Antennae 8-segmented, with forked sense cones on each of segments III and IV; segment II without dorsal seta basad campaniform sensillum; major sense cones on segments V to VII inserted on elongate bases. Mouth-cone moderately long to short conical. Pronotum with well defined blotch area. Mesosternal spinula present. Metasternum with transverse line behind anterior margin, line medially with or without T-shaped apodeme. Metascutum and scutellum partially or complete divided. Abdominal tergites II–VII with median setae not similarly placed and not of similar size, on II–IV closer together, with length increasing gradually from anterior to posterior tergites. Abdominal sternites III–VII usually with 3 pairs of setae, inserted marginally, those on VII of female usually positioned anterior of posterior margin.

NOTES. *Neohydatothrips* is morphologically similar to *Hydatothrips*, but differs by the metasternum not divided medially or divided only in the front part with a Y-shaped apodeme (Wang, 2007). Three species of *Neohydatothrips* are here recorded from Iran: *N. gracilipes*, *N. gracilicornis* and *N. tadzhicus*, of which *N. gracilipes* is newly recorded for Iran.

Key to Iranian species of *Neohydatothrips*

1. Posterior margins of abdominal tergites with craspedum *N. gracilicornis*
 – Posterior margins of abdominal tergites without craspedum 2
2. Pronotal blotch weakly sclerotized *N. gracilipes*
 – Pronotal blotch very dark and sclerotized *N. tadzhicus*

Neohydatothrips gracilipes (Hood, 1924)

Sericothrips gracilipes Hood, 1924: 149.

MATERIAL EXAMINED. **IRAN:** Alborz province: Karaj, 1 ♀, from *Glycyrrhiza glabra* L. (Fabaceae), 29.V.2009, M. Mirab-balou (ZJUH).

DIAGNOSIS. Female macroptera. Body generally yellow, pronotal blotch with brown markings; abdominal tergites II–VII with dark brown antecostal ridge, also brown areas laterally on these segments behind antecostal ridges; antennal segments grayish brown, segments III and basal halves of IV–V lighter; legs grayish yellow; forewings grayish yellow with a sub-basal pale band. Head short, cheeks about same length as eyes; ocellar setae III situated behind front ocellus, inside ocellar triangle. Antennae 8-segmented, segments III and IV with forked sense cones; segment VII about half the length of VIII. Pronotal blotch weakly sclerotized without a clear margin, posteroangular pair of setae on blotch well developed, about same length as blotch. Mesonotum and metanotum with dense transverse or longitudinal striae. Anterior margin of metasternum straight. Fore wing first vein setal row complete, second vein without distal setae. Abdominal tergites II–VII with posteromarginal combs present laterally but not medially; tergites VII and VIII with long and complete posterior comb. Abdominal sternites I–VII with complete posteromarginal comb, without discal setae.

MALE. Unknown (Wang, 2007).

MEASUREMENTS OF FEMALE IN MICRON; LENGTH (WIDTH). Body 1180(390). Head 95(175). Pronotum 110(190), posteroangular setae 70. Fore wing 800(80), hind wing 710(65). Antennal segments I–VIII as follows: 23(28), 37(32), 63(23), 62(21), 45(23), 54(20), 20(7), and 12(9).

DISTRIBUTION. Iran: Alborz province; Thailand, India, Australia, Mexico, Costa Rica, Trinidad, Jamaica, Taiwan (Wang, 2007; Mirab-balou *et al.*, 2011b).

NOTES. This species was identified based on the description by Wang (2007), and is here newly recorded for Iran.

Neohydatothrips gracilicornis (Williams, 1916)

Sericothrips gracilicornis Williams, 1916: 222.

MATERIAL EXAMINED. **IRAN:** Hamadan province: Hamadan, 1 ♀, Medical College, from *Goebelia alopecuroides* (L.) Bunge ex Boiss (Fabaceae), 15.V.2008, M. Mirab-balou (ZJUH); Zanjan province: Zanjan, 2 ♀, 2 ♂, Yengijeh, from alfalfa, *Medicago sativa* L. (Fabaceae), 25.VI.2009, M. Mirab-balou (ZJUH).

DISTRIBUTION. Iran: Tehran (Mortazawiha & Dern, 1977), Golestan (Alavi *et al.*, 2007), Khorasan-e-Shomali (Alavi, 2004), Hamadan and Zanjan; China, Europe, Morocco, Turkey, Israel, Japan (Mirab-balou *et al.*, 2011b).

NOTES. This species was reported from Iran by Mortazawiha & Dern (1977) from Tehran province; and here is newly recorded for Hamadan and Zanjan provinces.

***Neohydatothrips tadhicus* (Pelikán, 1964)**

Sericothrips tadhicus Pelikán, 1964: 228.

DISTRIBUTION. Iran: Khorasan province (Alavi, 2004); China and Tajikistan (Mirab-balou *et al.*, 2011b).

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