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M o n o g r a p h

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Fabrician types of new world *Oedionychina* Chapuis, 1875 (Coleoptera, Chrysomelidae, Alticini) deposited in the Zoological Museum of Kiel University collections with notes on Fabrician types of other collections and new combinations for species formerly placed in the subtribe

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Abstract. Type specimens of *Oedionychina* Chapuis, 1875 described by Fabricius from the Kiel collection are examined and illustrated. Lectotypes are designated for the following species: *Chrysomela albicollis* Fabricius, 1787; *Chrysomela nobilitata* Fabricius, 1787; *Chrysomela quadrifasciata* Fabricius, 1787; *Chrysomela quadriguttata* Fabricius, 1781; *Galleruca atomaria* Fabricius, 1801; *Galleruca decemguttata* Fabricius, 1801; *Galleruca fasciata* Fabricius, 1798; *Galleruca humeralis* Fabricius, 1801; *Galleruca lunata* Fabricius, 1801; *Galleruca nitida* Fabricius, 1801; *Galleruca obsoleta* Fabricius, 1801; *Galleruca petaurista* Fabricius, 1801; *Galleruca quadrinotata* Fabricius, 1798; *Galleruca sellata* Fabricius, 1801. The species status is restored for *Chrysomela quadriguttata* Fabricius, 1781 and *Alagoasa areata* (Germar, 1824) comb. nov. The following new combinations are proposed: *Phenrica quadriguttata* (Fabricius, 1781), *Asphaera nitida* (Fabricius, 1801), *Phenrica obsoleta* (Fabricius, 1801), *Alagoasa areata areata* (Germar, 1824), *Alagoasa areata decempunctata* (Latreille, 1833), *Alagoasa areata escuintla* Bechyné, 1955, *Alagoasa areata macromela* Bechyné, 1958, *Alagoasa areata praecessa* Bechyné, 1959, *Alagoasa areata recuperata* Bechyné, 1959; all comb. nov. New placement: *Galleruca avicenniae* Fabricius, 1792 is removed from Alticini and placed in Galerucini incertae sedis;

Galleruca trifasciata Fabricius, 1801 is removed from Chrysomelidae and placed in genus *Ora* Clark, 1865 (Scirtidae Fleming, 1821).

Keywords. Type specimens, lectotype designation, nomenclature, new combinations, new status.

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Introduction

Johann Christian Fabricius (1745–1808) was among the earliest authors who described species of Chrysomelidae Latreille, 1802. He described 97 species of flea beetles (Alticini Newman, 1834), 30 of them are placed in Oedionychina Chapuis, 1875. Fabricius' collections received significant attention and are described in detail (Staig 1940; Zimsen 1964). Fabrician types of Cassidinae Linnaeus, 1758 (Chrysomelidae) preserved at the Natural History Museum, London, were reviewed by Sekerka & Barclay (2014). In the beetle family Scirtidae Fleming, 1821, Fabrician types were examined by Ruta (2013).

A substantial portion of the Fabricius collection, in particular Coleoptera Linnaeus, 1758, are at present housed in the Zoological Museum of Kiel University, Germany. Johann Christian Fabricius founded the museum in 1775 and until his death in 1808, he was professor in Natural History, Economy and Finance at Kiel University that in those days belonged to Denmark. Fabricius can be regarded as the founder of modern entomology and one of his students later called him the “Linnaeus of insects” (Tuxen 1967). Throughout his career he described 9776 new species from all over the world, the majority of them (4112 taxa) beetles (Zimsen 1964), with syntypes of 3070 species of Coleoptera now in Kiel.

Fabricius travelled a lot and had an extensive network of collaborators that enabled him to study fresh specimens of insects gathered by famous expeditions and to describe them as part of the collections of his contemporaries. Well-known examples are Sir Joseph Banks (naturalist of Captain James Cook's first great voyage to the South Pacific, Australia and New Zealand; insects housed in the Natural History Museum, London) and Dr William Hunter (now in the Hunterian Zoology Museum, Glasgow). Fabricius was often allowed to keep specimens for his personal collection, so syntype series can be divided between institutions posing a challenge for taxonomic research today as they are distributed in several museum collections (for details see Zimsen 1964).

Separated series are particularly common between Fabricius' personal collection (called “Kiel collection”) and the Sehested and Tonder Lund collection (named “Copenhagen collection”) that both include by far the greatest number of Fabrician types. Both Niels Tønder Lund and Ove Sehested attended lectures by Fabricius for two years and later held posts in administration in Copenhagen that enabled them to make contact with collectors in Danish colonies (e.g., in West Africa, India, Caribbean). They obtained large collections of exotic specimens from these areas but were also keen collectors of Danish insects that were all studied by Fabricius (Zimsen 1964).

Arranged by Dr S.L. Tuxen, in 1958 Fabricius' personal collection was given on loan to the Zoological Museum in Copenhagen where both the “Kiel collection” and the “Copenhagen collection” were recurated and catalogued, resulting in the magnificent benchmark publication of Zimsen (1964) that is indispensable for everyone working with Fabricius' material. Prior to the return of the Fabricius collection to Kiel in 2017, it was agreed that scientific usage and accessibility of both collections should be optimised for the future by permanently uniting taxa of both collections in one place to avoid divided series of syntypes. Thus, the beetle specimens from the “Kiel collection” were transferred to Kiel,

together with the beetle specimens from the “Copenhagen collection” while all other insects remained in Copenhagen. As a result, roughly about a third of Fabricius’ type material (Coleoptera) is now deposited in Kiel, another third (non-Coleoptera) stays in Copenhagen and the last third is dispersed over various museum collections, mainly in London, Paris and Glasgow (Zimšen 1964).

Among his Chrysomelidae, Fabricius described 28 species that have nowadays been placed in the subtribe Oedionychina (Galerucinae Latreille, 1802: Alticini). This diverse group with over 900 species (Konstantinov *et al.* 2022) is characterized by confuse elytral punctuation and a globosely swollen (or minimally thickened) apical metatarsus, and is being revised by the authors. An ability to correctly interpret and apply Fabricius’ names is a paramount for any revisionary study of leaf beetles. In this paper, we treat 21 names of Fabricius applied to Oedionychina, designate lectotypes, establish new combinations and provide pictures of the types.

Material and methods

We follow the format of Sekerka & Barclay (2014) for reporting Fabrician types. The paragraphs are organized as follows: scientific name, plate number, taxonomic bibliography, material examined (labels cited verbatim), specimens misplaced (if applicable), status in Zimšen (1964), original description, current status, measurements and remarks. The following abbreviations are used to report species measurements: LB = total length of body; WB = maximal width of body. Measurements are in millimetres (mm). Where position or state of the specimen prevented accurate measurement of WB (e.g., when one elytron is missing), WB was calculated as twice the maximal width of one elytron.

Images were taken with a digital microscope (Keyence VHX-5000) using the VH-Z20R/Z20T (20× to 200×) zoom lens and the OP-42305 super diffused illumination adapter. Images were stacked for extended depth-of-field and processed using Adobe Photoshop Elements 2021 (Adobe Systems Software Ireland Limited, Republic of Ireland).

Any taxonomic changes are in accordance with the International Code of Zoological Nomenclature (ICZN 1999).

Results

List of types from the Kiel collections

Class Insecta Linnaeus, 1758
Order Coleoptera Linnaeus, 1758
Suborder Polyphaga Emery, 1886
Superfamily Chrysomeloidea Latreille, 1802
Family Chrysomelidae Latreille, 1802
Subfamily Galerucinae Latreille, 1802
Tribe Alticini Newman, 1834
Subtribe Oedionychina Chapuis, 1875

Chrysomela albicollis Fabricius, 1787
Figs 1–2

albicollis Fabricius, 1787: 76 (Cajennae).

Material examined

Lectotype (previously designated)
COUNTRY NOT INDICATED ON SPECIMEN • ♂; “*albicollis*/ TYPE/ Lectotype *Chrysomela albicollis* Fabricius 1787 des. A. Konstantinov 2017”; Kiel.

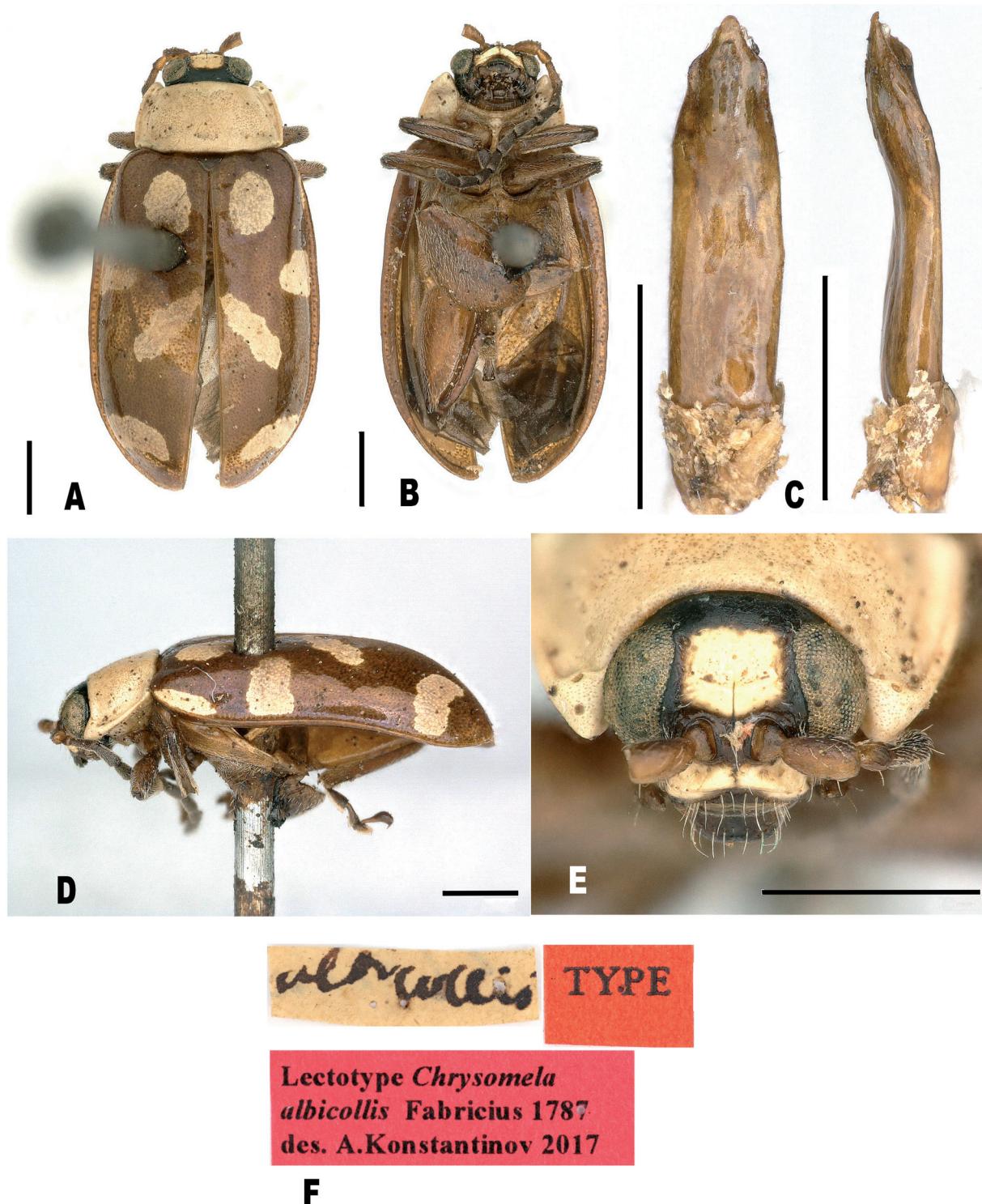


Fig. 1. *Chrysomela albicollis* Fabricius, 1787, lectotype, ♂ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Aedeagus. **D.** Lateral view. **E.** Frontal view. **F.** Labels. Scale bars = 1 mm.

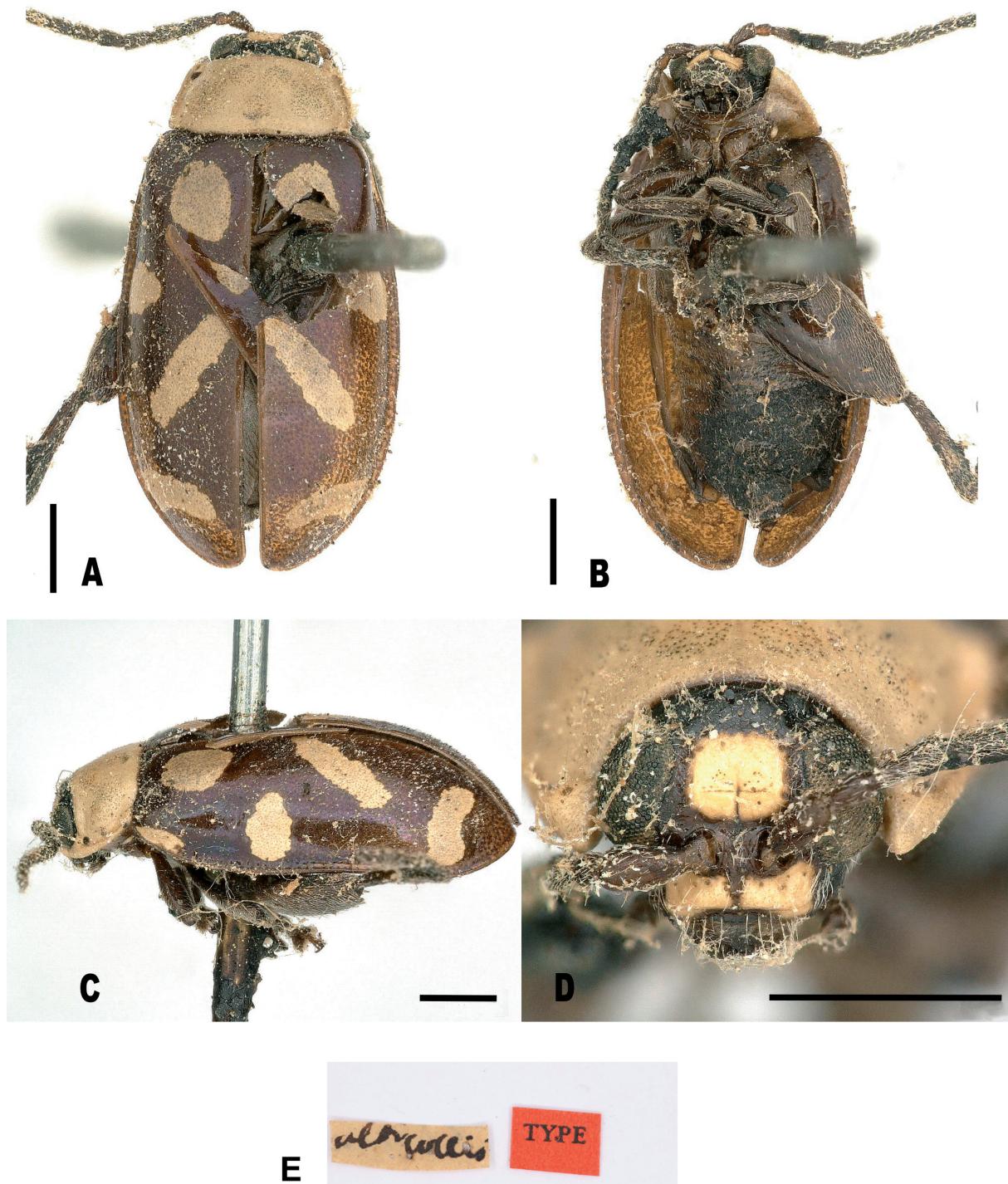


Fig. 2. *Chrysomela albicollis* Fabricius, 1787, paralectotype, sex unknown (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

Paralectotype

COUNTRY NOT INDICATED ON SPECIMEN • 1 spec.; “*albicollis*/ TYPE”; Kiel.

Status in Zimsen (1964)

P. 111 No.1720. “Cajennae Dom. V. Rohr” Kiel 2 specimens.

Original description

“C. saltatoria nigra thorace albo, elytris obscure violaceis: punctis quator albis; interior linearis. Habitat Cajennae Dom. V. Rohr. Media. Caput nigrum macula magna frontali alba. Thorax glaber, albus, nitidus, immaculatus. Elytra obscure violacea, nitida punctis quator, interiori ad suturam linearis obliquo.”

Current status

Omophoita albicollis (Fabricius, 1787).

Measurements

Lectotype (Fig. 1): LB = 5.91 mm; WB = 3.12 mm. Paralectotype (Fig. 2): LB = 6.21 mm; WB = 3.27 mm.

Remarks

The lectotype of this species had already been designated by Konstantinov *et al.* (2022). Presently, we confirm that the second specimen in Kiel is conspecific with the lectotype and treat it as a paralectotype. Its sex cannot be established as the wings cover the apical ventrite and the front tarsi are poorly visible. We confirm the correct placement in the genus *Omophoita* Chevrolat, 1836 based on the following characters: pronotal lateral explanation narrow, anterolateral corner of pronotum with lateral side straight, projecting directly forward, thickened. Intercoxal prosternal process narrow (see also Konstantinov *et al.* 2022).

Chrysomela nobilitata Fabricius, 1787

Figs 3–5

nobilis Fabricius, 1787: 76 (Cajennae).

Material examined

Lectotype (presently designated)

COUNTRY NOT INDICATED ON SPECIMEN • ♂; “*nobilis*/ TYPE/ Lectotype *Chrysomela nobilitata* Fabricius 1787 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; Kiel.

Paralectotype

COUNTRY NOT INDICATED ON SPECIMEN • 1 ♀; “*nobilis*/ TYPE/ Paralectotype *Chrysomela nobilitata* Fabricius 1787 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; Kiel.

