

Description of a new species of *Scotochroa* LeConte, 1874 (Coleoptera: Melandryidae) from Honshu, central Japan

Masahiro Saitō, Ondřej Konvička & Noboru Kanie

Descriptions of a new species of *Scotochroa* LeConte, 1874 (Coleoptera: Melandryidae) from Honshu, central Japan. – Acta Mus. Siles. Sci. Natur. 75: 49–55, 2026.

Abstract: *Scotochroa yamato* sp. nov. (Coleoptera: Melandryidae: Xylitini), is described and illustrated from Honshu Island in central Japan. This represents the first record of *Scotochroa* from Japan and the Palearctic Region. *Scotochroa yamato* sp. nov. morphologically resembles *Scotochroa atra* LeConte, 1874 and *Scotochroa basalis* LeConte, 1874, but differs from these two species in the shape of the mesoventral process, which does not reach the halflength of the mesocoxal cavities, whereas in the latter two species it extends to the posterior edge of the cavities. Adults of the new species appear for a short period from late April to mid-May. The main host plant for the larvae is identified *Brucea javanica* (L.) Merr., 1928 (Simaroubaceae), but it is likely that they also feed on dead branches of other broad-leaved trees. This represents the first documented bionomic association of *Scotochroa* with the wood of deciduous trees. Its habitat of the new species is lowland scrub and riparian forests, where it can be found on thin, tangled bushes by dead branches in dense shade.

Keywords: Taxonomy, new species, Coleoptera, Melandryidae, Xylitini, *Scotochroa*, Eastern Palearctic Region, Japan, Honshu Island.

Introduction

Scotochroa LeConte, 1874 (Coleoptera: Melandryidae: Xylitini) presently comprises three species, all from North America: *S. atra* LeConte, 1874, *S. basalis* LeConte, 1874, and *S. buprestoides* (Kirby, 1837). All these species are associated largely with coniferous wood (Nikitsky & Pollock 2010). In the past, *Dolotarsus lividus* (Sahlberg C. R., 1834) was placed in *Scotochroa*, but this Holarctic species has been subsequently transferred to *Dolotarsus* Jacquelin du Val, 1863 where its placement is generally accepted (see Nikitsky 2020). Herein, we describe a new species of *Scotochroa*. This represents the first record of this genus from Japan and the Palearctic Region.

Materials and methods

Morphological abbreviations used herein are as follows in dorsal view: L–body length from frons to elytral apices; W–body width across humeral region of elytra; FW–width across frons (minimum distance between eyes); ED–eye diameter; AnW–distance between antennal insertions; TW–temporal width; CL–clypeal length; CW–clypeal width; PL–pronotal length; PW–pronotal width; HW–maximum head width including eyes; EW–elytral width; EL–elytral length; MtiL–length of metathoracic tibia; Mta1stL–length of 1st metathoracic tarsomere; AL–aedeagal length; BpL–basal piece length; PmL–length of parameres; PmW–width of parameres. The average values of measurements are given in parenthesis after the range. Measurement method: stereo microscope with a micrometre (Wild Heerbrugg) was used, images of the plate were also taken with the same equipment and Olympus TG-5.

Exact label data are cited for each type specimen. Individual lines on labels are separated by a single slash, and individual labels are separated by a double slash. The holotype and paratypes are glued on cardboard plates. Type specimens of the new species are provided with additional red labels with the following printed text: “*Scotochroa yamato* sp. nov. / HOLOTYPE [or] PARATYPE, ♂ [or] ♀ / des. Masahiro SAITŌ, / Ondřej KONVIČKA / & Noboru KANIE, 2026 / クロヒラタサトナガクチキ”.

The entomological collection codes for each specimen depository are not-ed below and elsewhere in the text:

(CNC) – Canadian National Collection of Insects, Arachnids and Nematodes, Ottawa, Canada;

(DPC) – Collection of Darren A. Pollock, Eastern New Mexico University, Portales, New Mexico, USA;

(HKC) – Collection of Koji Hosokawa, Aichi Pref., Japan;

(HMC) – Collection of Hokkaido Museum, Sapporo, Japan;

(KAC) – Collection of Katsumi Akita, Mie Pref., Japan;

(KIC) – Collection of Kentarô Itô, Aichi Pref., Japan;

(KTC) – Collection of Kentarô Toyoshima, Gifu Pref., Japan;

(LBM) – Lake Biwa Museum, Japan;

(MSC) – Collection of Masahiro Saitô, Fukui Pref., Japan;

(NSMT) – National Museum of Nature and Science, Tsukuba, Japan;

(NKC) – Collection of Noboru Kanie, Aichi Pref., Japan;

(OKC) – Collection of Ondřej Konvička, Zlín, Czech Republic;

(WIRC) – Wisconsin Insect Research Collection, USA.

