FAUNA OF PLUME MOTHS (LEPIDOPTERA: PTEROPHORIDAE) OF AZERBAIJAN

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Summary. An annotated list of 49 plume moths species of Azerbaijan is given. Thirty four species are recorded from this country for the first time. New synonymy is established: Agdistis intermedia Caradja, 1920 = Agdistis duplicationis Arenberger, 2013, syn. n.

Key words: Lepidoptera, Pterophoridae, plume moths, taxonomy, new synonym, fauna, new records, Azerbaijan.

INTRODUCTION

Azerbaijan is the largest republic of Transcaucasia. Its geographical position favorably affects the diverse nature of the region, where, along with the mountains of the Greater Caucasus and Talys, there are the plain territories of the Kura-Arak and Lenkoran lowlands. The territory of the Republic has a rich and diverse flora and fauna, including endemics. Despite the fact that a considerable amount of materials are in the collection of the Zoological Institute, Russian Academy of Sciences, St. Petersburg (ZIN), the plume moths fauna of Azerbaijan is still poorly studied. According to published data, only 15 species were recorded in the territory of Azerbaijan (Zagulajev, 1990, Ustjuzhanin, 2001, Gielis, 2003, Arenberger, 2013, Ustjuzhanin et al., 2015). Examining the materials in the collection ZIN, and of those given to us by I. Pljushtch, A. Dantchenko, A. Zamesov, we expanded the list of Azerbaijan plume moths to 49 species. The species recorded for the fauna of this country for the first time are marked with an asterisk (*). List of collecting sites is given below:

Agdam: Agdam Distr., 39°59′N, 46°55′E, 360 m.
Agdzhabedi: Agdzhabedi Distr., 10 km SE Agdzhabedi, 40°02′N, 47°27′E, 16 m.
Alekseyevka: Chachmas Distr., vill. Alekseyevka, 41°49′N, 48°66′E.


AN ANNOTATED LIST OF PTEROPHORIDAE OF AZERBAIJAN

*Agdistis adactyla* (Hübner, [1823])

MATERIAL EXAMINED. **Azerbaijan**: Kalvaz, 16-18.VII 2003, 1♂, same locality, 06.VII 2004, 1♂; Avas, 01.VII 2007, 1♂ (I. Pljushtch.).

DISTRIBUTION. Temperate zone of Palaearctic.

*Agdistis andreeva* Arenberger, 2013

DISTRIBUTION. Azerbaijan.

NOTES. Reported from Azerbaijan (Kuba) by E. Arenberger (2013). The species status is doubtful. The female, taken as the holotype, has genitals slightly different from those of *Agdistis frankeniæ* (Zeller, 1847) and very similar to *Agdistis glaseri* Arenberger, 1978. But the males of this species, taken as the paratypes, of the same dates and collecting localities, are absolutely identical to *Agdistis frankeniæ*.

*Agdistis caradjai* Arenberger, 1975


DISTRIBUTION. Turkey, Dagestan, Azerbaijan.
Agdistis frankeniae (Zeller, 1847)

DISTRIBUTION. Europe, European part of Russia, Asia Minor, the Caucasus, Azerbaijan, Iran, Kazakhstan.

Agdistis intermedia Caradja, 1920


NOTES. Agdistis duplicationis was described from Azerbaijan (Kuba) by E. Arenberger (2013). When comparing A. duplicationis with the allolectotype of A. intermedia, their conspecificity becomes apparent. In the fundamental work on Pterophoridae (Arenberger, 1995), the image of the female genitalia of A. intermedia, in particular, the antrum shape, is not accurately done. Probably, this inaccuracy of the picture affected the decision to describe a new species.
DISTRIBUTION. Central Europe (Hungary), Eastern Europe, South of Western Siberia, Kazakhstan, Azerbaijan.

Agdistis karabachica Zagulajev, 1990

DISTRIBUTION. Azerbaijan, Turkmenistan.

Agdistis sissia Arenberger, 1987

DISTRIBUTION. Turkey, Armenia, Azerbaijan.

Agdistis tamaricis (Zeller, 1847)

MATERIAL EXAMINED. Azerbaijan: Geokchai, 14.VI 1960, 1 ♀; Baku, Botanical Garden, 1 ♂ (R. Effendi).
DISTRIBUTION. Europe, Turkey, Armenia, Azerbaijan, Turkmenistan, Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan, Iran, Iraq, Afghanistan, Pakistan, Mongolia, China.

Gillmeria irakella (Amsel, 1959)

DISTRIBUTION. Turkey, Iraq, Iran, Azerbaijan.

Gillmeria miantodacta (Zeller, 1841)

DISTRIBUTION. Europe, Azerbaijan.
*Gillmeria rhusiodactyla* (Fuchs, 1903)


DISTRIBUTION. Armenia, Azerbaijan, southern part of European Russia, western Kazakhstan.

*Amblyptilia acanthadactyla* (Hubner, [1813])


DISTRIBUTION. Temperate zone of Palaearctis.