Status in Zimsen (1964)

P. 111 No.1713. “Cajennae Dom. V. Rohr” Kiel 2 specimens.

Original description

“C. saltatoria ferruginae, elytrorum margine falsaque albis. Habitat Cajennae Dom. V. Rohr. Magna. Caput ferrugineum oculis atris. Thorax ferrugineus limbo omni albo. Elytra glabra nitida, ferruginea omni fasciaque media lata albis.”

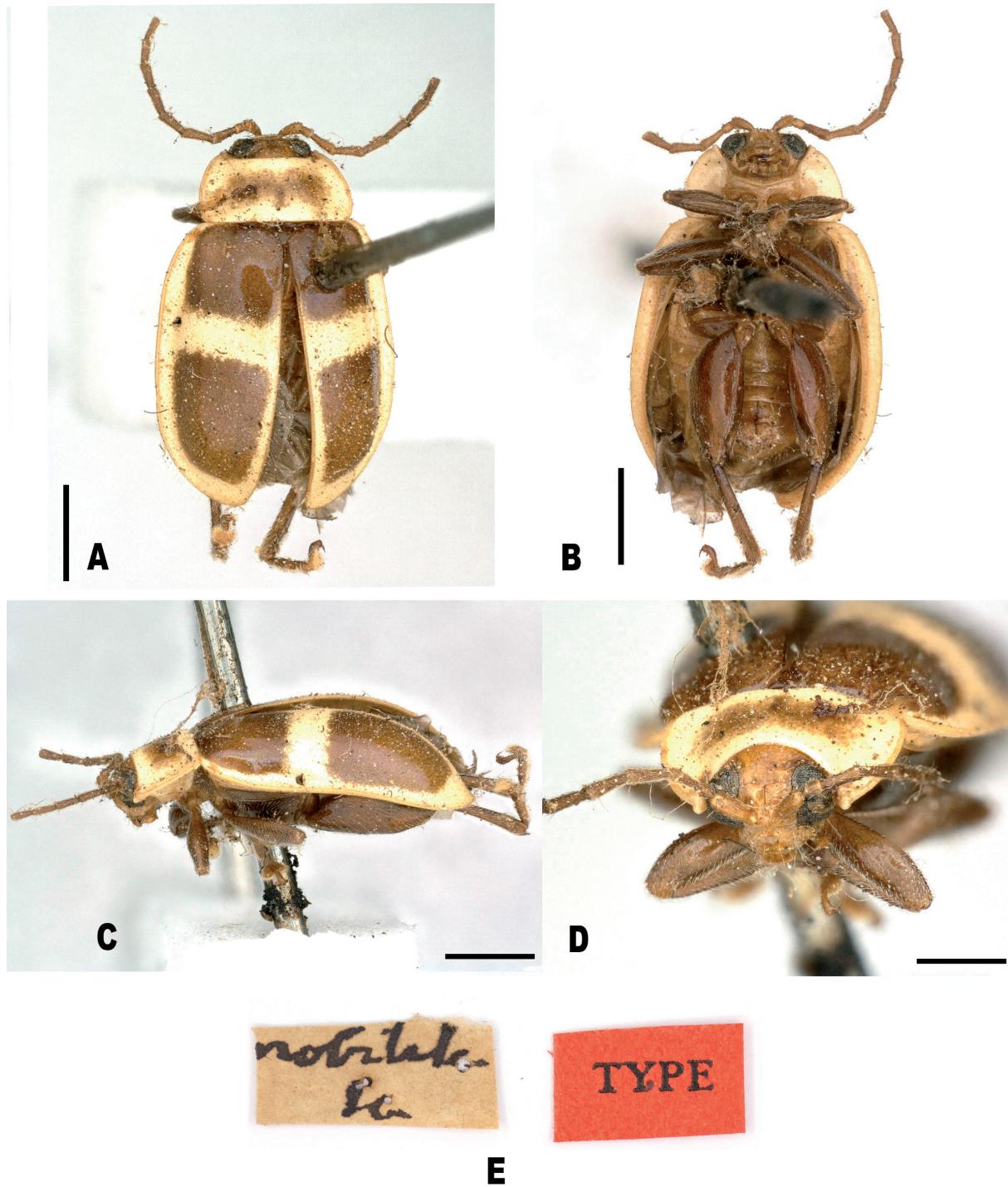


Fig. 3. *Chrysomela nobilitata* Fabricius, 1787, lectotype, ♂ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels of lectotype and paralectotype. Scale bars = 1 mm.

Current status

Asphaera nobilitata (Fabricius, 1787).

Measurements

Lectotype (Fig. 3): LB = 4.39 mm; WB = 2.72 mm. Paralectotype (Fig. 4): LB = 4.15 mm; WB = 2.29 mm.

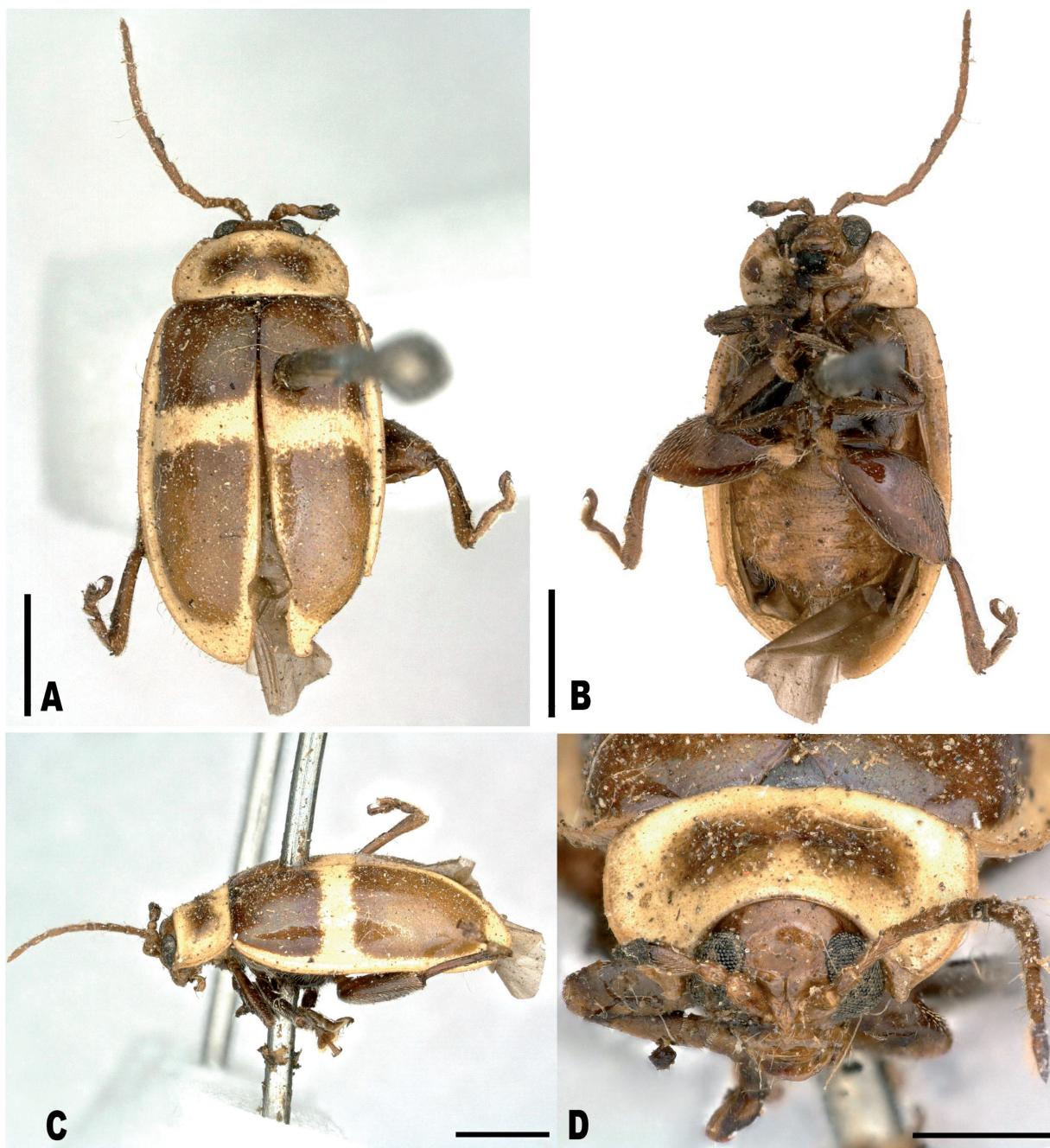


Fig. 4. *Chrysomela nobilitata* Fabricius, 1787, paralectotype, ♀ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. Scale bars = 1 mm.

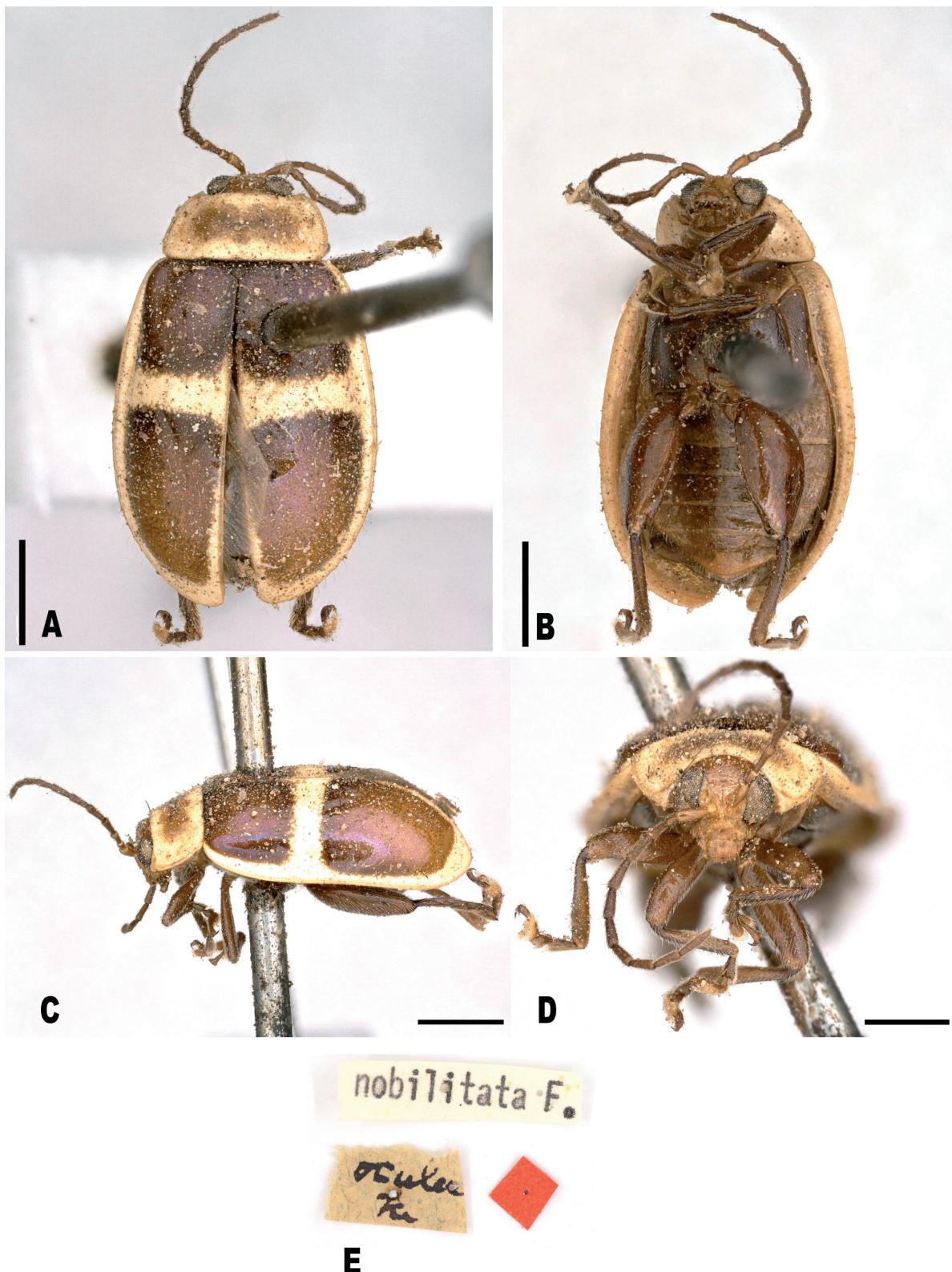


Fig. 5. *Chrysomela nobilitata* Fabricius, 1787, misplaced specimen, ♀ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

Remarks

The lectotype for *Chrysomela nobilitata* is designated here to have a unique bearer of this name and the standard for its application. The male specimen was chosen as lectotype because the aedeagus is usually better documented and most informative for species identification in Oedionychina (Van Roie unpubl. data). The right antenna of the lectotype is missing segments 6–11, the left antenna is missing segments 10–11. We confirm the correct placement in the genus *Asphaera* Duponchel & Chevrolat in d'Orbigny, 1842 based on the following characters: distance between antennal sockets less than or equal to transverse diameter of antennal socket in frontal view, second antennomere about half as long as third antennomere, anterolateral callosity of pronotum long and directed anteriorly. Lateral margin of elytron widely explanate (see also Konstantinov *et al.* 2022). One specimen, likely conspecific with *Chrysomela nobilitata*, was misplaced in the type series of *Galleruca oculata* Fabricius, 1801 (see below, Fig. 5). We are not sure if it is part of the type series, so we do not consider it a paralectotype, we do illustrate it and keep it with the rest of the species.

Chrysomela quadrifasciata Fabricius, 1787

Fig. 6

quadrifasciata Fabricius, 1787: 76 (Cajennae).

Material examined

Lectotype (presently designated)

COUNTRY NOT INDICATED ON SPECIMEN • ♀; “4 fasciata/ TYPE/ Lectotype *Chrysomela quadrifasciata* Fabricius 1787 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; Kiel.

Status in Zimšen (1964)

P. 111 No.1714. “Cajennae Dom. V. Rohr” Kiel 1 specimen.

Original description

“C. saltatoria ferruginea, elytris strigis quator albis. Habitat Cajennae Dom. V. Rohr. Magna. Caput ferrugineum puncto verticali antennisque nigris. Thorax ferrugineus albo obsolete varius. Elytra glabra, nitida, ferruginea strigis quatuor albis, quarum prima in ipsa basi, quarta undata. Corpus magis obscurum.”

Current status

Asphaera quadrifasciata (Fabricius, 1787).

Measurements

Lectotype (Fig. 6): LB = 5.20 mm; WB = 3.21 mm.

Remarks

The lectotype for *Chrysomela quadrifasciata* is designated here to have a unique bearer of this name and the standard for its application. The lectotype is missing all right legs, and the right antenna is missing segments 6–11. We confirm the correct placement in the genus *Asphaera* based on the following characters: distance between antennal sockets less than or equal to transverse diameter of antennal socket in frontal view, second antennomere about half as long as third antennomere, anterolateral callosity of pronotum long and directed anteriorly. Lateral margin of elytron widely explanate (see also Konstantinov *et al.* 2022).

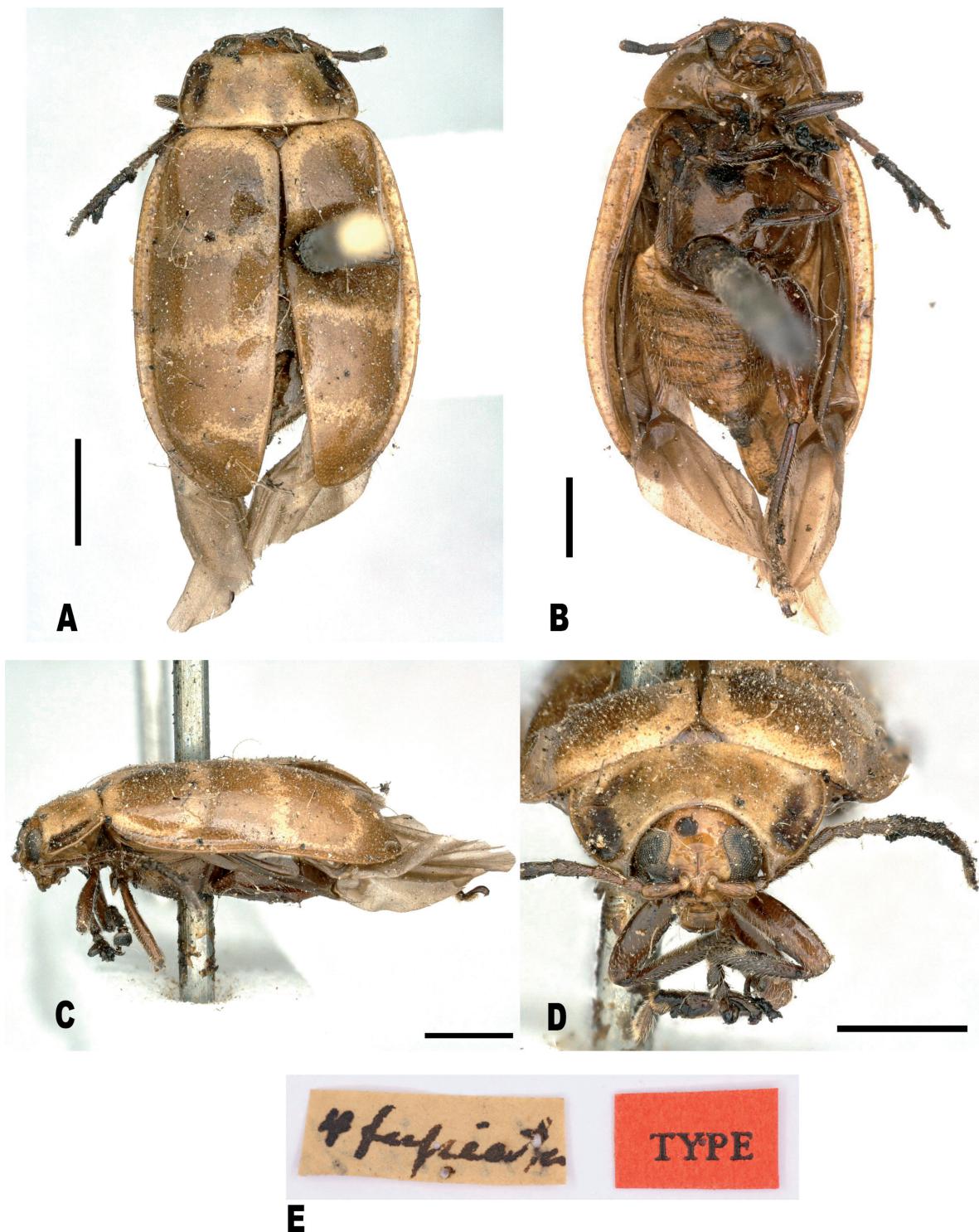


Fig. 6. *Chrysomela quadrifasciata* Fabricius, 1787, lectotype, ♀ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels of lectotype. Scale bars = 1 mm.

