

Materials on the Lepidoptera fauna of “Ecoportal de Piedra” National Park (Jujuy Province, North-Western Argentina). Part I. Pterophoridae (Lepidoptera: Pterophoridae)

**P. Ya. Ustjuzhanin, V. N. Kovtunovich, R. V. Yakovlev
& A. N. Streltzov**

Abstract

Basing on the materials from Russian entomological expedition to Jujuy Province, North-Western Argentina, the participants of which were working in Ecoportal de Piedra National Park, 22 Pterophoridae species have been revealed, two of which, *Emmelina doroshkini* Ustjuzhanin & Kovtunovich sp. n. and *E. reshेतnikovi* Ustjuzhanin & Kovtunovich sp. n., turned to be new to Science. Six more species, *Bipunctiphorus nigroapicalis* (Landry & Gielis, 1992), *Stenoptilodes brevipennis* (Zeller, 1874), *S. taprobanes* (Felder & Rogenhofer, 1875), *Lioptilodes cuzcoicus* Gielis, 1996, *Adaina zephyria* Barnes & Lindsey, 1921, and *Hellinsia mauleicus* (Gielis, 1991) have been indicated for Argentina for the first time, and eleven more species, *Postplatyptilia flinti* Gielis, 1991, *Stenoptilodes sematodactyla* (Berg, 1885), *Lioptilodes aguilaeicus* Gielis, 1991, *Oidaematophorus pseudotrichophloeus* Gielis, 2011, *Singularia carabayus* (Arenberger, 1990), *Hellinsia angulofuscus* (Gielis, 1991), *H. chalupi* Gielis, 2013, *H. grandaeus* (Meyrick, 1931), and *H. tacanasensis* Gielis, 2013 have been indicated for Jujuy Province for the first time. One species of the genus *Singularia* has not been identified on a unique female.

KEY WORDS: Lepidoptera, Pterophoridae, new species, new record, Argentina.

Materiales sobre la fauna de Lepidoptera del Parque Natural Ecoportal de Piedra (Provincia de Jujuy, noroeste de Argentina). Parte I. Pterophoridae (Lepidoptera)

Resumen

Basándose sobre el material de la expedición entomológica rusa a la provincia de Jujuy, Noroeste de Argentina, los participantes estuvieron trabajando en el Parque Nacional del Ecoportal de Piedra, 22 especies de Pterophoridae han sido registradas, dos de las cuales *Emmelina doroshkini* Ustjuzhanin & Kovtunovich sp. n. y *E. reshेतnikovi* Ustjuzhanin & Kovtunovich sp. n., resultan ser nuevas especies para la Ciencia. Seis especies más, *Bipunctiphorus nigroapicalis* (Landry & Gielis, 1992), *Stenoptilodes brevipennis* (Zeller, 1874), *S. taprobanes* (Felder & Rogenhofer, 1875), *Lioptilodes cuzcoicus* Gielis, 1996, *Adaina zephyria* Barnes & Lindsey, 1921 y *Hellinsia mauleicus* (Gielis, 1991) se indican por primera vez para Argentina, and eleven more species, *Postplatyptilia flinti* Gielis, 1991, *Stenoptilodes sematodactyla* (Berg, 1885), *Lioptilodes aguilaeicus* Gielis, 1991, *Oidaematophorus pseudotrichophloeus* Gielis, 2011, *Singularia carabayus* (Arenberger, 1990), *Hellinsia angulofuscus* (Gielis, 1991), *H. chalupi* Gielis, 2013, *H. grandaeus* (Meyrick, 1931), and *H. tacanasensis* Gielis, 2013 have been indicated for Jujuy Province for the first time. No ha sido identificada una especie del género *Singularia* sobre una única hembra.

PALABRAS CLAVE: Lepidoptera, Pterophoridae, nuevas especies, nuevos registros, Argentina.

Introduction

The studied area is located in the Subtropical Montane Cloud Forests of Northwestern Argentina or Southern Yungas. In Argentina the Southern Yungas covers an extension of 700 km long and less than 50 km wide (from 22° 11' S 64° 37' W to 28° 51' S 65° 51' W). Along the latitudinal range three sectors can be distinguished, i.e., northern, central, and southern. The area is located within the central sector of the Southern Yungas (24° 06' S to 64° 26' W). This ecoregion is characterized by an elevational gradient where different vegetation types can be recognized from 600 to 2200 m above sea level (a.s.l.). The vegetation communities can be divided into: piedmont forests (from 600 to 900 m a.s.l.), montane forests (from 900 to 1400 m a.s.l.), cloud forests (from 1400 to 2000 m a.s.l.), and *Polylepis* forests with high altitude grasslands (from 2000 to 2500 m a.s.l.). The first three forest types have a canopy height of about 20 to 30 m, while the latter is more a shrubland (less than 10 m in height). Mean annual rainfall is 1395 mm with 85% of the rainfall concentrated in the Austral summer (November to March). There is also a high input of humidity provided by fog even in the dry season that ensures that watersheds are supplied with water year-round. Many research studies highlight the importance of the Southern Yungas as harboring a high diversity of environments that allows high species richness. The area contains important habitat and populations of species of high conservation value. For example, several endemic bird species of the Southern Yungas, such as, Tucuman parrot (*Amazona tucumana* (Cabanis, 1885)) categorized as Vulnerable by the IUCN and included in CITES I, Mountain Cracidae (*Penelope dabbenei* Hellmayr & Conover, 1942), Blue-fronted Hummingbird (*Eriocnemis glaucopoides* D'Orbigny & Lafresnaye, 1838), Yellow-striped Brush-finches (*Atlapetes citrinellus* (Cabanis, 1883)), White-browed Tapaculo (*Scytalopus superciliaris* Cabanis, 1883) and Slaty Elaenia (*Elaenia strepera* Cabanis, 1883), raptors, such as: King vulture (*Sarcoramphus papa* (Linnaeus, 1758)), Andean condor (*Vultur gryphus* Linnaeus, 1758), and two very rare species Plushcap (*Catamblyrhynchus diadema* Lafresnaye, 1842) and Rufous-bellied saltator (*Pseudosaltator rufiventris* (D'Orbigny & Lafresnaye, 1837)). Among the mammal species: the tapir (*Tapirus terrestris* (Linnaeus, 1758)) categorized as Vulnerable by the IUCN and collared peccari (*Dicotyles tajacu* (Linnaeus, 1758)) are frequently seen. Tree species, such as, the Austral Pine (*Podocarpus parlatorei* Pilg.) included in CITES I, *Polylepis hyeronymii* Pilger, Southern Cedars (*Cedrela lilloi* Sessé & Moc. Ex DC. and *C. balansae* C. DC.), *Myroxylon peruferum* L., Quebracho (*Schinopsis haenkeana* Engl.), among many other (estimated to be 128 species woody species). The property falls within an Important Bird Area (IBA) - Reserva Natural Las Lancitas (AR021) and a Key Biodiversity Area (KBA) - Reserva Natural Las Lancitas.

