

To the Pterophoridae (Lepidoptera: Pterophoridae) fauna of Honduras

К фауне пальцекрылок (Lepidoptera: Pterophoridae) Гондураса

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КЛЮЧЕВЫЕ СЛОВА: Pterophoridae, Центральная Америка, Гондурас, новые виды, новые данные.

ABSTRACT. Basing on the Pterophoridae specimens, collected in Honduras and given to us for processing, we found 7 species new to science: *Hellinsia shishkini* Kovtunovich et Ustjuzhanin, *H. vasnetsovi* Kovtunovich et Ustjuzhanin, *H. savrasovi* Kovtunovich et Ustjuzhanin, *H. repini* Kovtunovich et Ustjuzhanin, *H. kuinji* Kovtunovich et Ustjuzhanin, *H. polenovi* Kovtunovich et Ustjuzhanin, *H. levitani* Kovtunovich et Ustjuzhanin **spp.n.** 18 Pterophoridae species are indicated for the fauna of Honduras for the first time.

РЕЗЮМЕ. По материалам пальцекрылок, собранных в Гондурасе, и переданным нам на обработку, выявлено 7 новых видов для науки: *Hellinsia shishkini* Kovtunovich et Ustjuzhanin, *H. vasnetsovi* Kovtunovich et Ustjuzhanin, *H. savrasovi* Kovtunovich et Ustjuzhanin, *H. repini* Kovtunovich et Ustjuzhanin, *H. kuinji* Kovtunovich et Ustjuzhanin, *H. polenovi* Kovtunovich et Ustjuzhanin, *H. levitani* Kovtunovich et Ustjuzhanin **spp.n.** 18 видов Pterophoridae впервые указаны для фауны Гондураса.

Introduction

Honduras is situated on a vast plateau crossed from east to west with mountain chains. A significant part of Honduras is covered with mountains, lowlands are met only along the sea. The tropical trade-climatic climate

of the country is characterized by sharp differences in the amount of precipitation on the windward (northern and eastern) and leeward slopes of the mountains. The seasonal temperature changes are negligible. The humid lowlands of the Caribbean Sea coast and the adjacent slopes of mountains with tropical forests are now partially destroyed. In the arid interior regions of the country, the area is covered with grassy savanna and rare low-growing forests. Flora and fauna of Honduras is quite rich and diverse, there are many nature reserves, national parks, inhabited by a large number of wild animals, some of which survived due to poor population (Figs 1–3).

Despite a rather superficial study of Honduras Pterophoridae in the literature, there are data on 12 known species inhabiting this country [Gielis, 2003, 2006, 2013; Matthews, Miller, 2010; Miller *et al.*, 2012]. As a result of the new material arrival from the prominent Russian naturalist and entomologist Viktor Sinyayev and his colleagues Vadim Zaritsky and Mildred Márquez, 25 more species have been added to the list, 7 of which proved to be new to science. The holotypes and part of the paratypes of the new species are deposited in the collection of the Zoological Museum of St. Petersburg (ZISP). Thus, the Pterophoridae fauna of Honduras currently constitutes 37 species of 14 genera.

Our study was made in honour of Russian landscape artists of XIX–XX centuries, the species new to science were named after some of them.



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Figs 1–3. Biotopes: 1–2 — Honduras, Lempira Dept., Parque Nacional, Celaque Cerro Minas, 2600 m; 3 — Honduras, Francisco Morazán near Tegusigalpa, La Tigra National Park, 1950 m. Foto V. Sinyayev.

Рис. 1–3. Биотопы: 1–2 — Гондурас, Национальный парк в департаменте Лемпира, гора Серро-Лас-Минас, 2600 м; 3 — Гондурас, Национальный парк Ла Тигра, 1950 м. Фото В. Синяева.

Acronyms: CUK — Collection of P. Ustjuzhanin and V. Kovtunovich (Novosibirsk and Moscow, Russia); ZISP — Zoological Institute, St. Petersburg, Russia.

Taxonomical part

Stenoptilia pallistriga Barnes et McDunnough, 1913

MATERIAL EXAMINED. 1 ♂, **HONDURAS**, Lempira, Cerro Minas P.N. Celaque, San Sebastian, 1380 m, 14°26'N, 88°36'W, 19.v.2013, V. Sinyayev & V. Zaritsky.

DISTRIBUTION. Dominica, Jamaica, Surinam, Ecuador, Paraguay [Gielis, 2003, 2006], Honduras.

NOTE. New for Honduras.

Anstenoptilia marmorodactyla (Dyar, [1903])

DISTRIBUTION. U.S.A., Hawaii Islands [Gielis, 2003], Honduras [Miller *et al.*, 2012].

Stenoptilodes brevipennis (Zeller, 1874)

MATERIAL EXAMINED. 1 ♂, **HONDURAS**, Lempira, Cerro Minas P.N. Celaque, San Sebastian, 1380 m, 14°26'N, 88°36'W, 19.v.2013, V. Sinyayev & V. Zaritsky.

DISTRIBUTION. Mexico, Peru, Puerto Rico, Surinam, Galapagos Islands, Bolivia [Gielis, 2003, 2013], Honduras [Miller *et al.*, 2012].

Lantanophaga pusillidactylus (Walker, 1864)

MATERIAL EXAMINED. 1 ♀, **HONDURAS**, Santa Barbara, near Campamento el Nispero, 760 m, 14°45'N, 88°21'W, 13.v.2013, V. Sinyayev & V. Zaritsky.

DISTRIBUTION. Mexico, Dominica, Puerto Rico, Jamaica, Virgin Islands, Ecuador, Brazil, Peru, Paraguay, Honduras.

