

Pyraloid Moths of Tajikistan: New Findings and Species Composition (Lepidoptera: Pyraloidea)

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ABSTRACT

In this study, we report 8 new species of pyraloid moths for the fauna of Tajikistan, which have not previously been recorded in the region. They were collected in various habitats in the territory of Tajikistan and during different seasons. These findings significantly expand our knowledge of the species diversity of Pyraloidea in the region. Additionally, the study provides a preliminary list of the pyraloid moths known from Tajikistan, making it a valuable resource for further faunistic research of this group of Lepidoptera in Central Asia. Given the difficult topography and limited previous research, it is likely that there are additional, yet undiscovered species in the high-altitude and less studied regions of Tajikistan.

Keywords: Lepidoptera, Pyraloidea, new records, checklist, Tajikistan.

INTRODUCTION

Pyraloid moths is a group of Lepidoptera of the great importance since many species are well known agricultural pests (Sinev & Korb, 2022a). The superfamily Pyraloidea, which includes the families Crambidae and Pyralidae, is the third largest superfamily of Lepidoptera. A total of 15.576 species have been described (Nieukerken et al., 2011), which are distributed worldwide and belong to one of the most ecologically diverse superfamilies of the Lepidoptera order (Regier et al., 2012). According to Nieukerken et al. (2011), the Crambidae family currently includes 9.655 described species, while the Pyralidae family includes 5.921 species. The fauna of Pyraloidea of Tajikistan remains poorly studied. Currently, there are no specialized works considering just the Pyraloidea of Tajikistan. In this context, we can cite the publication of N.G. Ershoff (1874), which is of considerable interest for the study of the pyraloid moths of Central Asia. His work includes list of species of pyraloid moths based on collections by A.P. Fedtschenko, A.B. Golike, and N. Dobuzhinsky in Turkestan, which also covered part of the territory of modern Tajikistan. It should be noted that a small number of species of pyraloid moths are indicated for Tajikistan in this work, probably due to the limited geographical coverage of collections within this territory, or the focus of researchers on other regions of Turkestan. In addition, to Ershoff's publication, there are several separate works devoted to species of pyraloid moths that are pests of woody and shrubby plants, highlighting the practical significance of studying this group of moths for agriculture and forestry (Ozerova, 1949; Voloshchuk & Kochetova, 1951; Degtyareva, 1973; Mukhitdinov & Asoev, 2014; Samadova & Rakhmadov, 2016). It is also worth noting some studies on the fauna, descriptions of new taxa, as well as new finds of pyraloid moths for Tajikistan and other Central Asian countries (Korb, 2018, 2022a, b, 2025, 2026; Sinev & Korb, 2022b, c; Huemer & Korb, 2026).

During our research, in addition to collecting butterflies during the day, we also collected pyraloid specimens at night using light traps. From an ecological point of view, this group of Lepidoptera is of particular interest, especially in the context of the fauna of a mountainous country like Tajikistan, where 93% of the territory is mountainous and only 7% is plains. Given the lack of information about the Pyraloidea fauna in Tajikistan, our goal was to conduct a study of the Pyraloidea fauna of this group in the region, along with the study of moths. These studies will significantly expand our knowledge of the species composition, distribution, and ecological features of this lepidopteran group in Tajikistan. In addition, the research helps identify potential pests of crops and forests, which is of great importance for the country's economy. Studying the diversity of pyraloid moths in Tajikistan also contributes to a better understanding of the zoogeography of this group in Central Asia.

MATERIAL AND METHODS

The material for this study was collected by the author in the period 2024-2025. Some specimens were collected at night using light traps, while others were collected during the day using an entomological net. The material was collected from the following localities:

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Tabakchi Ridge, southwestern Tajikistan, 580 m, 37°52'46.27" N, 068°57'31.57" E. This area is characterized by xerophytic sparse vegetation.

Tigrovaya Balka Nature Reserve, 320 m, 37°13'55.35" N, 068°23'04.04" E. Turang groves.

Hissar ridge, Almosi gorge, 1600 m, 36°44'12.78" N, 068°37'59.86" E. Mixed-grass meadows.

Hissar valley, Tursunzoda city, 700 m. Irrigation ditches.

Darvaz ridge, 2000 m. Mixed-grass meadows.

Rangontau ridge, Fakhrobod pass, 1500 m 38°21'19.70" N, 68°44'27.61" E. Rocky, with a mosaic of grasslands and the presence of woody and shrubby plants.