The Pterophoridae of Argentina are relatively well studied. According to publications, 63 species of them are known (BERG, 1885; STAUDINGER, 1899; MEYRICK, 1908, 1931, 1932; GIELIS, 1989, 1991, 1996, 2003, 2006, 2011, 2012, 2013; PASTRANA, 1989). For the Jujuy province only 6 species were given: *Michaelophorus dentiger* (Meyrick, 1916), *Oidaematophorus praenigratus* (Meyrick, 1921), *Singularia alternaria* (Zeller, 1874), *Hellinsia glaphyrottes* (Meyrick, 1908), and *Emmelina jason* (Meyrick, 1930) (GIELIS, 2011, 2013). *Hellinsia navarroi* Gielis, 2013, has been described from the Jujuy province in the vicinity of the region mentioned in this article.

In 2019, a Russian entomological expedition was conducted in North-Western Argentina (mostly, to the province Jujuy). The expedition members were: Vyacheslav Doroshkin (Chelyabinsk), Sergey Reshetnikov (Novosibirsk) and Roman Yakovlev (Barnaul). Two species of Cossidae (*Uretiana silviae* Yakovlev, Naydenov & Penco, 2020 and *Psychonotucta diiorioi* Yakovlev, Penco & Naydenov, 2020) collected from Eco Portal de Piedra was described (YAKOVLEV, NAYDENOV & PENCO, 2020; YAKOVLEV, PENCO & NAYDENOV, 2020). This publication opens a series of articles devoted to the local fauna of Lepidoptera in the private nature reserve Eco Portal de Piedra.

As a result of our studies, the Pterophoridae fauna of Argentina increased by 8 species and now includes 71 species.

Material and methods

The Pterophoridae were collected at twilight and at night on the territory of the private nature reserve Eco Portal de Piedra (Figs. 1-4) from 20-X to 05-XI-2019 using light traps. The studied specimens are deposited in the collection of the Zoological Institute St. Petersburg, Russia (ZISP) and in the Collection of P. Ustjuzhanin and V. Kovtunovich (Novosibirsk and Moscow, Russia, NUK). The holotypes and part of the paratypes of the new species are deposited in the collection ZISP.

List of collecting localities

Eco Portal De Piedra NP (a): NW Argentina, Jujuy Prov., Santa Barbara Mts., 12 km SW Palma Sola, Eco Portal De Piedra NP, 24° 05' 42,5" S 064° 23' 56,8" W, H-1045 m, 19-22-X-2019

Eco Portal De Piedra NP (b): NW Argentina, Jujuy Prov., Santa Barbara Mts., 12 km SW Palma Sola, Eco Portal De Piedra NP, 24° 05' 42,6" S 064° 23' 56,9" W, H-1045 m, 29-X-02-XI-2019

Eco Portal De Piedra NP (c): NW Argentina, Jujuy Prov., Santa Barbara Mts., 12 km SW Palma Sola, Eco Portal De Piedra NP, 24° 05' 27,5" S 064° 25' 52,1" W, H-1342 m, 03-XI-2019

25 km NE Palma Sola: NW Argentina, Jujuy Prov., 25 km NE Palma Sola, 23° 48' 53,7" S 064° 12' 44,7" W, H-454 m, 23-X-2019

10 km SEE Caimancito: NW Argentina, Jujuy Prov., 10 km SEE Caimancito, 23° 44' 38,6" S 064° 31' 09,2" W, H-405 m, 25-26-X-2019

30 km NNE San Pedro de Jujuy: NW Argentina, Jujuy Prov., 30 km NNE San Pedro de Jujuy, 24° 05' 16,1" S 064° 48' 47,0" W, H-505 m, 27-X-2019

List of species (the species new to the fauna of Argentina are marked with *)

**Bipunctiphorus nigroapicalis* (B. Landry & Gielis, 1992)

Platyptilia nigroapicalis B. Landry & Gielis, 1992: 9

Type locality: [ECUADOR] Galapagos Islands, Sta Cruz, 2 km W Bella Vista

Material: 1 ♂, Eco Portal De Piedra NP (b), 29-X-02-XI-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Distribution: Galapagos Islands [Ecuador], Venezuela (GIELIS, 2003), Argentina (Jujuy).

Michaelophorus dentiger (Meyrick, 1916)

Oxyptilus dentiger Meyrick, 1916: 557

Type locality: BRITISH GUYANA, Georgetown

Material: 1 ♀, 25 km NE Palma Sola, 23-X-2019; 1 ♀, 10 km SEE Caimancito, 25-26-X-2019; 1 ♀, 30 km NNE San Pedro de Jujuy, 27-X-2019; 1 ♀, Eco Portal De Piedra NP (b), 29-X-02-XI-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Distribution: Argentina (Catamarca, Jujuy, La Rioja, Tucumán, Salta), Brazil, Ecuador, Venezuela, British Guyana, Curacao, Cuba, Nicaragua, Honduras, Bolivia (GIELIS, 2003, 2011, 2013).

