

A new species of the genus *Cyanosesia* O. Gorbunov et Arita, 2001 (Lepidoptera: Sesiidae) from the island of Obi, North Maluku, Indonesia with a catalogue of the genus

Новый вид рода *Cyanosesia* O. Gorbunov et Arita, 2001 (Lepidoptera: Sesiidae) с острова Оби, Северное Малуку, Индонезия с каталогом рода

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KEY WORDS: Sesiini, *Cyanosesia tuzovi*, systematics, Oriental realm.

КЛЮЧЕВЫЕ СЛОВА: Sesiini, *Cyanosesia tuzovi*, систематика, Ориентальная область.

ABSTRACT. A new species, *Cyanosesia tuzovi* **sp.n.** from the island of Obi, North Maluku, Indonesia, is described and illustrated. The data on its biotope is presented and illustrated. An annotated catalogue of the genus *Cyanosesia* is added to this paper. The catalogue contains the following information: the references to the original descriptions, information on name-bearing types, complete bibliographies of the presented taxa, data on host plants and distribution. The holotype of the new species is deposited in the collections of the A.N. Severtsov Institute of Ecology and Evolution of the Russian Academy of Sciences, Moscow, Russia.

РЕЗЮМЕ. Приведено описание нового вида, *Cyanosesia tuzovi* **sp.n.** с острова Оби, Северное Малуку, Индонезия. Данные о его биотопе также представлены и проиллюстрированы. К статье добавлен аннотированный каталог рода *Cyanosesia*. Каталог содержит следующую информацию: ссылки на первоначальные описания, информацию о номенклатурных типах, полную библиографию, данные о кормовых растениях и распространении. Голотип нового вида хранится в коллекции Института проблем экологии и эволюции им. А.Н. Северцова Российской академии наук в Москве.

Introduction

During a short-time trip to North Maluku, Indonesia in February–March 2017, I could collect several very interesting species of Sesiidae with the help of artificial

sex attractants produced by PHEROBANK®, Wijk bij Duurstede, the Netherlands. One of the collected species was a representative of the genus *Cyanosesia* O. Gorbunov et Arita, 1995 [Gorbunov, 2020].

The genus *Cyanosesia* was established for two new species from Vietnam [Gorbunov, Arita, 1995]: *C. tonkinensis* O. Gorbunov et Arita, 1995, and *C. vietnamica* O. Gorbunov et Arita, 1995. The first of these species was selected as the type species of the genus. Currently the genus *Cyanosesia* consists of 17 species, including the new one described below.

The present paper presents the description of a new species, *Cyanosesia tuzovi* **sp.n.** In addition, I provide an annotated catalogue of the genus *Cyanosesia*, which contains updated taxonomic information including references to the original descriptions, information on name-bearing types, complete bibliographies, data on host plants and distribution.

The description of the holotype was made using a Leica EZ4 stereomicroscope with LED illuminations. Images of freshly collected moths and their habitat were taken with a Sony® α450 DSLR camera equipped with a Minolta® 50 f/2.8 Macro lens. The genitalia were photographed using a Keyence® BZ-9000 Bioevo Fluorescence Microscope. The processing of all illustrations was finalized with Adobe® Photoshop® 2020 software.

The material studied or mentioned herein is kept in the following collections:

BMNH — the Natural History Museum, London, UK; САК — personal collection of Axel Kallies, Melbourne, Australia;

COGM — the collection of the A.N. Severtsov Institute of Ecology and Evolution of the Russian Academy of Sciences, Moscow, Russia;

BMHU — Bishop Museum, Honolulu, Hawaii, U.S.A.

NSMT — National Museum of Nature and Science, Tsukuba, Tokyo (formerly Natural Science Museum Tokyo), Japan;

OUZM — Oxford University Museum of Natural History (Zoological Collections), Oxford University, Oxford, UK;

SMFM — Senckenberg Research Institute and Natural History Museum, Frankfurt am Main, Germany;

ZISP — Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia.

All labels of the holotype of the new species are cited verbatim. Each label is separated by semicolon (;), while lines on a label are shown separated by a slash (“/”). Pictures of the specimens are labeled with a number which consists of the name of the family, two consecutive digits and a year (e.g., SESIIDAE pictures №№ 0027-0028–2017). These numbers correspond to those of the illustrated specimens in the archives of the author. The dissected genitalia are placed in a microtube and pinned under the specimen. The genitalia number is also printed on a label (e.g., Preparation № OG–058-2018), pinned under the specimen and listed in the archives of the author.

Taxonomic account

Cyanosesia tuzovi O. Gorbunov, sp.n.

Figs 1–7.

