

New and interesting findings of the Lepidoptera from Astrakhan and Volgograd Territories (Southern Russia)

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Two species of moths, *Drasteria christophi* (Alphéraky, 1895) (Erebidae) and *Protarchanara abrupta* Eversmann, 1854 (Noctuidae), are reported from Russia for the first time; seventeen species of Notodontidae and Noctuidae are found as new for the fauna of Astrakhan and Volgograd Territories (Southern Russia).

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Keywords

Biodiversity, Lepidoptera, Notodontidae, Erebidae, Noctuidae, fauna, new records, Volga Region

Introduction

The distribution of Lepidoptera in the south of European Russia (including southern Volga region) is quite well studied. The modern data on the distribution of moths in Astrakhan and Volgograd territories are represented in a series of large faunal studies (Anikin et al. 2017, 2019). The present paper is based on the material collected by the first author in Astrakhan and Volgograd Territories (Southern Volga Region, Russia) in 2018–2023. The specimens were collected on a light trap using a DRV-250 lamp. All the material is deposited in the private collection of S. Rybalkin (Snezhinsk, Russia).

Species new for Astrakhan Territory marked as *, new for Russia - **.

Result

Family Notodontidae

**Furcula bifida* (Brahm, 1787)

Fig. 1

Material. Russia: Astrakhan Territory, Akhtubinsk, 28–30.vii.2019, 1 female, leg. S. Rybalkin.

Distribution. NW Africa, Europe, Transcaucasia, Turkey, Mongolia and Western Siberia (Schintlmeister 2008; Streltsov et al. 2022). First record for Astrakhan Territory.

Family Erebiidae

***Drasteria christophi* (Alphéraky, 1895)

Fig. 2

Material. Russia: Astrakhan Territory, Akhtubinsk, 14–15.v.2018, 1 male, leg. S. Rybalkin.

Distribution. Deserts of Kazakhstan, Uzbekistan and East Turkmenistan (Matov and Korb 2019). First record for Russian fauna.

Family Noctuidae

**Bryophila orthogramma* Boursin, 1954

Fig. 3

Material. Russia: Astrakhan Territory, Akhtubinsk, 31.vii.2019, 1 male, leg. S. Rybalkin.

Distribution. Eurasian, subboreal species (Kononenko 2016). First record for Astrakhan Territory.

**Phidrimana amurensis* (Staudinger, 1892)

Fig. 4

Material. Russia: Astrakhan Territory, Akhtubinsk District, Kochevaya village, 18.viii.2018, 2 males, leg. S. Rybalkin.

Distribution. Eastern palaeartic, subboreal. In the west of the range, was known from Middle-Volga region, Southern Urals and Western Siberian plain (Nupponen et al. 2002; Knyazev et al. 2010; Anikin et al. 2017, 2019; Knyazev 2020). First record for Astrakhan Territory.

**Cucullia dracunculi* (Hübner, [1813])

Fig. 5

Material. Russia: Astrakhan Territory, Akhtubinsk, 16–17.viii.2018, 3 males, leg. S. Rybalkin.

Distribution. West-Palearctic species (Ronkay and Ronkay, 2009). First record for Astrakhan Territory.

**Shargacucullia gozmanyi* Ronkay & Ronkay, 1994

Fig. 6

Material. Russia: Volgograd Territory, Ol'khovsky distr., Dmitrievka village, 30.iv.2023, 1 male, leg. S. Rybalkin.

Distribution. Known from Hungary, Turkey and Southern-Ural Region of Russia (Ronkay and Ronkay 1994; Çalıřkan 2008, Anikin et al. 2019). First record for Volgograd Territory of Russia.

**Atethmia ambusta* ([Denis et Schifermüller], 1775)

Fig. 7

Material. Russia: Astrakhan Territory, Akhtubinsk, 10.ix.2018, 2 males, leg. S. Rybalkin.