NOTE. New for Honduras.

Postplatyptilia huigraica B. Landry et Gielis, 1992

MATERIAL EXAMINED. 1 ♀, **HONDURAS**, Atlantida P.N., Pico Bonito, 210 m, 15°42'N, 86°50'W, 05–09.v.2013; 1 ♂, 1 ♀, Lempira, near Gracias, Cerro Minas P.N. Celaque, 1400 m, 14°33'N, 88°38'W, 14–18.v.2013, V. Sinyayev & V. Zaritsky; 1 ♀, Cortes dept., Cusuco N.P., 1610 m, 15°29'N, 88°12'W, 22–28.v.2014, V. Sinyayev & M. Márquez.

DISTRIBUTION. Costa Rica, Ecuador, Brazil, Galapagos Islands, Honduras.

NOTE. New for Honduras.

Postplatyptilia palmeri Gielis, 1996

MATERIAL EXAMINED. 1 ♀, **HONDURAS**, Lempira, near Gracias, Cerro Minas P.N. Celaque, 1400 m, 14°33'N, 88°38'W, 14–18.v.2013, V. Sinyayev & V. Zaritsky.

DISTRIBUTION. Mexico, Honduras.

NOTE. New for Honduras.

Amblyptilia landryi Gielis, 2006

DISTRIBUTION. Honduras [Gielis, 2006].

Lioptilodes albistriolatus (Zeller, 1871)

MATERIAL EXAMINED. 1 ♀, **HONDURAS**, Atlantida P.N., Pico Bonito, 210 m, 15°42'N, 86°50'W, 05–09.v.2013; 1 ♀, Santa Barbara, near Campamento el Nispero, 760 m, 14°45'N, 88°21'W, 13.v.2013, V. Sinyayev & V. Zaritsky; 1 ♂, 1 ♀, Lempira, Cerro Minas P.N. Celaque, San Sebastian, 1380 m, 14°26'N, 88°36'W, 19.v.2013, V. Sinyayev & V. Zaritsky; 1 ♂, Lempira dept., Cerro

Minas P.N. Celaque, 1760 m, 14°33'N, 88°38'W, 29–30.vi.2014, V. Sinyaev & M. Márquez.

DISTRIBUTION. Colombia, Argentina, Chile, Paraguay, Brazil, Peru, Ecuador, Costa Rica, U.S.A., Bermuda Islands, Juan Fernandez Islands, Hawaii Islands, Bolivia [Gielis, 2003, 2006, 2013], Honduras [Miller *et al.*, 2012].

Michaelophorus dentiger (Meyrick, 1916)

DISTRIBUTION. Argentina, Brazil, Ecuador, Venezuela, British Guyana, Curacao, Cuba, Nicaragua, Honduras, Bolivia [Gielis, 2003, 2013].

Michaelophoru indentatus (Meyrick, 1930)

MATERIAL EXAMINED. 1 ♀, **HONDURAS**. Lempira, Cerro Minas P.N. Celaque, near San Manuel, 1700 m, 14°27'N, 88°42'W, 20–21.v.2013; 1 ♂, 1 ♀, Lempira, Cerro Minas P.N. Celaque, San Sebastian, 1380 m, 14°26'N, 88°36'W, 19.v.2013, V. Sinyaev & V. Zaritsky.

DISTRIBUTION. U.S.A., Mexico, Costa Rica, Brazil, Honduras.

NOTE. New for Honduras.

Michaelophorus nubilus (Felder et Rogenhofer, 1875)

DISTRIBUTION. Brazil, Colombia, Trinidad, Costa Rica, Trinidad [Gielis, 2003], Honduras, Ecuador [Matthews, Miller, 2010].

Sphenarches anisodactylus (Walker, 1864)

DISTRIBUTION. Pantropical species. Honduras [Miller *et al.*, 2012].

Exelastis dowi Matthews et B. Landry, 2008

MATERIAL EXAMINED. 1 ♂, 1 ♀, **HONDURAS**, Lempira, Cerro Minas P.N. Celaque, San Sebastian, 1380 m, 14°26'N, 88°36'W, 19.v.2013, V. Sinyaev & V. Zaritsky; 1 ♀, Lempira, Cerro Minas P.N. Celaque, 1400 m, 14°33'N, 88°38'W, 14–18.v.2013, V. Sinyaev & V. Zaritsky.

DISTRIBUTION. U.S.A (Florida), Bahamas, Belize, Honduras.

NOTE. New for Honduras.

Megalorhipida dulcis (Walsingham, 1915)

DISTRIBUTION. Mexico, Costa Rica [Gielis, 2003], Honduras [Miller *et al.*, 2012].

Megalorhipida leucodactylus (Fabricius, 1794)

DISTRIBUTION. Pantropical species. Honduras [Miller *et al.*, 2012].

Hellinsia beneficus (Yano et Heppner, 1983)

MATERIAL EXAMINED. 1 ♂, **HONDURAS**. Lempira, Cerro Minas P.N. Celaque, near San Manuel, 1700 m, 14°27'N, 88°42'W, 20–21.v.2013, V. Sinyaev & V. Zaritsky.

DISTRIBUTION. Mexico, Hawaii introduced [Gielis, 2011], Honduras.

NOTE. New for Honduras.

Hellinsia crescens (Meyrick, 1926)

MATERIAL EXAMINED. 1 ♂, **HONDURAS**. Lempira, Cerro Minas P.N. Celaque, San Sebastian, 1380 m, 14°26'N, 88°36'W, 19.v.2013, V. Sinyaev & V. Zaritsky.