MATERIAL. **Holotype** ♂ (Figs 1–2) with labels: “Indonesia, N Maluku, / Obi Id., 3 km SW Laiwui, / 01°21.43’S, 127°37.33’E, / 115 m, 25.II.2017, / O. Gorbunov leg.” (white); “SESIIDAE / Pictures №№ / 0027-0028–2017 / Photo by O. Gorbunov” (white); “Genitalia examined / by O. Gorbunov / Preparation № / OG–058-2018” (white); “HOLOTYPUS ♂ / *Cyanosesia tuzovi* / O. Gorbunov, 2020 / O. Gorbunov des., 2017” (red).

DESCRIPTION. **Male** (holotype) (Figs 1–2). Alar expanse 19.4 mm; body length 9.5 mm; forewing 8.6 mm; antenna 4.8 mm.

Head with antenna black with dark greenish-violet sheen dorsally and dark brown ventrally; scapus black with dark greenish sheen dorsally and lemon-yellow ventrally; frons dark gray with bright blue-violet sheen and a broad show-white stripe laterally; both basal and apical joints of labial palpus black with dark violet sheen, mid joint lemon-yellow with an admixture of black scales with dark violet sheen dorso-distally; vertex entirely black with bright bronze-green sheen; occipital fringe black with dark violet sheen dorsally and lemon-yellow laterally.

Thorax with patagia black with dark violet sheen dorsally and lemon-yellow laterally; tegula black with bright violet-purple sheen, a small lemon-yellow spot anteriorly and a few lemon-yellow scales on inner margin; mesothorax black with violet-purple sheen; metathorax black with dark violet sheen and two lemon-yellow spots; thorax laterally black with blue-violet sheen, a small lemon-yellow spot at bottom of mesomeron and with a narrow lemon-yellow stripe on posterior margin of mesomeron; posteriorly both metepimeron and metameron dark gray with blue-violet sheen covered with long white hair-like scales. Legs with neck plate entirely lemon-yellow; fore coxa black with bright bluish sheen and a large lemon-yellow

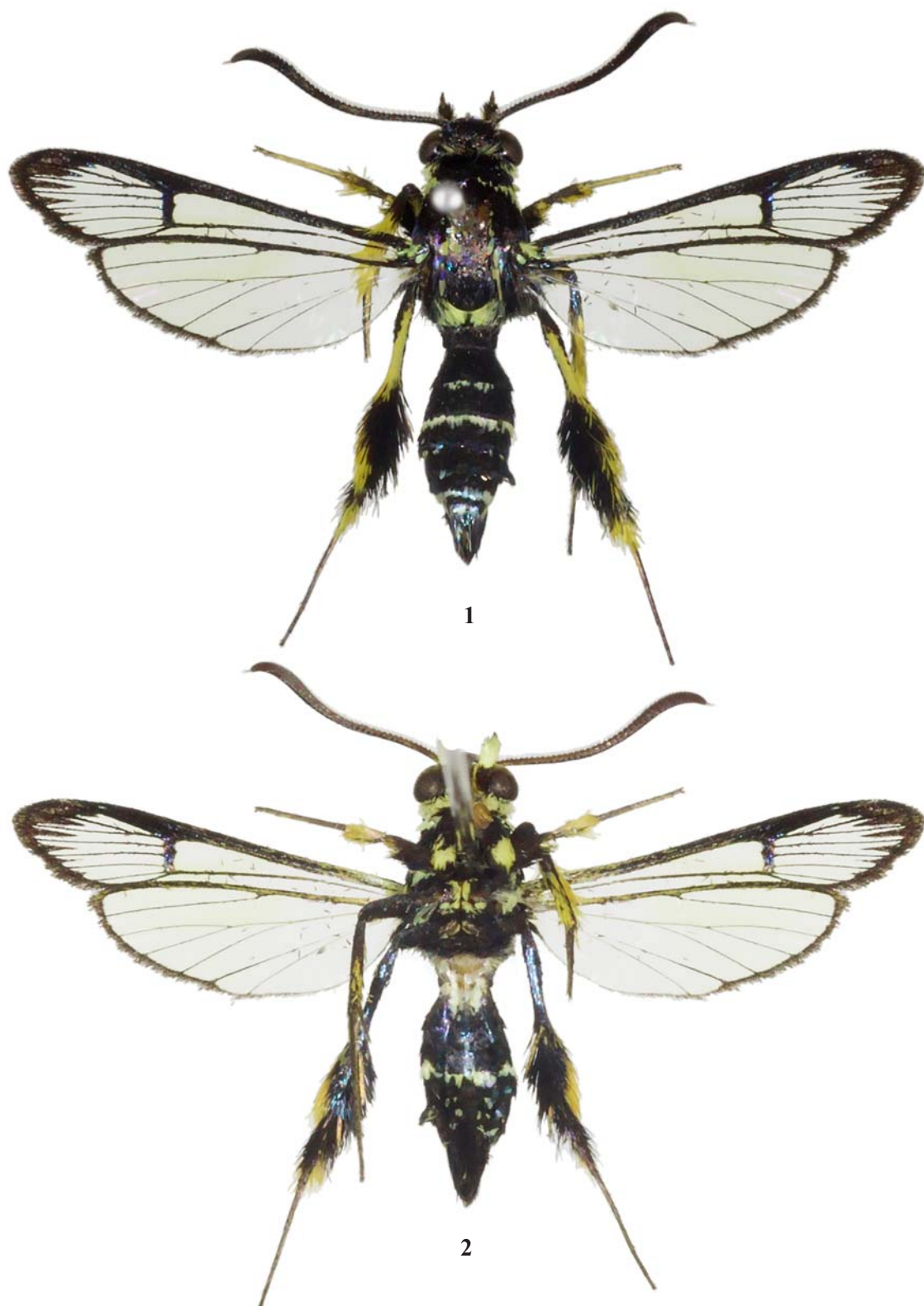