The preparation of the moth genitalia was carried out as follows: the cut-off abdomens of the individuals were placed in numbered 3 ml test tubes containing a 10-15% solution of potassium hydroxide (KOH). The test tubes were placed in a flask of water and then placed in a flask heater and heated at 90 °C for 30 minutes to macerate the tissues. After the specified time, the sclerotized parts of the genital capsule were separated from the soft tissues under a Nikon SMZ800 microscope, followed by their cleaning. The photographs of moths and their genitalia were taken with a NIKON D7000 digital camera connected to a NIKON SMZ800 microscope. All specimens used for this study are deposited in the collection of the E.N. Pavlovsky Institute of Zoology and Parasitology, National Academy of Science of Tajikistan.

RESULTS

NEW FAUNISCTIC DATA

Family Pyralidae

Subfamily Pyralinae

Synaphe infumatalis (Erschoff, 1874) Figs 1d, 2b

Material examined: 1♂, Southwest Tajikistan, Tabakchi ridge, 580 m, 4.04.2024 (leg. A.M. Davlatov); 1♂, Tajikistan, Rangontau ridge, Fakhrobod pass, 1500 m, 2.06.2024 (leg. A.M. Davlatov).

This species is known from Russia (East Caucasus region: the Chechen Republic and Republic of Dagestan) (Sinev et al., 2019), and Kazakhstan (Erschoff, 1874). The record from Tajikistan is the southernmost distribution point of this species. *S. infumatalis* appears to be a common species in Tajikistan and was recorded in various habitats, which may indicate its adaptive abilities and a wide ecological niche. The material was collected during the daytime using an entomological net.

Hypotia speciosalis Christoph, 1885 Fig.1f

Material examined: 1♀, Tajikistan, Tigrovaya Balka Nature Reserve, 320 m, 24.05.2025 (leg. A.M. Davlatov).

This species was first described from Turkmenistan. There is also information about its presence in Afghanistan (Koçak & Kemal, 2012). Only one specimen was recorded during the surveys, which highlights the rarity of this species. The specimen

was collected at night using a light trap, which is an effective method for attracting nocturnal insects. This fact also highlights the need for further research and monitoring to better understand the distribution of this species and the state of its population in Tajikistan as a whole.

Family Crambidae

Subfamily Crambinae

***Pseudobissetia terrestrellus* (Christoph, 1885) Fig. 1g**

Material examined: 1♂, Tajikistan, Tigrovaya Balka Nature Reserve, 320 m, 24.05.2025 (leg. A.M. Davlatov).

P. terrestrellus is distributed in Tunisia, Syria, Israel, Iran, Uzbekistan, and Turkmenistan (Bleszyński, 1965), Russia (East Caucasus region, Crimea) (Sinev & Streltsov, 2008), Europe - Spain, Romania, Bulgaria, Sicily, Southern Italy, and Greece (Slamka, 2008), Japan (Inoue, 1990), and Kyrgyzstan (Caradja, 1916). Based on the literature, the distribution of this species in Central Asia includes Kyrgyzstan and Turkmenistan, but it has not yet been recorded in Tajikistan. As part of the current study, one specimen was collected at night using a light trap. This find is the first confirmation of the presence of this species in Tajikistan and expands its known range in Central Asia. Further research is needed to determine the population density, features of the biology and distribution of this species in Tajikistan.

***Crambus perlellus* (Scopoli, 1763) Fig. 1h**

Material examined: 1♀, Tajikistan, Darvaz ridge, 2000 m, 13.07.2025 (leg. A.M. Davlatov).

C. perlellus is distributed in Europe, NW Africa, Asia Minor, Near East, Russia (from European part to Far East, for excepting north of West and East Siberia), N China to Japan, and in N America (Slamka, 2008). In Central Asia, it was previously recorded only in Kyrgyzstan (Caradja, 1916; Bleszyński, 1965; Sinev & Korb, 2022a). In the course our study, a single specimen of *C. perlellus* was collected, which was discovered during the daytime.

Subfamily Schoenobiinae

***Schoenobius gigantellus* ([Denis et Schiffermüller], 1775) Fig. 1e**

Material examined: 1♂, Tajikistan, Tigrovaya Balka Nature Reserve, 320 m, 24.05.2025 (leg. A.M. Davlatov).