DISTRIBUTION. Costa Rica, Ecuador, Brazil, Colombia, Venezuela [Gielis, 2003, 2011], Honduras.

NOTE. New for Honduras.

Hellinsia emmorus (Walsingham, 1915)

MATERIAL EXAMINED. 1 ♂, **HONDURAS**. Lempira, Cerro Minas P.N. Celaque, 1400 m, 14°33'N, 88°38'W, 14–18.v.2013, V. Sinyaev & V. Zaritsky.

DISTRIBUTION. Mexico, Guatemala [Gielis, 2003, 2011], Honduras.

NOTE. New for Honduras.

Hellinsia lenis (Zeller, 1877)

MATERIAL EXAMINED. 1 ♀, **HONDURAS**. Lempira, Cerro Minas P.N. Celaque, San Sebastian, 1380 m, 14°26'N, 88°36'W, 19.v.2013, V. Sinyaev & V. Zaritsky; 1 ♀, Comayagua, P.N. Cerro Azul, Meambar, 785m, 14°52'N, 87°54'W, 10–14.vi.2013, V. Sinyaev & V. Zaritsky; 1 ♂, Francisco Morozan, near Tegusigalpa, La Tigra, N.P., 1945 m, 14°12' N, 87°07'W, 08–09.vii.2013, V. Sinyaev & V. Zaritsky; 2 ♀, Comayagua, P.N. Cerro Azul, Meambar, 785m, 14°52'N, 87°54'W, 06–12.vi.2014, V. Sinyaev.

DISTRIBUTION. Colombia, Ecuador [Gielis, 2003, 2011], Honduras.

NOTE. New for Honduras.

Hellinsia obscuricilia Arenberger et Wojtusiak, 2001

MATERIAL EXAMINED. 1 ♂, **HONDURAS**. Santa Barbara, near Campamento el Nispero, 760 m, 14°45' N, 88°21'W, 13.v.2013, V. Sinyaev & V. Zaritsky.

DISTRIBUTION. Venezuela, Costa Rica, Bolivia [Gielis, 2011, 2013], Honduras.

NOTE. New for Honduras.

Hellinsia paleaceus (Zeller, 1873)

MATERIAL EXAMINED. 1 ♂, **HONDURAS**. Cortes dept., Cusuco N.P., 1610 m, 15°29'N, 88°12'W, 22–28.v.2014, V. Sinyaev & M. Márquez; 1 ♀, El Paraíso, Reserva Biológica, Yuscaran, 1770 m, 13°56'N, 86°52'W, 26–29.vi.2013, V. Sinyaev & V. Zaritsky; 1 ♂, 1 ♀, Lempira dept., Cerro Minas P.N. Celaque, 1760 m, 14°33'N, 88°38'W, 04–06.vii. 2014, V. Sinyaev & M. Márquez.

DISTRIBUTION. Canada, U.S.A., Puerto Rico [Gielis, 2003], Honduras.

NOTE. New for Honduras.

Hellinsia phlegmaticus (Walsingham, 1915)

MATERIAL EXAMINED. 1 ♂, **HONDURAS**, Ocotepeque dept., P.N. Guisayote, 2290m, 14°26' N, 89°03'W, 28– 31.v.2014, V. Sinyaev.

DISTRIBUTION. Mexico, Guatemala [Gielis, 2003, 2011], Honduras.

NOTE. New for Honduras.

Hellinsia pseudobarbata Gielis, 1999

MATERIAL EXAMINED. 2 ♂, **HONDURAS**. Atlantida P.N., Pico Bonito, 210 m, 15°42' N, 86°50'W, 05–09.v.2013, V. Sinyaev & V. Zaritsky.

DISTRIBUTION. Costa Rica [Gielis, 2003], Honduras.

NOTE. New for Honduras.

Hellinsia sublatus (Walsingham, 1915)

MATERIAL EXAMINED. 1 ♂, **HONDURAS**. Francisco Morozan, near Tegusigalpa, La Tigra, N.P., 1945 m, 14°12' N, 87°07'W, 08–09.vii.2013, V. Sinyaev & V. Zaritsky.

DISTRIBUTION. Venezuela, Bolivia [Gielis, 2003, 2013], Honduras.

NOTE. New for Honduras.

Hellinsia shishkini

Kovtunovich, Ustjuzhanin et Sinyaev **sp.n.**

Figs 4–6.

TYPE MATERIAL: **Holotype**, male, (ZISP 1916), **HONDURAS**, Santa Barbara El Playon, Santa Barbara P.N., 1150 m, 14°52' N, 88°09'W, 15–16. vi.2013, V. Sinyaev & V. Zaritsky. **Paratype**, 1 female, (ZISP 1906) **HONDURAS**, Lempira dept., Cerro Minas P.N. Celaque, 1760 m, 14°33'N, 88°38'W, 29–30.vi.2014, V. Sinyaev & M. Márquez.



Figs 4–6. *Hellinsia shishkini* Kovtunovich, Ustjuzhanin et Sinyayev **sp.n.**: 4 — male, holotype; 5 — male genitalia, holotype (ZISP, gen.pr. Nr.1916); 6 — female genitalia, paratype (ZISP, gen.pr. Nr.1906).

Рис. 4–6. *Hellinsia shishkini* Kovtunovich, Ustjuzhanin et Sinyayev **sp.n.**: 4 — самец, голотип; 5 — гениталии самца, голотип (ZISP, gen.pr. Nr.1916); 6 — гениталии самки, паратип (ZISP, gen.pr. Nr.1906).