spot subdistally; fore femur dark brown to black with blue-violet sheen and a few yellow elongate scales interior-distally; fore tibia ventrally yellow, dorsally dark brown to black with a few yellow scales; fore tarsus dark brown to black with bronze sheen dorsally and yellow with golden sheen ventrally; mid coxa black with bright greenish sheen and a few yellow scales internally; mid femur dark brown to black with blue-violet sheen and a few yellow elongate scales interior-distally and a few white hairy-like scales interior-basally; mid tibia black with violet sheen externally and yellow both dorsally and internally, ventrally mixed with black with violet sheen and yellow scales; spurs dark brown to black with bronze-violet sheen; mid tarsus dark brown to black with blue-violet sheen externally and yellow with golden sheen internally; hind coxa black with bright greenish sheen and a few yellow scales internally; hind femur dark brown to black with blue-violet sheen and a few yellow elongate scales interior-distally; hind tibia black with blue-violet sheen and a narrow yellow stripe dorsally; spurs dark brown to black externally and yellow with golden sheen internally; mid tarsus dark brown to black with blue-violet sheen and an admixture of yellow scales dorsally on basal tarsomeres; in addition, scales both on hind tibia distally of mid spurs and on dorsal part of basal tarsomere of hind tarsus visibly elongate and form a hind-leg tuft. Forewing transparent; basally black with dark greenish sheen and a few lemon-yellow scales; costal and anal margins, CuA-stem, discal spot, veins R_{4+5} –CuA₂ and cuneiform opaque lines between veins R_3 –CuA₁ black with dark violet sheen; cilia black with dark violet sheen; discal spot extremely narrow, level to vein M_2 about 0.09 times as broad as external transparent area; ventrally costal and anal margins, CuA-stem, discal spot, veins R_{4+5} –CuA₂ and cuneiform opaque lines between veins R_3 –CuA₁ black with dark blue-violet sheen and with an admixture of individual yellow scales; cilia dark brown to black with blue-violet sheen. Hindwing transparent; dorsally veins and outer margin black with dark violet sheen; discal spot undeveloped; outer margin extremely narrow, consists of one or two rows of scales; cilia black with dark violet sheen; ventrally veins and outer margin black with dark blue-violet sheen and with an admixture of individual yellow scales; cilia dark brown to black with blue-violet sheen.