S. gigantellus is found in Europe, Palestine, Transcaspia, Central Asia, Russia, China, and Japan (Slamka, 2008). It should be noted that in Central Asia, this species was known in Kyrgyzstan (Sinev & Korb, 2022a) and Uzbekistan (Nosirova & Xalmirzayeva, 2022). It is noteworthy that this species has not previously been recorded in Tajikistan. The only specimen was found at night using a light trap, which was the first confirmation of its presence in the region. This discovery expands the known distribution range of this species and requires further research to determine its population size and role in the ecosystem of Tajikistan.

Subfamily Odontiinae

***Ephelis cruentalis* (Geyer, 1832) Fig. 1c**

Material examined: 1 ♀, Tajikistan, Darvaz ridge, 2000 m, 13.07.2025 (leg. A.M. Davlatov).

E. cruentalis is distributed in SE Europe, NE Africa (Slamka, 2006), Kazakhstan and Iran (Kemal & Karabacak, 2008), Russia (East Caucasus region) (Sinev & Streltsov, 2008). Just one specimen of this species was collected. The material was collected during the daytime using an entomological net.

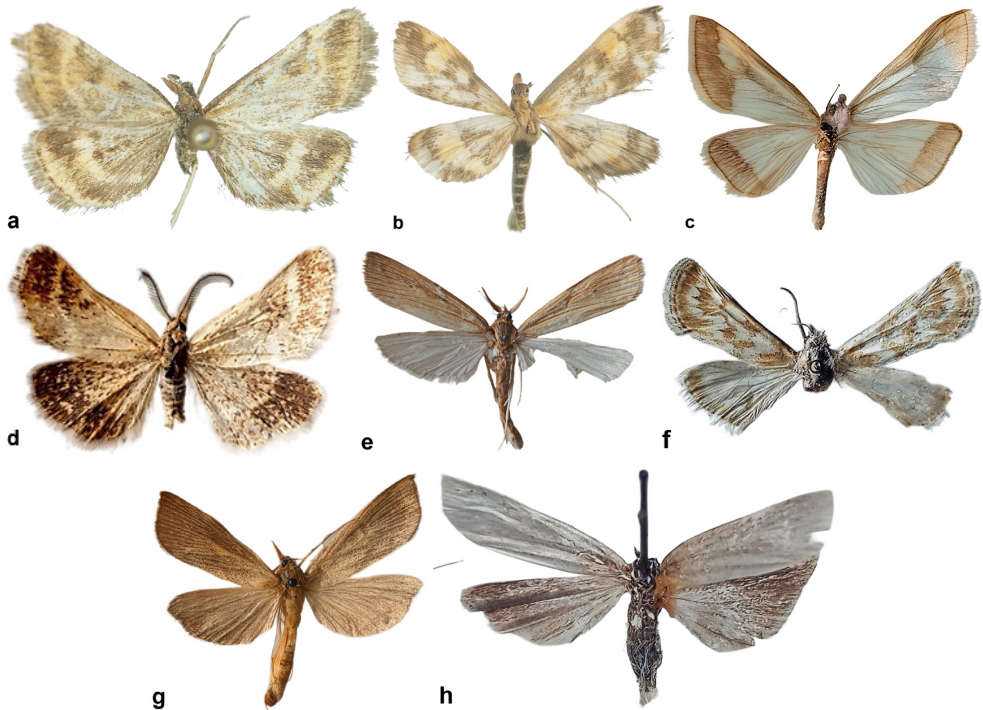


Figure 1. Adults of pyraloid moths; a) *Pyrausta despicata*; b) *P. aurata*; c) *Ephelis cruentalis*; d) *Synaphe infumatalis*; e) *Schoenobius gigantellus*; f) *Hypotia speciosalis*; g) *Pseudobissetia terrestrellus*; h) *Crambus perlatus*.

Subfamily Pyraustinae

***Pyrausta despicata* (Scopoli, 1763) Fig. 1a**

Material examined: 1 ♂, Tajikistan, Hissar ridge, Almosi gorge, 1600 m, 3.VII.2024 (leg. A.M. Davlatov).

P. despicata is distributed almost in all Europe excluding northernmost part, Transcaucasia, Central Asia, Russia (European part, south Siberia, Far East), Afghanistan, N India, Korea, China, N America (Slamka, 2006), Kyrgyzstan (Caradja,

1916; Sinev & Korb, 2022a). Prior to our study, this species in Central Asia was known only from Kyrgyzstan. The single specimen was collected during the daytime using an entomological net. As with other *Pyrausta* species, it is partly diurnal, flying in the sunshine, but comes to light at night (Broad, Lees, & Boyes, 2025).