DESCRIPTION. External characters. Head, thorax and tegulae with pale scales. Labial palpi thin and short, slightly tapered to apices, a little smaller than the eye diameter. Antennae pale yellow. Wingspan 17–18 mm, of holotype — 17 mm. Fore and hind wings silver white, unicolorous, fringe of the same white color on all lobes. Legs pale yellow, almost white, with rare inclusions of small brown scales.

Male genitalia. Valves asymmetric, narrow. Saccular process on left valve thin, long, protrudes beyond its apex, smoothly bent. Saccus at base of right valve, shaped as narrow plate with spikes apically and basally. Anellus arms short, of equal length, right one significantly wider than left one. Saccus arched. Uncus narrow, thin. Aedeagus straight, twice shorter than valves.

Female genitalia. Posterior apophyses thin, long. Papillae anales oval. Antrum wide, pear-shaped. Ductus sclerotized tubulate, distally widened. bursa copulatrix membranous, narrow, elongated, without signa. Ductus seminalis narrow, very long, almost twice longer than bursa copulatrix.

DIFFERENTIAL DIAGNOSIS. In the silver-white color of the wings, the new species is similar to *Hellinsia homodactylus* (Walker, 1864), and to *Hellinsia angela* Gielis, 2011. It differs from the first one in the significantly smaller size, and from the second one — in the shorter labial palpi. The new species also differs from the both in the specific genital structure. In the male genitalia, the new species is similar to *Hellinsia meridae* Gielis 2014 by the saccular process protruding beyond the apex of V. Zaritsky the left valve. But in the new species, the saccular process is smoothly bent on the apex of the left valve, while in *H. meridae* it is straight. The new species also differs by the sacculus on the right valve, which has a spike apically and basally, unlike in *H. meridae*.

ETYMOLOGY. The species is named after the landscape painter, representative of the Dusseldorf art school, academician and professor Ivan Ivanovich Shishkin (1832–1898).

Hellinsia vasnetsovi

Kovtunovich, Ustjuzhanin et Sinyaev **sp.n.**

Figs 7–8.

MATERIAL EXAMINED. **Holotype**, male, (ZISP 1907), **HONDURAS**. Lempira, Cerro Minas P.N. Celaque, San Sebastian, 1380 m, 14°26'N, 88°36'W, 19.v.2013, V. Sinyaev & V. Zaritsky. **Paratype**, 1 male (CUK), same data as holotype, 19.v.2013, V. Sinyaev & V. Zaritsky.

DESCRIPTION. External characters. Head with brown hairs. Thorax and tegulae pale brown. Labial palpi brown, apically slightly tapered, equal to the eye diameter in length. Antennae yellowish brown. Wingspan 19 mm. Fore wings pale brown, clear elongated dark brown spot distally along costal edge. At cleft base dark brown spot of scales slightly blurred. First lobe apically framed by dark brown almost fused spots. Three clear dark brown spots on second lobe along costal edge at fringe base. Fringe inside cleft pale brown. Hind wings greyish brown, slightly darker than fore wings, fringe unicolorous, brown grey. Hind legs pale yellow, surrounded by dark brown scales at spur base. Spurs at hind legs of unequal length.

Male genitalia. Valves asymmetric, left one significantly wider than right one. Saccular process on left valve thin, long, reaches the top of valve. Internal process of valve (harpe) as robust spike tapered apically and widened basally reaching the middle of valve. At right valve base, sacculus in shape of narrow plate with fold in middle. Anellus arms short, narrow, equal in length. Saccus triangle. Uncus narrow, thin. Aedeagus smoothly curved, twice shorter than valve, with small needle-like cornutus distally.

Female genitalia. Unknown.

DIFFERENTIAL DIAGNOSIS. In the wings color, the new species is similar to *Hellinsia praenigratus* (Meyrick, 1921), from which it differs by the absence of the discal spot on the fore wings and by the specific genital structure. In the male genital structure, in the saccular process reaching the top of the left valve, the new species is similar to *Hellinsia fusciciliatus* (Zeller, 1877), but differs by the inner process in the valve (harpe), the concave aedeagus and the sacculus on the right valve.

ETYMOLOGY. The species is named after the Russian painter, master of historical and folk painting, Victor Mikhailovich Vasnetsov (1848–1926).

Hellinsia savrasovi

Kovtunovich, Ustjuzhanin et Sinyaev **sp.n.**

Figs 9–11.

MATERIAL EXAMINED. **Holotype**, male, (ZISP 1908), **HONDURAS**, Lempira, Cerro Minas P.N. Celaque, near San Manuel,

1700 m, 14°27'N, 88°42'W, 20–21.v.2013, V. Sinyaev & V. Zaritsky. **Paratypes**. 1 male, (CUK), 1 female, (ZISP 1909), same data as holotype, 20–21.v.2013, V. Sinyaev.

DESCRIPTION. External characters. Head, thorax and tegulae with greyish-brown hairs. Labial palpi brown, straight, apically slightly tapered, in length equal to eye diameter. Antennae greyish-brown. Wingspan 18–19 mm (holotype — 19 mm). Fore wings greyish-brown, distally with two clear longitudinal dark brown spots along costal edge. At cleft base, dark brown spot of scales expressed poorly. Second lobe apically slightly darkened with dark brown scales. Fringe inside cleft brown. Hind greyish-brown, unicolorous. Hind legs yellowish-grey, at spur base surrounded by brownish scales. Spurs on hind legs of unequal length.

