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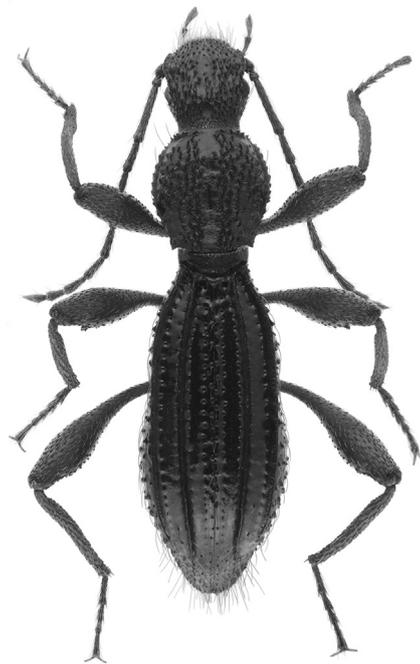


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First records of *Urophora mauritanica* Macquart, 1851 and *U. merzi* Mohamadzade Namin, 2011 (Diptera: Tephritidae) from Armenia

© D.A. Evstigneev

Ulyanovsk Civil Aviation Institute, Mozhaysky str., 8/8, Ulyanovsk 432071 Russia. E-mail: temporaria@yandex.ru

Abstract. *Urophora mauritanica* Macquart, 1851 reared from *Carthamus* sp., and *U. merzi* Mohamadzade Namin, 2011 reared from *Centaurea behen* L. are recorded from Armenia for the first time. The first species was known from the Mediterranean region, Moldova, Ukraine, Russia, Azerbaijan, Kazakhstan, Uzbekistan and Iran. The second one was known only from Iran. Detailed illustrations of morphological characteristics of adults, along with the figures of host plants are presented in this paper.

Key words: Tephritidae, first records, host plants, Armenia.

Первые находки *Urophora mauritanica* Macquart, 1851 и *U. merzi* Mohamadzade Namin, 2011 (Diptera: Tephritidae) в Армении

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Ульяновский институт гражданской авиации имени главного маршала авиации Б.П. Бугаева, ул. Можайского, 8/8, Ульяновск 432071 Россия. E-mail: temporaria@yandex.ru

Резюме. Мухи-пестрокрылки *Urophora mauritanica* Macquart, 1851 и *U. merzi* Mohamadzade Namin, 2011 впервые приводятся для Армении. Первый вид был известен из Средиземноморья, Молдовы, Украины, России, Азербайджана, Казахстана, Узбекистана и Ирана. Второй был известен только из Ирана. Личинки *U. mauritanica* развиваются в соцветиях *Carthamus* sp., а личинки *U. merzi* – в соцветиях *Centaurea behen* L. Приведены изображения обсуждаемых видов, а также их кормовых растений.

Ключевые слова: Tephritidae, новые находки, кормовые растения, Армения.

This paper contributes to the series of publications focusing on the tephritid flies found in the Caucasus and Transcaucasia regions [Evstigneev, Korneyev, 2018; Korneyev, Evstigneev, 2019; Evstigneev, 2020a, b, 2022; Evstigneev, Glukhova, 2020, 2022; Evstigneev, Przhiboro, 2021 etc.].

During studies on the tephritid fauna of Armenia, two species were found for the first time in this country: *Urophora mauritanica* Macquart, 1851 and *U. merzi* Mohamadzade Namin, 2011. This discovery contributes to our understanding of the tephritid diversity in Armenia and expands the known distribution of these species.

The material for this study was collected during 2017–2018 seasons and deposited in the private collection of the author. A comprehensive description of methods employed in this research can be found in previous articles by Evstigneev and Glukhova [2020] and Evstigneev and Przhiboro [2021]. The morphological terminology used in this paper follows White et al. [1999].

Urophora mauritanica Macquart, 1851
(Figs 1–8)

Material. Armenia, Yerevan, neighborhood of Erebuni fortress, biotope disturbed, 15.07.2017, 2♀, 2♂ reared from capitula of *Carthamus* sp. 6–9.04.2018 (D.A. Evstigneev).

Host plants. Larvae of this species develop in capitula of various species of the genus *Carthamus* [White, Korneyev, 1989; Korneyev, White, 1996]. The host plant of *U. mauritanica* is shown in Fig. 17.

Distribution. Mediterranean region [White, Korneyev, 1989], Moldova, Ukraine, Russia, Uzbekistan, Azerbaijan, Kazakhstan [Korneyev, White, 1996], Iran [Mohamadzade Namin, Korneyev, 2018], Armenia (new record).