***Pyrausta aurata* (Scopoli, 1763) Figs 1b, 2a**

Material examined: 4♂♂, Tajikistan, Hissar Valley, Tursunzoda city, 700 m, 4..2025 (leg. A.M. Davlatov).

Pyrausta aurata is distributed in Europe, N Africa, Palestine, Syria, Transcaucasia, Central Asia, Russia (European part, south of West Siberia, Transbaikalia, south of Far East), Afghanistan, Mongolia (Slamka, 2013). Although Slamka (2013) indicates the distribution of *P. aurata* also in Central Asia, its presence is reliably known only from Kyrgyzstan (Sinev & Korb, 2022a) and Uzbekistan (Nosirova & Xalmirzayeva, 2022). Thus, our find is the first recorded in Tajikistan, which expands the known range of the species. The samples were collected during the daytime using an entomological net.

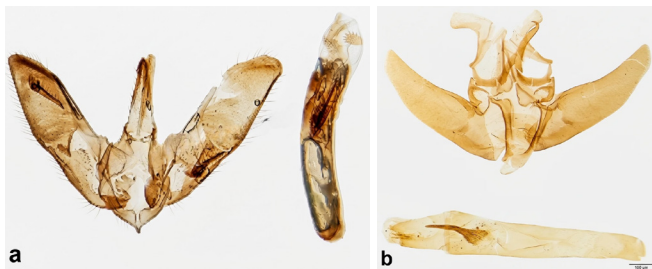


Figure 2. Genitalia of pyraloid moths; a) *Purausta aurata* (male); b) *Synaphe infumatalis* (male).

A PRELIMINARY LIST OF PYRALOIDEA PREVIOUSLY KNOWN IN TAJIKISTAN

Family Pyralidae

Subfamily Phycitinae

Cadra figulilella (Gregson 1871)

Ephestia figulilella Gregson, 1871. *Entomologist*, 5, 385. TL: Liverpool, England.

Distribution. Cosmopolitan species and occurs in Europe, North Africa, Russia, in Asia from the Middle East, through China and Korea to Japan, North, and South America.

Sources indicating distribution in Tajikistan: Ozerova, 1949; Voloshchuk & Kochetova, 1951.

Sciota rhenella (Zincken, 1818)

Phycis rhenella Zincken, 1818. Die Lineeischen Tineen in ihre natürlichen Gattungen aufgelöst. *Magazin der Entomologie*, 3, 13-176. TL: Deutschland.

Distribution. Central and south Europe, Russia (European part, south West and East Siberia, south of Far East); Turkey, Central Asia, Syria, Iraq.

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Source indicating distribution in Tajikistan: Degtyareva, 1973.

***Aglossa asiatica* (Erschoff, 1872)**

Aglossa pinguinalis var. *asiatica* Erschoff, 1872. *Horae Soc. ent., ross.* 8, 317. TL: Samarkand, Uzbekistan.

Distribution. Eastern and North-eastern Mediterranean: Sardinia, Corsica, Crete, Cyprus, Bulgaria, North-East Africa, Turkey, Syria, Iran, Pakistan, Uzbekistan, Tajikistan, Russia (East Caucasus region).

Source indicating distribution in Tajikistan: Degtyareva, 1973.

Material examined: 1♀, Southwest Tajikistan, Tabakchi ridge, 580 m, 4.IV.2024 (leg. A.M. Davlatov).

***Oncocera combustella* (Herrich-Schäffer, 1855)**

Tinea combustella Herrich-Schäffer, 1855. “*Systematische Bearbeitung der Schmetterlinge von Europa*”, Band 5. TL: Marseille, France.

Distribution: Mediterranean-Asiatic.

Source indicating distribution in Tajikistan: Degtyareva, 1973.

***Merulempista amoenella* (Zeller, 1848)**

Acrobasis amoenella Zeller, 1848. *Isis von Oken.* 9, 609-610. TL: “die europäische Türkei” (Eastern Thrace).

Distribution: S Europe, N Africa (Karsholt, & Razowski, 1996), Russia (Poltavsky, Artokhin, & Silkin, 2009), China (Caradja, 1910), Afghanistan, Uzbekistan (Koçak & Kemal, 2012), Mongolia, Kazakhstan, Turkmenistan, Tadjikistan (Scalercio, Luzzi, & Infusino, 2014).

Source indicating distribution in Tajikistan: Degtyareva, 1973.

***Euzophera bigella* (Zeller, 1848)**

Ephestia bigella Zeller, 1848. *Isis von Oken*, (8), 596. TL: Sicilien-Toscana, Italien.