Postplatyptilia flinti Gielis, 1991

Postplatyptilia flinti Gielis, 1991: 55

Type locality: ARGENTINA, B(ueno)s A(ire)s, Río Santiago, Palo Blanco, Berisso

Material: 3 ♂♂, 1 ♀, Eco Portal De Piedra NP (b), 29-X-02-XI-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Distribution: Argentina (Buenos Aires), Paraguay, Brazil (GIELIS, 2003), Bahamas Isl. (MATTHEWS *et al.*, 2019). New record for Jujuy Province.

**Stenoptilodes brevipennis* (Zeller, 1874)

Platyptilia brevipennis Zeller, 1874: 442

Type locality: PERU, Payta, Piura.

= *Platyptilia crenulata* Barnes & McDunnough, 1913: 185

Type locality: USA (Florida)

= *Stenoptilodes amrishi* Makhan, 1994: 354

Type locality: SURINAM

Material: 3 ♂♂, Eco Portal De Piedra NP (b), 29-X-02-XI-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Distribution: Mexico, Honduras, Costa Rica, Cuba, Trinidad, Brazil, Peru, Puerto Rico, Belize, Surinam, Ecuador (Galapagos Islands), Paraguay, Uruguay (GIELIS, 2003, 2006), Bolivia (GIELIS, 2013), Honduras (MILLER *et al.*, 2012) Argentina (Jujuy).

Stenoptilodes sematodactyla (Berg, 1885)

Platyptilia sematodactyla Berg, 1885: 283

Type locality: ARGENTINA, Banda Oriental

= *Platyptilia epidelta* Meyrick, 1908: 486

Type locality: ARGENTINA, Paraná

Material: 1 ♀, Eco Portal De Piedra NP (a), 19-22-X-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Distribution: Argentina (Buenos Aires, Paraná) (Gielis, 2006). New record for Jujuy Province.

**Stenoptilodes taprobanes* (Felder & Rogenhofer, 1875)

Amblyptilia taprobanes Felder & Rogenhofer, 1875: plate 140, fig. 54

Type locality: CEYLON

Material: 1 ♀, Eco Portal De Piedra NP(b), 29-X-02-XI-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Distribution: France, Spain, Portugal, Finland, Canary Islands, Italy, Sicily, Malta, Bulgaria, Greece, Crete, Cyprus, Crimea, Russia (Southern Russian Far East), Turkey, Indonesia, Sri Lanka, Thailand, Malaysia: Sabah, India, Myanmar, Thailand, New Guinea, Australia, Hawai'i Islands, Libya, Cape Verde, Chad, Ghana, São Tomé, Côte d'Ivoire, Comoros, Congo Republic, the Democratic Republic of the Congo, Eswatini, Ethiopia, Malawi, Nigeria, Tanzania, Kenya Madagascar, Mauritius, Namibia, Reunion, Saudi Arabia, Seychelles, Tanzania, South Africa, United Arab Emirates, Yemen (including Socotra Isl.), USA, Mexico, Ecuador, Venezuela, Paraguay, Bolivia (FLETCHER, 1910; MEYRICK, 1910, 1934, 1938, BIGOT, 1964; ARENBERGER, 1986, 1999, 2004, 2009; GIBEAUX, 1994; GIELIS, 2003, 2006, 2008; MARTIRÉ & ROCHAT, 2008; GIELIS & KARSHOLT, 2009; USTJUZHANIN *et al.*, 2011; KOVTUNOVICH & USTJUZHANIN, 2012; KOVTUNOVICH, USTJUZHANIN & MURPHEY, 2014; USTJUZHANIN & KOVTUNOVICH, 2015, 2019; USTJUZHANIN *et al.*, 2020), Argentina (Jujuy).

Lioptilodes aguilaeicus Gielis, 1991

Lioptilodes aguilaeicus Gielis, 1991: 23

Type locality: ARGENTINA, Neuquen, Piedra del Águila

Material: 22 ex., Eco Portal De Piedra NP (a), 19-22-X-2019; 21 ex., Eco Portal De Piedra NP (b), 29-X-02-XI-2019; 1 ♂, 25 km NE Palma Sola, 23-X-2019; 1 ♀, 10 km SEE Caimancito, 25-26-X-2019; 1 ♂, Eco Portal De Piedra NP (c), 03-XI-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Distribution: Argentina (Neuquen), Chile (GIELIS, 2003). New record for Jujuy Province.

**Lioptilodes cuzcoicus* Gielis, 1996

Lioptilodes cuzcoicus Gielis, 1996: 86

Type locality: PERU, Pillahuata, Cuzco

Material: 1 ♂, Eco Portal De Piedra NP (a), 19-22-X-2019; 8 ex., Eco Portal De Piedra NP (b), 29-X-02-XI-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Distribution: Ecuador, Peru (GIELIS, 2003, 2006), Argentina (Jujuy).

Oidaematophorus praenigratus (Meyrick, 1921)

Pterophorus praenigratus Meyrick, 1921: 421

Type locality: PERU, Jurimaguas

Distribution: Peru, Ecuador (GIELIS, 2011); Argentina (Jujuy) (GIELIS, 2013); Bolivia (USTJUZHANIN & KOVTUNOVICH, 2018).

Oidaematophorus pseudotrichyphloeus Gielis, 2011

Oidaematophorus pseudotrichyphloeus Gielis, 2011: 697

Type locality: PERU, Res Nac. de Lachay, Lima

Material: 2 ♂♂, 1 ♀, Eco Portal De Piedra NP (a), 19-22-X-2019; 3 ♂♂, 2 ♀♀; 29-X-02-XI-2019; 1 ♂, 03-XI-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Distribution: Peru, Argentina (Cordoba), Ecuador (GIELIS, 2011). New record for Jujuy Province.