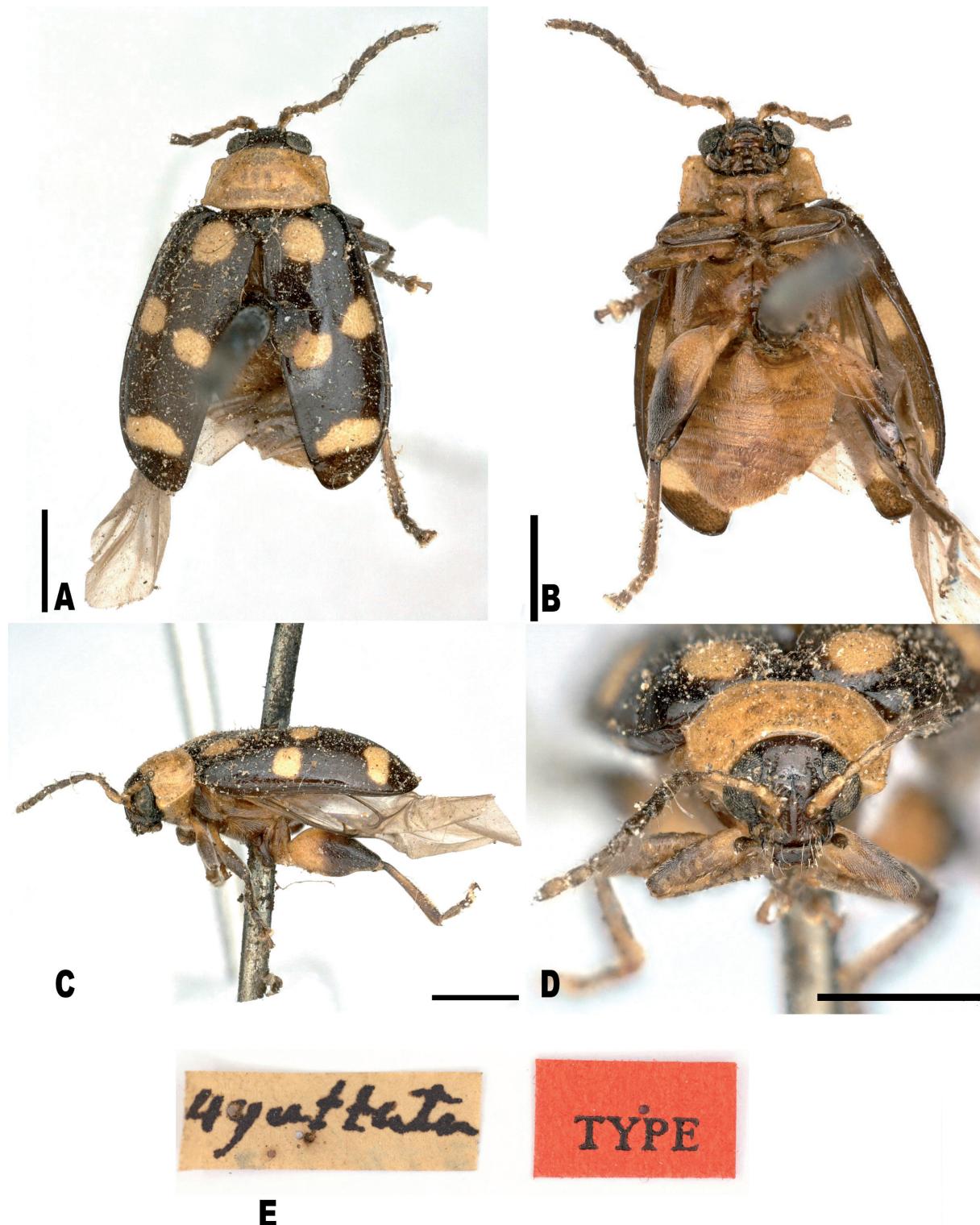


Fig. 7. *Chrysomela quadriguttata* Fabricius, 1781. lectotype, ♂ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels of lectotype and paralectotype. Scale bars = 1 mm.

Chrysomela quadriguttata Fabricius, 1781
Figs 7–8

quadriguttata Fabricius, 1781: 132 (Cajennae).

Material examined

Lectotype (presently designated)

COUNTRY NOT INDICATED ON SPECIMEN • ♂; “*4 guttata*/ TYPE/ Lectotype *Chrysomela quadriguttata* Fabricius 1781 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; Kiel.

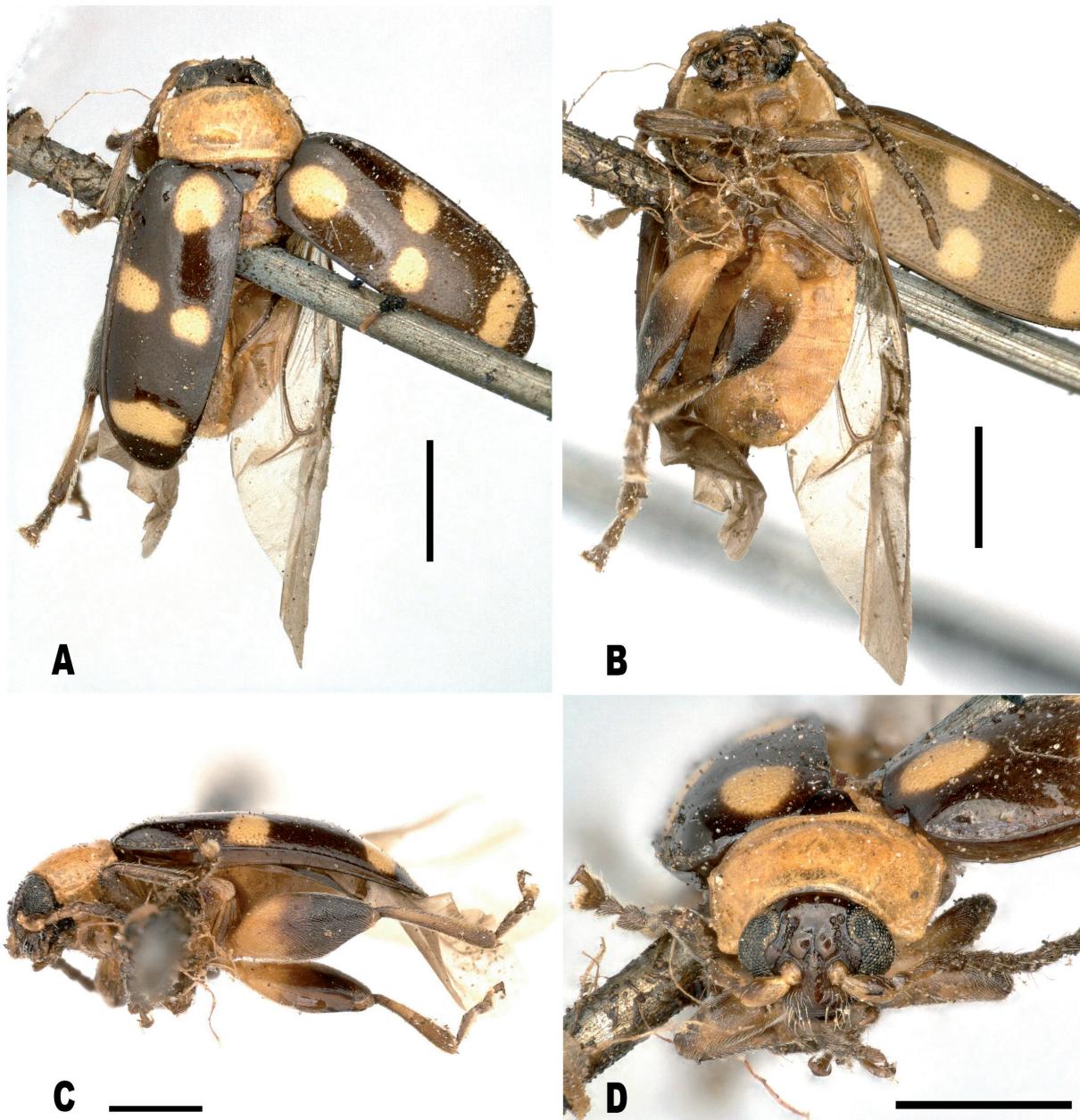


Fig. 8. *Chrysomela quadriguttata* Fabricius, 1781. paralectotype, ♀ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. Scale bars = 1 mm.

Paralectotype

COUNTRY NOT INDICATED ON SPECIMEN • 1 ♀; “*4 guttata*/ TYPE/ Lectotype *Chrysomela quadriguttata* Fabricius 1781 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; Kiel.

Status in Zimsen (1964)

P. 112 No.1742. “Cajennae D. Schulz” Kiel 2 specimens.

Original description

“*C. saltatoria ferruginea*, thorace elytrorumque punctis quator albis. Habitat Cajennae. D. Schulz. Nimis affinis videtur *C. 2guttatae*, at puncta elytrorum quator magna distincta. Pedes femoribus posticis incrassatis.”

Current status

Phenrica quadriguttata (Fabricius, 1781) stat. rest., comb. nov.

Measurements

Lectotype (Fig. 7): LB = 4.23 mm; WB = 2.10 mm. Paralectotype (Fig. 8): LB = 4.02; WB = 2.35 (specimen difficult to measure due to body pose on insect pin, see Fig. 8).

Remarks

The lectotype for *Chrysomela quadriguttata* is designated here to have a unique bearer of this name and the standard for its application. The left antenna of the lectotype is missing segments 6–11. This species had been synonymized with *Omophoita aequinoctialis* (Linnaeus, 1758) by Harold 1877: 140. *Chrysomela quadriguttata* indeed shares some resemblance with *O. aequinoctialis*, but clearly does not belong in Oedionychina. Based on the following characters it belongs to Disonychina LeConte & Horn, 1883: frontal ridge long, about twice as long as clypeus; pronotum quadrate, anterolateral callosity of pronotum strongly rounded, apical metatarsomere not globosely swollen. Within Disonychina, it belongs to *Phenrica* Bechyné, 1957.

***Galleruca abbreviata* Fabricius, 1798**

Fig. 9

abbreviata Fabricius, 1798: 97 (Cajennae).

Material examined

Types probably lost.

Specimen probably misplaced

COUNTRY NOT INDICATED ON SPECIMEN • 1 ♀; “*abbreviata*/ TYPE”; Kiel.

Status in Zimsen (1964)

P. 111 No.1716. “Cajennae D. Richard” Kiel 1 specimen.

Original description

“*G. saltatoria nigra* thorace elytrorumque fasciis duabus albis. Habitat Cajennae Dom. Richard. Magna in hac familia. Caput nigrum fronte late alba. Thorax albus, nitens, immaculatus. Elytra violacea, nitida fasciis duabus latis albis, quae tamen nec marginem nec futuram attingunt. Corpus nigrum abdomini pallidiore. Pedes nigri.”

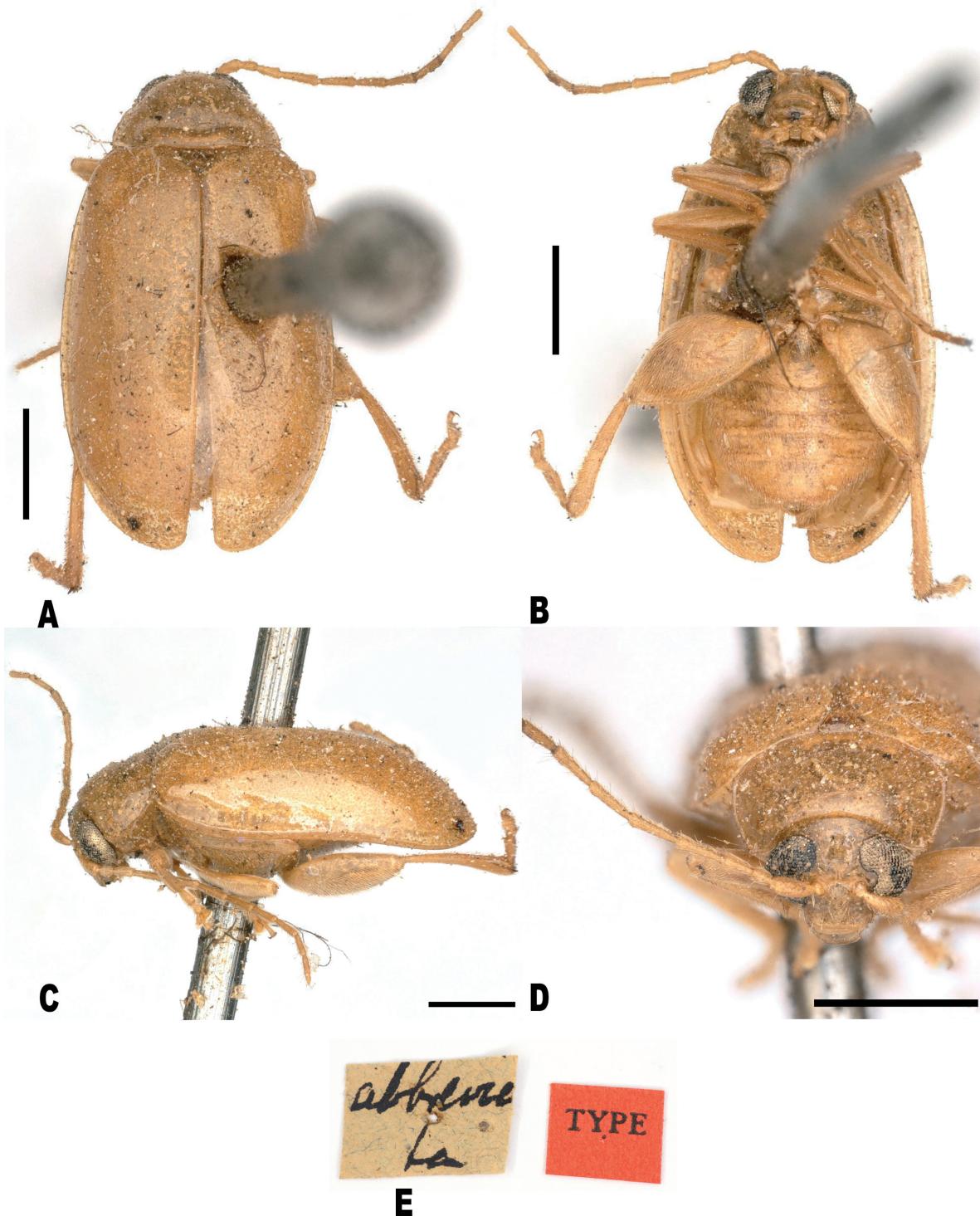


Fig. 9. *Galleruca abbreviata* Fabricius, 1798, misplaced specimen, ♀ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

Current status

Asphaera abbreviata (Fabricius, 1781).

Measurements

Misplaced specimen (Fig. 9): LB = 5.05 mm; WB = 2.80 mm.

Remarks

The specimen in Kiel with label *abbreviata* belongs to *Monomacra* Chevrolat, 1836, but it does not conform with the original description of *Galleruca abbreviata*. It is an alticine but obviously does not belong in Oedionychina. Olivier (1808) redescribed and figured this species. Both description and illustration are not similar to the specimen in Kiel. Thus, we suspect that the original type specimen of *Galleruca abbreviata* is currently lost, and potentially destroyed. Due to the type not conforming with the descriptions of Fabricius and Olivier, we did not designate a lectotype for this species. We do illustrate it (Fig. 9).

***Galleruca atomaria* Fabricius, 1801**

Fig. 10

atomaria Fabricius, 1801: 490 (Carolina).

Material examined

Lectotype (presently designated)

COUNTRY NOT INDICATED ON SPECIMEN • ♂; “*atomaria*/ Lectotype *Galleruca atomaria* Fabricius 1801 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; Kiel.

Status in Zimsen (1964)

P. 110 No.1702. ‘in Carolina Mus. D. Bosc’ Kiel 1 specimen.

Original description

“G. pallida, elytrorum sutura, atomisque ferrugineis. Habitat in Carolina. Mus. D. Bosc. Statura parva G. tenellae. Antennae ferrugineae. Caput ferrugineum, vertice nigro. Thorax marginatus, pallidus, immaculatus. Elytra laevia, pallida, sutura, quae tamen apicem [haue] attingit, puncto maiori distincto in medio atomisque ferrugineis. Corpus pallidum.”

Current status

Synonym of *Capraita suturalis* (Fabricius, 1801).

Measurements

Lectotype (Fig. 10): LB = 3.03 mm; WB = 1.56 mm (specimen difficult to measure due to body pose on insect pin, see Fig. 10).