Distribution. European species (Anikin et al. 2019). First record for Astrakhan Territory.

***Protarchanara abrupta* Eversmann, 1854

Fig. 8

Material. Russia: Astrakhan Territory, Akhtubinsk, 10.ix.2018, 1 male, leg. S. Rybalkin.

Distribution. Central Asia: West, South and East Kazakhstan, West China, Mongolia (Volynkin et al. 2014). First record for Russian fauna.

**Euxoa dsheiron* Brandt, 1938

Fig. 9

Material. Russia: Astrakhan Territory, Akhtubinsk, 8.ix.2018, 13.ix.2018, 15.ix.2018, 5 males, leg. S. Rybalkin.

Distribution. Central Asia, in Russia only from Orenburg Territory (Nupponen and Fibiger 2006, 2011). First record for Astrakhan Territory.

**Sideridis rivularis*(Fabricius, 1775)

Fig. 10

Material. Russia: Astrakhan Territory, Akhtubinsk, 13.ix.2018, 1 male, leg. S. Rybalkin.

Distribution. Euro-Siberian species (Anikin et al. 2019). First record for Astrakhan Territory.

**Polymixis trisignata* (Ménétriés, 1847)

Fig. 11

Material. Russia: Astrakhan Territory, Akhtubinsk, 15.x.2021, 2 males, leg. S. Rybalkin.

Distribution. South Europe, Caucasus, Transcaucasia, Asia Minor, Middle East, Central Asia, Kazakhstan, Southeast Russia, South Ural (Kononenko 2016). First record for Astrakhan Territory.

**Pseudohadena arenacea* Ronkay, Varga & Fábıán, 1995

Fig. 12

Material. Russia: Astrakhan Territory, Akhtubinsk district, 7 km S Zolotukha village, 1–2.x.2022, 2 males, leg. S. Rybalkin.

Distribution. Known from Kazakhstan and Orenburg Territory in Southern Ural (Ronkay et al. 1995; Anikin et al. 2017). First record for Astrakhan Territory.

**Orthosia cruda* ([Denis et Schifermüller], 1775)

Fig. 13

Material. Russia: Astrakhan Territory, Akhtubinsk, 20.iv.2021, 1 male, leg. S. Rybalkin.

Distribution. West-Palearctic species (Anikin et al. 2019). First record for Astrakhan Territory.

**Conistra erythrocephala* ([Denis et Schifermüller], 1775)

Fig. 14

Material. Russia: Astrakhan Territory, Akhtubinsk, 15.iv.2021, 1 male, leg. S. Rybalkin.

Distribution. European species (Anikin et al. 2019). First record for Astrakhan Territory.

Gortyna moesiaca (Herrich-Schaffer, 1849)

Fig. 15

Material. Russia: Astrakhan Territory, Akhtubinsk district, 7 km S Zolotukha village, 1–2.x.2022, 1 male, Astrakhan Territory, Akhtubinsk, 2.x.2017, 1 male leg. S. Rybalkin.

Distribution. South of Rumania, East of Turkey, Armenia, North of Iran and Western Kazakhstan. First record for Astrakhan Region was reported by Matov and Anikin (2015) for Akhtubinsk district. Very rare species for Southern-Volga region.

**Fabula zollikoferi* (Freyer, 1836)

Fig. 16

Material. Russia: Astrakhan Territory, Akhtubinsk district, 7 km S Zolotukha village, 1–2.x.2022, 1 male, leg. S. Rybalkin.

Distribution. West-Palearctic species (Gyulai and Ronkay 1999; Zilli et al. 2005). Central Asian, subtemperate. Russia: North Caucasus; South Ural, West Siberia, Altai. – North West Europe (migrant), locally in Central and East Europe, Central Asia, Kazakhstan, Mongolia (Kononenko 2016). First record for Astrakhan Territory.