**Adaina zephyria* Barnes & Lindsey, 1921

Adaina zephyria Barnes & Lindsey, 1921: 366

Type locality: USA, San Diego, California

Material: 4 ex., Eco Portal De Piedra NP (a), 19-22-X-2019; 1 ♂, 10 km SEE Caimancito, 25-26-X-2019; 4 ex., Eco Portal De Piedra NP (b), 29-X-02-XI-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Distribution: USA, Mexico, Costa Rica, Venezuela, Ecuador, Peru (GIELIS, 2003), Bolivia, Brazil (GIELIS, 2011), Honduras (KOVTUNOVICH *et al.*, 2018), Argentina (Jujuy).

Singularia alternaria (Zeller, 1874)

Aciptilia alternaria Zeller, 1874: 447

Type locality: CHILE, Valparaiso

Material: 1 ♂, Eco Portal De Piedra NP (a), 19-22-X-2019; 1 ♀, Eco Portal De Piedra NP (c), 03-XI-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Distribution: Argentina (Chubut, Neuquen, Río Negro, Santo Cruz, Buenos Aires, Jujuy), Chile, Ecuador (GIELIS, 2003).

Singularia carabayus (Arenberger, 1990)

Pterophorus carabayus Arenberger 1990: 128

Type locality: PERU, Oconeque, Carabaya

Material: 1 ♂, Eco Portal De Piedra NP (a), 19-22-X-2019; 1 ♂, Eco Portal De Piedra NP (c), 03-XI-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Distribution: Argentina (Tucumán), Ecuador, Peru (GIELIS, 2003). New record for Jujuy Province.

Singularia sp.

Material: 1 ♀, 10 km SEE Caimancito, 25-26-X-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Note: It was impossible to determine this specimen on a unique female.

Hellinsia angulofuscus (Gielis, 1991)

Oidaematophorus angulofuscus Gielis, 1991: 89

Type locality: ARGENTINA, Rosario de la Frontera, Los Baños, Salta.

Material: 1 ♂, Eco Portal De Piedra NP (a), 19-22-X-2019; 1 ♂, Eco Portal De Piedra NP (b), 29-X-02-XI-2019, R. Yakovlev, V. Doroshkin & S. Reshetnikov leg.

Distribution: Argentina (Salta), Paraguay (GIELIS, 2003), Brazil (GIELIS, 2011). New record for Jujuy Province.

Hellinsia chalupi Gielis, 2013

Hellinsia chalupi Gielis, 2013: 99

Type locality: ARGENTINA, Tucumán, Alto de San Agustín, 14 km NW Tucumán

Material: 29 ex. Eco Portal De Piedra NP (a), 19-22-X-2019; 1 ♂, Eco Portal De Piedra NP (b), 29-X-02-XI-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Distribution: Argentina (Tucumán, Salta) (GIELIS, 2013). New record for Jujuy Province.

Hellinsia glaphyrotes (Meyrick, 1908)

Pterophorus glaphyrotes Meyrick, 1908: 497

Type locality: BRAZIL, São Paulo

Material: 9 ex., Eco Portal De Piedra NP (a), 19-22-X-2019; 55 ex., Eco Portal De Piedra NP (b), 29-X-02-XI-2019; 1 ♂, Eco Portal De Piedra NP (c), 03-XI-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Distribution: Argentina (Catamarca, Córdoba, Jujuy, Salta, Tucumán), Paraguay, Brazil, Ecuador, Peru (GIELIS, 2003, 2011), Bolivia (GIELIS, 2013).

Hellinsia grandaevus (Meyrick, 1931)

Pterophorus grandaevus Meyrick, 1931: 380

Type locality: CHILE, Peulla, Llanquihue

Material: 1 ♂, Eco Portal De Piedra NP (a), 19-22-X-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Distribution: Chile, Argentina (Tierra del Fuego, Santa Cruz, Neuquen, Río Negro, Buenos Aires, Córdoba, Catamarca) (GIELIS, 2003), Bolivia (GIELIS, 2011). New record for Jujuy Province.

**Hellinsia mauleicus* (Gielis, 1991)

Oidaematophorus mauleicus Gielis, 1991: 83

Type locality: CHILE, Maule Prov., Rio Teno, ca. 40 km. E. Curico

Material: 1 ♂, Eco Portal De Piedra NP (c), 03-XI-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Distribution: Chile (GIELIS, 2003), Argentina (Jujuy).

Hellinsia navarroi Gielis, 2013

Hellinsia navarroi Gielis, 2013: 100

Type locality: ARGENTINA, Jujuy, 3 km NE Caimancito, 23 km ENE Calilegua

Material: 1 ♂, Eco Portal De Piedra NP (a), 19-22-X-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Distribution: Argentina (Jujuy).

Hellinsia tacanasensis Gielis, 2013

Hellinsia tacanasensis Gielis, 2013: 102

Type locality: ARGENTINA, Tucumán, 11 km S Tacanas, 28 km WSW Trancas

Material: 1 ♂, Eco Portal De Piedra NP (a), 19-22-X-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Distribution: Argentina (Tucumán, Salta) (GIELIS, 2013). New record for Jujuy Province.

Emmelina jason (Meyrick, 1930)

Pterophorus jason Meyrick, 1930: 568

Type locality: BRAZIL, Queluz

Material: 1 ♀, Eco Portal De Piedra NP (a), 19-22-X-2019; 1 ♂, Eco Portal De Piedra NP (b), 29-X-2002-XI-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Distribution: Argentina (Jujuy) (GIELIS, 2013), Brazil (GIELIS, 2003).