Distribution: From Europe to Central Asia, Middle East, North Africa (Leraut, 2014).

Sources indicating distribution in Tajikistan: Baeva, 1963; Degtyareva, 1973; Mukhitdinov & Asoev, 2014 (As *Euzophera punicaella* (Moore, 1891)).

Note. *E. bigella* has recently causing significant damage to pomegranate plantations in Tajikistan, especially in the southern regions, where the main production of this crop is concentrated. The larvae of this pest damage the pomegranate fruits, reduce their marketability, and make them unsuitable for sale. Penetrating inside the pomegranate, they eat out the pulp and pave passages filled with excrement, which often goes unnoticed in the early stages of damage. Despite the annual chemical treatments carried out by the relevant authorities in Tajikistan, the level of harmfulness of *E. bigella* remains high (Mukhitdinov & Asoev, 2014). This indicates the need to develop and implement new, more effective, and environmentally sound strategies for controlling this pest, taking into account its biological characteristics and resistance to insecticides.

***Euzophera alpherakyella* Ragonot, 1887**

Euzophera alpherakyella Ragonot, 1887, Ann. Soc. ent. Fr. 254. TL: Kuldscha, China.

Distribution: Syria, Kazakhstan, China, Pakistan, Iran, Afghanistan, Turkmenistan (Roesler, 1973); Russia (Sinev et al. 2019); Kyrgyzstan (Sinev & Korb, 2022a); Uzbekistan, Tajikistan (Shermatov et al., 2025).

Sources indicating distribution in Tajikistan: Shermatov et al., 2025.

Note. The occurrence of *E. alpherakyella* in Tajikistan requires additional research and clarification.

***Acrobasis legatea* (Haworth, 1811)**

Phycis legatea Haworth, [1811]. *Lepid. Br.* (3), 492. TL: Britain.

Distribution: Most of Europe, except the north, east to Russia and Kazakhstan, Central Asia.

Source indicating distribution in Tajikistan: Degtyareva, 1973.

***Acrobasis khachella* (Amsel, 1950)**

Rhodophaea khachella Amsel, 1950. Die Microlepidopteren der Brandt'schen Iran-Ausbeute. 2. Teil. *Arkiv för Zoologi*, Series. 2, 1(17), 223-257. TL: Baloutchistan Strasse Khach-Zahedan Fort Sengan, 1800 m, Iran.

Distribution: Central Iran (Zendjan Prov.), Tajikistan, Kyrgyzstan and Kazakhstan.

Source indicating distribution in Tajikistan: Korb, 2022b.

***Coleocornutia shirazella* Amsel, 1961**

Coleocornutia shirazella Amsel, 1961. Die Microlepidopteren der Brandt'schen Iran-Ausbeute. 5. Teil. *Arkiv för Zoologi* N. S. 13(17), 323-445. TL: Shiraz, Iran.

Distribution: Iran, Kazakhstan, Kyrgyzstan, Tajikistan (Korb & Sinev, 2019; Sinev & Korb 2022b).

Source indicating distribution in Tajikistan: Sinev & Korb, 2022b.

***Phycita aceris* Sherniyazova, 1974**

Phycita aceris Sherniyazova, 1974. *News of the Academy of Sciences of the Tajik SSR. Department of Biological Sciences*, 3: 57-63. TL: Kondara Gorge, Hissar ridge, 1300 m. Tajikistan.

Distribution. Tajikistan (Sherniyazova, 1974), Kazakhstan (Korb & Sinev, 2019).

Source indicating distribution in Tajikistan: Sherniyazova, 1974.

***Phycita hyssarica* Sherniyazova, 1974**

Phycita hyssarica Sherniyazova, 1974. *News of the Academy of Sciences of the Tajik SSR. Department of Biological Sciences*, 3: 57-63. TL: Kondara Gorge, Hissar ridge, 1300 m. Tajikistan.

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Distribution. Tajikistan (Sherniyazova, 1974), Kyrgyzstan (Sinev & Korb, 2022a).
Source indicating distribution in Tajikistan: Sherniyazova, 1974.

***Phycita amygdali* Sherniyazova, 1974**

Phycita amygdali Sherniyazova, 1974. *News of the Academy of Sciences of the Tajik SSR. Department of Biological Sciences*, 3: 57-63. TL: Kondara Gorge, Hissar ridge, 1300 m. Tajikistan.

Distribution. Tajikistan (Sherniyazova, 1974).
Source indicating distribution in Tajikistan: Sherniyazova, 1974.

