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Annotated checklist of thrips (Thysanoptera) of Armenia

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Abstract. The faunistic list of Thysanoptera is presented based on literature data and the author's research in ten of the eleven regions of Armenia during 2022–2024. In total, 25 species of thrips species are known from Armenia, with seven species recorded in the country for the first time: *Aeolothrips fasciatus* (Linnaeus, 1758), *Odontothrips karnyi* Priesner, 1924, *Thrips atratus* Haliday, 1836, *T. minutissimus* Linnaeus, 1758, *T. pillichi* Priesner, 1924, *T. trehernei* Priesner, 1927, *T. vulgatissimus* Haliday, 1836. New host plants have been identified for four species.

Key words: thrips, Thysanoptera, new records, host plants, Armenia, Transcaucasia.

Аннотированный чек-лист трипсов (Thysanoptera) Армении

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Резюме. Представлен фаунистический список трипсов (Thysanoptera) Армении, основанный на литературных данных и исследованиях автора в 10 из 11 регионов страны в течении 2022–2024 годов. Всего в Армении известно 25 видов трипсов, семь из которых приведены для страны впервые: *Aeolothrips fasciatus* (Linnaeus, 1758), *Odontothrips karnyi* Priesner, 1924, *Thrips atratus* Haliday, 1836, *T. minutissimus* Linnaeus, 1758, *T. pillichi* Priesner, 1924, *T. trehernei* Priesner, 1927, *T. vulgatissimus* Haliday, 1836. Для 4 видов отмечены новые кормовые растения.

Ключевые слова: трипсы, Thysanoptera, новые находки, кормовые растения, Армения, Закавказье.

Introduction

Thrips, the members of the order Thysanoptera, are a diverse group of insects found worldwide with 6042 described species listed [Classification..., 2018]. These insects play a significant role in various ecosystems, often serving as pollinators, herbivores, and potential vectors of plant diseases. Armenia hosts a wide variety of cultivated and wild plant life, suggesting the existence of a wide range of entomofauna, including thrips. However, thrips have been insufficiently studied in Armenia, and the current knowledge of the diversity is likely incomplete, with only 16 species representing the families Aeolothripidae, Thripidae, and Phlaeothripidae are mentioned in the available literature [Ananian, 1976]. In neighboring countries, more extensive research has been conducted, with over 270 [Mirab-balou, 2018] and 193 species of thrips [Tunç, Hastenpflug-Vesmanis, 2016] recorded from Iran and Turkey respectively. In this article, available information on the thrips fauna of Armenia is reviewed.

Material and methods

The field surveys were conducted by the author in 10 out of 11 Armenian regions (based on the administrative division). Thrips were collected from various habitats, including agricultural fields, natural vegetation, and urban areas. Several greenhouses were surveyed as well. We used standard methods, such as flower and leaf shaking, brushing [Silva et al., 2021] and crop washing in the mixture of liquid detergent, sodium hypochlorite and water [Burris et al., 1990]. Specimens preserved in 70% ethanol and later mounted on microscope slides for identification [Bisevac, 1997].

Morphological identification of thrips species was performed using taxonomic keys and published literature [Zur Strassen, 2003]. The specimens were prepared using a modified version of the Bisevac [1997] procedure, which included: clearing in 10% KOH solution, dehydration in a graded ethanol series, and mounting in Fora-Berleze balsam.

The material studied is deposited in the collections of the Scientific Center of Zoology and Hydroecology of the National Academy of Sciences of the Republic of Armenia (Yerevan).

The list below includes all available literature as well as our own data. Species newly recorded from Armenia are marked with an asterisk.

Family Aeolothripidae

**Aeolothrips fasciatus* (Linneaeus, 1758)

Material. 4♀, Yerevan, Nor Nork, 1302 m, on Trifolium pratense L. and Medicago sativasativa L. (Fabaceae), 23.06.2022.

Distribution. Widespread around the globe [Mound et al., 2025].

Family Melanthripidae

Melanthrips fuscus (Sulzer, 1776)

Material. 3♀, Tavush Region, Zikatar, 1265 m, on Ranunculus sp. (Ranunculaceae), 24.05.2023.