Abdomen dorsally black with greenish-violet sheen; tergites 3 and 4 each with a narrow lemon-yellow stripe proximally; tergite 5 with a few lemon-yellow scales latero-proximally; tergites 6 and 7 each with a narrow lemon-yellow stripe distally; ventrally black with blue-violet sheen; sternite 1+2 pale lemon-yellow proximally; sternite 4 with a narrow lemon-yellow stripe proximally; anal tuft small, black with dark violet sheen.

Male genitalia (holotype) (genital preparation № OG–058-2018) (Figs 3–6). Tegumen-uncus complex well-developed, with numerous setae on inner surface of uncus ventro-apically; tegumen relatively long and broad; gnathos rather well-developed, visibly asymmetrical and rounded distally, covered with minute spines (Fig. 3); valva (Fig. 4) pentagonal-oval, densely covered with multifurcate scale-like setae in dorsal half and with sparse hairs in ventral half; crista sacculi well-developed, triangular-oval, broad, with hair-like setae on anterior margin; saccus (Fig. 5) narrow, rounded basally, about as long as vinculum; aedeagus (Fig. 6) slightly longer than valva, relatively thin; vesica with numerous pointed spinules.

INDIVIDUAL VARIABILITY. Unknown.

DIFFERENTIAL DIAGNOSIS. By the structure of the male genitalia, this new species seems to be closest to *C. leleji* O. Gorbunov et Arita, 2016, from the male of which it can be distinguished by the colouration of the bright coloured scales of the head, thorax and abdomen, which are lemon-yellow in

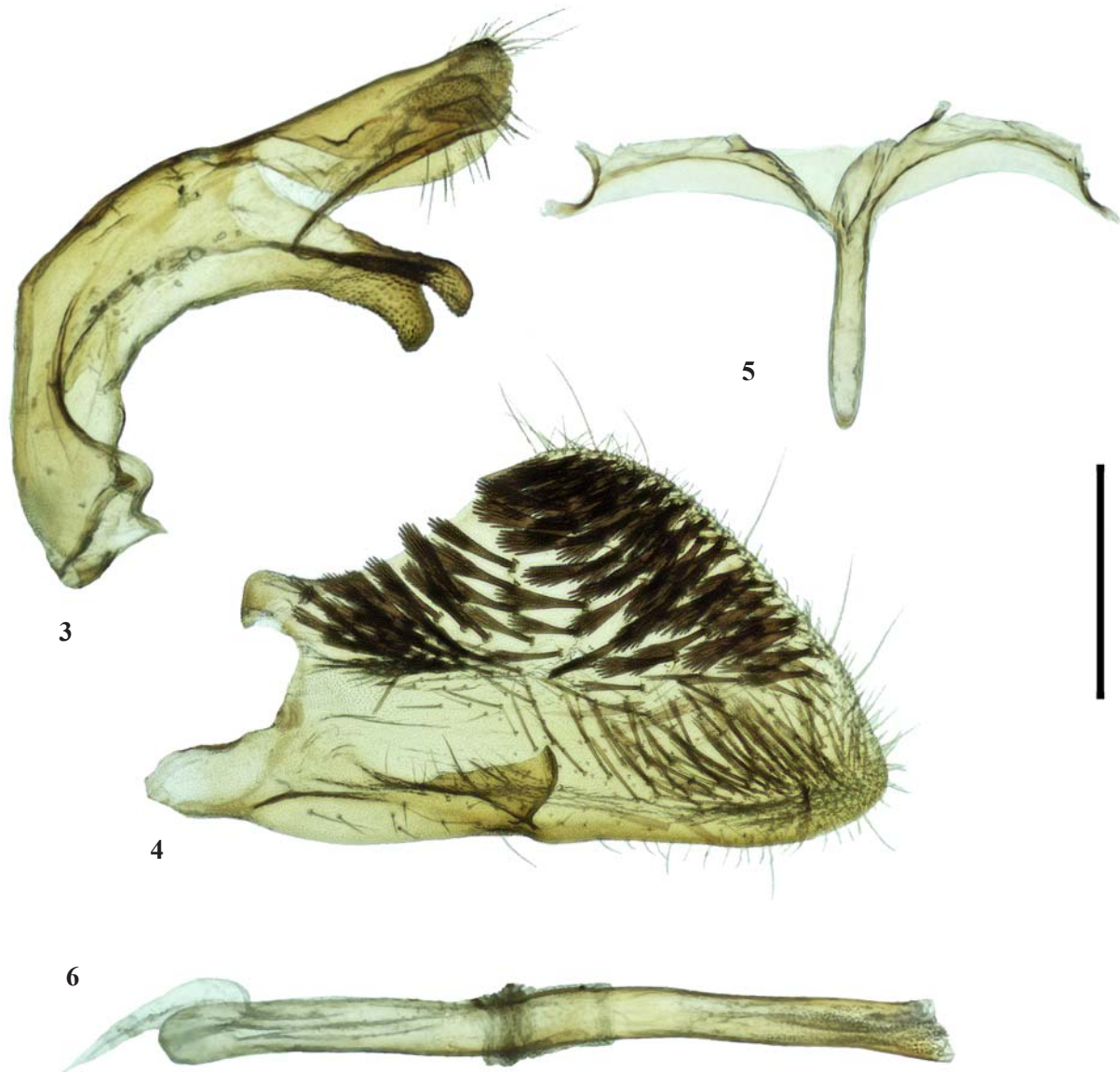


Figs 1–2. *Cyanosesia tuzovi* sp.n.: 1 — holotype, upside. Sesiidae picture № 0027–2017. Alar expanse 19.4 mm; 2 — ditto underside. Sesiidae picture № 0028–2017.

Рис. 1–2. *Cyanosesia tuzovi* sp.n. : 1 — голотип, сверху. Sesiidae снимок № 0027–2017. Размах крыльев 19.4 мм; 2 — вид снизу. Sesiidae снимок № 0028–2017.

the new species instead of yellow in *C. leleji*. Besides this, these two species are distinguished by the colouration of the labial palpus (basal joint black with bronze sheen externally and pale yellow internally, remaining joints yellow with a narrow black stripe externally in *C. leleji*, vs. both basal and apical joints black with dark violet sheen, mid joint lemon-yellow with an admixture of black scales with dark violet sheen dorso-distally in *C. tuzovi* sp.n.), thorax laterally (brown with violet sheen, with a large dark yellow with golden sheen spot medially in the species compared, vs. black with blue-violet sheen, a small lemon-yellow spot at bottom of mesomeron and with a narrow lemon-yellow stripe on posterior margin of mesomeron in *C. tuzovi* sp.n.), neck plate (dark brown with bronze sheen in *C. leleji*, vs. entirely lemon-yellow in the new species), hind tibia (dark brown to black with greenish sheen, a broad yellow band at base of mid spurs