***Emmelina doroshkini* Ustjuzhanin & Kovtunovich, sp. n. (Figs. 5-7)**

Type material: Holotype: 1 ♂, ARGENTINA, Jujuy Prov., Santa Barbara Mts., 12 km SW Palma Sola, Eco Portal De Piedra NP, 24°05'42,6" S 064°23'56,9" W, H-1045 m, 29-X-02-XI-2019, R. Yakovlev, V. Doroshkin, S. Reshetnikov leg. (ZISP, gen.pr. Nr.1926). Paratypes: 7 ♀♀, same data as holotype, (ZISP, 1927, CUK), R. Yakovlev, V. Doroshkin and S. Reshetnikov leg.

Description: External characters. Head, thorax and tegulae light-grey. Labial palpi thin, short. Antennae thin, light-brown. Wingspan 17-19 mm (holotype - 17 mm). Fore wings yellowish-grey. Dark-brown elongated spot along costal edge, above cleft. First lobe apically sharp, ending with small brown point. Distinct rectangular dark-brown spot before cleft. Less expressed brown spot basally. Second lobe lanceolate, apically sharp, interspersed with small brown scales. Hind wings unicolorous, light-grey. Hind legs light-brown, with portions of darker brown scales at bases of spurs.

Male genitalia: Valves symmetric. On both valves, sclerotized saccular processes arcuately curved distally. Uncus simple, thin, curved almost at right angle. Anellus arms thin, almost straight. Vinculum long, distally widened. Aedeagus thin, slightly curved, twice shorter than valve.

Female genitalia: Papillae anales triangle. Posterior apophyses long, slightly curved distally. Antrum narrow, tubulate. Ductus bursae quite long, thin, membranous. Ductus seminalis thin, passes into bursa copulatrix together with ductus bursae. Bursa copulatrix oval, membranous.

Diagnosis: The new species is similar to *Emmelina jason* (Meyrick, 1930) in the long vinculum, but clearly differs by its saccular processes on both valves, the curved uncus and the curved aedeagus.

Distribution: Argentina.

Flight period: October-November.

Etymology: the species is named after Vyacheslav Doroshkin (Chelyabinsk, Russia), an entomologist-naturalist, a member of the expedition to North-western Argentina.

***Emmelina reshetnikovi* Ustjuzhanin & Kovtunovich, sp. n. (Figs. 8-9)**

Type material: Holotype: 1 ♂, ARGENTINA, Jujuy Prov., Santa Barbara Mts., 12 km SW Palma Sola, Eco Portal De Piedra NP, 24° 05' 42,5" S 064° 23' 56,8" W, H-1045 m, 19-22-X-2019, R. Yakovlev, V. Doroshkin and S. Reshetnikov leg. (ZISP, gen.pr. Nr. 1928).

Description: External characters. Head, thorax and tegulae light-brown. Labial palpi thin, straight, slightly longer than longitudinal eye diameter. Antennae thin, light-brown. Wingspan 22 mm. Fore wings light-brown. Narrow dark-brown elongated spot along costal edge, above cleft. First lobe apically sharp. Small dark-brown spot before cleft. Second lobe apically sharp. Fringe inside cleft noticeably darker than basic background of wing. Hind wings unicolorous, light-brown. Hind legs light-brown, with portions of darker brown scales at bases of spurs.

Male genitalia: Valves asymmetric, left valve significantly wider than right. Harpe on left valve of a complicated structure: in lower inner part, on wide sclerotized plate, an apically sharp process shaped as slightly curved spike. Short undulated apically sharp outgrowth extending from base of this process. Dense spiky bristles on outer distal part of the said above plate. Arched saccular process on right valve. From it, harpe shaped as wide plate, extends. Its top ending with small thin finger-like process. Uncus short, apically sharp. Anellus arms thin, long. Vinculum wide, short. Aedeagus thin, slightly concave.

Diagnosis: In the male genitalia, in the shape of the right valve and its structural elements, the new species is similar to the African species *Emmelina amseli* (Bigot, 1969) and *Emmelina bigoti* Gibeaux, 1990, but clearly differs in the shape and structure of the left valve and the aedeagus, and also in the wide vinculum.

Distribution: Argentina.

Flight period: October.

Etymology: The species is named after Sergey Reshetnikov (Novosibirsk, Russia), an entomologist-naturalist, a member of the expedition to North-western Argentina.

Discussion

The collected material is just a small fragment of Eco Portal De Piedra fauna. Basing on the material studied, it is impossible to carry out a detailed arealogue analysis of the fauna or to publish a list of species claiming to be complete. We think that the private reserve Eco Portal De Piedra is a reference site for subtropical forests of Northern Argentina, which can be the basis for promising projects for the study of the biota in Northern Argentina.

Acknowledgments

We are grateful to Carlos Cuñado Strelkov, Silvia Strelkov & Carlos Cuñado (Palma Sola, Argentina) for their assistance in organizing the studies of the entomofauna in the province Jujuy in Northern Argentina. We also express our gratitude to Vyacheslav Doroshkin (Chelyabinsk, Russia) and Sergey Reshetnikov (Novosibirsk, Russia) for their assistance in collecting the specimens in North-western Argentina. We are especially grateful to Sergey Reshetnikov (Novosibirsk, Russia) for the photos of the adults of the new species. The authors are grateful to Anna Ustjuzhanina (Tomsk, Russia) for linguistic corrections of the manuscript.