Subfamily Pyralinae

***Pyalis transcaspica* Rebel, 1903**

Pyalis transcaspica Rebel, 1903. *Deutsche Entomologische Zeitschrift Iris*. 16 (1), 1-8. TL: Turkmenbashi, Turkmenistan.

Distribution. Kazakhstan, Kyrgyzstan, Tajikistan (Huemer & Korb, 2026), Turkmenistan (Rebel, 1903), and North-Eastern Iran (Wieser et al., 2002; Rajaei et al., 2023).

Source indicating distribution in Tajikistan: Huemer & Korb, 2026.

Family Crambidae

Subfamily Crambinae

***Pediasia kuldjaensis* (Caradja, 1916)**

Crambus jucundellus var. *kuldjaensis* Caradja, 1916. *Deutsche Entomologische Zeitschrift Iris* 30(1), 3. TL: Kuldja, Xinjiang, China.

Distribution: E Ukraine, Russia (south of European part, south of West Siberia, Transbaikalia) (Slamka, 2008), North-West China (Xinjiang), Central Asia and Southern Kazakhstan (Korb, 2022a).

Source indicating distribution in Tajikistan: Korb, 2022a.

***Chrysocrambus craterellus* (Scopoli, 1763)**

Phalaena craterella Scopoli, 1763. *Entomologia Carniolica*. 246. TL: Carniolia [Krain], Slovenia.

Distribution: Europe, Asia Minor, Transcaucasia, Jordan, Iran, (Slamka, 2008), Central Asia.

Source indicating distribution in Tajikistan: Ershoff, 1874.

***Euchromius ocelleus* (Haworth, [1811])**

Palparia ocellea Haworth, [1811], *Lep. Br.*:486. TL: United Kingdom.

Distribution. Cosmopolitan distribution: Tropics and Subtropics, N. Africa, Asia Minor, large part of Asia, also N. America, Hawaii, Australia (Slamka, 2008).

Source indicating distribution in Tajikistan: Schouten, 1992; Kemal & Koçak, 2018.

***Euchromius confusus* Schouten, 1992**

Euchromius confusus Schouten, 1992. *Tijdschr. Entomol. Deel.*, 135: 211. TL: Paghman 30km NW v. Kabul, 2100 m., Afghanistan.

Distribution. Afghanistan, Tajikistan.

Source indicating distribution in Tajikistan: Schouten, 1992.

***Euchromius bellus* (Hübner, 1796)**

Tinea bella Hübner, 1796. *Samml. eur. Schmett. Tineae*. 29: Taf.9 f.60. TL: Hungary.

Distribution. Mediterranean species, also known from C. Europe, Morocco, Asia Minor, Israel, Palestine, Lebanon, Iraq, Iran, Syria, Transcaucasia (Slamka, 2008).

Source indicating distribution in Tajikistan: Schouten, 1992.

***Euchromius scobiolae* Blesziński, 1965**

Euchromius scobiolae Blesziński, 1965. *Microlepidoptera Palaearctica*. Vol. 1. Crambinae: 533 S. + 133 Taf. TL: Kuschik, Afghanistan.

Distribution. Turkmenistan, Tajikistan, Afghanistan (Schouten, 1992), Kazakhstan (Korb & Sinev, 2019).

Source indicating distribution in Tajikistan: Schouten, 1992.

***Euchromius gratiosellus* (Caradja, 1910)**

Eromene ramburiella gratiosella Caradja, 1910; *Dt. ent. Z. Iris*. 24 (6/7): 116. TL: Lob-Noor, E. Turkestan.

Distribution. Algeria, Spain, France, Italy, Turkey, Russia, Ukraine, Iran, Armenia, Kazakhstan, Turkmenistan, Kyrgyzstan, Tajikistan and Mongolia (Schouten, 1992; Slamka, 2008).

Source indicating distribution in Tajikistan: Schouten, 1992.

***Euchromius jaxartellus* Erschoff, 1874**

Eromene jaxartella Erschoff, 1874; in *Fedschenko, Travels in Turkestan*. 2 (5): 82. TL: Turkestan.

Distribution. E. Caucasus region, S. Uralsk region (Sinev & Streltsov, 2008) Armenia Turkmenistan, Tajikistan Kyrgyzstan, Kazakhstan, Iran, Afghanistan, Pakistan and Mongolia (Schouten, 1992; Slamka, 2008).

Source indicating distribution in Tajikistan: Schouten, 1992; Slamka, 2008.