and with a yellow-orange spot exterior-distally in the species compared, vs. tibia black with blue-violet sheen and a narrow yellow stripe dorsally in the new species), and abdomen (dorsally black with green-blue sheen; tergite 4 with a broad yellow-orange stripe anteriorly; tergite 5 with a narrow yellow-orange stripe anteriorly; tergites 6 and 7 each with a narrow yellow-orange stripe posteriorly; ventrally dark brown to black with greenish sheen; sternites 4 and 5 each with a broad yellow-orange stripe anteriorly; sternite 6 with a few yellow scales posteriorly in *C. leleji*, vs. black with greenish-violet sheen; tergites 3 and 4 each with a narrow lemon-yellow stripe proximally; tergite 5 with a few lemon-yellow scales latero-proximally; tergites 6 and 7 each with a narrow lemon-yellow stripe distally; ventrally black with blue-violet sheen; sternite 1+2 pale lemon-yellow proximally; sternite 4 with a narrow lemon-yellow stripe proximally *C. tuzovi*



Figs 3–6. Male genitalia of *Cyanosesia tuzovi* sp.n., holotype. Genital preparation № OG–058-2018: 3 — tegumen-uncus complex; 4 — valva; 5 — saccus; 6 — aedeagus. Scale bar 0.5 mm.

Рис. 9–12. Гениталии самца *Cyanosesia tuzovi* sp.n., голотип. Препарат гениталий № OG–058-2018: 3 — тегумен-ункус комплекс; 4 — вальва; 5 — саккус; 6 — эдеагус. Масштаб 0,5 мм.

sp.n.). In addition, these two species differ from each other by the conformation of the male genitalia, especially by the shape of both crista sacculi and saccus [compare Figs 4 and 5 with figs 10 and 11 in Gorbunov, Arita, 2016: 38].

By the colouration of the legs and abdomen and by the conformation of both forewing and male genitalia, the new species is clearly distinguishable from all of its congeners.

BIONOMICS. The larval host-plant is unknown. The holotype was attracted by unspecific artificial sex pheromones. It came to lures right after noon.

HABITAT. In the island of Obi, North Maluku, this species was collected on a clearing among the secondary rainforest in the vicinity of the town of Labuha (Fig. 7).

DISTRIBUTION. Known from the type locality on the islands of Obi, North Maluku, Indonesia.

ETYMOLOGY. This new species is named after my friend Dr. Vasily K. Tuzov, a great expert on Rhopalocera of the world fauna, who courageously shares with me all the hardships in our many joint entomological trips to different parts of the globe.

Catalogue of the genus *Cyanosesia* O. Gorbunov et Arita 1995

Cyanosesia O. Gorbunov et Arita, 1995

“*Cyanosesia* gen. nov.” — Gorbunov, Arita, 1995: 74. Type species: *Cyanosesia tonkinensis* O. Gorbunov et Arita, 1995, by original designation.

LITERATURE. Kallies, 2003: 161 (*Cyanosesia*); Kallies, Arita, 2004: 67, 84 (*Cyanosesia*); Pühringer, Kallies, 2004: 11 (*Cyanosesia*); Kallies, 2011: 152 (*Cyanosesia*); Gorbunov, Arita, 2016: 35, 36 (*Cyanosesia*).

RANGE. Oriental realm from East India (Meghalaya) in the west to the Philippines (Samar) and Borneo (Sabah) in the east and from South China (Gong Kong, Guangdong) and Taiwan in the north and Java and Wallacea (Sulawesi and Obi) in the south.

Cyanosesia borneensis Kallies, 2003

“*Cyanosesia borneensis* sp. n.” — Kallies, 2003: 161, figs 1, 2. Type locality: “North Borneo (SE) [Malaysia, Sabah] / Forest Camp, 19 km / N of Kalabakan / ...”. Holotype ♀ (BMHU).

LITERATURE. Kallies, Arita, 2004: 67 (*Cyanosesia borneensis*); Pühringer, Kallies, 2004: 11 (*Cyanosesia borneensis*); Gorbunov, Arita, 2016: 36 (*Cyanosesia borneensis*).

FLIGHT PERIOD. The holotype was collected on November 1.

HOST PLANT. Unknown.

DISTRIBUTION. It is known only from the type locality in Sabah, Indonesia.

Cyanosesia cyanolampra (Diakonoff, 1968 [“1967”])*

“*Sura cyanolampra*, new species” — Diakonoff, 1968: 229, figs 331, 711–712. Type locality: “Luzon, Los Baños ...” [= Philippines: Luzon, Laguna, Los Baños]. Holotype ♀ (USNM).

* According to Clarke, the actual date of publication of the 257 issue of the Bulletin of the United States National Museum is January 31st, 1968 (“1868” in the text!) [Clarke, 1980].