Remarks

The lectotype for *Galleruca atomaria* is designated here to have a unique bearer of this name and the standard for its application. Although the syntype of *Galleruca suturalis* should be housed at Paris, our current understanding of the identity of the latter species does imply a correct status of *Galleruca atomaria* as synonym. We confirm the correct placement in the genus *Capraita* Bechyné, 1957 based on the following characters: sides of pronotum widely explanate, with anterolateral callosity of pronotum hook-like, directed anterolaterally; vertex with many punctures; metafemora triangular, apical metatarsus strongly globosely swollen (see also Konstantinov *et al.* 2022).

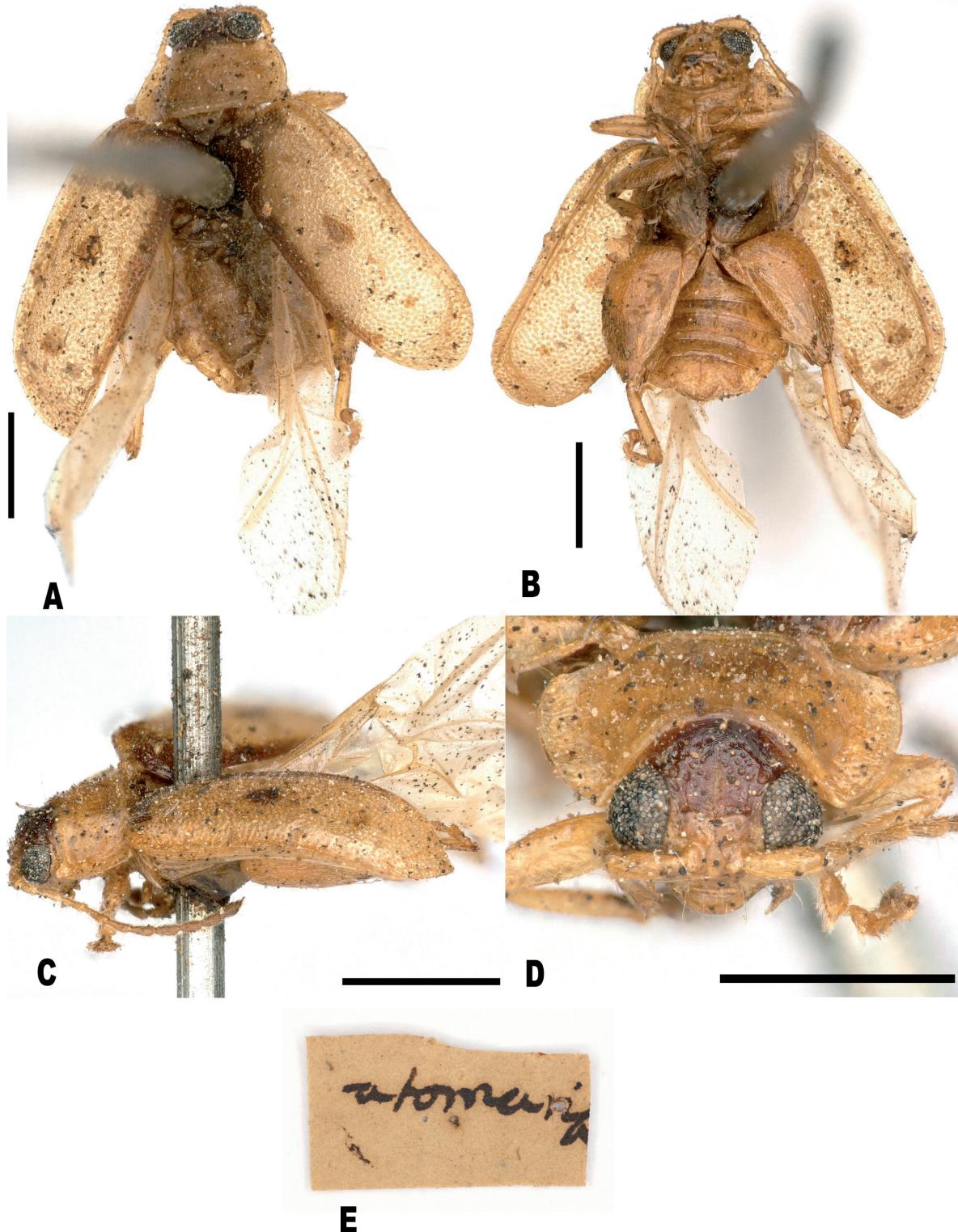


Fig. 10. *Galleruca atomaria* Fabricius, 1801, lectotype, ♂ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

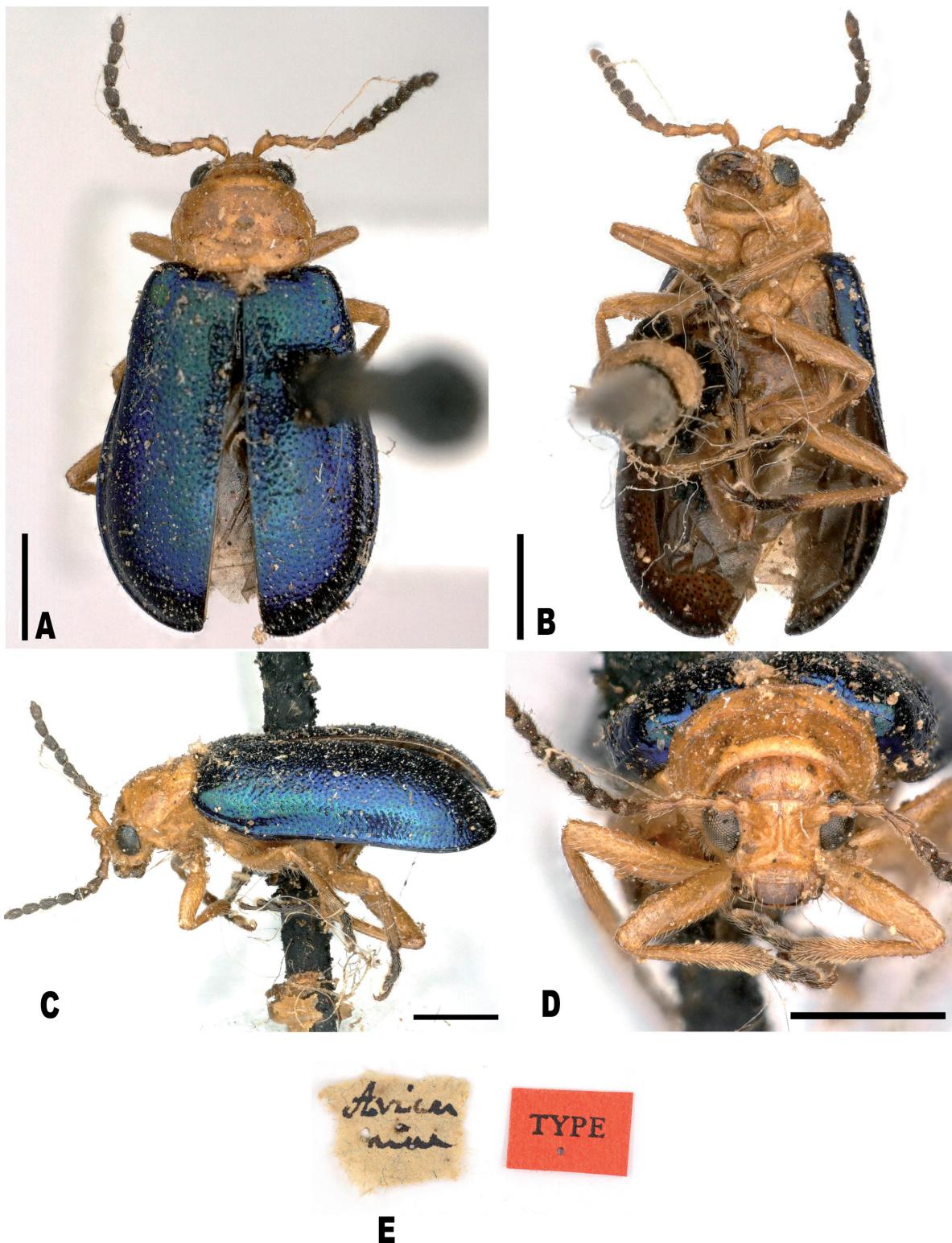


Fig. 11. *Galleruca avicenniae* Fabricius, 1792, syntype, ♀ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

Galleruca avicenniae Fabricius, 1792
Fig. 11

avicenniae Fabricius, 1792: 18 (Americae meridionalis Avicenniis).

Material examined

Syntype

COUNTRY NOT INDICATED ON SPECIMEN • ♀; “*avicenniae*/ TYPE”; Kiel.

Status in Zimsen (1964)

P. 109 No. 1692. “in Americae meridionalis Avicenniis Dr. Isert” Kiel 1 specimen.

Original description

“G. ferruginea elytris cyaneis. Habitat in Americae meridionalis Avicenniis Dr. Isert. Parva. Antennae nigrae basi ferrugineae. Caput & thorax laevia, ferruginea, nitida, immaculata. Elytra laevia, cyanea, nitida. Corpus & pedes ferruginea.”

Current status

avicenniae (Fabricius, 1792) incertae sedis Galerucini Latreille, 1802.

Measurements

Syntype (Fig. 11): LB = 5.21 mm; WB = 2.82 mm.

Remarks

The syntype housed in Kiel corresponds with the original description. However, it is clearly not an Alticinae and belongs to Galerucini based on the thin metafemora missing metafemoral spring. Why this species was included in Oedionychina is difficult to trace. Illiger (1807: 83) noted in a footnote that *Galleruca avicenniae* should be included in the genus *Haltica* Geoffroy, 1762 (now a synonym of *Altica* Geoffroy, 1762), after a comment from Count von Hoffmannsegg while visiting the collection of Count von Hagens in Berlin. Heikertinger & Csiki (1940: 439) included this species as *Oedionychus avicenniae*, effectively including in Oedionychina. The rationale behind this decision is unknown, but potentially because the footnote in Illiger (1807) including *Galleruca avicenniae* was on the same page with three species obviously belonging in Oedionychina (current combinations: *Ciguapanychis bicolor* (Linnaeus, 1767), *Kuschelina thoracica* (Fabricius, 1775) and *Kuschelina vians* (Illiger, 1807)).

Galleruca collaris Fabricius, 1798
Figs 12–13

collaris Fabricius, 1798: 97 (America).

Specimens probably misplaced

COUNTRY NOT INDICATED ON SPECIMEN • 2 ♀♀; “*collaris*/ TYPE”; Kiel.

Status in Zimsen (1964)

P. 111 No. 1724. “in America Dom. Hybner” Kiel 2 specimens.

Original description

“G. saltatoria nigra thorace anoque rufis. Habitat in America Dom. Hybner. Statura et maguitudo praecedentium. Caput cum antennis nigrum, immaculatum. Thorax rufus macula una altera dorsali,

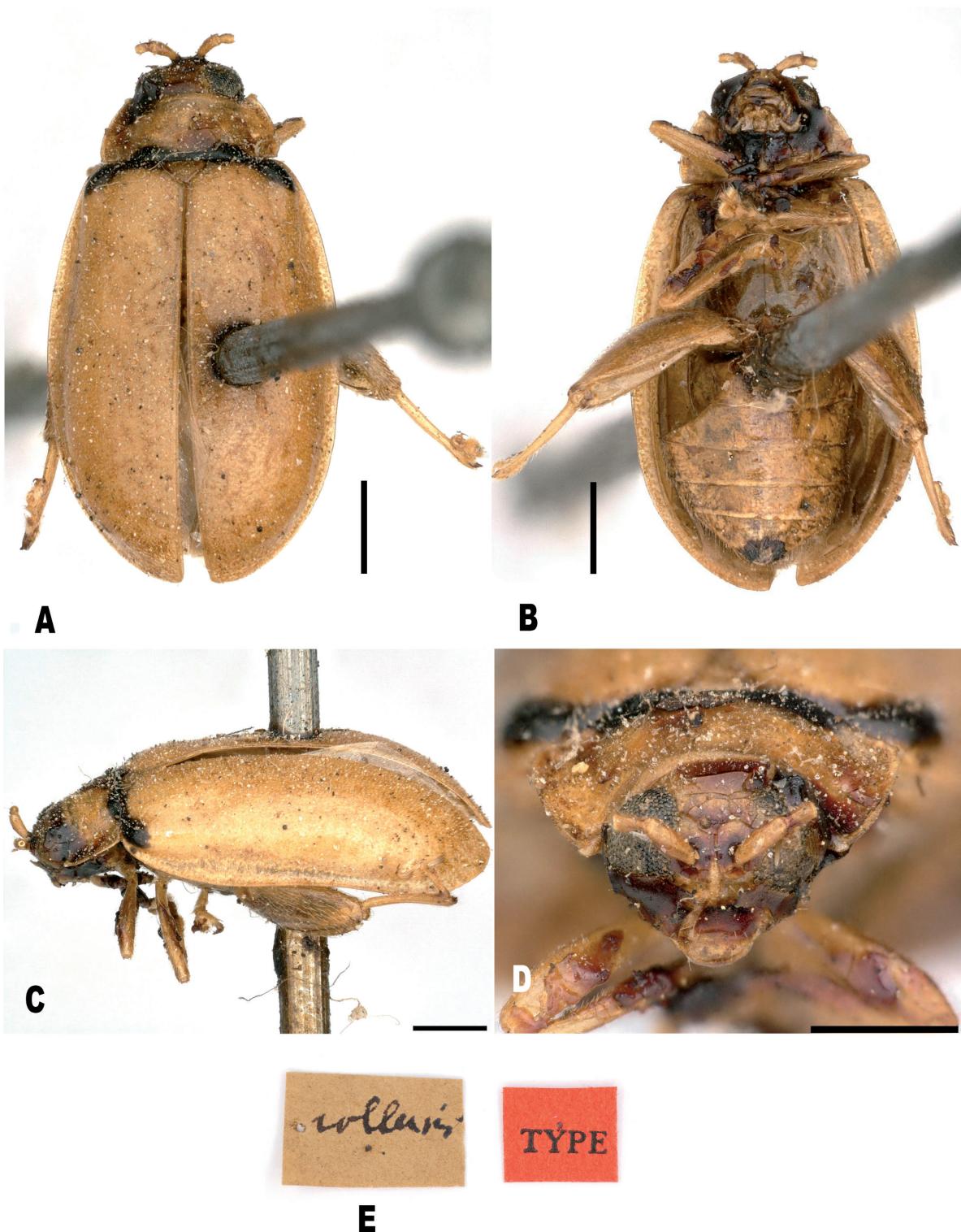


Fig. 12. *Galleruca collaris* Fabricius, 1798, misplaced specimen, ♀ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels of the two misplaced specimens. Scale bars = 1 mm.

nigra. Elytra glabra, nigra, immaculata. Abdomen nigrum ano rufo. Pedes nigri femoribus posticis incrassatis."

Current status

Not established.

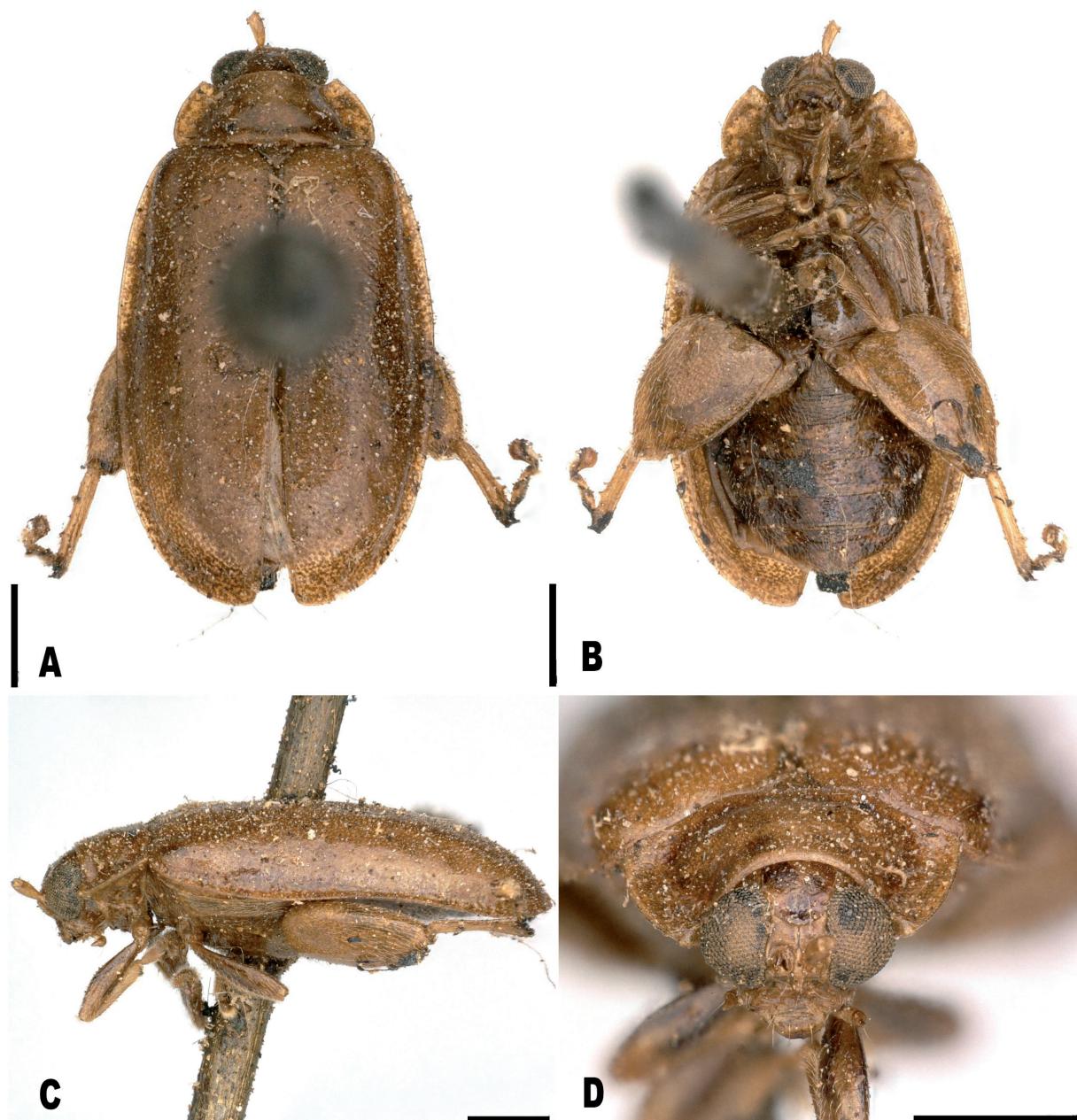


Fig. 13. *Galleruca collaris* Fabricius, 1798, misplaced specimen, ♀ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. Scale bars = 1 mm.