BIBLIOGRAPHY

- ARENBERGER, E., 1986.– Contribution to the distribution of the Pterophoridae in Saudi-Arabia.– *Fauna of Saudi Arabia*, **7** (1985): 165-171.
- ARENBERGER, E., 1999.– Die Pterophoridae des Jemen.– *Esperiana*, **7**: 245-262, pls. 6-7.
- ARENBERGER, E., 2004.– Pterophoridae (Lepidoptera, Pterophoroidea).– In W. MEY (Ed.). *The Lepidoptera of the Brandberg Massif in Namibia*.– *Esperiana Memoir*, **1**: 203-208.
- ARENBERGER, E., 2009.– Faunistische Angaben über Pterophoridae vom Sokotra Archipel mit der Neubeschreibung von *Agdistis haghieri* sp. n. (Lepidoptera).– *Zeitschrift der Arbeitsgemeinschaft österreichischer Entomologen*, **61**: 95-100.
- BERG, C., 1885.– Quindecim Lepidoptera Nova faunae Republicae Argentinae et Uruguayensis.– *Anales de la Sociedad Científica Argentina*, **19**: 283-285.
- BIGOT, L., 1964.– Les Pterophoridae de Madagascar.– *Bulletin de la Société Entomologique de France*, **69**(1-2): 25-37.
- FLETCHER, T. B., 1910.– The Orneodidae and Pterophoridae of the Seychelles Expedition. (The Percy Sladen Trust Expedition to the Indian Ocean in 1905).– *Transactions of the Linnean Society of London (2 Zool.)*, **13**(1): 397-403.
- GIBEAUX, C., 1994.– Insectes Lépidoptères: Pterophoridae.– *Faune de Madagascar*, **81**: 1-176.
- GIELIS, C., 1989.– Neotropical Pterophoridae 1. The genus *Megalorrhypida* Amsel, 1935.– *Phegea*, **17**: 107-117.
- GIELIS, C., 1991.– A taxonomic review of the Pterophoridae from Argentina and Chile.– *Zoologische Verhandelingen Leiden*, **269**: 1-164, figs. 1-178.
- GIELIS, C., 1996.– Neotropical Pterophoridae 12: New species.– *SHILAP Revista de lepidopterología*, **24**(93): 81-110.
- GIELIS, C., 2003.– Pterophoroidea & Alucitoidea.– *World Catalogue of Insects*, **4**: 198 pp. Apollo Books, Stenstrup.
- GIELIS, C., 2006.– Review of the Neotropical species of the family Pterophoridae, part I: Ochyroticinae, Deuterocopinae, Pterophorinae (Platyptilini, Exelastini, Oxyptilini) (Lepidoptera).– *Zoologische Mededelingen*, **80-2**(1): 1-290.
- GIELIS, C., 2008.– Order Lepidoptera, family Pterophoridae.– In A. VAN HARTEN (ed.). *Arthropod fauna of the UAE*, **1**(2007): 459-468.

- GIELIS, C., 2011.– Review of the Neotropical species of the family Pterophoridae, part II: Pterophorinae (Oidaematophorini, Pterophorini).– *Zoologische Mededelingen*, **85**: 589-824.
- GIELIS, C., 2012.– Review of the Neotropical species of the family Pterophoridae, part III: Additions from Chile, Ecuador and Paraguay (Lepidoptera).– *Boletín de la Sociedad Entomológica Aragonesa*, **51**: 105-124.
- GIELIS, C., 2013.– Review of the Neotropical species of the family Pterophoridae, part IV: Additions from Argentina, Bolivia, Chile and Uruguay (Lepidoptera).– *Boletín de la Sociedad Entomológica Aragonesa*, **53**: 95-109.
- GIELIS, C. & KARSHOLT, O., 2009.– Additional records of Pterophoridae from the Cape Verde Islands, with description of a new species of *Agdistis* Hübner.– *Nota lepidopterologica*, **32**(2): 139-144.
- KOVTUNOVICH, V. N. & USTJUZHANIN, P. Y., 2012.– On the fauna of Pterophoridae (Lepidoptera: Pterophoridae Hübner) of Swaziland.– *Amurian Zoological Journal*, **4**(2): 160-163.
- KOVTUNOVICH, V. N., USTJUZHANIN, P. Y. & MURPHY, R., 2014.– Plume moths of Malawi (Lepidoptera: Pterophoridae).– *Zootaxa*, **3847**(4): 451-494.
- MARTIRÉ, D. & ROCHAT, J., 2008.– *Les papillons de La Réunion et leurs chenilles*: 496 pp. Biotope Editions. Muséum National d'Histoire Naturelle, Paris.
- MATTHEWS, D. L., MILLER, J. Y., SIMON, M. J. & GOSS, G. J., 2019.– Additions to the plume moth fauna of The Bahamas (Lepidoptera: Pterophoridae) with description of four new species.– *Insecta Mundi*, **708**(708): 1-35. DOI:10.5281/zenodo.3673602.
- MEYRICK, E., 1908.– Notes and descriptions of Pterophoridae and Orneodidae.– *Transactions of the Entomological Society of London*, **1907**: 471-511.
- MEYRICK, E., 1910.– Descriptions of Micro-Lepidoptera from Mauritius and Chagos Isles.– *Transactions of the Entomological Society of London*, **1910**(3): 366-377.
- MEYRICK, E., 1931.– Microlepidoptera from South Chile and Argentina.– *Anales del Museo Nacional de Historia Natural de Buenos Aires*, **36**: 377-415.
- MEYRICK, E., 1932.– *Exotic Microlepidoptera*, **4**: 225-256. Marlborough.
- MEYRICK, E., 1934.– The Percy Sladen and Godman Trusts Expedition to the Islands in the Gulf of Guinea, October 1932 March 1933. III. Micro-Lepidoptera.– *Annals and Magazine of Natural History*, (10)**14**(82): 401-411.
- MEYRICK, E., 1938.– Exploration du Parc National Albert. Pterophoridae, Tortricina and Tineina.– *Institut des Parcs Nationaux du Congo belge*, **14**: 3-28, pls 1-3.
- MILLER, J. Y., MATTHEWS, D. L., WARREN, A. D., SOLIS, M. A., HARVEY, D. J., GENTILI-POOLE, P., LEHMAN, R., EMMEL, T. C. & COVELL, C. V., 2012.– An annotated list of the Lepidoptera of Honduras.– *Insecta Mundi*, **205**: 1-72.
- PASTRANA, J. A., 1989.– Una especie nueva de Pterophoridae de la Provincia de Córdoba, Argentina.– *Revista de la Sociedad Entomológica de Argentina*, **45**: 253-255.
- STAUDINGER, O., 1899.– Lepidopter.– In *Ergebnisse der Hamburger Magalhaenischen Sammelreise 1892/93, Herausgegeben vom Naturhistorischen Museum zu Hamburg. Artropoden*, **2**(4): 117 pp., 1 pl. L. Friederichsen & Co., Hamburg.
- USTJUZHANIN, P. YA. & KOVTUNOVICH, V. N., 2015.– On the fauna of the plume moths of Ghana (Lepidoptera: Pterophoridae).– *SHILAP Revista de lepidopterología*, **43**(170): 309-313.
- USTJUZHANIN, P. YA. & KOVTUNOVICH, V. N., 2018.– Species list of Pterophoridae of Bolivia with new records (Lepidoptera: Pterophoridae).– *SHILAP Revista de lepidopterología*, **46**(183): 497-500.
- USTJUZHANIN, P. YA. & KOVTUNOVICH, V. N., 2019.– Family Pterophoridae.– In S. YU. SINEV (ed.). *Catalogue of the Lepidoptera of Russia. Second edition*: 113-118.
- USTJUZHANIN, P. Y., KOVTUNOVICH, V. N., GORBUNOV, O. G. & KEMAL, A., 2011.– On the fauna of the plume moths (Lepidoptera, Pterophoridae) of Ethiopia.– *Amurian Zoological Journal*, **3**(4): 354-357, pl. 4.
- USTJUZHANIN, P. Y., KOVTUNOVICH, V. N., UDOVICHENKO, P., ARMSTRONG, A. & STRELTZOV, A., 2020.– Plume moths in the protected areas of KwaZulu Natal province, Republic of South Africa.– *Ecologica Montenegrina*, **27**: 11-21.
- YAKOVLEV, R. V., NAYDENOV, A. E. & PENCO, F. C., 2020.– *Uretiana silviae* sp. n. - new Cossidae (Lepidoptera) species from Northern Argentina.– *Russian Entomological Journal*, **29**(3): 295-297. DOI:10.15298/rusentj.29.3.09.
- YAKOVLEV, R. V., PENCO, F. C. & NAYDENOV, A. E., 2020.– Three new species of the genus *Psychonoctua* Grote, 1865 from Argentina and the Caribbean Islands (Lepidoptera: Cossidae, Zeuzerinae).– *SHILAP Revista de lepidopterología*, **48**(191): 499-505.