Fig. 7. Habitat of *Cyanosesia tuzovi* **sp.n.**: Indonesia, North Maluku, Obi Island, 3 km SW of Laiwui, 01°21.43' S, 127°37.33' E, 115 m, 25.II.2017. Photo by O. Gorbunov.

Рис. 7. Биотоп *Cyanosesia tuzovi* **sp.n.**: Индонезия, Северное Малуку, остров Оби, 3 км ЮЗ Лайвуя, 01°21.43' ю.ш., 127°37.33' в.д., 115 м, 25.II.2017. Фото О. Горбунова.

LITERATURE. Heppner, Duckworth, 1981: 25 (*Sura cyanolampira*); Kallies, Arita, 2004: 67, 84, 89 (*Cyanosesia cyanolampira*); Pühringer, Kallies, 2004: 11 (*Cyanosesia cyanolampira*); Gorbunov, Arita, 2016: 36 (*Cyanosesia cyanolampira*).

FLIGHT PERIOD. One paratype was collected on September 1.

HOST PLANT. Unknown.

DISTRIBUTION. It is known from a few localities on the island of Luzon, the Philippines.

Cyanosesia cyanosa Kallies et Arita, 2004

“*Cyanosesia cyanosa* sp. n.” — Kallies, Arita, 2004: 67, 88, figs 14, 28. Type locality: “N. Vietnam, Vinh Phu Prov., Tam Dao, 930 m, ...”. Holotype ♂ (CAK).

LITERATURE. Pühringer, Kallies, 2004: 11 (*Cyanosesia cyanosa*); Gorbunov, Arita, 2016: 36 (*Cyanosesia cyanosa*).

FLIGHT PERIOD. The holotype of this species was collected on June 25–26.

HOST PLANT. Unknown.

DISTRIBUTION. It is known from the type locality in North Vietnam only.

Cyanosesia formosana Arita et O. Gorbunov, 2002

“*Cyanosesia formosana* sp. nov.” — Arita, Gorbunov, 2002: 234, figs 15, 30a–e. Type locality: “Taiwan, Nantou Hsien, Kuan-taoshan, 1,300 m ...”. Holotype ♂ (NSMT).

LITERATURE. Kallies, Arita, 2004: 67 (*Cyanosesia formosana*); Pühringer, Kallies, 2004: 11 (*Cyanosesia formosana*); Gorbunov, Arita, 2016: 36 (*Cyanosesia formosana*).

FLIGHT PERIOD. The type series was collected in late June and early July.

HOST PLANT. Unknown.

DISTRIBUTION. This species is known from the island of Taiwan only.

Cyanosesia hypochalcia (Hampson, 1919)

“*Synanthedon hypochalcia* n. sp.” — Hampson, 1919: 60. Type locality: “Assam, Khásis, ...” [= India: Meghalaya, Khasi Hills]. Holotype ♂ (BMNH).

LITERATURE. Dalla Torre, Strand, 1925: 28 (*Synanthedon hypochalcia*); Gaede, 1933: 780 (*Synanthedon hypochalcia*); Heppner, Duckworth, 1981: 31 (*Synanthedon hypochalcia*); Kallies, 2003: 161, 164 (*Cyanosesia hypochalcia*); Kallies, Arita, 2004: 67 (*Cyanosesia hypochalcia*); Pühringer, Kallies, 2004: 11 (*Cyanosesia hypochalcia*); Gorbunov, Arita, 2016: 36 (*Cyanosesia hypochalcia*).

FLIGHT PERIOD. The type series was collected in April.

HOST PLANT. Unknown.

DISTRIBUTION. This species is known only from the type locality in the state Meghalaya in India.

Cyanosesia javana O. Gorbunov et Kallies, 1998

“*Cyanosesia javana* sp. nov.” — Gorbunov, Kallies, 1998: 461, figs 1, 3a–d. Type locality: “W. Java: G[unung] Malang” [Indonesia, western Java, Mt. Malang]. Holotype ♂ (BMNH).

LITERATURE. Arita, Gorbunov, 2002: 237 (*Cyanosesia javana*); Kallies, 2003: 161, 164 (*Cyanosesia javana*); Kallies, Arita, 2004: 67 (*Cyanosesia javana*); Pühringer, Kallies, 2004: 11 (*Cyanosesia javana*); Gorbunov, Arita, 2016: 36 (*Cyanosesia javana*).

FLIGHT PERIOD. Unknown.

HOST PLANT. Unknown.

DISTRIBUTION. It is known only from the type locality on the island of Java, Indonesia.

Cyanosesia leleji O. Gorbunov et Arita, 2016

“*Cyanosesia leleji*, sp.n.” — Gorbunov, Arita, 2016: 35, figs 1–13. Type locality: “S.E.Sulawesi / Tiu Lapulu / ... [= Indonesia: Sulawesi Tenggara, Kota Kendari, Lapulu]”. Holotype ♀ (ZISP).