Subfamily Evergestinae***Evergestis frumentalis* (Linnaeus, 1761)**

Phalaena frumentalis Linnaeus, 1761, *Fauna suecica* (2), 351, no.1351. TL: Sweden.

Distribution. From Iberian Peninsula (including Portugal and S Spain) to Sweden, Finland and towards east to central and southern parts of Europe (except Great Britain and the Netherlands), Asia Minor, Caucasus, Russia (European part, south

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of West Siberia, Altai, Transbaikalia), Central Asia (Goater, Nuss, & Speidel, 2005), Iran (Bienert, 1869; Lederer, 1871; Alipanah et al., 2018).

Source indicating distribution in Tajikistan: Ershoff, 1874.

Subfamily Odontiinae

***Aporodes floralis* (Hübner, [1809])**

Pyralis floralis Hübner, [1809]. *Samml. eur. Schmett.* 6. *Pyralides*: Tab.22, fig.142. TL: Europa.

Distribution. S Europe to S part of C Europe, Maderia, N Africa, Asia Minor, Syria, Iran, Afghanistan, C Asia, N India, (Slamka, 2006).

Source indicating distribution in Tajikistan: Ershoff, 1874.

Subfamily Pyraustinae

***Ecpyrrorrhoe rubiginalis* (Hübner, 1796)**

Phalaena rubiginalis (Hübner, 1796). *Sammlung europäischer Schmetterlinge*. 6, 22. TL: Europe.

Distribution. China, Russia, Japan, Iran, Europe, Transcaucasia, C. Asia (Slamka, 2013; Xiang et al., 2022).

Source indicating distribution in Tajikistan: Ershoff, 1874.

***Loxostege clathralis* (Hübner, 1813)**

Loxostege clathralis (Hübner, 1813). *Sammlung europäischer Schmetterlinge*. Figs 233-236. TL: S Europa, Armenia.

Distribution. SE Europe, Transcaucasia, Kazakhstan, Afghanistan, C Asia (Slamka, 2013); Turkey (Koçak & Kemal, 2009); Russia (Sinev, Streltsov, & Trofimova, 2019); Ukraine (Obraztsov, 1935; Yepishin et al., 2020).

Source indicating distribution in Tajikistan: Ershoff, 1874.

***Loxostege verticalis* (Linnaeus, 1758)**

Phalaena verticalis Linnaeus, 1758, *Syst. Nat.* (10)1, 533. TL: [Europa].

Distribution. Widespread in Palearctic region (except northernmost part), Russia (Far East), Korea, China; India (Slamka, 2013).

Source indicating distribution in Tajikistan: Ershoff, 1874.

***Pyrausta pionalis* Toll, 1948**

Pyrausta pionalis Toll, 1948, *Beitrag zur Mikrolepidopterenfauna von Nordost-Persien. Zeitschrift der Wiener Entomologischen Gesellschaft*. 32, 107-116. TL: Razavi Khorasan Province [Nordost-Persien], Binalud Mountains [Kuh-i-Mirabi-Gebirge], 2000 m, Iran.

Distribution. North Iran, Afghanistan, Transcaucasia (Slamka, 2013), Turkmenistan, Uzbekistan, Kazakhstan, Kyrgyzstan and Tajikistan (Sinev & Korb, 2022b).

Source indicating distribution in Tajikistan: Sinev & Korb, 2022b.

***Epimetasia gregori* Amsel, 1970**

Epimetasia gregori Amsel, 1970, *Afghanische Pyraustinae (Lepidoptera: Pyralidae). Beiträge zur Naturkundlichen Forschung in Südwestdeutschland*, 29 (1), 25-66, 54. TL: Bandi-Amir, Afghanistan, 2900 m.

Distribution. Afghanistan, Tajikistan.

Source indicating distribution in Tajikistan: Korb, 2026.

***Cynaeda forsteri davlatovi* Korb, 2026**

Cynaeda forsteri davlatovi Korb, 2026. *Eversmannia*. 86, 3-7. TL: W. Pamir, Yazgulemsky Mts., Bidzhrav River, 2675 m, N 38°11'02", E 71°59'43", Tajikistan.

Distribution. The species is distributed in southern Russia, southeastern Kazakhstan, Kyrgyzstan, and Tajikistan.

Source indicating distribution in Tajikistan: Korb, 2026.

Subfamily Evergestinae***Evergestis kopetdagensis sinevi* Korb, 2018**

Evergestis kopetdagensis sinevi Korb, 2018, *Caucasian Entomological Bulletin* 14(1), 87-89. TL: vill. Ala-Too vic., 982 m, Bishkek vic., Kyrgyzstan.