Measurements

Misplaced specimen 1 (Fig. 12): LB = 5.74 mm; WB = 3.21 mm. Misplaced specimen 2 (Fig. 13): LB = 5.48 mm; WB = 3.11 mm.

Remarks

The specimens do not match the description. According to it, they have a black habitus, black elytra and thorax with a spot. Because we think that the true type specimens of *G. collaris* are misplaced, we do not designate the lectotype. Available specimens belong to *Walterianella* Bechyné, 1955.

Galleruca decemguttata Fabricius, 1801
Figs 14–16

decemguttata Fabricius, 1801: 492 (America Meridionali).

Material examined

Lectotype (presently designated)

COUNTRY NOT INDICATED ON SPECIMEN • ♂; “10-guttata/ [red squared label] / Lectotype *Galleruca decemguttata* Fabricius 1801 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; Kiel.

Paralectotypes

COUNTRY NOT INDICATED ON SPECIMEN • 1 ♀; “*G. 10guttata* in Am. Mer. Schmidt/ TYPE/ Paralectotype *Galleruca decemguttata* Fabricius 1801 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; ex-Copenhagen; ZMUC 00031086 • 1 ♀; “TYPE/ Lectotype *Galleruca decemguttata* Fabricius 1801 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; ex-Copenhagen; ZMUC 00031087.

Status in Zimsen (1964)

P. 111 No.1712. “in America meridionali D. Schmidt” Kiel 1 specimen, Copenhagen 2 specimens.

Original description

“*G. saltatoria*, ferruginea, thorace elytrorumque punctis quinque albis. Habitat in America meridionali. D. Smidt. Mus. D. de Sehestedt. Magna. Caput obscure ferrugineum, ore pallido, antennisque nigris. Thorax albus, immaculatus. Elytra laevia, brunnea, cyaneo parum nitida, punctis quinque albis. 1.2.1. transverso 1. Corpus ferrugineum.”

Current status

Alagoasa decemguttata (Fabricius, 1801).

Measurements

Lectotype (Fig. 14): LB = 4.64 mm; WB = 2.81 mm. Paralectotype 1 (Fig. 15): LB = 5.98 mm; WB = 3.48 mm. Paralectotype 2 (Fig. 16): LB = 6.13 mm; WB = 3.78 mm.

Remarks

The lectotype for *Galleruca decemguttata* is designated here to have a unique bearer of this name and the standard for its application. Both the lectotype and the paralectotypes are completely intact. We confirm the correct placement in the genus *Alagoasa* Bechyné, 1955 based on the following characters: frontal ridge narrow, vertex with a few punctures, sides of pronotum widely explanate, body broadly curved (see also Konstantinov *et al.* 2022).

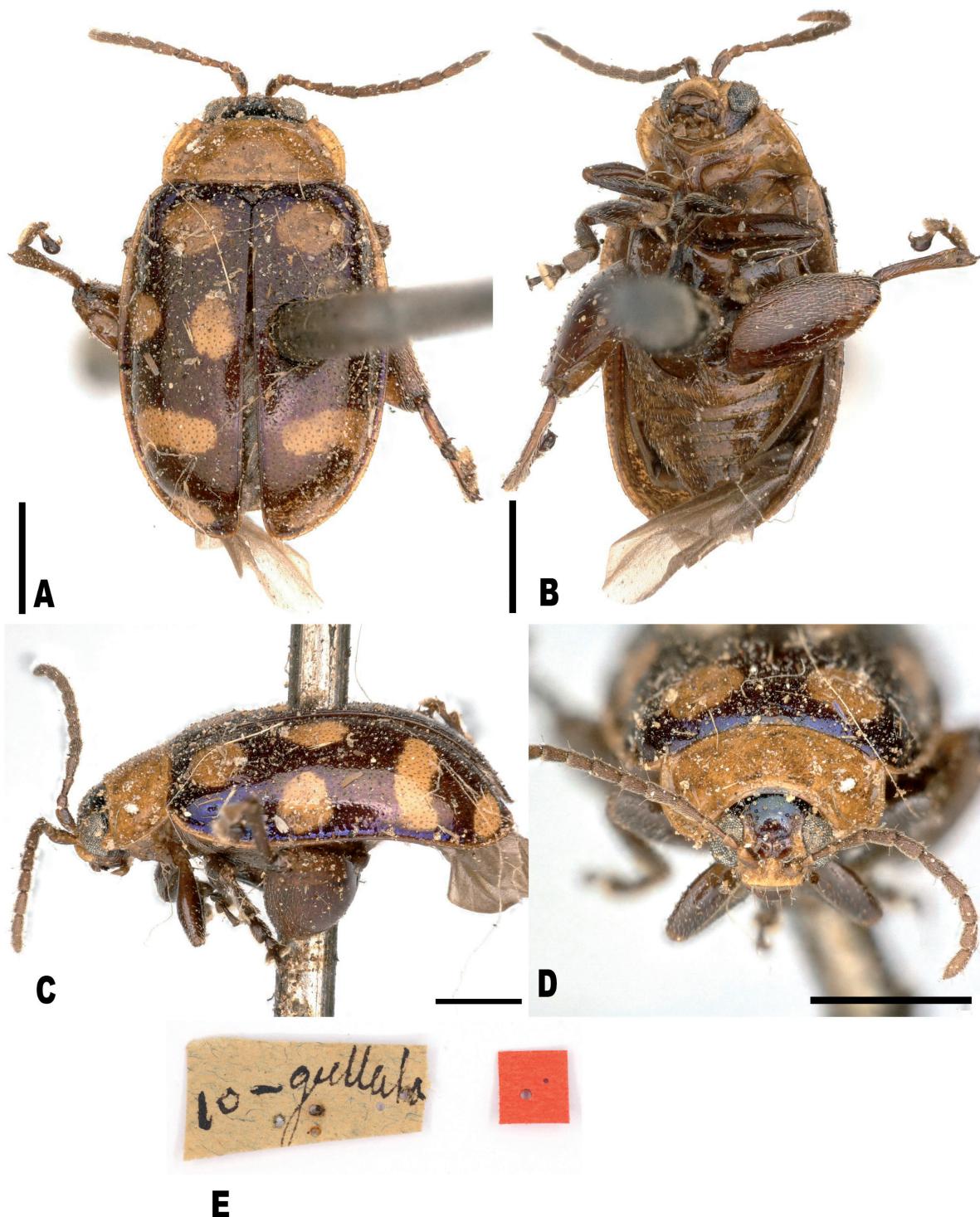


Fig. 14. *Galleruca decemguttata* Fabricius, 1801, lectotype, ♂ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

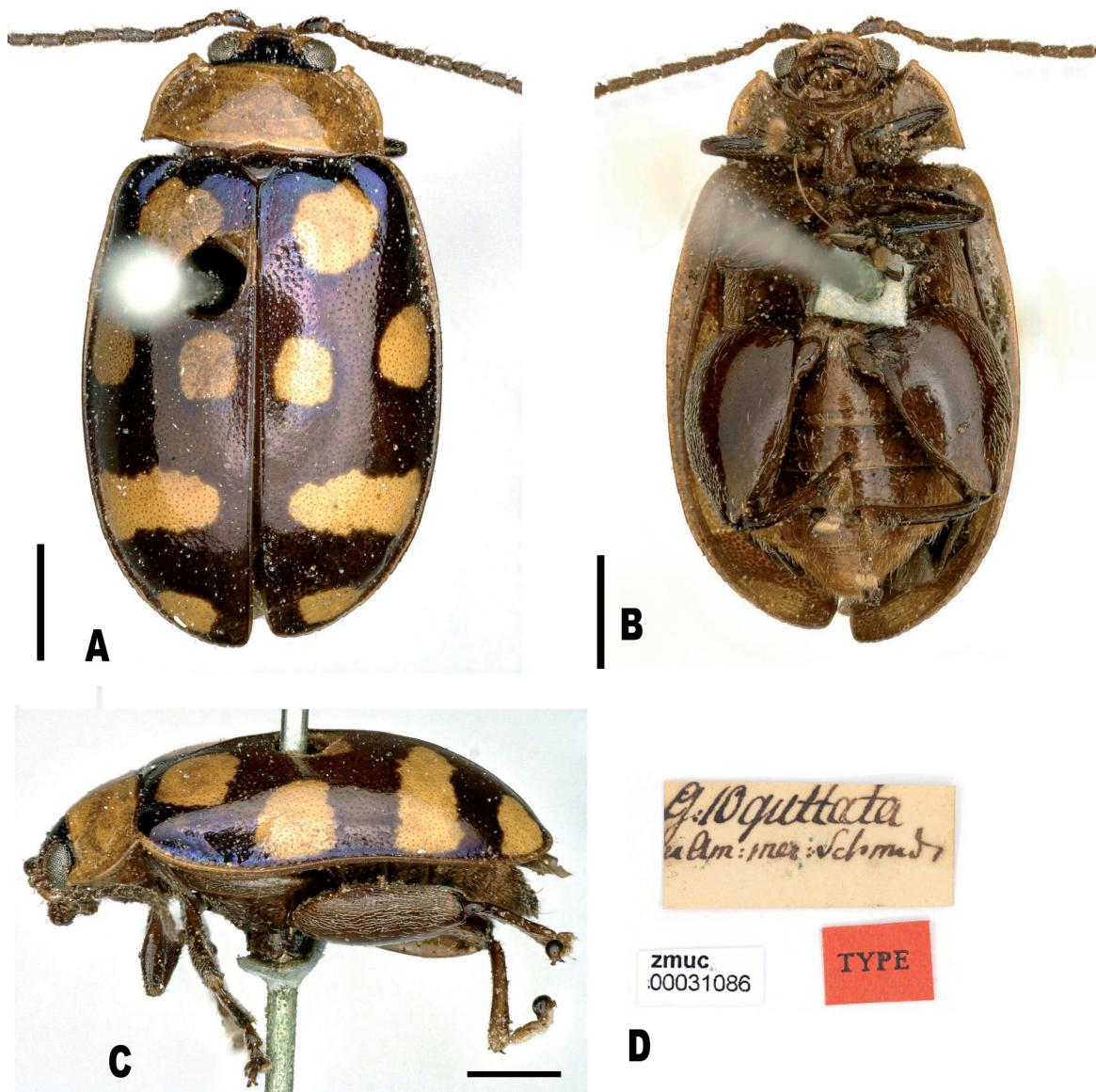


Fig. 15. *Galleruca decemguttata* Fabricius, 1801, paralectotype, ♀ (ZMUC 00031086). A. Dorsal view. B. Ventral view. C. Lateral view. D. Labels. Scale bars = 1 mm.

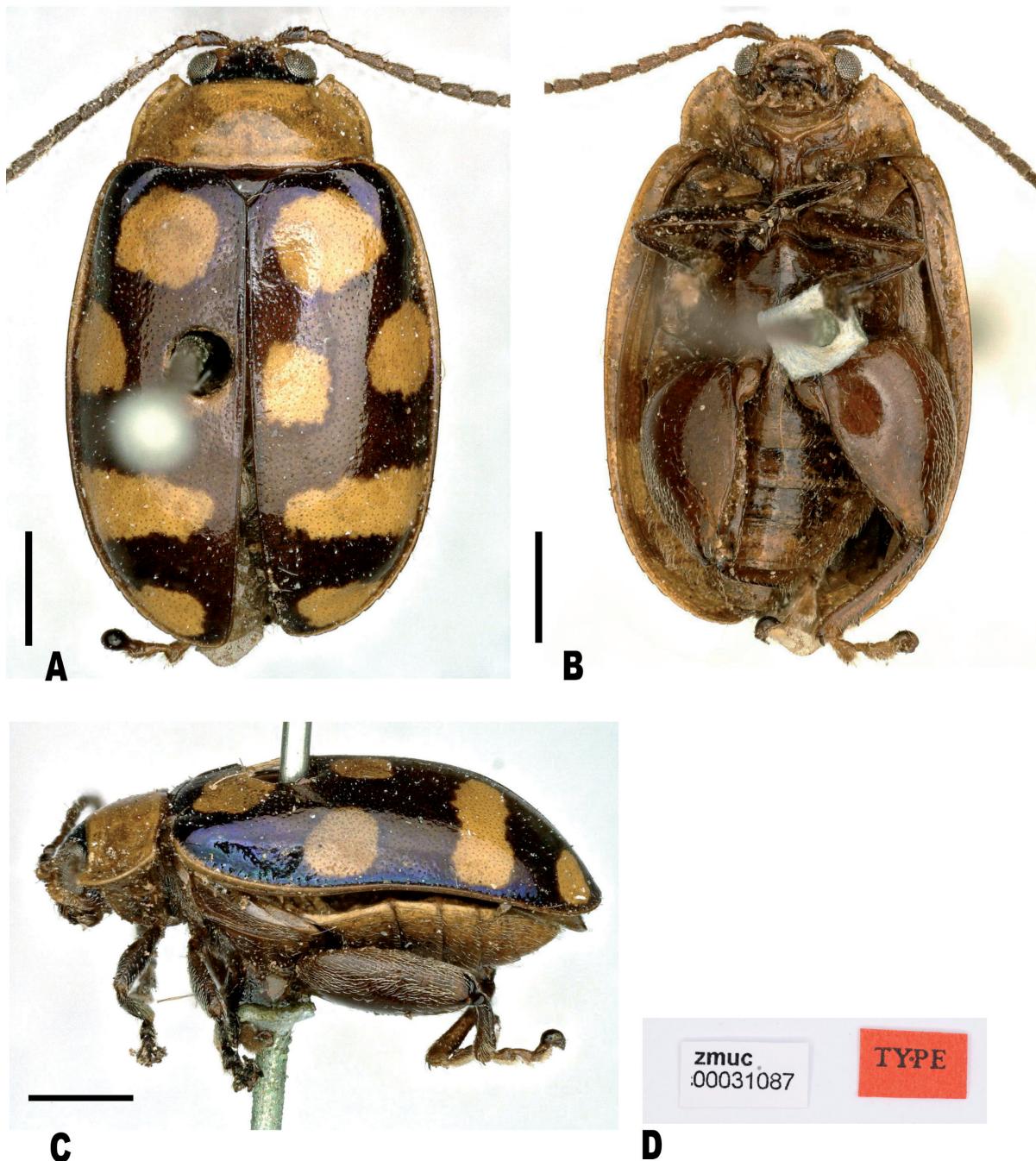


Fig. 16. *Galleruca decemguttata* Fabricius, 1801, paralectotype, ♀ (ZMUC 00031087). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Labels. Scale bars = 1 mm.

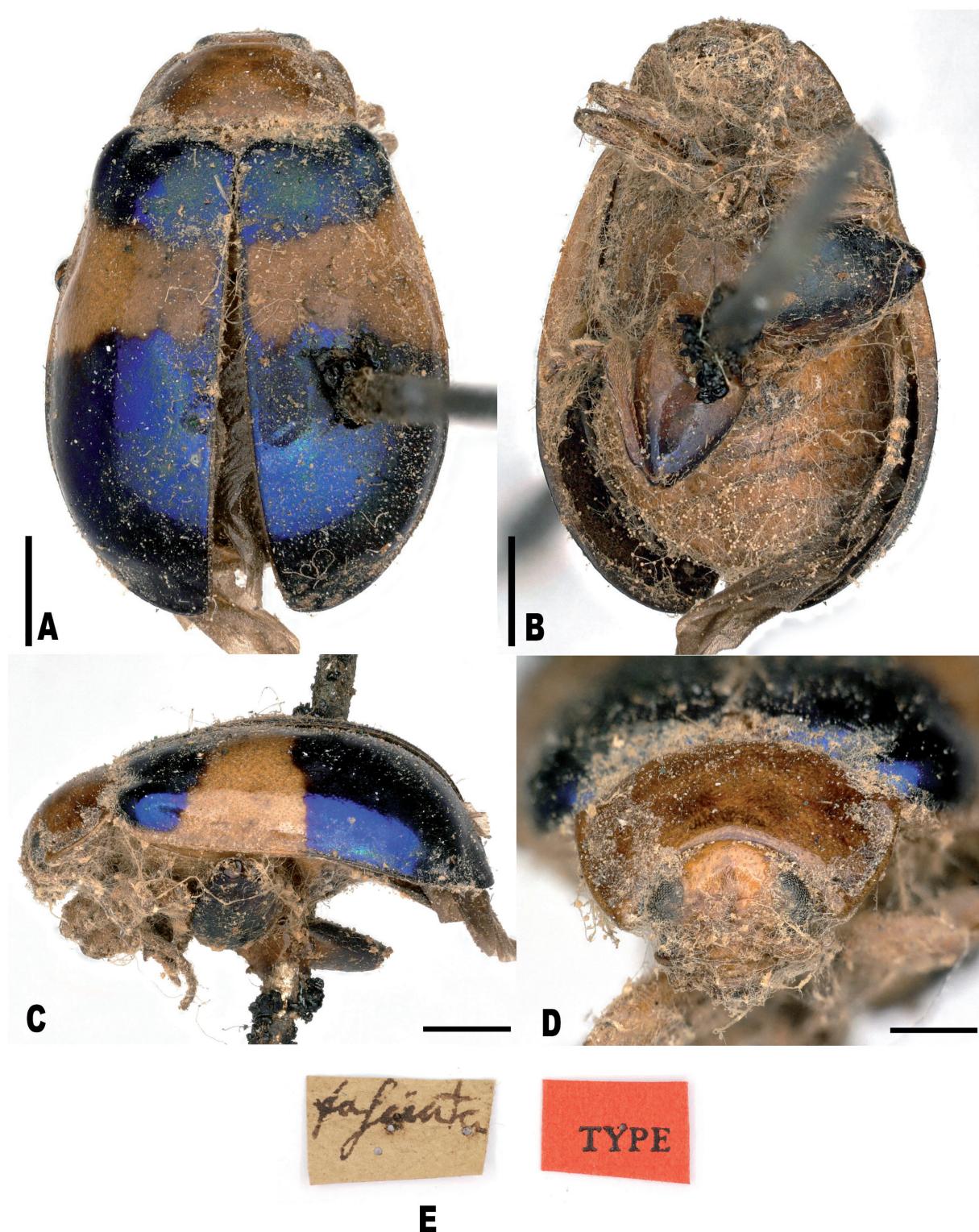


Fig. 17. *Galleruca fasciata* Fabricius, 1798, lectotype, ♀ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

Galleruca fasciata Fabricius, 1798
Fig. 17

fasciata Fabricius, 1798: 96 (St. Domingo Iusula (sic!)).