Systematics

Family Melandryidae Leach, 1815

Tribe **Xylitini** Thomson, C.G., 1864

Genus **Scotochroa** LeConte, 1874

[Japanese name: sato-nagakuchikimushi-zoku, サトナガクチキムシ属]

Type species. *Scotochroa atra* LeConte, 1874: 274.

Generic diagnosis: Apical maxillary palpomere short, approximately triangular. Antennomeres 5-10 short and triangular, subequal in length and maximum width. Pronotal disc flattened posterolaterally, slightly explanated basal area, distinctly punctulate, without depressions between medial area and lateral margins; lateral carinae present, not reach anterior margin; posterior margin distinctly bisinuate; lateral margins distinctly converging anteriorly. Elytra without striae. Tarsomeres cylindrical, not compressed laterally. Procoxal cavities opened interiorly and posteriorly. Metendosternite (Fig. 11) with D-shaped laminae at the base of arms. Aedeagus trident-shaped apically, parameres shorter than length of basal piece.

Differential diagnosis. *Scotochroa* is thought to be closely related to *Scotochroides* Mank, 1939. It can be distinguished from *Scotochroides* by the short and triangular antennomeres 5-10, subequal in length and maximum widths (the antennomeres 5-10 elongate, filiform to triangular, distinctly longer than their maximum width in *Scotochroides*) (Mank 1939).

Scotochroa atra LeConte, 1874

Scotochroa atra LeConte, 1874; type locality: White Mountains, New Hampshire in USA.

Specimens examined. 1♀, “CANADA Québec / Gaspé O. Co. Mont / Albert 1.VIII.1984 / Larochelle, Larivière” (CNC).

Scotochroa basalis LeConte, 1874

Scotochroa basalis LeConte, 1874; type locality: Oregon in USA.

Specimens examined. 1♀, “BRITISH COLOMBIA / Princeton / 16. August 1983 / Funnel trap” (WIRC, lost due to dermestid damage); 1 spec. “COLO. BoulderCo. / U. Colo. Mt. Res. / Sta. VIII-5-1973 / C. W. & L. B. O’Brien” (OKC); 1♀, “CANADA. B. C.: Spahats / Cr. P.P.; on stump; 20 / JUL 1990; 900b8D; / E. Fuller” (OKC) ; 1 spec. “Ghost Dam, Alta. / 4.VII.1963, / Lot 1 BP&JL Carr” (CNC); 1 spec. “Bear, Idaho / 30.VII.77 / Lot 4 BP&JL Carr” (CNC); 1 spec. “Bear, Idaho / 1.VIII.77 / Lot 1 BP&JL Carr” (CNC); 1 spec. “Tp. 6 Rge. 4 / W. 5 Mer. Alberta / 13.VII.1961, Lot 2 BP&JL Carr” (CNC).

Scotochroa buprestoides (Fabricius, 1793)

Elater buprestoides Fabricius, 1793.

Xylita buprestoides: Paykull, 1798; type locality: Canada.

Scotochroa buprestoides: Mank, 1939.

Specimens examined. 1 spec. “LUMEN // RIVIERA / TOURAINE QUÉ / 3.VII.1973 / R. Sexton Touraine. Que” (CNC); 8 spec. “CANADA: Québec / Terr. Nouveau-Québec / Chemin Selbaie / 20-27.VII.1997 / Piège-inteception / Échantillon P-1230 / Pessière niore / P. Paquin” (CNC).

***Scotochroa yamato* Saitô, Konvička & Kanie, sp. nov. (Figs. 1–10)**

[Japanese name: Kurohira-sato-nagakuchiki, クロヒラサトナガクチキ]

Type locality: Japan, Honshu Island, Aichi Prefecture, Toyota-shi, Nishihirose-machi, Kojoyokuzure.