Male genitalia. Valves narrow, elongated, left one slightly wider than right one. Saccular process on left valve thin long, arched as oval ring. Sacculus on right valve in shape of narrow thin long plate, distally with icicle-like process. Anellus arms long, right arm significantly longer and wider than left. Saccus arched. Uncus narrow, thin, arched. Aedeagus smoothly curved, distally with two needle-like cornuti.

Female genitalia. Posterior apophyses thin long. Papillae anales oval. Lamina vaginalis wide, poorly sclerotized, heart-shaped. Antrum short, sclerotized, triangle. Ductus thin, membranous, long. bursa copulatrix elongated, oval, interspersed with numerous tiny spikes. Ductus seminalis narrow, long.

DIFFERENTIAL DIAGNOSIS. In the male genitalia, in the arched saccular process on the left valve as an oval ring, the new species is unique and has no analogs among other species of this genus. It only slightly resembles *Hellinsia phlegmaticus* and *Hellinsia phloeochroa* (Walsingham, 1915) in the wings color and in the male genital structure.

ETYMOLOGY. The species is named in honor of the Russian landscape painter, the creator of the Russian lyrical landscape, Alexei Kondratievich Savrasov (1830–1897).

Hellinsia repini

Kovtunovich, Ustjuzhanin et Sinyaev **sp.n.**

Figs 12–14.

MATERIAL EXAMINED. **Holotype**, male, (ZISP 1910), **HONDURAS**, Francisco Morozan, near Tegusigalpa, La Tigra, N.P., 1945 m, 14°12' N, 87°07' W, 03. vi.2014, V. Sinyaev & V. Zaritsky. **Paratype**. 1 female, (ZISP 1911), same data as holotype, 03.vi.2014, V. Sinyaev.

DESCRIPTION. External characters. Head with dark brown scales. Thorax and tegulae with yellowish-grey hairs. Labial palpi pale brown, straight, 1.5 times longer than eye diameter. Antennae greyish-yellow. Wingspan 22 mm. Fore wings yellowish-brown, interspersed with dark small spots and strokes. Costal edge slightly darker. At cleft base dark brown spot of scales expressed poorly. Fringe inside cleft pale grey. Hind wings yellowish-brown, unicolorous. Hind legs yellowish-grey, at spur base surrounded by brownish scales. Spurs on hind legs of unequal length.

Male genitalia. Valves lanceolate, equal in length, left valve slightly wider than right one. Saccular process on left valve robust, bent at right angle, located centrally, not extending beyond valve edge. Narrow fold distally ending as hollow tube, in basal part of sacculus, on right valve. Arched fold extending from base of inner edge in right valve and closing in its middle part. Anellus arms thin, of equal length. Saccus triangle. Uncus narrow, thin, in length equal to saccular process on left valve. Aedeagus almost twice shorter than length of valve, slightly curved distally, small cornuti apically. Base of aedeagus slightly widened.



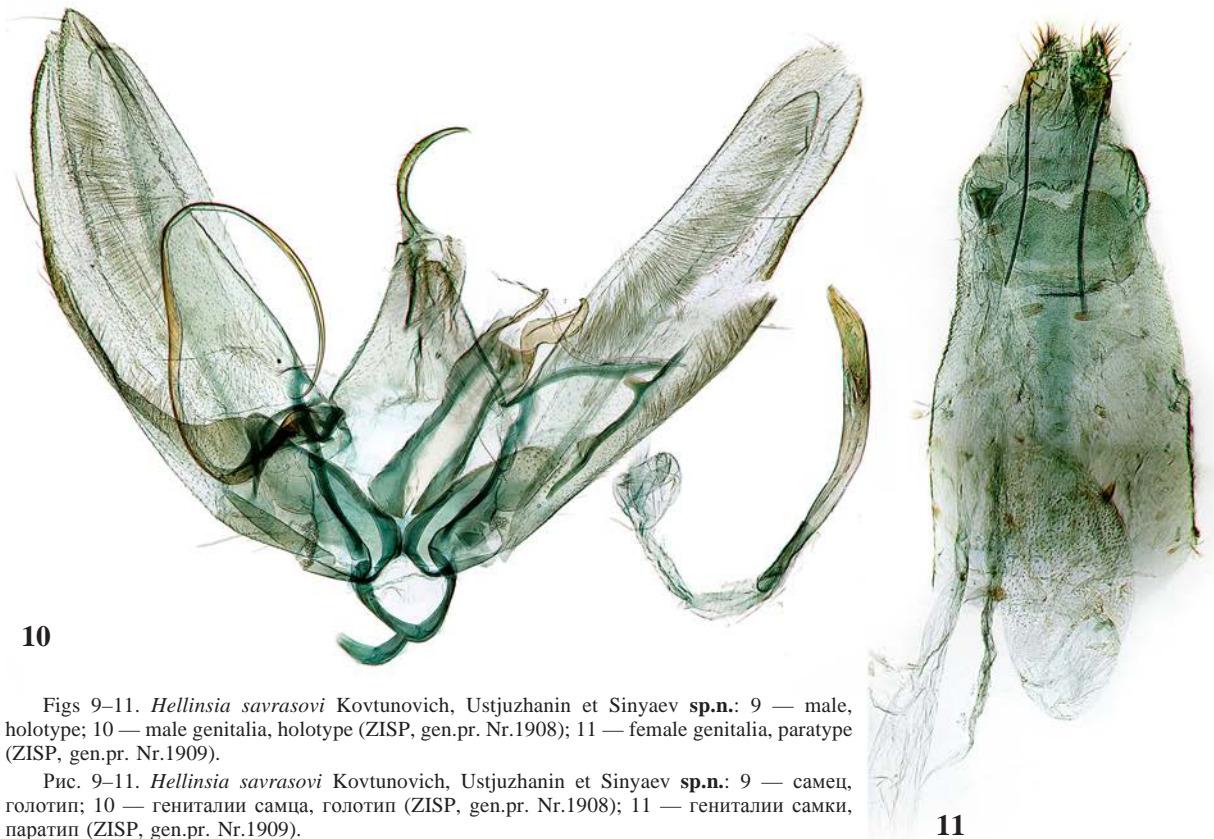
Figs 7–8. *Hellinsia vasnetsovi* Kovtunovich, Ustjuzhanin et Sinyaev sp.n.: 7 — male, holotype; 8 — male genitalia, holotype (ZISP, gen.pr. Nr.1907).