**Aporophyla lutulenta* ([Denis et Schifermüller], 1775)

Fig. 17

Material. Russia: Astrakhan Territory, Akhtubinsk district, 7 km SW Bataevka, 23–25.ix.2022, 2 males, leg. S. Rybalkin.

Distribution. European species (Anikin et al. 2019). First record for Astrakhan Territory.

**Opigena polygona* ([Denis et Schifermüller], 1775)

Fig. 18

Material. Russia: Astrakhan Territory, Akhtubinsk, 7.ix.2018, 1 female, 9.vi.2018, 1 male leg. S. Rybalkin.

Distribution. Euro-Siberian species (Anikin et al. 2019). First record for Astrakhan Territory.

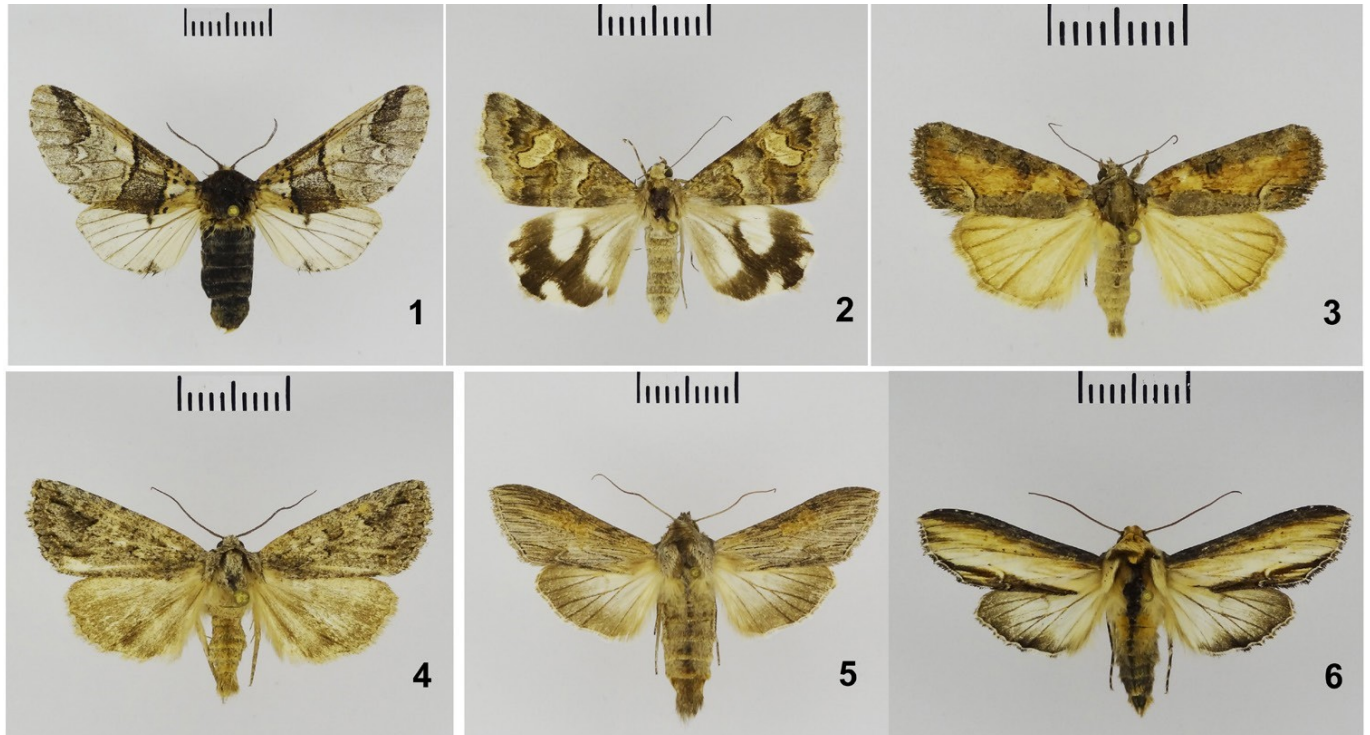


Figure 1. Figures 1-6. Adult Lepidoptera from Astrakhan and Volgograd Territories (private collection of S. Rybalkin): **1.** *Furcula bifida*, female; **2.** *Drasteria christophi*, male; **3.** *Bryophila orthogramma*, male; **4.** *Phidrimana amurensis*, male; **5.** *Cucullia dracunculi*, male; **6.** *Shargacucullia gozmanyi*, male.