Type material: Holotype (Fig. 1): ♂, “Kojoyokuzure / Nishihirose-machi / Toyota-shi / Aichi Pref., JPN / 3. V. 2023 / N. Kanie leg.” (NSMT). Paratypes: 1♂2♀♀, “Aichi-ken / Nagoya-shi / Chikusa-ku / Heiwa-kôen / 26. IV. 1988 / Noboru Kanie leg.” (KAC); 3♂♂, “Left bank, Riv. Kiso / Sobue / Aichi Pref., JPN / 15. IV. 1990 / N. Kanie leg.” (1♂, MSC; 2♂♂, NKC); 1♀, “Riv. Kiso / Sobue / Aichi Pref., JPN / 3. V. 1990 / N. Kanie leg.” (NKC); “平和公園 / 名古屋市千種区 / 2-V-1992 / leg. Noboru Kanie // Heiwa Park / Chikusa, Nagoya / Aichi Pref., JPN / 2. V. 1992 / N. Kanie leg.” (NKC); 1♀, “Park Heiwa / Nagoya / AICHI –p. / 30. IV. 1995 / N. Kanie leg.” (OKC); 1♂, “Aichi-ken / Nagoya-shi / Chikusa-ku / Heiwa-kôen / 2.V. 1992 / Noboru Kanie leg.” (KAC); 1♀, “矢作川 野見町 / 愛知県豊田市 / 20-IV-1997 / leg. 蟹江昇 // Riv. Yahagi / Nomi, Toyota / Aichi Pref., JPN / 20. IV. 1997 / N. Kanie leg.” (NSMT); 1♀, “荒井町平成記念橋 / 愛知県豊田市 / 25-IV-1999 / leg. Noboru Kanie // Heisei Memorial Bridge / Arai-chô, Toyota / Aichi Pref., JPN / 25. IV. 1999 / N. Kanie leg.” (NSMT); 1♂1♀, “岐阜県羽島郡 / 川島町 小網町 / 1999. 5.-3 / 豊島健太郎採集 // Koami, Kawashima / Hashima-gun / Gifu Pref., JPN / 3. V. 1999 / K. Toyoshima leg.” (1♂, WIRC; 1♀, KTC); 1♀, “千種区平和公園 / 愛知県名古屋市 / 5-V-1999 / leg. Noboru Kanie // Heiwa Park / Chigusa, Nagoya / Aichi Pref., JPN / 5. V. 1999 / N. Kanie leg.” (MSC); 1♂ & 1♀, “猪崎 / Fukuchiyama city / Kyoto Pref. JAPAN / 25. April. 2004 / Isamu Tanaka leg. // Izaki / Fukuchiyama / Kyoto Pref., JPN / 25. IV. 2004 / I. Tanaka leg.” (1♂, HMC; 1♀, WIRC); 1♀, “Mie-ken / Suzuka-shi / Kishioka-yama / 8. V. 2004 / Kenji Kannô leg.” (KAC); 1♂, “天竜区 二俣町 / Hamamatsu city / Shizuoka JAPAN / 4. May. 2019 / Toshihisa Tsuboi leg. // Futamata, Tenryu-ku / Hamamatsu / Shizuoka Pref., JPN / 4. V. 2019 / T. Tsuboi leg.” (OKC); 1♀, “高代寺 / Toyono Town / Osaka Pref., JAPAN / 6. May. 2004 / Isamu Tanaka leg. // Koudaiji / Toyono / Osaka Pref., JPN / 6. V. 2004 / I. Tanaka leg.” (HKC); 1♀, “木曾三川公園 / 愛知県稲沢市 / 18 - IV - 2020 / leg. Noboru Kanie // Kisosansen Park / Inazawa-shi / Aichi Pref., JPN / 18. IV. 2020 / N. Kanie leg.” (OKC); 1♀, “天竜区 二俣町大園 / Hamamatsu city / Shizuoka, JAPAN / 28. April. 2022 / Toshihisa Tsuboi leg. // Oosono, Futamata / Tenryu, Hamamatsu / Shizuoka Pref., JPN / 28. IV. 2022 / T. Tsuboi leg.” (HKC); 3♂♂6♀♀, “Mie-ken / Tsu-shi / Ichishi-chô / Ishibashi / 29. VI. 2024 (Host: *Castanea srenata*) / 20-22. IV. 2025 emerg. / Katsumi Akita leg.” (KAC); 1♂, “1-chôme / Sakamoto / Shiga Pref, JPN / 8. V. 2025 / S. Nakagawa leg.” (LBM); 1♀, “Itaka-chô / Meito-kan, nagoya / Aichi Pref., JPN / Kentarô Itô leg.” (KAC); 1♀, “near Toribuchi / Aida-chô, Aida-gun / Okayama Pref., JAPAN / May 19, 1996 / Ryôji TOYOSHIMA lgt. // *Phloeotrypa* sp. / from western parts of Japan. / Det. R. TOYOSHIMA, 1996 // *Scotochroa* * / Det.* sp(?) * / D. A. Pollock 1998” (DPC).