*Amblyptilia punctidactyla* (Haworth, 1811)

MATERIAL EXAMINED. **Azerbaijan**: Belokany, 11.VIII 1962, 1 ♂ (A. Zagulajev).

DISTRIBUTION. Temperate zone of Palaearctic region.

*Paraplatyptilia metzneri* (Zeller, 1841)


DISTRIBUTION. Europe, Iran, Asia Minor, Armenia, Azerbaijan, Kyrgyzstan, Uzbekistan, Kazakhstan, Tajikistan, NW China, South Siberia, Mongolia.

*Cnaemidophorus rhododactyla* (Denis et Schiffermuller, 1775)


DISTRIBUTION. Holarctic region.

*Marasmarcha cinnamomea* (Staudinger, 1870)


DISTRIBUTION. South-East of European Russia, the Crimea, Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Afghanistan, China, South of Western Siberia, Mongolia.

*Stenoptilia arida* (Zeller, 1847)


*Stenoptilia coprodactyla* (Stainton, 1851)


DISTRIBUTION. Europe, southern West Siberia, Asia Minor, the Caucasus, Central Asia.
Stenoptilia mannii (Zeller, 1852)


DISTRIBUTION. Southern Europe, Asia Minor, Iraq, Central Asia, Azerbaijan, Armenia.

Stenoptilia parnasia Arenberger, 1986


DISTRIBUTION. Greece, Turkey, Armenia, Azerbaijan, Turkmenistan.

Stenoptilia pelidnodactyla (Stein, 1837)


Stenoptilia pterodactyla (Linnaeus, 1761)


DISTRIBUTION. Europe, Azerbaijan, Kazakhstan, Kyrgyzstan, Siberia, Russian Far East, North America.

Stenoptilia stigmatodactyla (Zeller, 1852)


DISTRIBUTION. Europe, Asia Minor and North Africa, Azerbaijan, Iran, Kazakhstan, South Siberia, Yakutia, Magadan region.

Stenoptilia zophodactyla (Duponchel, 1838)


DISTRIBUTION. This species is widespread throughout tropical and subtropical regions.

*Procaperia maculata (Constant, 1865)


DISTRIBUTION. Southern Europe, Asia Minor, Armenia, Azerbaijan.

*Procaperia orientalis Arenberger, 1988


DISTRIBUTION. India (Kashmir), Uzbekistan, Kyrgyzstan, Turkmenistan, Tajikistan, Azerbaijan.
*Capperia celeusi* (Frey, 1886)

**MATERIAL EXAMINED.** Azerbaijan: Paraga, 25.VI 1933, 1 ♀ (Znoiko); Lerik, 04.VII 1964, 1 ♂ (M. Pastuhov); 02.VII 1964, 1 ♀ (A. Zagulajev); 36 km W of Lenkoran', 04.VII 1962, 1 ♀ (A. Zagulajev); Kalvaz, 08.VII 2003, 1 ♂ (I. Pljushtch).

**DISTRIBUTION.** Europe, Asia Minor, Iran, Turkmenistan, Armenia, Azerbaijan.

*Capperia fusca* (Hofmann, 1898)

**DISTRIBUTION.** Europe, the Caucasus, Turkey, southern Ural, west Kazakhstan, Tajikistan, Azerbaijan.

**NOTES.** This species was recorded from Azerbaijan by Arenberger (2013).

*Capperia loranai* (Fuchs, 1895)


**DISTRIBUTION.** Europe, Azerbaijan.

*Crombrugghia tristis* (Zeller, 1839)

**MATERIAL EXAMINED.** Azerbaijan: Lerik, 01.VII 1964, 1 ♀ (M. Pastuhov).

**DISTRIBUTION.** Europe, Asia Minor, Iraq, Iran, Turkmenistan, Armenia, Azerbaijan.

*Crombrugghia distans* (Zeller, 1847)


**DISTRIBUTION.** North Africa, Europe, the Caucasus, Asia Minor, Iran, Afghanistan, India, the Himalaya, Central Asia, Kazakhstan, China, southern Siberia.

*Pselnophorus poggei* (Mann, 1862)

**MATERIAL EXAMINED.** Azerbaijan: Lerik, 08.VI 1970, 1 ♂; Mistan, 05.VI 1960, 1 ex. (Yu. Kostyuk); Belokany, 20.VII 1960, 1 ♂ (R. Effendi).

**DISTRIBUTION.** Turkey, Iran, North Caucasus, Georgia, Azerbaijan.

*Hellinsia osteodactayla* (Zeller, 1841)


**DISTRIBUTION.** Europe, the Caucasus, Central Asia, Kazakhstan, Siberia, the Far East, Mongolia, China, Japan.

*Emmelina monodactyla* (Linnaeus, 1758)


**DISTRIBUTION.** North Africa, Europe, the Caucasus, Central Asia, Kazakhstan, southern Siberia east to Tuva, Mongolia, China, India, Philippines, North and South America.