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Distribution. Reported from Europe, Asia, Northern Africa [Mound et al., 2017]. This species was recorded from Ghukasyan District (currently Shirak Region, surroundings of Ashotsk) of Armenia on Onobrychis sp. (Fabaceae) [Ananian, 1976]; listed for Tavush Region for the first time.

Family Thripidae

Drepanothrips reuteri Uzel, 1895

Distribution. Reported from Europe [Zur Strassen, 2003], North America [Mound et al., 2017], Crimea, the Caucasus [Ananian, 1976]. It is known in Ararat Valley of Armenia as a pest of grape [Ananian, 1976].

Frankliniella intonsa (Trybom, 1895)

Material. 2♀, Yerevan, Arabkir, 1138 m, on Tragopogon sp. (Asteraceae), 27.06.2022; 3♀, Lori Region, Odzun, 1356 m, on Senecio sp. (Asteraceae), 6.07.2023; 2♀, Kotayk Region, Nor Geghi, 1384 m, on greenhouse Fragaria × ananassa D. (Rosaceae), 9.11.2023.

Distribution. Widespread across the Old World, from western Europe to Vietnam, Japan and Taiwan, and feeds on very wide range of unrelated plant species [Mound et al., 2025]. This species is listed from Armenia as a pest of cereals, carrot, and potatoes [Ananian, 1976].

Frankliniella occidentalis Pergande, 1895

Material. Ararat Region: 2♀, Hayanist, 840 m, Khachpar, 841 m, 17.11.2023. Armavir Region: 3♀, Hovtashat, 836 m, 17.11.2023; 5♀, Zvartnots, 876 m, on greenhouse Fragaria × ananassa D. (Rosaceae), 17.11.2023. Kotayk Region: 2♀, Kamaris, 1473 m, on greenhouse Fragaria × ananassa D. (Rosaceae), 21.01.2022; 5♀, Nor Geghi, 1365 m, 10.09.2023; 4♀, Nor Geghi, 1387 m, 9.11.2023; 2♀, Proshyan, 1329 m, on Rosa × damascena M. (Rosaceae), 2.12.2023. Syunik Region: 1♀, Shikahogh, 971 m, on Prunella vulgaris L. (Lamiaceae), 29.06.2023.

Notes. The species was recorded from Armavir Region of Armenia, in greenhouses on pepper [Ghazaryan, 2021]. In my research, *F. occidentallis* was found on Fragaria ananassa and Rosa damascena in greenhouse conditions as a pest. Feeding on strawberry thrips caused ugly fruit formation, and on roses flower petals deformation and discolouration. This information was provided by agronomists of the greenhouses. In the open field *F. occidentallis* was found on Prunella vulgaris. In Ararat, Kotayk and Syunik regions, *F. occidentallis* is recorded on above mentioned crops for the first time.

Distribution. Widespread across Europe, America, Asia, also present in several countries of Africa and Oceania [Thysanoptera, 2019]. Among countries neighboring Armenia the species is recorded from Turkey, Azerbaijan, and Iran [Thysanoptera, 2019; Thysanoptera..., 2025].

Frankliniella tenuicornis (Uzel, 1895)

Distribution. Recorded form the Holarctic, Palaearctic and Nearctic [Mound et al., 2025]. Europe, the Caucasus, Siberia, Middle Asia, Northern America [Ananian, 1976]. In Armenia, the species is recorded from Yerevan, on cereals and "wild flowers" [Ananian, 1976].

Kakothrips pisivorus Westwood, 1880

Distribution. Recorded from Transcaspian Region, Syria [Zur Strassen, 2003], Europe, the Caucasus, Siberia [Ananian, 1976]. In Armenia, the species was recorded from Yerevan as *K. robustus* (Uzel, 1895) [Ananian, 1976].

Limothrips angulicornis Jablonowski, 1884.

Distribution. Recorded from the Western Palaearctic [Zur Strassen, 2003], Europe, Georgia, Northern America [Ananian, 1976]. From Armenia the species was recorded on Triticum sp. (Poaceae) without clear distribution data [Ananian, 1976].

**Odontothrips karnyi* Priesner, 1924

Material. 3♀, Yerevan, Nor Nork, 1302 m, on Medicago sativa ssp. sativa L. (Fabaceae), 23.06.2022.