Description:

Male: Body (Fig. 1) elongate, subparallel-sided, L/W 3.5–3.9 (3.7, n = 6), moderately convex dorsally, dully shining with unobtrusive setation; legs and antennae sparsely covered with fine setation. Dorsal surface (Fig. 1) entirely black, with mouthparts yellowish-brown; legs brownish-black except tarsi brown; antennae brownish-black except basal three antennomeres dark yellowish-brown. Ventral surface entirely brownish-black, densely covered with fine yellowish-white setation. Body surface densely microsculptured among punctures.

Head trapezoidal in dorsal view, densely punctate. Vertex to occiput smooth. Frons with shallow round depressions, VW/ED about 2.6 (n = 1), AnW/VW about 0.9 (n = 1); frontoclypeal suture lacking. Clypeus rectangular, without punctures, anterior margin straight. Labrum rectangular in visible, anterior margin straight. Terminal maxillary palpomere (Fig. 5) ovate, parallel-sided, about 1.7 times as long as (n = 1) wide; aboral margin about as long as (n = 1) adoral margin; apical margin outwardly bowing. Eyes ovate, protruding. Antennae (Fig. 2) stout and short, filiform, not reaching hind angles of pronotum when directed posteriorly; terminal segment slightly oblong-oval shaped with rounded tip; 6th to 10th triangular; 3rd to 5th weakly serrate; relative lengths of each antennomere from base to apex (n = 1): 1.5, 0.8,

0.8, 1.0, 1.0, 1.0, 1.1, 1.2, 0.9, 0.9, 1.0; relative length to width of each antennomere from base to apex (n = 1): 1.8, 0.9, 0.9, 1.3, 1.3, 1.3, 1.5, 1.7, 1.4, 1.5, 1.5.

Pronotum trapezoidal in dorsal view, PL/PW 0.8–0.9 (0.9, n = 6), HW/PW 0.6–0.7 (0.7, n = 6), W/PW 1.0–1.0 (1.0, n = 6), widest before basal margin, distinctly and arcuately narrowing apically and strongly narrowing toward base; all outer edge narrowly bordered, except anterior margin and anterior angles obsolete; basal angles obtuse angulate; posterior margin straight to weakly bisinuate in whole with a pair of shallow depressions in the center; disc convex, densely punctate, punctures absent on narrow longitudinal central area, weakly flattened dorsally. Scutellum shield semi-elliptical, sparsely punctate.

Elytra elongate, with lateral margins subparallel, widest behind the middle, gradually and straightly narrowing from widest portion to apex; EL/EW 2.1–2.4 (2.2, n = 6); elytral base as wide as that of pronotum; humeri and apices narrowly rounded; disc densely punctate, slightly flattened dorsally.

Metathoracic wings (Fig. 4) macropterous, length about 2.6 times maximal width (n = 1), about 1.2 times as long as EL (n = 1); length from folding line (at the widest, contacting point of RP and r3 in Lawrence *et al.*, 2011) to apex about 27.0 % (n = 1) entire length, extent of apical field about 23.1 % (n = 1) entire extent. Wing veins other than RA1+2 and MP1+2 degenerate.

Ventral surface coarsely punctate. Metathoracic process (Fig. 9) not reach halflength of mesocoxal cavity. Abdominal ventrites 2–4 (Fig. 10) with a pair of shallow and wide square depressions, densely and finely granularly sculptured; 5th ventrite emarginate apically.

Legs slender, relatively short. Prothoracic tarsomeres (Fig. 7) 1–3 weakly expanded. Mta1stL/MtaL about 0.6 (n = 1), relative lengths of each metathoracic tarsomere from base to apex (n = 2): 1.9, 1.0, 0.4, 0.7.