Material examined

Lectotype (presently designated)

COUNTRY NOT INDICATED ON SPECIMEN • ♀; “*fasciata*/ TYPE/ Lectotype *Galleruca fasciata* Fabricius 1798 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; Kiel.

Status in Zimsen (1964)

P. 110 No.1708. “in St. Domingo D. Brongiard” Kiel 1 specimen.

Original description

“*G. saltatoria pallida elytris cyaneis: fascia pallida. Habitat in St. Domingo Iusula (sic!) Dom. Brongiart. Magna in hac familia. Antennae basi pallidae, apice fuscae. Caput et thorax pallida, immaculate. Elytra laevia, glabra, cyanea, nitida: fascia lata pallida, versus suturam attenuata. Corpus pallidum femoribus posticis incrassatis, cyaneis.*”

Current status

Ciguapanychis fasciatus (Fabricius, 1798).

Measurements

Lectotype (Fig. 17): LB = 6.03 mm; WB = 3.58 mm.

Remarks

The lectotype for *Galleruca fasciata* is designated here to have a unique bearer of this name and the standard for its application. The lectotype is quite dirty, but the species is quite unique and thus all characters for identification are still visible. We confirm the correct placement in the genus *Ciguapanychis* Konstantinov, Van Roie & Furth, 2022 based on the following characters: frontal ridge short, as wide as transverse diameter of antennal socket, vertex with some (but not many) punctures, pronotal edges moderately convex, hind margin of pronotum sinusoidal, epipleuron visible in lateral view for about $\frac{1}{3}$ of elytron (see also Konstantinov *et al.* 2022).

Galleruca humeralis Fabricius, 1801
Figs 18–21

humeralis Fabricius, 1801: 494 (America meridionali).

Material examined

Lectotype (presently designated)

COUNTRY NOT INDICATED ON SPECIMEN • ♀; “*G. humeralis* en Am. mer. Schmidt/ TYPE/ Lectotype *Galleruca humeralis* Fabricius 1801 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; ex-Copenhagen; ZMUC 00031095.

Specimens probably misplaced

COUNTRY NOT INDICATED ON SPECIMEN • 2 specs; “[humeralis]/ [red squared label]”; Kiel. • 1 ♂; “TYPE”; ex-Copenhagen; ZMUC 00031094.

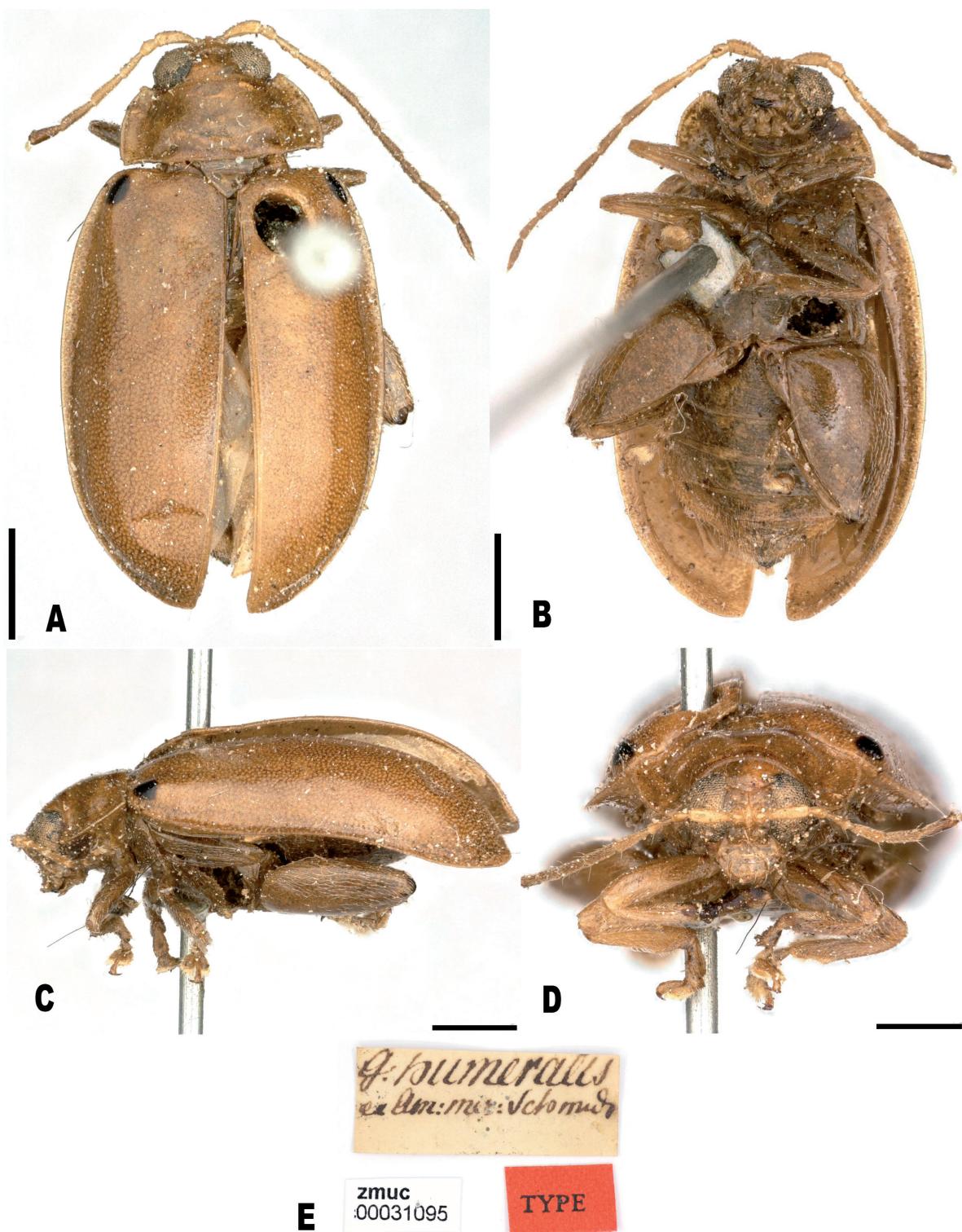


Fig. 18. *Galleruca humeralis* Fabricius, 1801, lectotype, ♀ (ZMUC 00031095). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

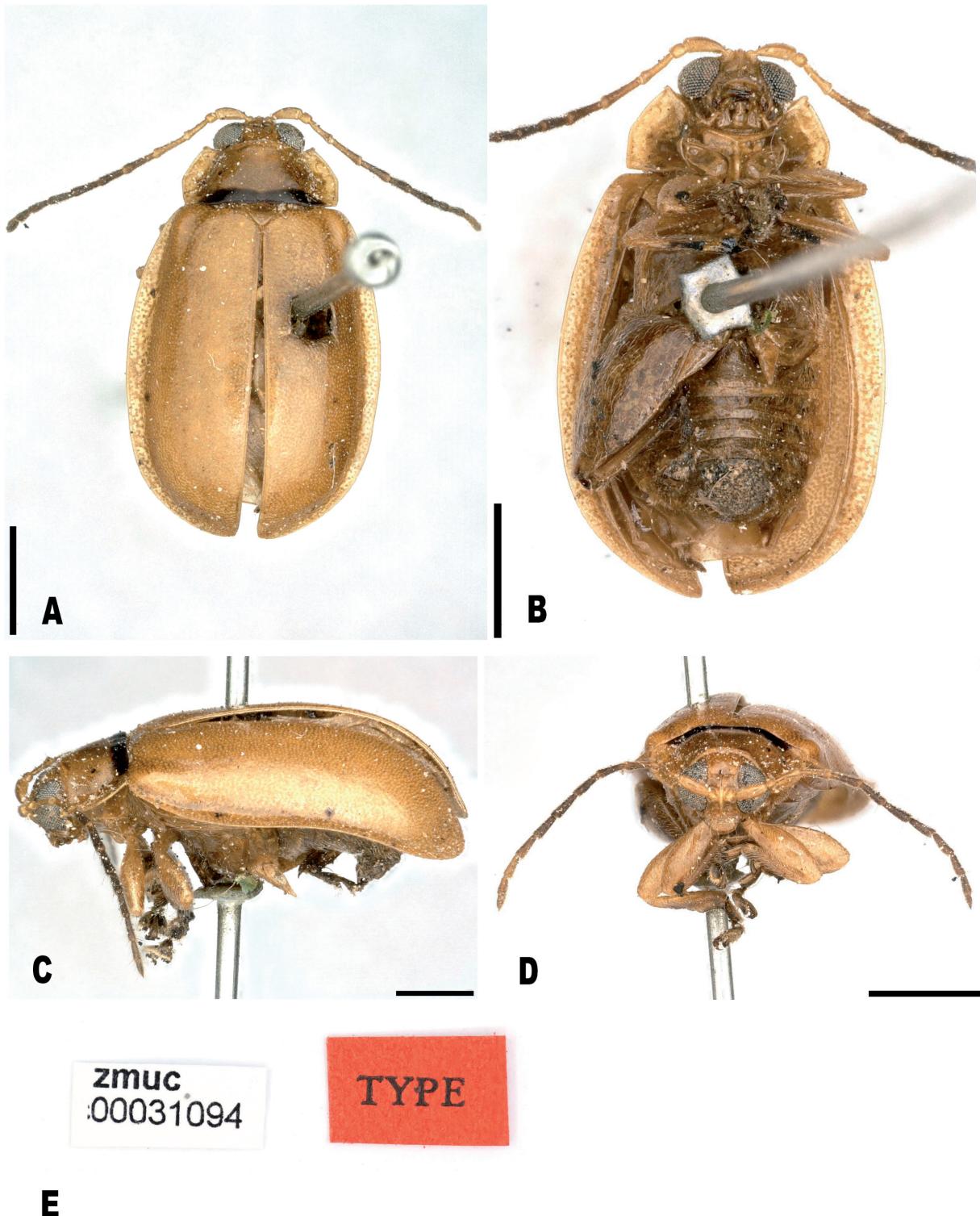


Fig. 19. *Galleruca humeralis* Fabricius, 1801, misplaced specimen, ♂ (ZMUC 00031094). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

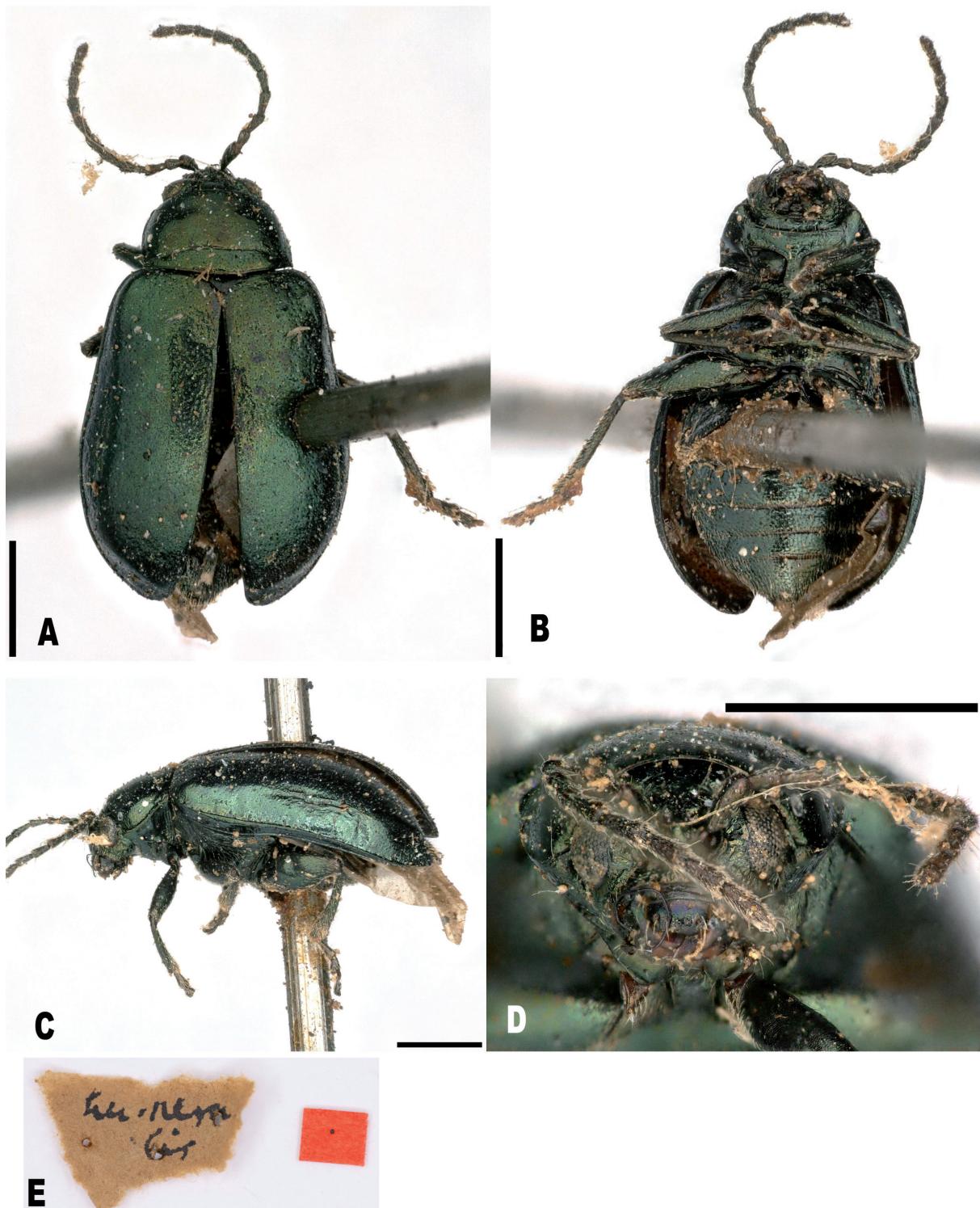


Fig. 20. *Galleruca humeralis* Fabricius, 1801, misplaced specimen, sex unknown (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

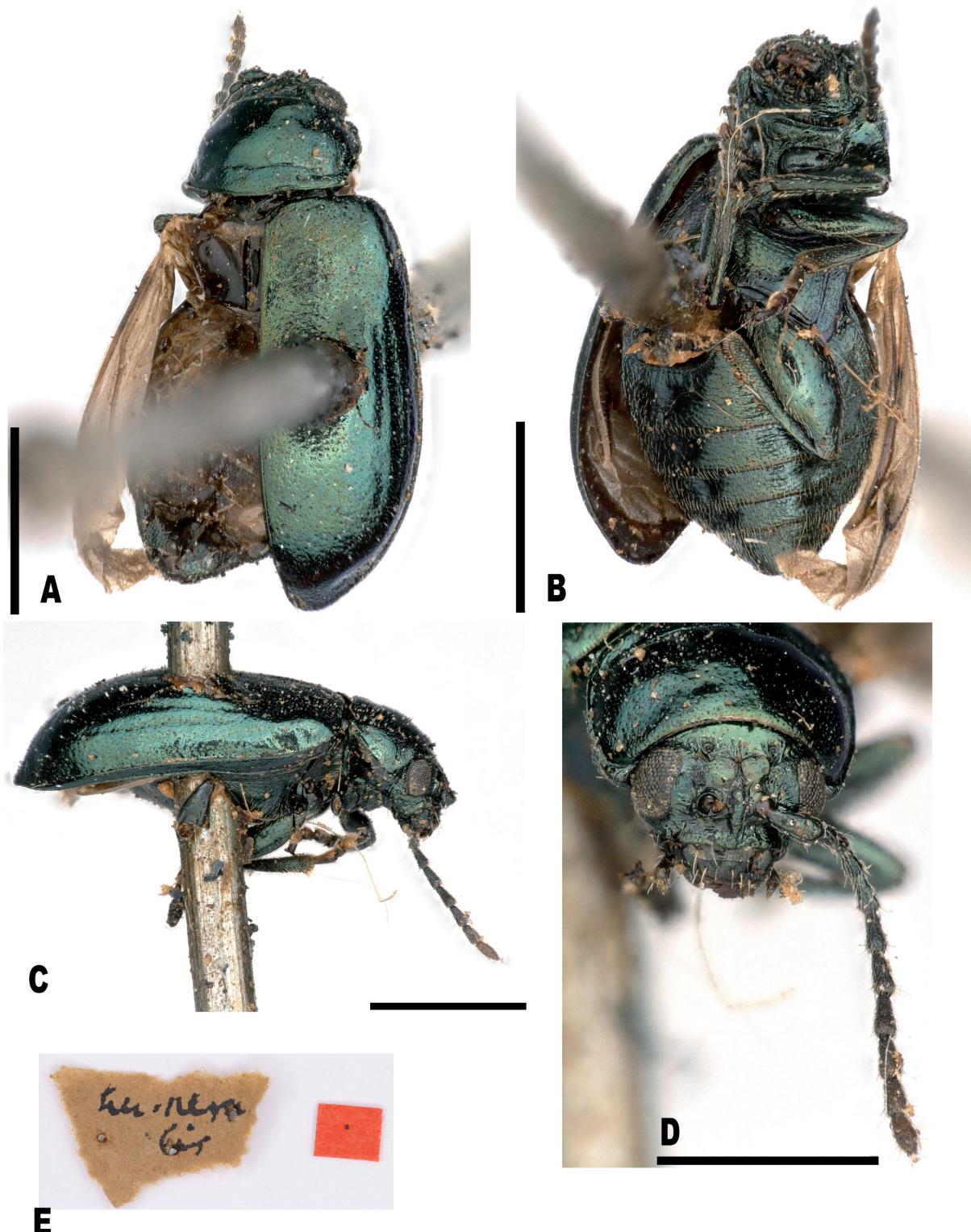


Fig. 21. *Galleruca humeralis* Fabricius, 1801, misplaced specimen, sex unknown (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

Status in Zimsen (1964)

P. 111 No.1722. “in America meridionali Dom. Smidt Mus. D. de Sehestedt” Copenhagen 2 specimens, Kiel 2 specimens.

Original description

“*G. saltatoria*, pallide testacea, elytris puncto humerali nigro. Habitat in America meridionali. D. Smidt. Mus. D. de Sehestedt. Statura et magnitude omnino *G. sellatae*. Antennae pallidae. Caput et thorax pallidiora. Elytra laevia, pallide testacea, puncto humerali atro. Corpus testaceum, femoribus valde incrassatis. *Variat elytris immaculatis.*”

Current status

Walterianella humeralis (Fabricius, 1801).