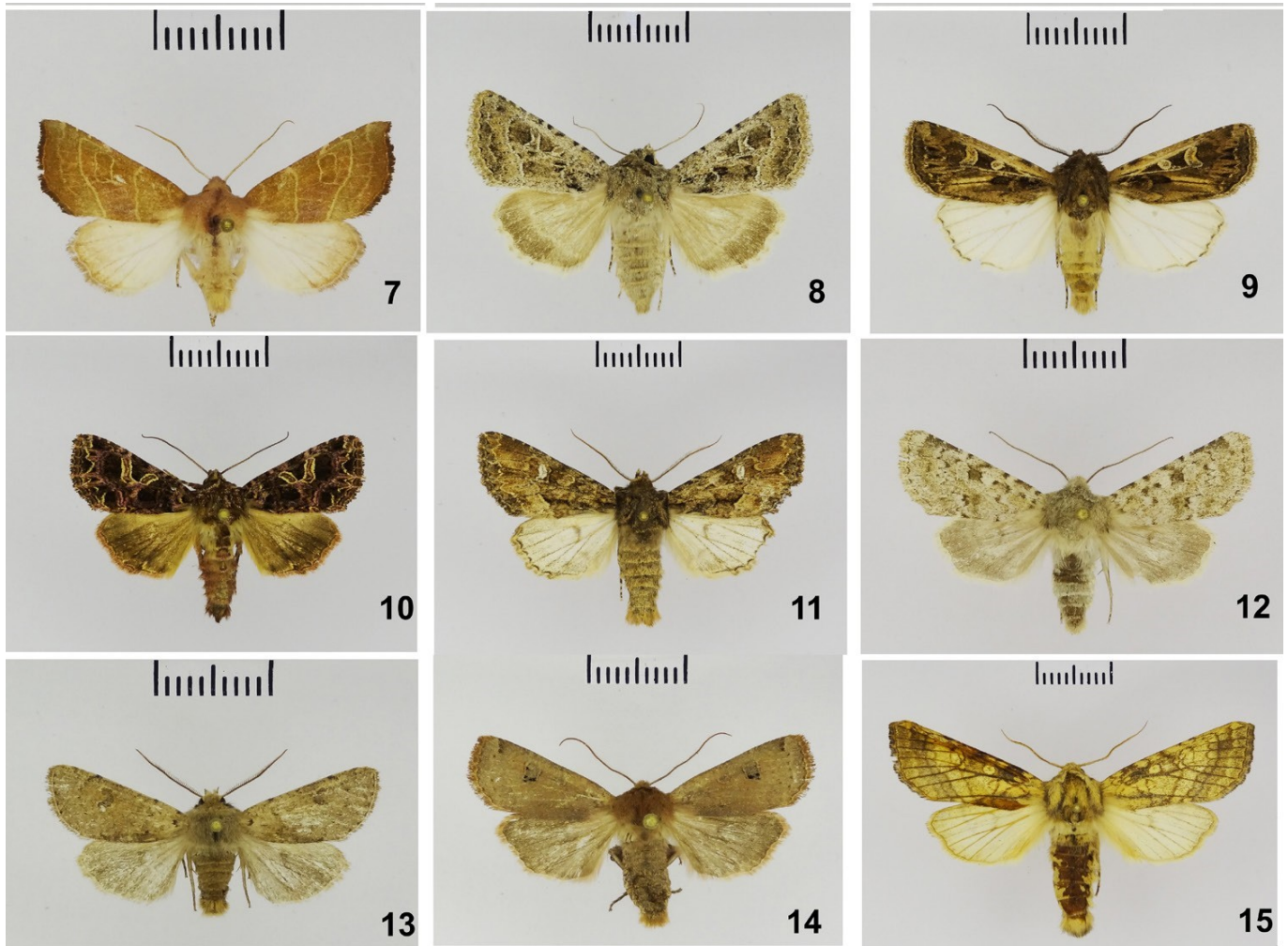


Figure 2. Figures 7-15. Adult Lepidoptera from Astrakhan Territory (private collection of S. Rybalkin): **7.** *Atethmia ambusta*, male; **8.** *Protarchanara abrupta*, male; **9.** *Euxoa dsheiron*, male; **10.** *Sideridis rivularis*, male; **11.** *Polymixis trisignata*, male; **12.** *Pseudohadena arenacea*, male; **13.** *Orthosia cruda*, male; **14.** *Conistra erythrocephala*, male; **15.** *Gortyna moesiaca*, male.

**Xestia xanthographa* (Denis & Schiffermüller, 1775)

Fig. 19

Material. Russia: Astrakhan Territory, Akhtubinsk, 13.ix.2018, 1 male, Astrakhan Territory, Akhtubinsk district, 7 km S Zolotukha village, 1.ix.2018, 1 female, leg. S. Rybalkin.

Distribution. European species (Anikin et al. 2019). First record for Astrakhan Territory.

**Oligia versicolor* (Borkhausen, 1792)

Fig. 20

Material. Russia: Astrakhan Territory, Akhtubinsk, 20.v.2018, 4 males, leg. S. Rybalkin.