Aedeagus (Fig. 4) elongate, apically trilobed; EL/AL about 3.6 (n = 1), AL/AW about 5.4 (n = 1). Basal piece elongate, parallel-sided in dorsal view; BpL/BpW about 5.0 (n = 1). Parameres oval, weakly narrowing from center to base and apex in dorsal view; PmL/PmW about 2.1 (n = 1); BpL / PmL about 2.6 (n = 1).

Female: Similar to male, distinguished in the following: 1) abdominal ventrite 2–4 without a pair of shallow and wide square depressions; 2) terminal maxillary palpomere (Fig. 6) nearly circular; 3) prothoracic tarsomere 1–4 (Fig. 8) not expanded, cylindrical. L/W 3.3–3.6 (3.5, n = 8); EL/EW 2.0–2.3 (2.1, n = 8); VW/ED about 2.7 (n = 1); AnW/VW about 0.9 (n = 1); HW/PW 0.6–0.7 (0.7, n = 8); W/PW 1.0–1.1 (1.1, n = 8). Relative lengths of each antennomere from base to apex (n = 1): 1.2, 1.0, 0.9, 1.2, 1.2, 1.0, 0.8, 0.8, 0.9, 0.8, 1.2; relative length to width of each antennomere (n = 1): 1.8, 1.5, 1.4, 1.8, 1.5, 1.2, 1.1, 1.0, 1.2, 1.0, 1.8. 5th sternite roundly and inwardly curved apically. Mta1stL/MtiL about 0.6 (n = 1), relative lengths of each metathoracic tarsomere from base to apex (n = 1): 2.2, 0.9, 0.4, 0.6.

Measurements (n = 6 ♂♂, 8 ♀♀ in mm). L: ♂ 3.1–6.1 (4.7), ♀ 3.9–6.1 (5.1); W: ♂ 1.0–1.6 (1.3), ♀ 1.1–1.9 (1.5).

Distribution: Aichi Prefecture, central Honshu, Japan.

Bionomics: Adults of this species appear for a short period from late April to mid-May. The main host plant for the larvae is identified *Brucea javanica* (Simaroubaceae), but it is likely that they also feed on dead branches of some other broad-leaved trees. Its habitat is lowland scrub and riparian forests, where it can be found on thin, tangled bushes by dead branches in dense shade.

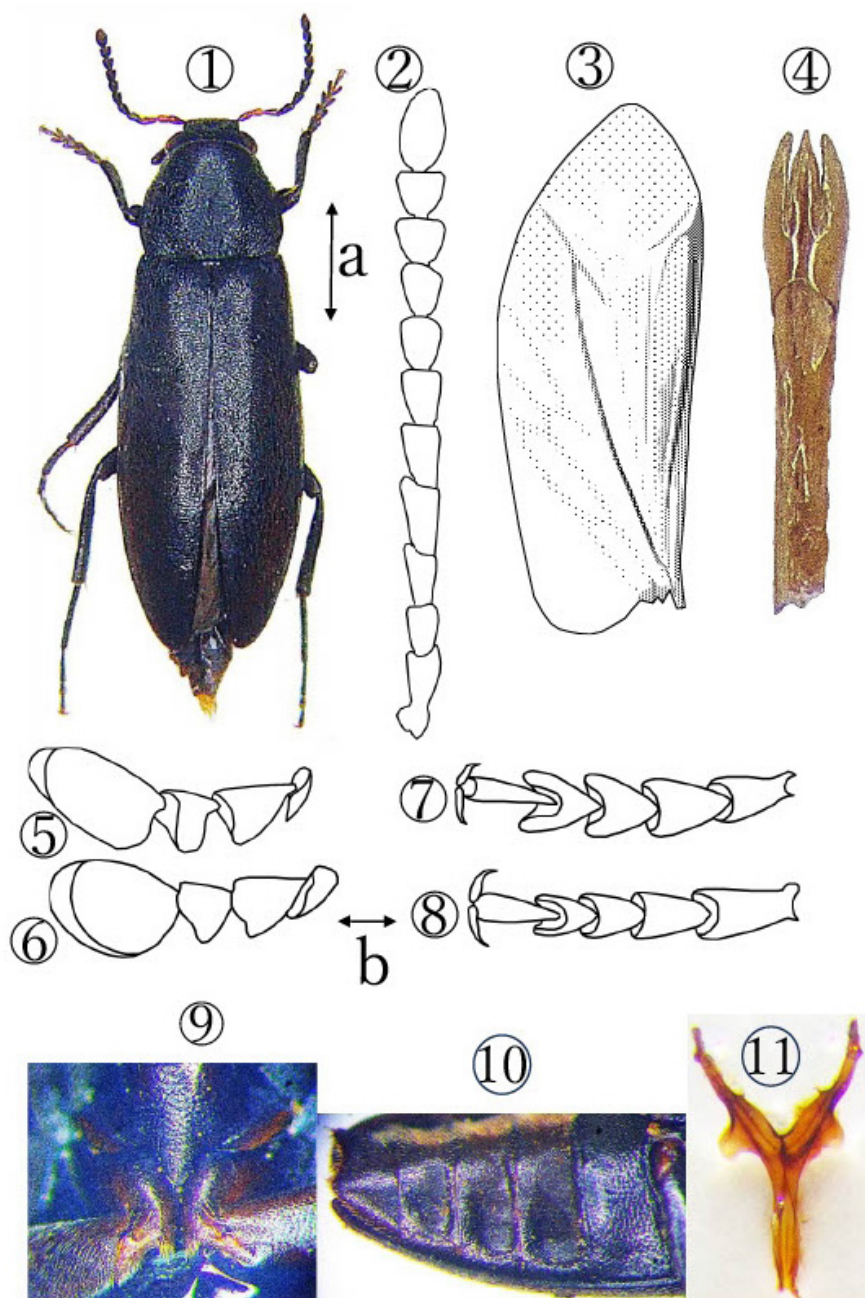
The collection data for *S. atra* and *S. basalis* indicate adults have been taken during summertime, suggesting an ecological difference from the new species, which disappears in summer. On the other hand, morphologically, it appears that new species short legs and possibly weak flight wings (regarding the ratio of the apical field involved in flight to the all area of the hindwing, in two species of Aderidae, which lives in an open environment and has high flying ability, the percentage exceeds 50%, while in one species of Melandryidae, which lives under tree bark and has few opportunities to fly, the percentage is 38%. In the case of the new species, the percentage is even lower at 23%) may make travelling for long difficult.