*P. U.
Altai State University
Lenina, 61
RUS-656049 Barnaul
RUSIA / RUSSIA
E-mail: petrust@mail.ru
<https://orcid.org/0000-0002-5222-2241>

V. K.
Moscow Society of Nature Explorers
Bol'shaya Nikitskaya, 6
RU-103009 Moscow
RUSIA / RUSSIA
E-mail: vasko-69@mail.ru
<https://orcid.org/0000-0001-5091-4263>

y / and

Biological Institute
Tomsk State University
Lenina Prospekt, 36
RUS-634050 Tomsk
RUSIA / RUSSIA

R. Ya.
Department of Ecology
Altai State University
RUS-656049 Barnaul
RUSIA / RUSSIA
E-mail: cossus_cossus@mail.ru
E-mail: yakovlev_asu@mail.ru
<https://orcid.org/0000-0002-9409-1200>

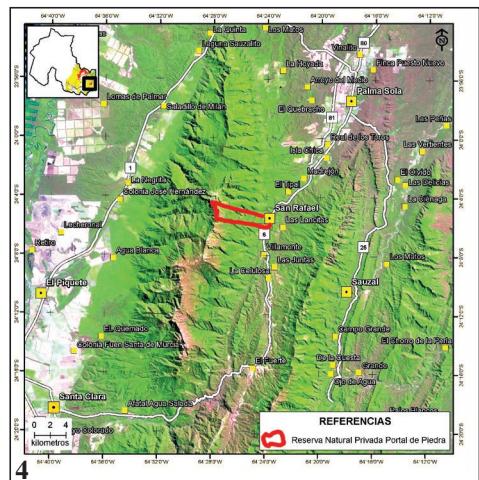
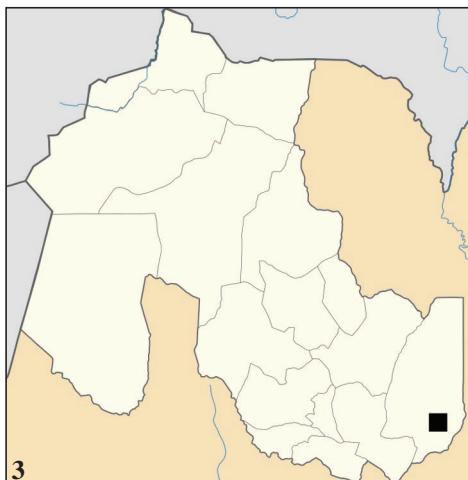
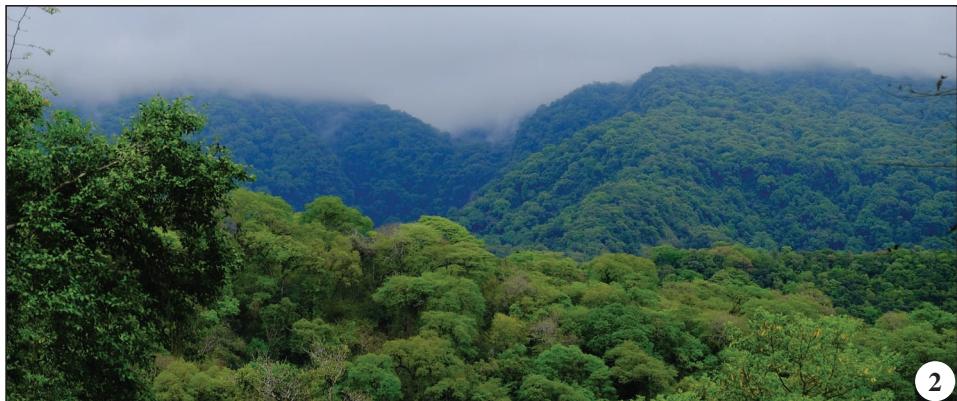
y / and