Рис. 7–8. *Hellinsia vasnetsovi* Kovtunovich, Ustjuzhanin et Sinyaev sp.n.: 7 — самец, голотип; 8 — гениталии самца, голотип (ZISP, gen.pr. Nr.1907).

Female genitalia. Posterior apophyses thin, long. Papillae anales triangle. Lamina vaginalis wide, poorly sclerotized. Antrum long, sclerotized, tubulate. Ductus wide, membranous, long. Bursa copulatrix elongated, oval, with well expressed narrow long transverse signum.

DIFFERENTIAL DIAGNOSIS. In the wings color, *H.repini* sp.n. is similar to *Hellinsia grandis* (Fish, 1881), but

the new species differs by the smaller size and the genital structure. In the male genitalia, in the shape of the saccular process on the left valve, and in the fold in the base of the right valve inner edge, the new species is close to *Hellinsia minasgerais* Gielis, 2016, from which it differs by the valves and the anellus arms which are equal in length, by the narrow fold ending with a hollow tube in on the right valve, also by the



Figs 9–11. *Hellinsia savrasovi* Kovtunovich, Ustjuzhanin et Sinyaev sp.n.: 9 — male, holotype; 10 — male genitalia, holotype (ZISP, gen.pr. Nr.1908); 11 — female genitalia, paratype (ZISP, gen.pr. Nr.1909).

Рис. 9–11. *Hellinsia savrasovi* Kovtunovich, Ustjuzhanin et Sinyaev sp.n.: 9 — самец, голотип; 10 — гениталии самца, голотип (ZISP, gen.pr. Nr.1908); 11 — гениталии самки, паратип (ZISP, gen.pr. Nr.1909).



Figs 12–14. *Hellinsia repini* Kovtunovich, Ustjuzhanin et Sinyaev **sp.n.**: 12 — male, paratype; 13 — male genitalia, holotype (ZISP, gen.pr. Nr.1910); 14 — female genitalia, paratype (ZISP, gen.pr. Nr.1911).

Рис. 12–14. *Hellinsia repini* Kovtunovich, Ustjuzhanin et Sinyaev **sp.n.**: 12 — самец, голотип; 13 — гениталии самца, голотип (ZISP, gen.pr. Nr.1910); 14 — гениталии самки, паратип (ZISP, gen.pr. Nr.1911).

robust saccular process on the left valve which is not extending beyond valve edge and by the cornuti in the aedeagus.

ETYMOLOGY The species is named in honor of the outstanding Russian painter Ilya Efimovich Repin (1844–1930).

Hellinsia kuinji

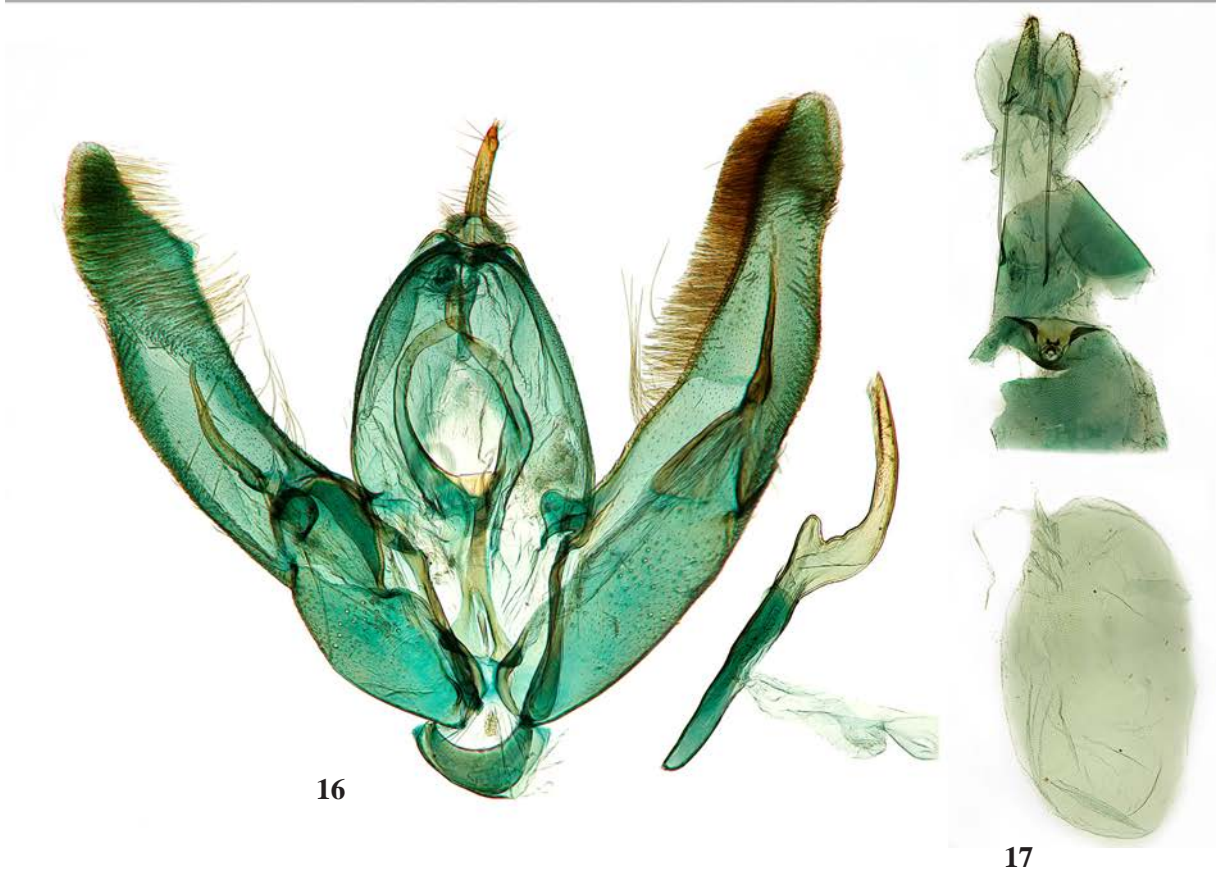
Kovtunovich, Ustjuzhanin et Sinyaev **sp.n.**