*Emmelina pseudojezonica* Derra, 1987

**MATERIAL EXAMINED.** **Azerbaijan:** Lenkoran’, 09.VII 1964, 1 ♂; Zengelyash, 23.VII 1964, 1 ♀ (M. Pastuhov).

**DISTRIBUTION.** Europe, southern part of European Russia, the Caucasus.

*Adaina microdactyla* (Hübner, [1813])

**MATERIAL EXAMINED.** **Azerbaijan:** Chananab, 28.VI 1955, 1 ♀ (A. Zagulajev).

**DISTRIBUTION.** Europe, Turkey, Georgia, Azerbaijan, Israel, Iran, Nepal, China, Japan, Vietnam, Indonesia, Philippines, New Guinea, Solomon Islands, tropical and subtropical Africa, Madagascar.

**Tabulaephorus decipiens** (Lederer, 1870)

**NOTES.** This species was recorded from Azerbaijan by Arenberger (2013).

**DISTRIBUTION.** Iran, Kyrgyzstan, Azerbaijan, Armenia, Tajikistan.

**Tabulaephorus parthisicus** (Lederer, 1870)

**NOTES.** This species was recorded from Azerbaijan by Gielis (2003).

**DISTRIBUTION.** Turkey, Turkmenistan, Armenia, Azerbaijan, Israel, Jordan, Syria, Iran, Afghanistan.

**Merrifieldia baliodactyla** (Zeller, 1841)

**NOTES.** This species was recorded from Azerbaijan by Arenberger (2013).

**DISTRIBUTION.** Europe, the Caucasus, Kazakhstan, West Siberia, China (Xinjiang).

*Merrifieldia calcaria* (Lederer, 1870)

**MATERIAL EXAMINED.** **Azerbaijan:** Kalvaz, 6.VI 2004, 1 ♂ (I. Pljushtch).

**DISTRIBUTION.** Iran, Turkmenistan, Kazakhstan, Azerbaijan.

*Merrifieldia farsi* Arenberger, 1981

**MATERIAL EXAMINED.** **Azerbaijan:** Ordubad, 2 ♀ (old materials of the collection ZIN, the date and the collector are not known).

**DISTRIBUTION.** Iran, Azerbaijan.

*Merrifieldia malacodactyla* (Zeller, 1847)

DISTRIBUTION. Europe, Asia Minor, Iran, the Caucasus, Syria, Israel, Kazakhstan, Central Asia, Saudi Arabia, Iran, Iraq, Afghanistan.

*Merrifieldia tridactyla* (Linnaeus, 1758)

NOTES. This species was recorded from Azerbaijan by Arenberger (2013).

DISTRIBUTION. Europe, the Caucasus, Turkey, Iran, Kazakhstan, Southern Ural, south of western Siberia, western Yakutia.

*Wheeleria elbursi* Arenberger, 1981

MATERIAL EXAMINED. Azerbaijan: Ordubad, 2 ♀ (old materials of the collection ZIN, the date and the collector are not known).

DISTRIBUTION. Iran, Turkey, Armenia, Azerbaijan.

*Wheeleria kabuli* (Arenberger, 1981)

NOTES. This species was recorded from Azerbaijan by Gielis (2003).

DISTRIBUTION. Afghanistan, Azerbaijan, Iran.

*Wheeleria obsoleta* (Zeller, 1841)


DISTRIBUTION. Southern Europe, Turkey, Jordan, Iran, Turkmenistan, Azerbaijan.

*Wheeleria phlomidis* (Staudinger, 1870)

MATERIAL EXAMINED. Paraga, 24.VI 1933, 1 ♂ (Znoiko).

DISTRIBUTION. Southern Europe, Turkey, Israel, Jordan, Syria, Iran, Kazakhstan, Azerbaijan, south of the European part of Russia, Southern Ural.

*Wheeleria spilodactyla* (Curtis, 1827)


DISTRIBUTION. Europe, North Africa, Iran, Azerbaijan.

*Pterophorus pentadactyla* (Linnaeus, 1758)


DISTRIBUTION. Palaearctic region except for southern parts and Japan.
CONCLUSION

Despite a fairly large number of species of plume moths provided in the present work, we assume that during future research this list can be extended by at least 7-10 species from such genera as Hellinsia, Platyptilia etc, poorly presented in the current review. For comparison, the plume moths fauna of the neighboring republic Armenia includes 55 species (Ustjuzhanin et al., 2015), and there is no doubt that the Pterophoridae species diversity of Azerbaijan is not less rich.

ACKNOWLEDGEMENTS

The authors are grateful to S. Sinev and A. Lvovskiy (Zoological Institute of the Russian Academy of Sciences, St. Petersburg) for providing the possibility to examine the Pterophoridae collection. We also express our sincere gratitude to I. Plusch (Kiev), A. Danchenko and A. Zamesov (Moscow) for giving us the Pterophoridae specimens from Azerbaijan.

REFERENCES


© Far Eastern entomologist (Far East. entomol.) Journal published since October 1994.
Editor-in-Chief: S.Yu. Storozhenko
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