Distribution. Recorded from Turano-European-Mediterranean region, also from Cabo Verde, Yemen, Mongolia, on plants of Fabaceae [Zur Strassen, 2003].

Odontothrips loti (Haliday, 1852)

Material. 2♀, Yerevan, Nor Nork, 1302 m, on Lotus caucasicus K. (Fabaceae), 23.06.2022; 3♀, Tavush Region, Koghb env., "Zikatar" State Sanctuary, 1271 m, on Lapsana grandiflora B. (Asteraceae), 6.07.2023; 2♀, Vayots dzor Region, Herher, 1886 m, on Cichorium intybus L. (Asteraceae), 14.07.2023.

Distribution. Widespread in Europe, in the USA. Among countries neighboring Armenia the species is recorded from Georgia and Azerbaijan. In Armenia, the species was recorded from Yerevan [Ananian, 1976]. Feeds on flowers of various Fabaceae, including Lotus, Genista, Lupinus, Trifolium. From Tavush and Vayots dzor regions as well as on Asteraceae flowers *O. loti* is reported for the first time.

Taeniothrips inconsequens (Uzel, 1895)

Distribution. Distributed in the Palaearctic Region [Zur Strassen, 2003]. In Armenia, the species was recorded from Yerevan on plum tree, but not as a pest [Ananian, 1976].

Tenothrips frici (Uzel, 1895)

Distribution. Widespread around the globe [Mound et al., 2017]. In Armenia, the species was recorded from Yerevan on flowers of Centaurea sp. (Asteraceae) [Ananian, 1976].

**Thrips atratus* Haliday, 1836

Material. 2♀, Tavush Region, Zikatar, 1265 m, on Salvia sp. (Lamiaceae), 25.05.2023; 2♀, Lori Region, Margahovit, 1786 m, on Hyoscyamus niger L. (Solanaceae), 29.06.2023; 2♀, Gegarkunik Region, Sevan, 1944 m, on Rosa sp. (Rosaceae), 17.07.2023.

Distribution. Widespread both in Europe and North America [Zur Strassen, 2003].

**Thrips minutissimus* Linnaeus, 1758

Material. 5♀, Lori Region, Margahovit, 1786 m, on Filipendula hexapetala M. (Rosaceae), 29.06.2023.

Distribution. Species occurs throughout northern Europe [Mound et al., 2025], also reported from Iran [Mirab-balou, 2018].

Thrips physopus Linnaeus, 1758

Distribution. Widespread in Europe, Siberia, Mongolia [Zur Strassen, 2003], the Caucasus, Africa, North America [Ananian, 1976]. In Armenia, the species was recorded as a pest of flowers of Rosa sp. (Rosaceae) [Ananian, 1976].

**Thrips pillichi* Priesner, 1924

Material. 5♀, Gegharkunik Region, Sevan Botanical Garden, 1944 m, on Lapsana grandiflora B. (Asteraceae), 17.07.2023.

Distribution. Widespread in Europe, Iran [Mirab-balou, 2018]. The species was found on flowers of Asteraceae [Zur Strassen, 2003].

Thrips tabaci Lindeman, 1889

Material. 1♀, Aragatsotn Region, Aparan, 1879 m, on Rumex crispus L. (Polygonaceae), 24.06.2023.

Distribution. Widespread across the globe [Mound et al., 2025]. In Armenia, the species was recorded from all regions on more than hundred species of wild and cultivated plants, from which it prefers to feed on representatives of Solanaceae and Apiaceae families [Ananian, 1976].

**Thrips trehernei* Priesner, 1927

Material. 3♂, Yerevan, Nor Nork, 1294 m, on Tragopogon sp. (Asteraceae) and Convolvulus arvensis L. (Convolvulaceae), 23.06.2022; 7♂, Tavush Region, Zikatar, 1265 m, on Carduus pycnocephalus L. (Asteraceae) and Achillea biebersteinii Af. (Asteraceae), 24.05.2023; 4♂, Aragatsotn Region, Aparan, 1886 m, on Taraxacum officinale W. (Asteraceae), 7.07.2023; 3♂, Vayots dzor Region, Herher, 1886 m, Tragopogon sp. (Asteraceae), 14.07.2023.