Figs 15–17.

MATERIAL EXAMINED. **Holotype**, male, (ZISP 1912), **HONDURAS**, El Paraiso, Reserva Biologica, Yuscaran, 1770 m, 13°56'N, 86°52'W, 26–29.vi.2013, V. Sinyaev & V. Zaritsky. **Paratype**. 1 female, (ZISP 1913), same data as holotype, 26–29.vi.2013, V. Sinyaev & V. Zaritsky.

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DESCRIPTION. External characters. Head with dark brown scales. Thorax and tegulae pale yellow. Labial palpi pale grey, straight, equal to eye diameter in length. Antennae pale brown. Wingspan 19–20 mm (holotype — 20 mm). Fore wings pale grey, costal edge slightly darkened. Narrow dark brown spot at cleft base. Fringe inside cleft pale grey. Hind wings pale grey, unicolorous. Hind legs yellowish grey,



Figs 15–17. *Hellinsia kuinji* Kovtunovich, Ustjuzhanin et Sinyaev **sp.n.** 15 — male, holotype; 16 — male genitalia, holotype (ZISP, gen.pr. Nr.1912); 17 — female genitalia, paratype (ZISP, gen.pr. Nr.1913).

Рис. 15–17. *Hellinsia kuinji* Kovtunovich, Ustjuzhanin et Sinyaev **sp.n.**: 15 — самец, паратип; 16 — гениталии самца, голотип (ZISP, gen.pr. Nr.1912); 17 — гениталии самки, паратип (ZISP, gen.pr. Nr.1913).

poorly expressed brownish scales at spur base. Spurs on hind legs of unequal length.

Male genitalia. Valves narrow, equal in length. Saccular process on left valve slightly bent, located centrally, not exceeding beyond valve edge. On right valve, wide fold of sacculus reaching the middle, then noticeably narrowing apically. Anellus arms very long, widely spaced, their apices almost reaching the uncus base. Saccus bluntly triangle. Uncus arched, distinct sclerotized claw spine apically (from lateral view). Aedeagus crescent, distally with a distinct branch.

Female genitalia. Posterior apophyses thin, long, slightly widened apically. Papillae anales oval. Lamina vaginalis sclerotized, in the shape of wide arcuate folds. Antrum short, ostium round. Ductus thin, membranous, long. Bursa copulatrix large, oval, without signa.

DIFFERENTIAL DIAGNOSIS. In the male genital structure, in the claw spike on the uncus tip and in the unusual shape of the aedeagus, the new species is unique among the representatives of *Hellinsia* and the genera close to it. Possibly, later, it will be established as a separate genus in case of finding the additional material.

ETYMOLOGY. The species is named in honor of the Russian artist of Greek origin, master of landscape painting Arkhip Ivanovich Kuindzhi (1842–1910).

Hellinsia polenovi

Kovtunovich, Ustjuzhanin et Sinyaev **sp.n.**

Figs 18–19.

MATERIAL EXAMINED. **Holotype**, male, (ZISP 1914), **HONDURAS**, Lempira, Cerro Minas P.N. Celaque, near San Manuel, 1700 m, 14°27'N, 88°42'W, 20–21.v.2013, V. Sinyaev & V. Zaritsky; **Paratype**, male (CUK 317), Cortes dept., Cusuco N.P., 1610 m, 15°29'N, 88°12'W, 22–28.v.2014, V. Sinyaev & M. Márquez.

DESCRIPTION. External characters. Head with brown collar of scales and with white hairs on forehead. Thorax and tegulae pale yellow. Labial palpi thin, pale yellow, noticeably darkened apically, equal to eye diameter in length. Antennae pale yellow. Wingspan 19 mm. Fore wings pale yellow, dark brown longitudinal strokes along costal edge distally. Small brown spot of scales in cleft base. Fringe inside cleft pale yellow. Hind wings yellowish grey, unicolorous, slightly darker than fore wings. Hind legs pale yellow, poorly expressed brownish scales in spur base. Spurs on hind legs of unequal length.

Male genitalia. Valves narrow, lanceolate, equal in length. Saccular process on left valve thick, robust, bent at right angle, located in center, not exceeding beyond valve edge. Sacculus on right valve wide basally, oval fold in middle. Anellus arms thin, slightly undulated, right arm slightly longer than left one. Saccus triangle. Uncus narrow, thin, in length equal to saccular process on left valve. Aedeagus slightly curved, almost twice shorter than valve in length.