Distribution. Kyrgyzstan, Tajikistan.

Source indicating distribution in Tajikistan: Korb, 2018.

***Evergestis hyrcanalis george* Korb, 2026**

Evergestis hyrcanalis george Korb, 2026. *Eversmannia*. 86, 3-7. TL: W. Pamir, Ishkashimskii Mt. Range, Vezdara River, 2925 m, N 37°12'07", E 71°49'48", Tajikistan.

Distribution. The species is distributed in Iran, Afghanistan and Tajikistan.

Source indicating distribution in Tajikistan: Korb, 2026.

Subfamily Spilomelinae***Glyphodes pyloalis* Walker, 1859**

Glyphodes pyloalis Walker, 1859. *List Spec. Lepid. Insects Colln Br. Mus.* 19, 973. TL: Ceylon.

Material examined: 6♂♂, 2♀♀, Tajikistan, Khatlon region, Nosiri Husrav district, 460 m, 20.IV.2024 (leg. A.M. Davlatov); 15♂♂, 9♀♀, Tajikistan: Hissar valley, 750 m, 19.VII.2025 (leg. A.M. Davlatov).

Distribution. Russia, Georgia, Azerbaijan, Uzbekistan, Tajikistan, Pakistan, India, Afghanistan, Iran, China, Japan, Indonesia (Sumatra), Sri Lanka, North America the Democratic Republic of the Congo, Equatorial Guinea, Mozambique.

Source indicating distribution in Tajikistan: Samadova & Rakhmadov, 2016.

Note. *G. pyloalis* is a serious pest of mulberries in Tajikistan, causing significant damage to the country's silk industry. Younger larvae feed on the leaf parenchyma from

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the underside, leaving the upper epidermis intact. This leads to a decrease in the plant's photosynthetic activity and weakens its growth processes. As the caterpillars grow older, their nutrition features change. Older larvae bend the leaves and secure them with webs on the inside, creating a kind of "nest." Such damage leads to deformation of the leaves and makes them unsuitable for feeding the silkworm. Thus, *G. pyloalis* not only reduces the yield of mulberries, but also negatively affects the quality of the fodder base for sericulture. In this regard, biological and ecological studies of *G. pyloalis* are currently being conducted in order to identify vulnerabilities in its life cycle and develop and implement effective and environmentally friendly measures to control this pest.

***Mecyna salangalis* Amsel, 1970**

Mecyna salangalis Amsel, 1970, *Afghanische Pyraustinae (Lepidoptera: Pyralidae) Ergebnisse der 1. und 2. Afghanistan-Expedition der Landessammlungen für Naturkunde Karlsruhe*. 29(1), 25-66. TL: Salang Pass, 2100 m, East Afghanistan.

Distribution. Afghanistan, Tajikistan, Kyrgyzstan (Sinev & Korb, 2022 c).

Source indicating distribution in Tajikistan: Sinev & Korb, 2022 c.

Subfamily Scopariinae

***Scoparia juldusellus bahtibegim* Korb, 2025**

Scoparia juldusellus bahtibegim Korb, 2025. *Eversmannia*. 84, 3-7. TL: W Pamir, Bartang River valley near Darzhomch, 2220 m a.s.l., N38°07'07", E71°56'18", Tajikistan.

Distribution. Inner and Western Tien Shan, Western Pamir.

Source indicating distribution in Tajikistan: Korb, 2025.

CONCLUSION

To date 43 species of pyraloid moths have been recorded in Tajikistan, and this number is far from final. There is a high probability that this number will increase as a result of further research, given the insufficient knowledge of the moth fauna in Tajikistan. Further in-depth research is needed not only on the fauna, but also on the biological and ecological features of pyraloid moths. This is particularly important because many species are pests of woody and shrubby plants and therefore pose a threat to forests, orchards and ornamental plantings. Studying the biology and ecology of this group of moths will allow us to develop effective strategies for controlling them, minimizing the damage they cause to agriculture and forestry. It is important to consider their specific life cycle, feeding habits and reproduction.

In addition, a promising area of research is the study of the distribution of moths in various regions of Tajikistan, as well as the identification of factors that influence on their numbers and population dynamics. This will make it possible to predict possible outbreaks of pest numbers and take timely measures to prevent them. A comprehensive approach that combines faunal, ecological and biological research is essential for effectively protecting Tajikistan's vegetation from the harmful effects of pyraloid moths.

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