Distribution. Widespread across Europe and in North America, southeastern Australia [Mound et al, 2025].

Thrips validus Uzel, 1895

Distribution. Known from Western Europe, Sibiria [Zur Strassen, 2003], Transcaucasia [Ananian, 1976]. In Armenia, the species was recorded from Yerevan as *T. validus longicollis* Uzel, 1895 [Ananian, 1976].

**Thrips vulgatissimus* Haliday, 1836

Material. 7♀, Gegharkunik Region, Semyonovka env., 2070 m, on Rumex alpinus L. (Polygonaceae), 25.06.2023.

Distribution. Widespread across Europe, also northern and western areas of North America [Mound et al., 2025].

Family Phlaeothripidae

Haplothrips aculeatus (Fabricius, 1803)

Distribution. Widespread in Europe [Mound et al., 2025], the Caucasus, Middle Asia, Siberia, Far East [Ananian, 1976]. Reported from Armenia as widely distributed [Ananian, 1976].

Haplothrips angusticornis Priesner, 1921

Distribution. Reported from Europe, Middle East [Haplothrips..., 2024]. In Armenia, the species was recorded from Yerevan [Ananian, 1976].

Haplothrips leucanthemi (Schrank, 1781)

Material. 2♀, Yerevan, Nor Nork, 1302 m, on Trifolium pratense L. (Fabaceae), 23.06.2022; 3♀, Lori Region, Fioletovo env., 1649 m, 25.06.2023; Lori Region, Margahovit, 1782 m, on Anthemis sp. (Asteraceae), 25.06.2023; 2♀, Tavush Region, Koghb env., "Zikatar" Environmental Center, 1271 m, on Anthemis sp. (Asteraceae), 6.07.2023; 2♀, Aragatsotn Region, near Aparan water body, 1886 m, on Tripleurospermum sp. (Asteraceae), 7.07.2023; 2♀, Vayots dzor Region, Herher, 1886 m, on Centaurea solstitialis L. (Asteraceae), 14.07.2023; 2♀, Kotayk Region, Akunk env., 1510 m, on Xeranthemum squarrosum B. (Asteraceae), 15.07.2023; 2♀, Gegarkunik Region, Sevan Botanical Garden, 1950 m, on Tripleurospermum sp. (Asteraceae), 17.07.2023.

Distribution. Known from Europe (England and Scotland) [Mound et al., 2025], and also from Iran [Mirab-Balou, 2018].

Remarks. This species was reported as *H. niger* Osborn, 1883 from Armenia (Yerevan) on Trifolium sp., Plantago sp., Taraxacum sp., and Crataegus sp. [Ananian, 1976]. For above listed regions and associated plants *H. leucanthemi* is recorded for the first time.

Haplothrips reuteri (Karny, 1907)

Distribution. Reported from Russia, Turkey [Tunç, Hastenpflug-Vesmanis, 2016], Iran [Mirad-balou, 2018]. In Armenia, the species was recorded from Yerevan as a pest of Trifolium sp. and Medicago sp. (Fabaceae) [Ananian, 1976].

Haplothrips tritici (Kurdjumov, 1912)

Distribution. Reported from Europe including the European part of Russia, the Caucasus, Western Siberia, West and Middle Asia, Kazakhstan, North America [Ananian, 1976]. In Armenia, the species was recorded from cereal cultivating regions and is known as a pest of wheat [Ananian, 1976].

The presented research provides data on the occurrence of 25 species of thrips in Armenia, of which seven are recorded from the country for the first time and four are new both for associated plant and for the country's regions.

Comparison of existing data on Armenian fauna with data for neighboring Iran and Turkey is an evidence of insufficient level of study of the thrips of Armenia. Different climatic zones of Armenia and diverse habitats suggest that the Thysanoptera fauna is likely far from fully documented. The records presented in this annotated checklist mark a significant step forward in the documentation of Thysanoptera in Armenia. One noteworthy aspect of this study is the revelation of previously unreported species in Armenia, underscoring the need for continued exploration of the region's diversity of thrips.

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