Differential diagnosis: *Scotochroa yamato* sp. nov. morphologically resembles *S. atra* and *S. basalis* but differs by the length of the mesoventral process (Fig. 9), which does not reach the half length of mesocoxal cavity, whereas in the latter two species it extends to reach the posterior edge of the cavity. On the other hand, the new species morphologically also resembles *S. buprestoides*, but differs from the latter by the punctuation on the basal half of the elytra being simply dense without being raised granules, whereas in the latter species it is “coarse with raised granules” (Mank 1939).

Etymology: The specific epithet *yamato* refers to an ancient Japanese name and commemorating the first record of this genus from Japan.

Notes: Mank (1939) provided a diagnostic key to the three hitherto known species, *S. atra*, *S. basalis* and *S. buprestoides*. When the distinguishing characters outlined in that key were applied to the subsequently described species *S. yamato* sp. nov., it became evident that these traits fall within the range of intraspecific variation observed in the new taxon. For example, the new species, the length ratio of the third to fourth antennal segments is such that the third segment can be shorter, longer, or same long as the fourth. It seems unlikely that very closely related species would have similar features stable. Mank examined only a few specimens, on the other hand, we examined a large number of specimens. As a matter of fact, we reexamined specimens of three known species and found that doubt to the characters used for identification. Likewise, *S. basalis* was described together with *S. atra*, and we could not separate by form and size, “but differs by the prothorax more distinctly bisinuate behind, the hind angles better defined, and by the antennae being testaceous at base, and at the extremity of the last joint” (LeConte 1874). The new species contain the same individual differences, so, we suggest that *S. basalis* appears be conspecific with *S. atra*. Consequently, a review of the American species included in this genus appears necessary.

Acknowledgements: We wish to express our thanks to Dr. Daniel K. Young (University of Wisconsin, Madison, U. S. A.) for the comments on the manuscript and English corrections, thanks are also due to Dr. Craig Brabant (University of Wisconsin, Madison, U. S. A.) for arranging for the loan of the specimen from WIRC. We are grateful to our colleagues Patrice Bouchard (Canadian National Collection of Insects, Arachnids and Nematodes, Ottawa, Canada), Darren A. Pollock (Eastern New Mexico University, Portales, U. S. A.), and Derrek Sikes (University of Alaska Fairbanks, Fairbanks, U. S. A.) for lending specimens for our study.