Urophora merzi Mohamadzade Namin, 2011
(Figs 9–16)

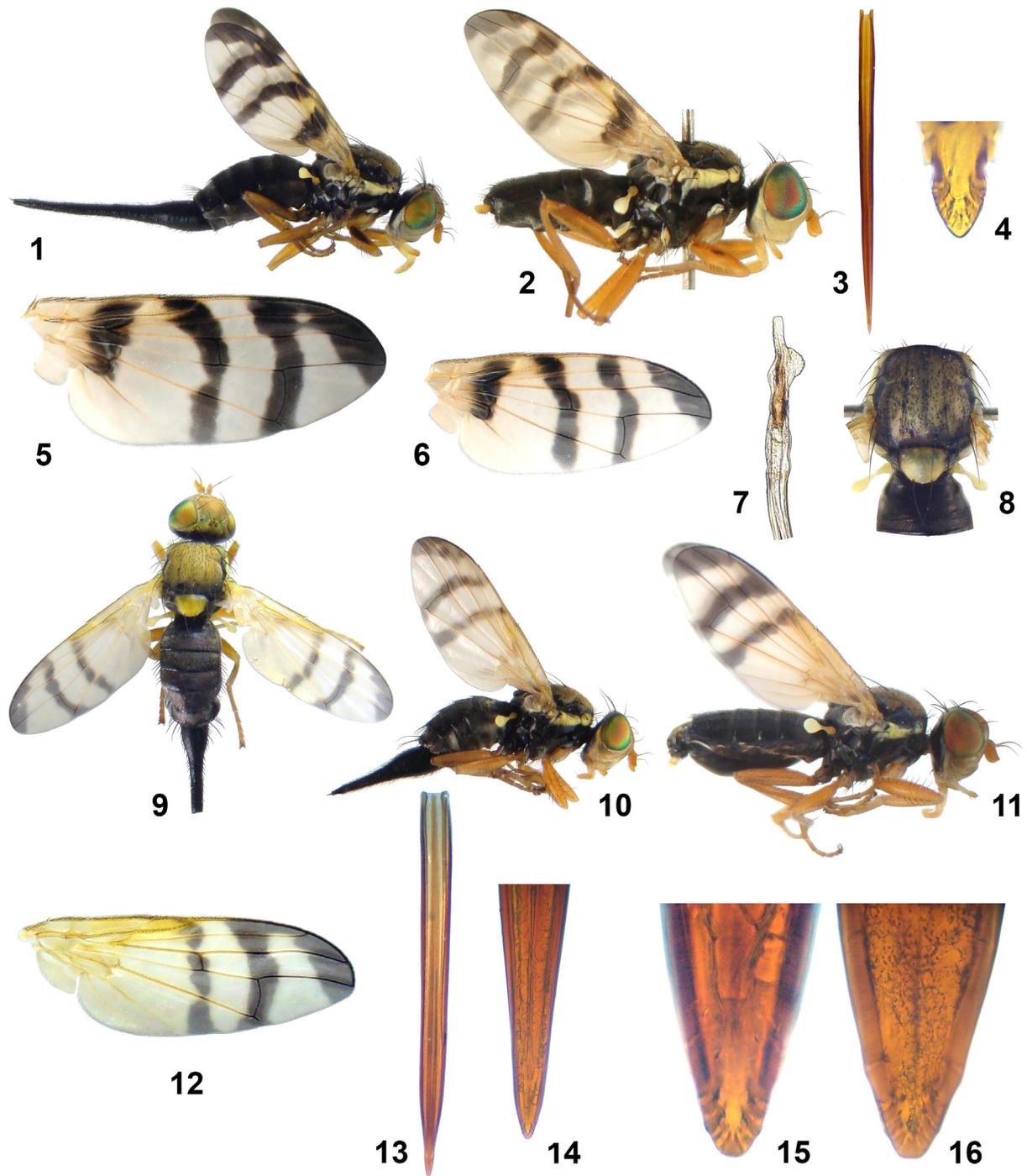
Material. Armenia, Ararat Province, near Urtsalanj village, 18.07.2018, 3♀, 3♂ reared from capitula of *Centaurea behen* L. 2–6.04.2019 (D.A. Evstigneev).

Host plants. Larvae of this species were found to develop within the capitula of *Centaurea behen* L. [Mohamadzade Namin, Nozari, 2011]. During our research in Armenia, we also observed the development of the immature stages of this species on the same host plant (Fig. 18).

Distribution. Iran [Mohamadzade Namin, Nozari, 2011; Mohamadzade Namin, Korneyev, 2018], Armenia (new record).

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Figs 1–16. Species of the genus *Urophora*, general view and details of the structure.

1–8 – *U. mauritanica*: 1 – female, habitus, lateral view, 2 – male, habitus, lateral view, 3 – aculeus, 4 – aculeus apex, 5 – female wing, 6 – male wing, 7 – glans of phallus, 8 – female thorax, dorsal view; 9–16 – *U. merzi*: 9 – female, habitus, dorsal view, 10 – female, habitus, lateral view, 11 – male, habitus, lateral view, 12 – male wing, 13 – aculeus, 14 – distal part of aculeus, 15–16 – aculeus apex in two specimens.

Рис. 1–16. Виды рода *Urophora*, общий вид и детали строения.