Distribution. European species (Anikin et al. 2019). First record for Astrakhan Territory.

Discussion

This work emphasizes the high relevance of conducting entomological faunistic studies in such seasons as autumn and early spring, since traditionally much less work is carried out at this time than in the summer months. The high efficiency of such lepidopterological studies has recently been shown on the example of the Republic of Dagestan and the Kuril Islands (Rybalkin 2020a, b; Ustjuzhanin et al. 2022; Yakovlev et al. 2022; Dubatolov et al. 2023).

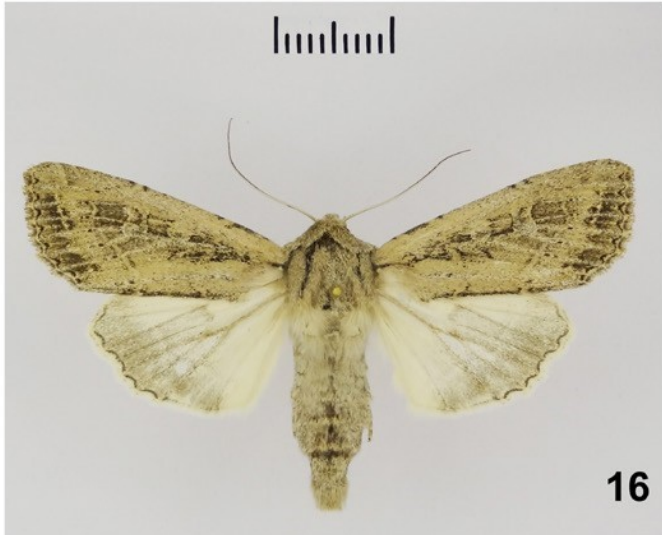


Figure 3. Figures 16–20. Adult *Lepidoptera* from Astrakhan Territory (private collection of S. Rybalkin): **16.** *Fabula zollikoferi*, male; **17.** *Aporophyla lutulenta*, male; **18.** *Opigena polygona*, male; **19.** *Xestia xanthographa*, male; **20.** *Oligia versicolor*, male.

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