Measurements

Lectotype (Fig. 18): LB = 5.97 mm; WB = 3.40 mm. Misplaced specimen 1 (Fig. 19): LB = 4.39 mm; WB = 2.66 mm. Misplaced specimen 2 (Fig. 20): LB = 4.58 mm; WB = 2.65 mm. Misplaced specimen 3 (Fig. 21): LB = 3.06 mm; WB = 1.88 mm.

Remarks

The lectotype for *Galleruca humeralis* is designated here to have a unique bearer of this name and the standard for its application. We chose the female, and not the male, as lectotype because it conforms closely with the original description stating ‘elytra with a black humeral point’. The male specimen from the Copenhagen collection does show some differences from the female lectotype: humeral calli more developed, without dark spot, elytral edges more explanate, less rounded apically; basal part of pronotum with dark coloration, pronotal edges angulated. This could mean that there are two species included in this type series (Fabricius also did not mention a variety with dark pronotal base, only a variety without elytral spots). Although sexual dimorphism is not uncommon in *Walterianella* (e.g., Bechyné & Bechyné 1977), we chose to be conservative and not designate the male specimen as paralectotype. We confirm the correct placement in the genus *Walterianella* based on the following characters: eyes big, interocular space about as wide as diameter of eye, pronotal borders widely explanate, flattened, prosternal process keeled. Two specimens from Kiel collection (Figs 20–21) do not conform at all with the description of Fabricius (1801) and are very likely misplaced. They belong to *Altica*.

Galleruca lunata Fabricius, 1801

Figs 22–23

lunata Fabricius, 1801: 494 (America meridionali).

Material examined

Lectotype (presently designated)

COUNTRY NOT INDICATED ON SPECIMEN • ♀; “*G. lunata* en Am. Mer. Schmidt/TYPE/Lectotype *Galleruca lunata* Fabricius 1801 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; Kiel; ZMUC 00031096.

Paralectotype

COUNTRY NOT INDICATED ON SPECIMEN • 1 ♀; “[*lunata*; red squared label] / Lectotype *Galleruca lunata* Fabricius 1801 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; ex-Copenhagen.

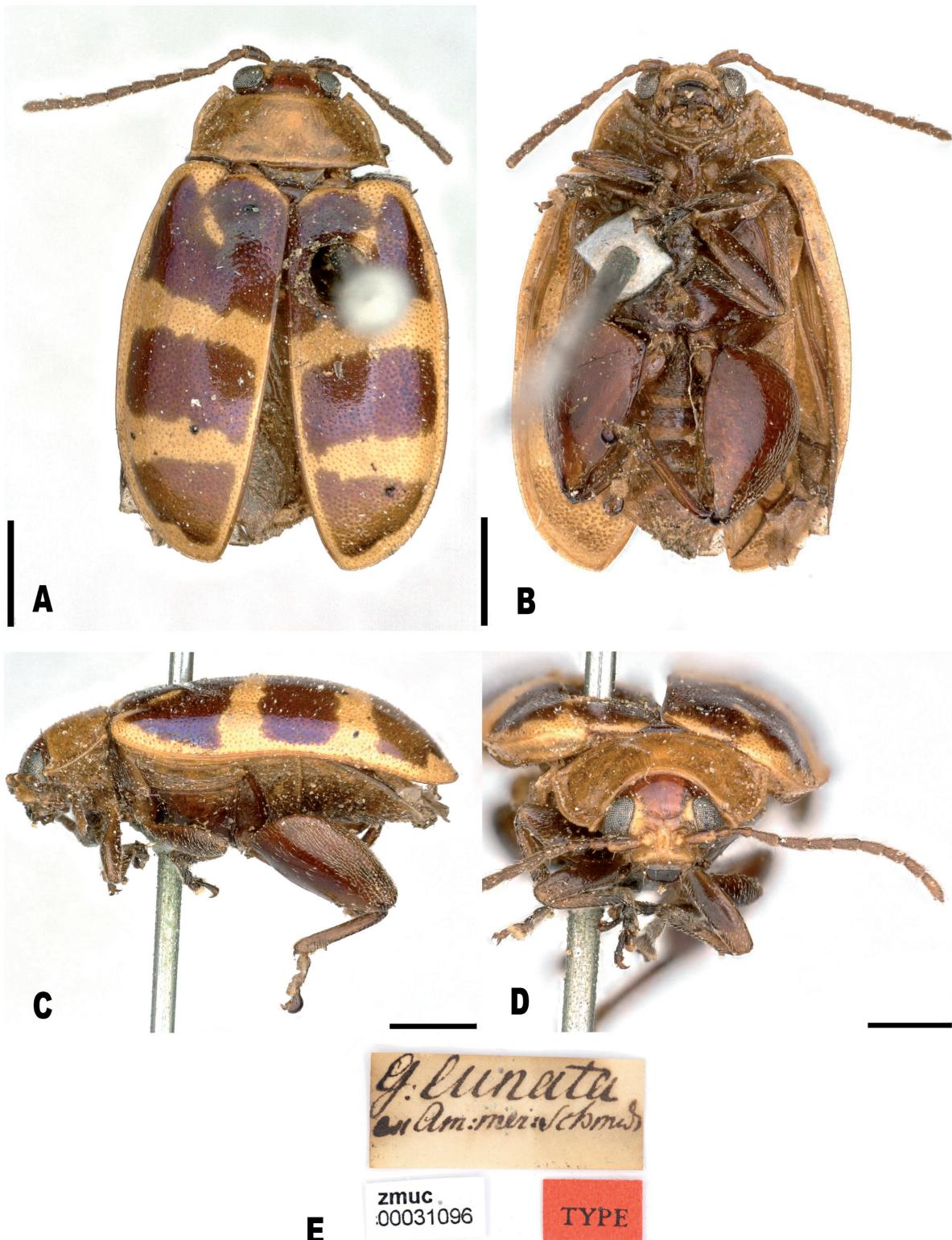


Fig. 22. *Galleruca lunata* Fabricius, 1801, lectotype, ♀ (ZMUC 00031096). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

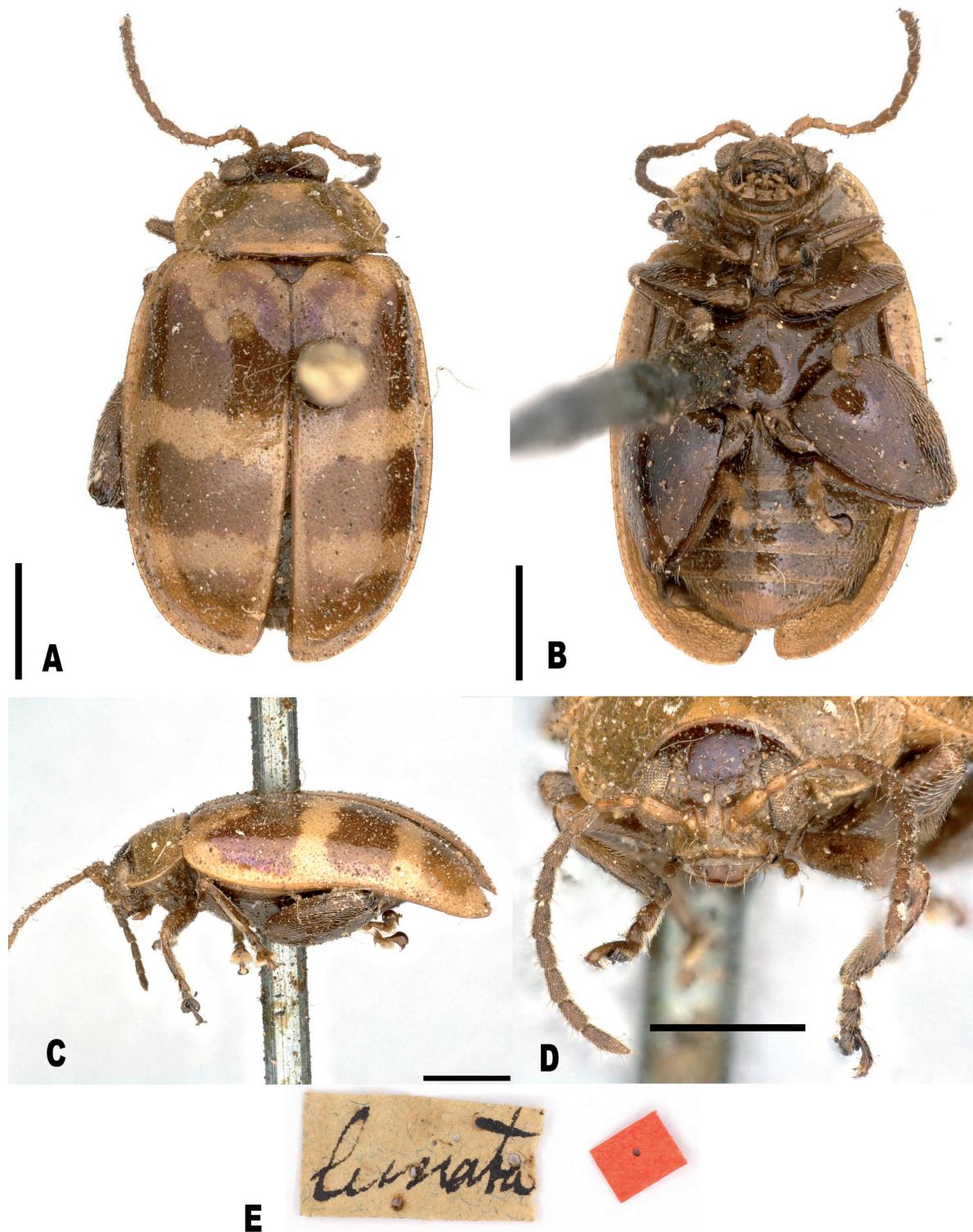


Fig. 23. *Galleruca lunata* Fabricius, 1801, paralectotype, ♀ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

Status in Zimsen (1964)

P. 111 No.1723. ‘in America meridionali D. Smidt Mus. D. Lund’ Copenhagen 1 specimen, Kiel 1 specimen.

Original description

“G. saltatoria, ferruginea, thorace elytrorum lunula falsciisque duabus albis. Habitat in America meridionali. D. Smidt. Mus. D. Lund. Magna. Caput ferrugineum, antennis fulcis. Thorax albus, immaculatus. Elytra laevia, brunnea, nitida, lunula baseos, margine fasciisque duabus albis. Corpus ferrugineum.”

Current status

Alagoasa lunata (Fabricius, 1801).

Measurements

Lectotype (Fig. 22): LB = 5.02 mm; WB = 3.08 mm. Paralectotype (Fig. 23): LB = 4.92 mm; WB = 2.99 mm.

Remarks

The lectotype for *Galleruca lunata* is designated here to have a unique bearer of this name and the standard for its application. The right antenna of the lectotype is missing segments 9–11, the rest of the specimen is intact. We confirm the correct placement in the genus *Alagoasa* based on the following characters: frontal ridge relatively narrow, vertex with a few punctures, sides of pronotum widely explanate, body broadly curved (see also Konstantinov *et al.* 2022).

Galleruca miniata Fabricius, 1801
Figs 24–25

miniata Fabricius, 1801: 495 (Carolina).

Material examined

COUNTRY NOT INDICATED ON SPECIMEN • 1 ♂; “*miniata*”; Kiel • 1 spec.; “*Miniata*”; Kiel.

Status in Zimsen (1964)

P. 112 No. 1727 ‘in Carolina D. Bose’ Kiel 2 specimens, Paris 3 specimens (Blake 1952: 62).

Original description

“G. saltatoria nigra, thorace rubro, elytris rubris: sutura vittaque lata nigris. Habitat in Carolina. Mus. D. Bose. Magna. Caput nigrum. Thorax vix punctatus, ruber, macula media obscuriore. Elytra subpunctata, rubra, vitta lata suturaque nigris. Corpus nigrum, pedibus piceis, femoribus valde incrassatis. Post mortem color rufus, vivacissimus, in pallidum obscurum transit.”

Current status

Kuschelina miniata (Fabricius, 1801).

Measurements

Syntype 1 (Fig. 24): LB = 5.93 mm; WB = 3.20 mm. Syntype 2 (Fig. 25): LB = 6.08 mm; WB = 3.61 mm.

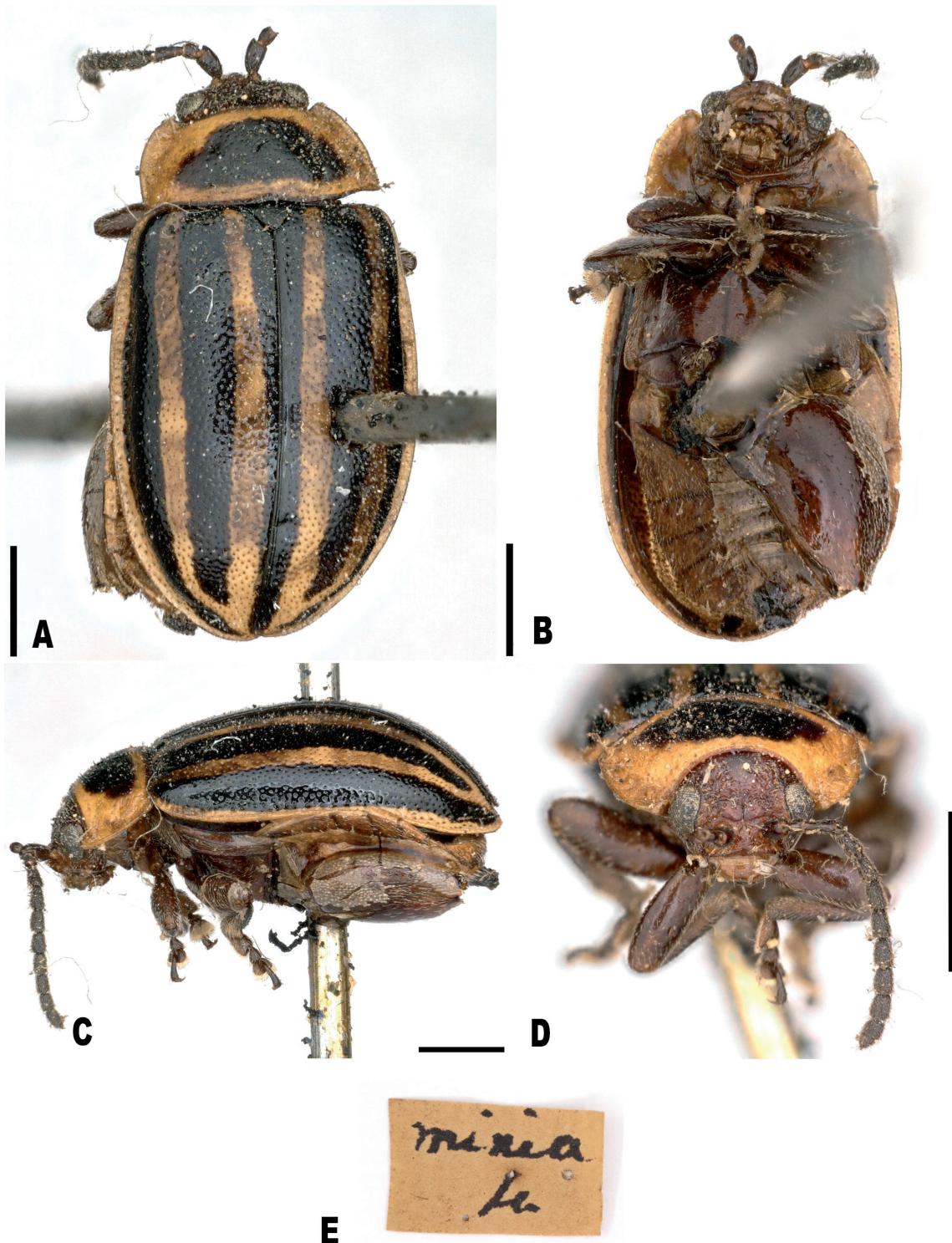


Fig. 24. *Galleruca miniata* Fabricius, 1801, syntype, ♂ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels of the two syntypes. Scale bars = 1 mm.