1–8 – *U. mauritanica*: 1 – самка, общий вид сбоку, 2 – самец, общий вид сбоку, 3 – акулеус, 4 – вершина акулеуса, 5 – крыло самки, 6 – крыло самца, 7 – гланс фаллуса, 8 – грудь самки сверху; 9–16 – *U. merzi*: 9 – самка, общий вид сверху, 10 – самка, общий вид сбоку, 11 – самец, общий вид сбоку, 12 – крыло самца, 13 – акулеус, 14 – дистальная часть акулеуса, 15–16 – вершина акулеуса у двух экземпляров.



Figs 17–18. Host plants of *Urophora mauritanica* and *U. merzi*.
Рис. 17–18. Кормовые растения *Urophora mauritanica* и *U. merzi*.
17 – *Carthamus* sp.; 18 – *Centaurea behen*.

References

- Evstigneev D.A. 2020a. Description of males and redescription of females of *Terellia babaki* V. Korneyev (Diptera: Tephritidae) on specimens from Armenia. In: Psikhologicheskie i estestvennonauchnye issledovaniya v Ulyanovskom institute grazhdanskoj aviatsii: sbornik nauchnykh statej [Psychological and natural science research at the Ulyanovsk Civil Aviation Institute: collection of scientific papers]. Ulyanovsk: Kachalin A.V.: 20–29 (in Russian).
- Evstigneev D.A. 2020b. *Tephritis araileri* sp. nov. and *Tephritis conaraileri* sp. nov. – new species of tephritid flies (Diptera: Tephritidae) from Armenia. In: Psikhologicheskie i estestvennonauchnye issledovaniya v Ulyanovskom institute grazhdanskoj aviatsii: sbornik nauchnykh statej [Psychological and natural science research at the Ulyanovsk Civil Aviation Institute: collection of scientific papers]. Ulyanovsk: Kachalin A.V.: 30–42 (in Russian).
- Evstigneev D.A. 2022. *Terellia hajastanica*, a new species of tephritid flies (Diptera: Tephritidae) associated with *Centaurea pseudoscabiosa* subsp. *glehnii* (Asteraceae) in Armenia. *Zoosystematica Rossica*. 31(2): 258–263. DOI: 10.31610/zsr/2022.31.2.258
- Evstigneev D.A., Glukhova N.V. 2020. First records of two species of Tephritidae and one species of Platystomatidae (Diptera) from Transcaucasia. *Zoosystematica Rossica*. 29(1): 155–161. DOI: 10.31610/zsr/2020.29.1.155
- Evstigneev D.A., Glukhova N.V. 2022. Tephritid flies (Diptera: Tephritidae) of the Caucasus and Transcaucasia: new records and new host plants. *Zoosystematica Rossica*. 31(1): 118–129. DOI: 10.31610/zsr/2022.31.1.118
- Evstigneev D.A., Korneyev S.V. 2018. New and little-known species of the genus *Tephritis* Latreille (Diptera, Tephritidae) from Kabardino-Balkaria and Adygea (Russia). *Ukrainska Entomofaunistyka*. 9(4): 5–15.
- Evstigneev D.A., Przhiboro A.A. 2021. New records of flies of the genus *Tephritis* (Diptera: Tephritidae) from the Caucasus and Transcaucasia, with notes on other tephritid species. *Zoosystematica Rossica*. 30(1): 13–24. DOI: 10.31610/zsr/2021.30.1.13
- Korneyev S.V., Evstigneev D.A. 2019. Review of the *Tephritis hyoscyaminiconura* group of species (Diptera: Tephritidae) with description of a new species. *Annales Zoologici*. 69(4): 719–736. DOI: 10.3161/00034541ANZ2019.69.4.007
- Korneyev V.A., White I.M. 1996. Fruit-flies of the genus *Urophora* R.-D. (Diptera, Tephritidae) of Eastern Palaearctic. II. Review of species of the subgenus *Urophora* s. str. Communication 3. *Entomological Review*. 76(4): 499–513.
- Mohamadzade Namin S., Nozari J. 2011. A new species of *Urophora* Robineau-Desvoidy, 1830 (Diptera, Tephritidae) from Iran. *ZooKeys*. 152: 63–70. DOI: 10.3897/zookeys.152.1911
- Mohamadzade Namin S., Korneyev V.A. 2018. An annotated checklist of fruit flies (Diptera: Tephritidae) of Iran. *Zootaxa*. 4369(3): 377–405. DOI: 10.11646/zootaxa.4369.3.5
- White I.M., Korneyev V.A. 1989. A revision of the western Palaearctic species of *Urophora* Robineau-Desvoidy (Diptera: Tephritidae). *Systematic Entomology*. 14(3): 327–374. DOI: 10.1111/j.1365-3113.1989.tb00289.x
- White I.M., Headrick D.H., Norrbom A.L., Carroll L.E. 1999. Chapter 33. Glossary. In: Fruit Flies (Tephritidae): Phylogeny and Evolution of Behavior. Boca Raton: CRC Press: 881–924.

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