Institute of Archaeology and Ethnography SB RAS
17, Ac. Lavrentieva ave.
RUS-630090 Novosibirsk
RUSIA / RUSSIA

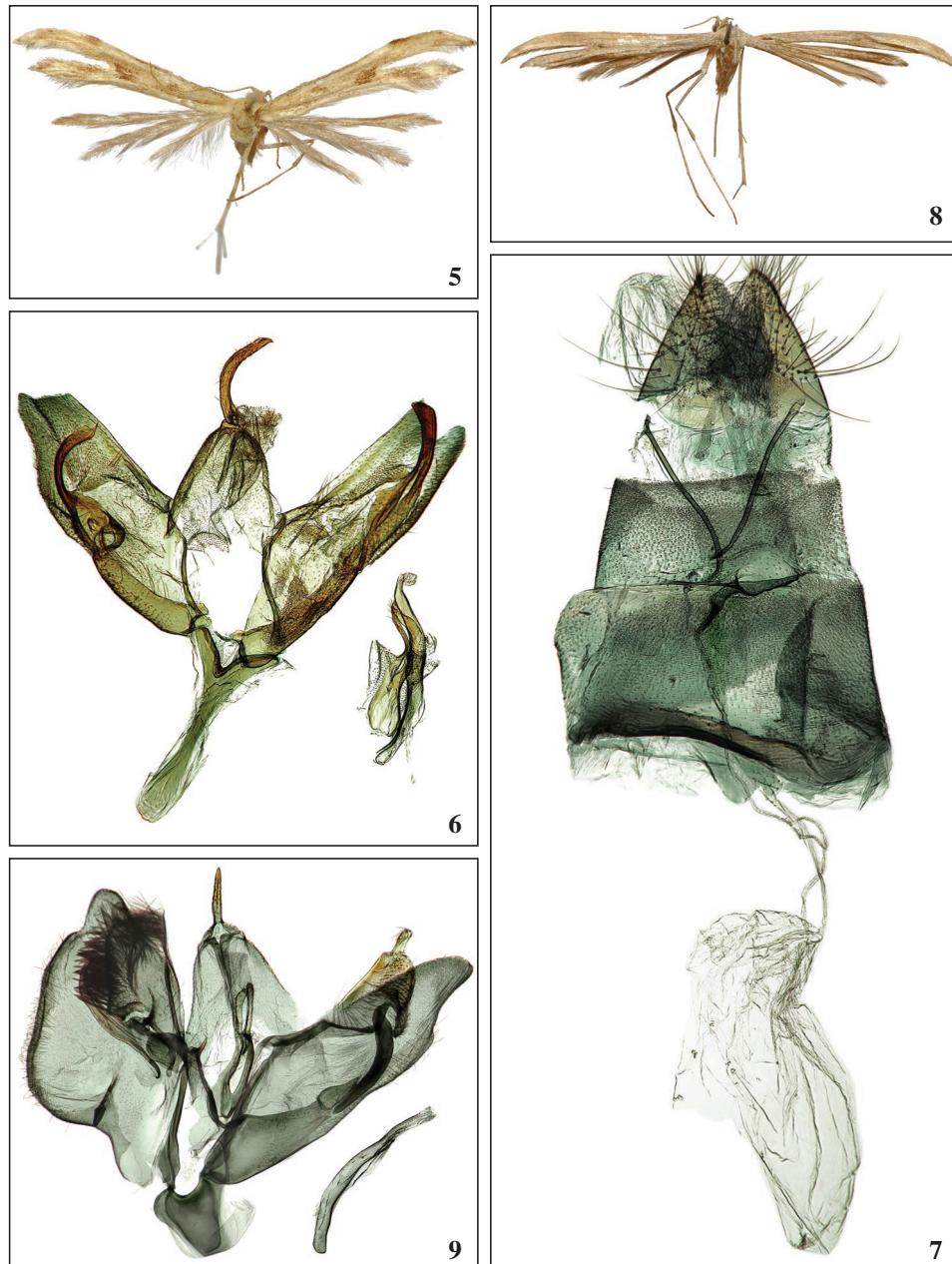
A. S.
Herzen State Pedagogical University of Russia
Moika Emb., 48
RUS-191186 Saint-Petersburg
RUSIA / RUSSIA
E-mail: streltzov@mail.ru
<https://orcid.org/0000-0002-5658-8515>

*Autor para la correspondencia / Corresponding author

(Recibido para publicación / Received for publication 17-IX-2020)
(Revisado y aceptado / Revised and accepted 17-X-2020)
(Publicado / Published 30-IX-2021)



Figures 1-4.— Biotopes and maps. **1-2.** Biotopes Eco Portal De Piedra National Park. Photo R. Yakovlev; **3-4.** Maps and location of Eco Portal De Piedra National Park.



Figures 5-9.- 5-7. *Emmelina doroshkini* Ustjuzhanin & Kovtunovich, sp. n. **5.** Adult (Holotype, ZISP); **6.** Male genitalia (Holotype, ZISP, 1926); **7.** Female genitalia (Paratype, ZISP, 1927). **8-9.** *Emmelina reshetnikovi* Ustjuzhanin & Kovtunovich sp. n. **8.** Adult (Holotype, ZISP); **9.** Male genitalia (Holotype, ZISP, 1928).