LITERATURE. Present publication: 192 (*Cyanosesia leleji*).

FLIGHT PERIOD. The type series was collected in March.

HOST PLANT. Unknown.

DISTRIBUTION. It is known only from the type locality in South-East Sulawesi, Indonesia.

Cyanosesia litseavora Kallies et Arita, 2004

“*Cyanosesia litseavora* sp. n.” — Kallies, Arita, 2004: 67, 85, figs 11–12, 27, 34. Type locality: “N. Vietnam, Vinh Phu Prov., Tam Dao, 1100 m, ...”. Holotype ♂ (NSMT).

LITERATURE. Pühringer, Kallies, 2004: 11 (*Cyanosesia litseavora*); Gorbunov, Arita, 2016: 36, 39 (*Cyanosesia litseavora*).

FLIGHT PERIOD. Moths on the wing in late September — early October.

HOST PLANT. Larvae in trunks of *Litsea umbellate* (Lauraceae).

DISTRIBUTION. It is known from the type locality in North Vietnam only.

Cyanosesia meyi Kallies et Arita, 1998

“*Cyanosesia meyi* sp. nov.” — Kallies, Arita, 1998: 249, figs 3, 20. Type locality: “Philippines], E[ast]. Samar, near Taft, ...” [= Philippines: Eastern Samar, Taft]. Holotype ♂ (SMFM).

LITERATURE. Kallies, Arita, 1998: 250 (*Cyanosesia meyi*); Kallies, 2003: 161 (*Cyanosesia meyi*); Arita, Gorbunov, 2002: 237 (*Cyanosesia meyi*); Kallies, Arita, 2004: 70 (*Cyanosesia meyi*); Pühringer, Kallies, 2004: 11 (*Cyanosesia meyi*); Gorbunov, Arita, 2016: 36 (*Cyanosesia meyi*).

FLIGHT PERIOD. The holotype was collected in early September.

HOST PLANT. Unknown.

DISTRIBUTION. It is known only from the island of Samar, the Philippines.

Cyanosesia ormosiae Kallies, 2011

“*Cyanosesia ormosiae* sp. n.” — Kallies, 2011: 152, figs 1–3, 9, 10. Type locality: “Hong Kong: | New Territories, | Ma On Shan | ...”. Holotype ♂ (BMNH).

LITERATURE. Kallies et al., 2014: 587 (*Cyanosesia ormosiae*); Gorbunov, Arita, 2016: 36 (*Cyanosesia ormosiae*).

FLIGHT PERIOD. Unknown. Larvae of the type series were collected in late May.

HOST PLANT. Larvae in trunks of *Ormosia pachycarpa* (Fabaceae).

DISTRIBUTION. Known only from the type locality in Hong Kong, China.

Cyanosesia panorpaeformis (Boisduval, 1875 [“1874”]) **

“*S.[esia] Panorpaeformis*. Boisd.” — Boisduval, 1875: 393, pl. 9, fig. 6. Type locality: “... les forêts de l’île de Luçon.” [= Philippines: Luzon]. 2 Syntypes (?).

LITERATURE. Dalla Torre, Strand, 1925: 161 (*Paranthrene panorpaeformis*); Heppner, Duckworth, 1981: 24 (*Paranthrene panorpaeformis*); Kallies et al., 2014: 187 (*Cyanosesia panorpaeformis*); Gorbunov, Arita, 2016: 36 (*Cyanosesia panorpaeformis*).

FLIGHT PERIOD. Unknown.

HOST PLANT. Unknown.

DISTRIBUTION. It is known only from the type locality on the island of Luzon, the Philippines.

Cyanosesia pelocroca (Diakonoff, 1968 [“1967”])

“*Glossosphacia pelocroca*, new species” — Diakonoff, 1968: 225, figs 344, 706–707. Type locality: “Luzon, Los Baños ...” [= Philippines: Luzon, Laguna, Los Baños]. Holotype ♀ (USNM).

** Butler [1876: 513] wrote: “Dr. Boisduval’s long expected work on the Sphingidae has recently appeared, bearing date 1874; that it was not, however, procurable earlier than February 22nd, 1875, I have evidence in a letter from the author, dated 18th of February, 1875, ...”.

LITERATURE. Kallies, Arita, 1998: 247, 248 (*Cyanosesia pelocroca*); Kallies, 2003: 161 (*Cyanosesia pelocroca*); Kallies, Arita, 2004: 70 (*Cyanosesia pelocroca*); Pühringer, Kallies, 2004: 11 (*Cyanosesia pelocroca*); Gorbunov, Arita, 2016: 36 (*Cyanosesia pelocroca*).

FLIGHT PERIOD. Unknown.

HOST PLANT. Unknown.

DISTRIBUTION. It is known from the type locality on the island of Luzon, the Philippines.