Figs 1–11: *Scotochroa yamato* sp. nov. 1, habitus (holotype), dorsal view; 2, outline of antenna, male; 3, metathoracic wings, male; 4, aedeagus, dorsal view, male; 5, 6, maxillary palpomere (5, male; 6, female); 7, 8, prothoracic tarsomeres (7, male; 8, female); 9, mesovenal process, male; 10, ventral abdomen, male; 11, metendosternite. Paratypes except 1, holotype. Scale bars: a, 1.0 mm for 1; b, 0.5 mm for 4–8.

References

- Fabricius J. C. (1793): *Entomologia systematica emendata et aucta. Secundum classes, ordines, genera, species adjectis synonymis, locis, observationibus, descriptionibus*. Tom. 1. [Appendix specierum nuper detectarum: pp. 435–462]. – Hafniae: C. G. Proft, 519 pp.
- Kirby W. (1837): The insects. Pp. xxxix + 325 + [2], 8 pls. In: Richardson J. (ed.): *Fauna Boreali-Americana; or the zoology of the northern parts of British America: containing descriptions of the objects of natural history collected on the late northern land expedition, under the command of Captain Sir John Franklin, R.N. Part the fourth and last*. – Norwich: Josian Fletcher.
- LeConte J. L. (1874): Catalogue of the Coleoptera of Mt. Washington, N. H. by E. P. Austin; with descriptions of new species. Pp. 265–276. In: Austin E. P. (ed.): *Proceedings of the Boston Society of Natural History* 16: 384 pp.
- Mank E. W. (1939): *Scotochroa* and a closely allied new genus *Scotochroides* (Coleoptera: Melandryidae). – The Canadian Entomologist 71: 181–183.
- Nikitsky N. B. (2020): Melandryidae Leach, 1815. Pp. 47–59. In: Iwan D. & Löbl I. (eds): *Catalogue of Palaearctic Coleoptera*. Volume 5. Tenebrionoidea. Revised and updated edition. – Brill, Leiden/Boston, i–xxiii + 945 pp.
- Nikitsky N. B. & Pollock D. A. (2010): Melandryidae Leach, 1815. Pp. 520–533. In: Leschen R. A. B., Beutel R. G. & Lawrence J. F. (eds): *Handbook of Zoology. Arthropoda: Insecta. Coleoptera, Beetles. Morphology and systematics*. Vol. 2. Elateroidea, Bostrichiformia, Cucujoidea partim. – Walter de Gruyter, Berlin/New York.
- Nikitsky N. B. & Saitô M. (2014): Description of a new species of the genus *Zilora* (Coleoptera: Melandryidae) from Central Honshu, Japan, with a provisional key to species of the world. – *Elytra*, New Series 4: 205–211.
- Paykull G. von (1798): *Fauna Suecica. Insecta*. 1. Edman J. F. (ed.). – Uppsala, 8 + 358 + 2 pp.
- Saitô M. & Young D. K. (2015b): Descriptions of a new species of *Ariotus* (Coleoptera: Aderidae) and a new genus and species of Aderidae from Honshu, Central Japan, with a key to the genera of Japanese Aderidae. – *Elytra*, New Series 5: 453–462.
- Sahlberg C. R. (1834): Pars XXIX. Pp. 441–456. In: *Insecta Fennica enumerans, dissertationibus academicis A. 1817–1834 editis*. Tomus 1. – Aboae: J. C. Frenckel, viii + 520 pp.
- Thomson C. G. (1864): *Skandinaviens Coleoptera, synoptiskt bearbetade*. Tom. 6. – Lund: Lundbergska Boktryckeriet, 385 pp.

Author's addresses: Masahiro Saitô, 4–3–23–115 Mikuni-higashi, Mikuni-chô, Sakai-shi, Fukui Pref., 913–0016 Japan. (斎藤昌弘, 福井県坂井市三国町三国東4丁目3–23–115),
E-mail: heteromerasaito@fork.ocn.ne.jp, orcid iD: 0009-0002-6755-967X.

Ondřej Konvička, Zálešná 1 7313, CZ-760 01 Zlín, Czech Republic.
E-mail: brouk.vsetin@centrum.cz, orcid iD: 0000-0002-4300-1869.

Noboru Kanie, 117 Nishibora-chô, Seto-shi, Aichi Pref., 489–0837 Japan.
(蟹江昇, 愛知県瀬戸市西洞町117)