Female genitalia. Unknown.

DIFFERENTIAL DIAGNOSIS. In the pale yellow fore wings color and in the darker hind wings, *H. polenovi* **sp.n.** is similar to *Hellinsia paleaceus*, but the new species differs by the specific male genital structure. In the male genitalia, in the shape of the saccular process on the left valve, the new species is close to *Hellinsia yalae* Gielis, 2013, but differs by the sacculus on the right valve, located in the valve middle and having no bent pineal top, while in *H. yalae* the pineal top is present, and the sacculus almost reaches the tip of the valve. *H. polenovi* **sp.n.** is also distinctive in the longer and narrower anellus arms.

ETYMOLOGY. The species is named in honor of the Russian artist, master of historical, landscape and genre painting Vasily Dmitrievich Polenov (1844–1927).

Hellinsia levitani

Kovtunovich, Ustjuzhanin et Sinyaev **sp.n.**

Figs 20–21.

MATERIAL EXAMINED. **Holotype**, male, (ZISP 1915), **HONDURAS**, Lempira, Cerro Minas P.N. Celaque, near San Manuel, 1700 m, 14°27'N, 88°42'W, 20–21.v.2013, V. Sinyaev & V. Zaritsky.

DESCRIPTION. External characters. Head with dark brown scales. Labial palpi white, straight, slightly smaller than eye diameter. Antennae grey. Wingspan 23 mm. Fore wings dark grey. Oblique brown spot in cleft base. Fringe inside cleft brown grey. Hind wings dark grey, unicolorous.

Male genitalia. Valves asymmetric, left one noticeably wider than right one. Saccular process on left valve very long, exceeding tip of valve, spirally twisted distally, sharply tapered apically. On right valve, sacculus with long narrow fold in its basal part. Anellus arms very wide, triangle, equal in length. Saccus triangle. Uncus narrow, thin. Aedeagus almost straight, 1,5 times shorter the valve length. Distinct cornutus distally.

Female genitalia. Unknown.

DIFFERENTIAL DIAGNOSIS. In the male genital structure, in the asymmetric valves, the long saccular process on the left valve and the triangle saccus, *H. levitani* **sp.n.** is close to *Hellinsia montezerpae* Arenberger et Wojtusiak, 2001, from which it differs by the saccular process with the curved apex exceeding the tip of the left valve, by the straight aedeagus and by the wide triangle anellus arms.

ETYMOLOGY. The species is named in honor of the Russian landscape painter Isaac Ilyich Levitan (1860–1900), an academician of the Imperial Academy of Arts, a master of “landscape of mood”.

Adaina beckeri Gielis, 1992

DISTRIBUTION. Costa Rica, Belize [Gielis, 2003, 2011], Honduras [Miller *et al.*, 2012].

Adaina costarica Gielis, 1992

MATERIAL EXAMINED. 1 ♂, **HONDURAS**, Lempira, Cerro Minas P.N. Celaque, 1400 m, 14°33'N, 88°38'W, 14–18.v.2013, V. Sinyaev & V. Zaritsky.

DISTRIBUTION. Costa Rica, Honduras.

NOTE. New for Honduras.

Adaina primulacea Meyrick, 1929

MATERIAL EXAMINED. 1 ♀, **HONDURAS**, Lempira dept., Cerro Minas P.N. Celaque, 1760 m, 14°33'N, 88°38'W, 29–30.vi.2014, V. Sinyaev & M. Márquez.

DISTRIBUTION. Costa Rica, Panama, Honduras.

NOTE. New for Honduras.

Adaina simplicius (Grossbeck, 1917)

DISTRIBUTION. U.S.A., Brazil, Paraguay, Costa Rica, Ecuador, Bolivia [Gielis, 2003, 2011, 2013], Honduras [Miller *et al.*, 2012].

Adaina zephyria Barnes et Lindsey, 1921

MATERIAL EXAMINED. 1 ♀, Lempira, Cerro Minas P.N. Celaque, near San Manuel, 1700 m, 14°27'N, 88°42'W, 20–21.v.2013, V. Sinyaev & V. Zaritsky.

DISTRIBUTION. U.S.A., Mexico, Costa Rica, Venezuela, Ecuador, Peru, Bolivia, Brazil [Gielis, 2003, 2011], Honduras.

NOTE. New for Honduras.



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21



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Figs 18–21. *Hellinsia* spp.: 18–19 — *H. polenovi* Kovtunovich, Ustjuzhanin et Sinyayev **sp.n.**; 20–21 — *H. levitani* Kovtunovich, Ustjuzhanin et Sinyayev **sp.n.**; 18, 20 — male, holotype; 19, 21 — male genitalia, holotype (ZISP, gen.pr. Nr.1914 et Nr.1915 respectively).

Рис. 18–21. *Hellinsia* spp.: 18–19 — *H. polenovi* Kovtunovich, Ustjuzhanin et Sinyayev **sp.n.**; 20–21 — *H. levitani* Kovtunovich, Ustjuzhanin et Sinyayev **sp.n.**; 18, 20 — самец, голотип; 19, 21 — гениталии самца, голотип (ZISP, gen.pr. Nr.1914 et Nr.1915 respectively).

Emmelina buscki (Barnes et Lindsey, 1921)

DISTRIBUTION. U.S.A., Mexico, Costa Rica, Jamaica, Bolivia [Gielis, 2003, 2013], Honduras [Matthews, 2006].

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