Cyanosesia philippina O. Gorbunov et Kallies, 1998

“*Cyanosesia philippina* sp. nov.” — Gorbunov, Kallies, 1998: 458, figs 2, 4a–d. Type locality: “Surigao, Mindanao” [Philippines, northern Mindanao Island, Province of Surigao] Holotype ♂ (BMNH).

LITERATURE. Kallies, Arita, 1998: 350, fig. 4 (*Cyanosesia philippina*); Gorbunov, Arita, 2002: 237 (*Cyanosesia philippina*); Kallies, 2003: 161 (*Cyanosesia philippina*); Kallies, Arita, 2004: 70 (*Cyanosesia philippina*); Pühringer, Kallies, 2004: 11 (*Cyanosesia philippina*); Gorbunov, Arita, 2016: 36 (*Cyanosesia philippina*).

FLIGHT PERIOD. One paratype was collected in early May.

HOST PLANT. Unknown.

DISTRIBUTION. Known from islands of Luzon and Mindanao, the Philippines.

Cyanosesia tonkinensis O. Gorbunov et Arita, 1995

“*Cyanosesia tonkinensis* sp. nov.” — Gorbunov, Arita, 1995: 77, figs 3, 11, 13a–e. Type locality: “North Vietnam, Vinh Phu Prov., ca. 100 km N of Hanoi, Tam Dao Mt., 950 m.”. Holotype ♂ (COGM).

LITERATURE. Zukowsky, 1929: 35 (*Paranthrene trizonata* Hampson, 1900); Gorbunov, Kallies, 1998: 457, 460, 461, 464 (*Cyanosesia tonkinensis*); Gorbunov, Arita, 2002: 237 (*Cyanosesia tonkinensis*); Kallies, 2003: 161, 164 (*Cyanosesia tonkinensis*); Kallies, Arita, 2004: 70, 85, figs 13, 35 (*Cyanosesia tonkinensis*); Pühringer, Kallies, 2004: 11 (*Cyanosesia tonkinensis*); Kallies, 2007: 394 (*Cyanosesia tonkinensis*); Kallies et al., 2014: 587 (*Cyanosesia tonkinensis*); Gorbunov, Arita, 2016: 36 (*Cyanosesia tonkinensis*).

FLIGHT PERIOD. The holotype was collected on May 10. Other specimens were collected in early July and late September.

HOST PLANT. *Litsea umbellata* (Lauraceae).

DISTRIBUTION. Known from South China (Guangdong) and North Vietnam (Vinh Phu).

Cyanosesia treadawayi Kallies et Arita, 1998

“*Cyanosesia treadawayi* sp. nov.” — Kallies, Arita, 1998: 246, figs 1, 2, 19, 28. Type locality: “[Philippine]. I[slands], C[entral], Leyte, Mahaplang Hilusig, 700 m. Mt Balocauae, ...”. Holotype ♂ (SMFM)

LITERATURE. Kallies, Arita, 1998: 249 (*Cyanosesia treadawayi*); Arita, Gorbunov, 2002: 237 (*Cyanosesia treadawayi*); Kallies, 2003: 161 (*Cyanosesia treadawayi*); Kallies, Arita, 2004: 70 (*Cyanosesia treadawayi*); Pühringer, Kallies, 2004: 11 (*Cyanosesia treadawayi*); Gorbunov, Arita, 2016: 36 (*Cyanosesia treadawayi*).

FLIGHT PERIOD. The type series was collected in late June.

HOST PLANT. Unknown.

DISTRIBUTION. This species is known from the island of Leyte, the Philippines.

Cyanosesia tuzovi sp.n.

“*Cyanosesia tuzovi* sp.n.” — present publication, Figs 1–6. Type locality: Indonesia, North Maluku, Obi Id., 3 km SW Laiwui. Holotype ♂ (COGM).

FLIGHT PERIOD. The holotype was collected in late February.

HOST PLANT. Unknown.

DISTRIBUTION. Known from the type locality on the island of Obi, North Maluku, Indonesia.

Cyanosesia vietnamica O. Gorbunov et Arita, 1995

“*Cyanosesia vietnamica* sp. nov.” — Gorbunov, Arita, 1995: 79, figs 4, 18. Type locality: “Vietnam, Pahia (Arbe Signal), ...” [= North Vietnam:]. Holotype ♀ (MHNG).

LITERATURE. Gorbunov, Kallies, 1998: 457, 461, 464 (*Cyanosesia vietnamica*); Kallies, 2003: 161 (*Cyanosesia vietnamica*); Kallies, Arita, 2004: 70 (*Cyanosesia vietnamica*); Pühringer, Kallies, 2004: 11 (*Cyanosesia vietnamica*); Gorbunov, Arita, 2016: 36, 39 (*Cyanosesia vietnamica*).

FLIGHT PERIOD. The holotype was collected on May 23.

HOST PLANT. Unknown.

DISTRIBUTION. North Vietnam.

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