Fig. 25. *Galleruca miniata* Fabricius, 1801, syntype, sex unknown (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. Scale bars = 1 mm.

Remarks

Two syntypes were examined. However, the taxonomy of the *Kuschelina miniata* group is complex, as apparent in the revision of Blake (1954). We did not designate lectotypes because of the following reasons: (i) we expect that the two syntypes represent two different species in this species complex, one specimen possibly representing *K. petaurista* (Fabricius, 1801) and the other not completely conforming to the description in Blake's revision; (ii) Blake (1927) noted that there are three syntypes in the Bosc collection in Paris (reiterated by Zimsen 1964), all showing some degree of variability. Therefore, we chose to be conservative, not designating a lectotype until the Paris syntypes could be studied.

Galleruca nitida Fabricius, 1801
Figs 26–27

nitida Fabricius, 1801: 493 (America meridionali).

Material examined

Lectotype (presently designated)

COUNTRY NOT INDICATED ON SPECIMEN • ♂; “*G. nitida* en Am. Mer. Schmidt./ TYPE/ Lectotype *Galleruca nitida* Fabricius 1801 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; ex-Copenhagen; ZMUC 00031093.

Paralectotype

COUNTRY NOT INDICATED ON SPECIMEN • 1 ♀; “Paralectotype *Galleruca nitida* Fabricius 1801 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; ex-Copenhagen; ZMUC 00031092.

Status in Zimsen (1964)

P. 111 No.1719. “in America meridionali D. Smidt Mus. D. Lund” Copenhagen 2 specimens.

Original description

“*G. saltatoria*, atra, thorace elytrorumque fascia albis. Habitat in America meridionali. S. Smidt. Mus. D. Lund. Magna. Caput cum antennis atrum, immaculatum. Thorax laevis, albus, nitidus. Elytra atra, cyaneo parum nitida, margine baseos fasciaque lata albis. Abdomen album. Pedes atri, femoribus posticis valde incrassatis.”

Current status

Asphaera nitida (Fabricius, 1801) comb. nov.

Measurements

Lectotype (Fig. 26): LB = 5.41 mm; WB = 1.63 mm. Paralectotype (Fig. 27): LB = 6.03 mm; WB = 3.87 mm.

Remarks

The lectotype for *Galleruca nitida* is designated here to have a unique bearer of this name and the standard for its application. The lectotype is missing segments 3–11 of the right antenna. The paralectotype is missing segments 2–11 of the left antenna. We place this species, previously included in the genus *Wanderbiltiana* Bechyné, 1955, in *Asphaera* based on the following characters: distance between antennal sockets less than the transverse diameter of antennal socket in frontal view, second antennomere about half as long as third antennomere, anterolateral callosity of pronotum long and directed anteriorly. Lateral margin of elytron widely explanate (see also Konstantinov *et al.* 2022).

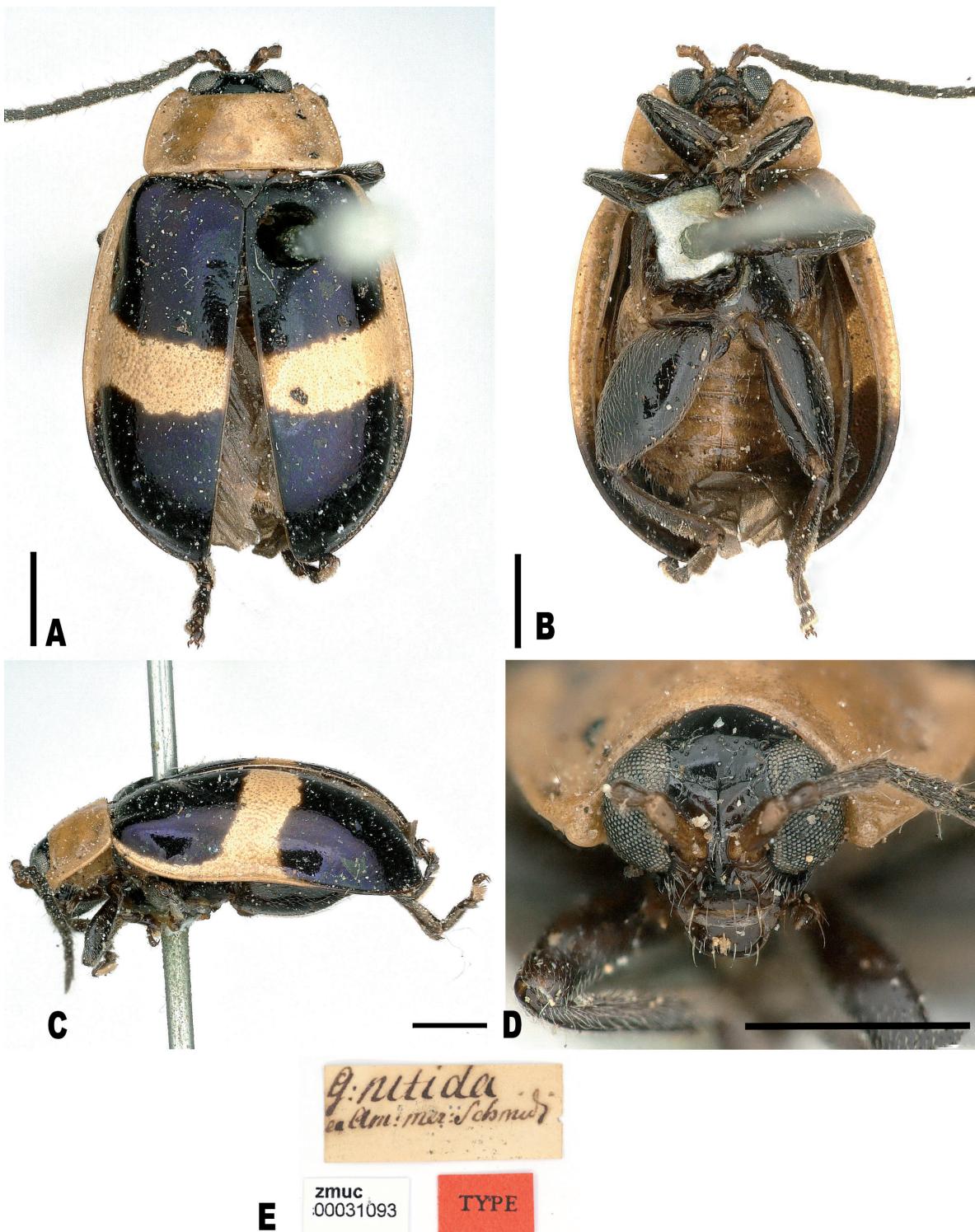


Fig. 26. *Galleruca nitida* Fabricius, 1801, lectotype, ♂ (ZMUC 00031093). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

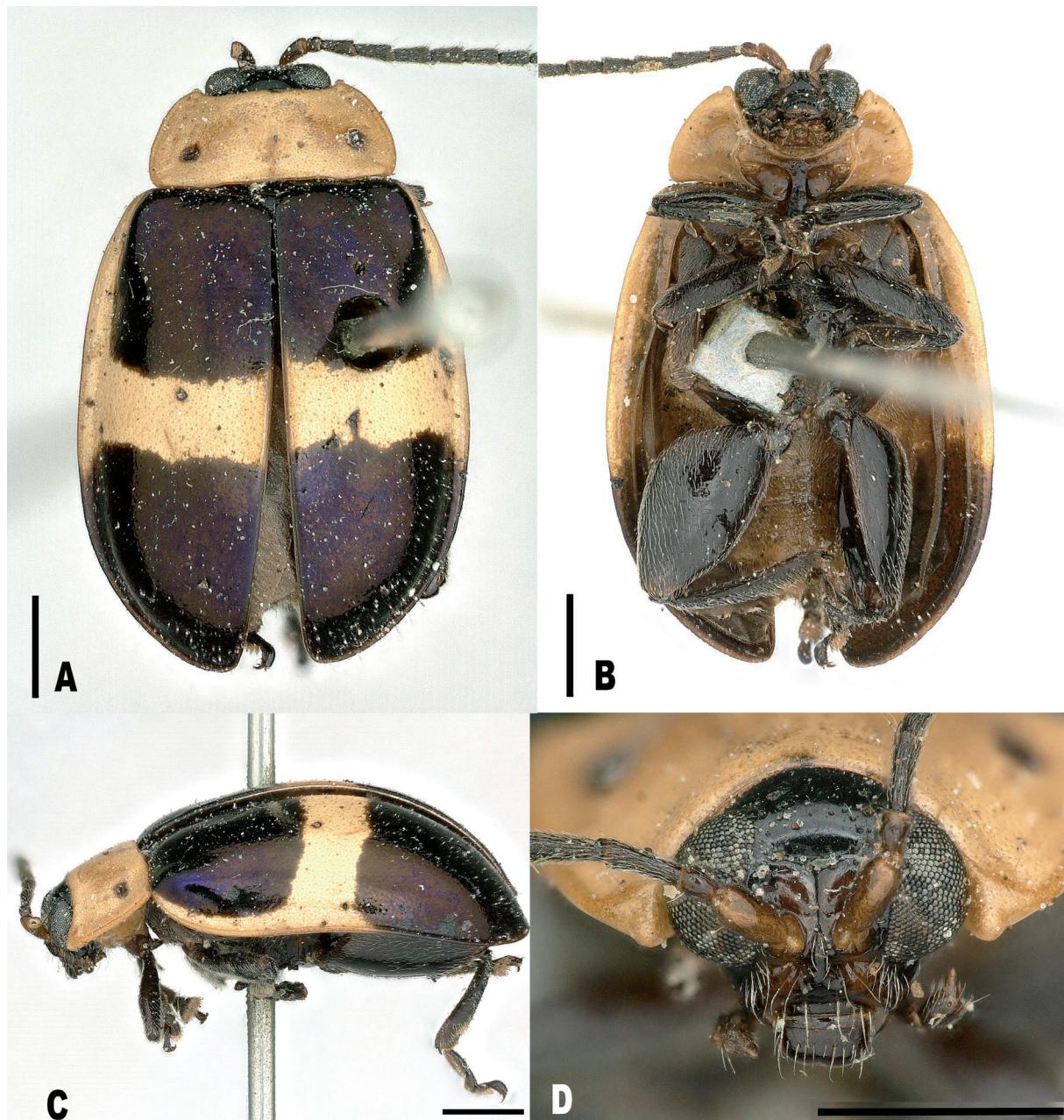


Fig. 27. *Galleruca nitida* Fabricius, 1801, paralectotype, ♀ (ZMUC 00031092). A. Dorsal view. B. Ventral view. C. Lateral view. D. Frontal view. E. Labels. Scale bars = 1 mm.

Galleruca obsoleta Fabricius, 1801
Fig. 28

obsoleta Fabricius, 1801: 497 (America meridionali).

Material examined

Lectotype (presently designated)

COUNTRY NOT INDICATED ON SPECIMEN • ♀; “*G. obsoleta* en Am. Mer. Schmidt/ TYPE/ Lectotype *Galleruca obsoleta* Fabricius 1801 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; ex-Copenhagen; ZMUC 00031103.

Status in Zimsen (1964)

P. 112 No.1737. “in America meridionali D. Smidt Mus. D. de Sehestedt” Copenhagen 1 specimen.

Original description

“*G. saltatoria*, nigra, thorace ferrugineo, elytris vitta obsoleta, testacea. habitat in America meridionali. D. Smidt. Mus. D. de Sehestedt. Statura praecedentium. Caput cum antennis nigrum. Thorax laete ferrugineus, immaculatus. Elytra laenia, nigra: vitta obsoleta, testacea, quae tamen apicem haud attingit. Pedes rufi, femoribus posticis valde incrassates, apice nigris.”

Current status

Phenrica obsoleta (Fabricius, 1801) comb. nov.

Measurements

Lectotype (Fig. 28): LB = 4.49 mm; WB = 2.35 mm.

Remarks

The lectotype for *Galleruca obsoleta* is designated here to have a unique bearer of this name and the standard for its application. Klug (1829) listed this species as present in Suriname (as *Galeruca obsoleta*). Later, this species was placed in the genus *Oedionychis* Latreille, 1829 (as *Oedionychus*) by Heikertinger & Csiki (1940). The rationale of this decision is unknown, and there is no indication that the authors have seen the type of Fabricius. Probably based on Heikertinger & Csiki (1940), Bechyné mentioned this species in his unpublished catalogue as *Alagoasa obsoleta*. Since there was no record of this species in any other paper of Bechyné, we suspect that Bechyné made this new (unpublished) combination solely to solve any incertae sedis, without studying the type. Nevertheless, this species clearly does not belong in Oedionychina, but rather Disonychina based on the following characters: frontal ridge long, about twice as long as clypeus; pronotum quadrate, anterolateral callosity of pronotum strongly rounded, apical metatarsomere not globosely swollen. Within Disonychina, it belongs to *Phenrica*.

Galleruca oculata Fabricius, 1801
Fig. 29

oculata Fabricius, 1801: 496 (America meridionali).

Material examined

Lectotype (presently designated)

COUNTRY NOT INDICATED ON SPECIMEN • ♀; “*G. oculata* en Am. Mer. Schmidt/ TYPE/ Lectotype *Galleruca oculata* Fabricius 1801 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; ex-Copenhagen; ZMUC 00031097.

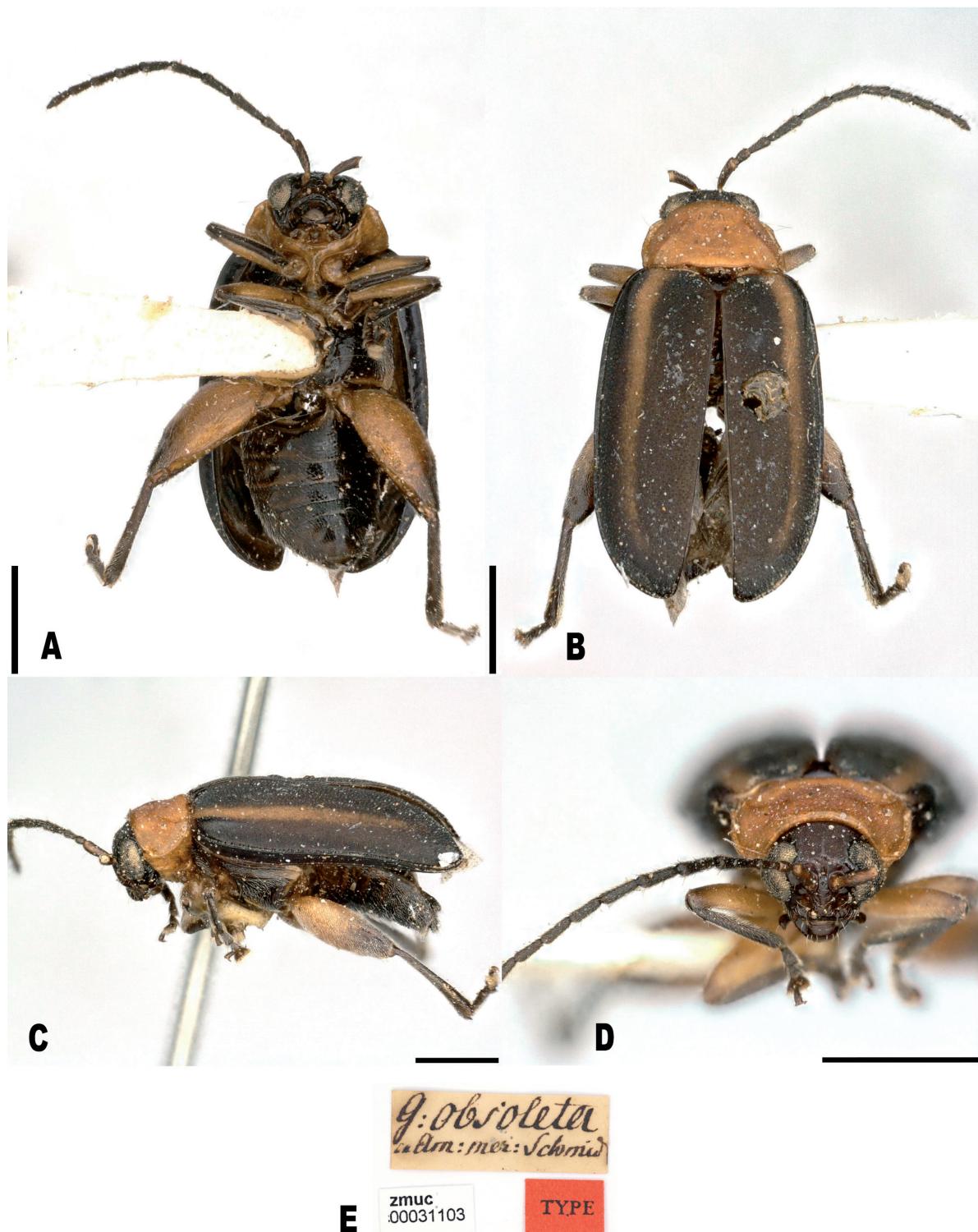


Fig. 28. *Galleruca obsoleta* Fabricius, 1801, lectotype, ♀ (ZMUC 00031103). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

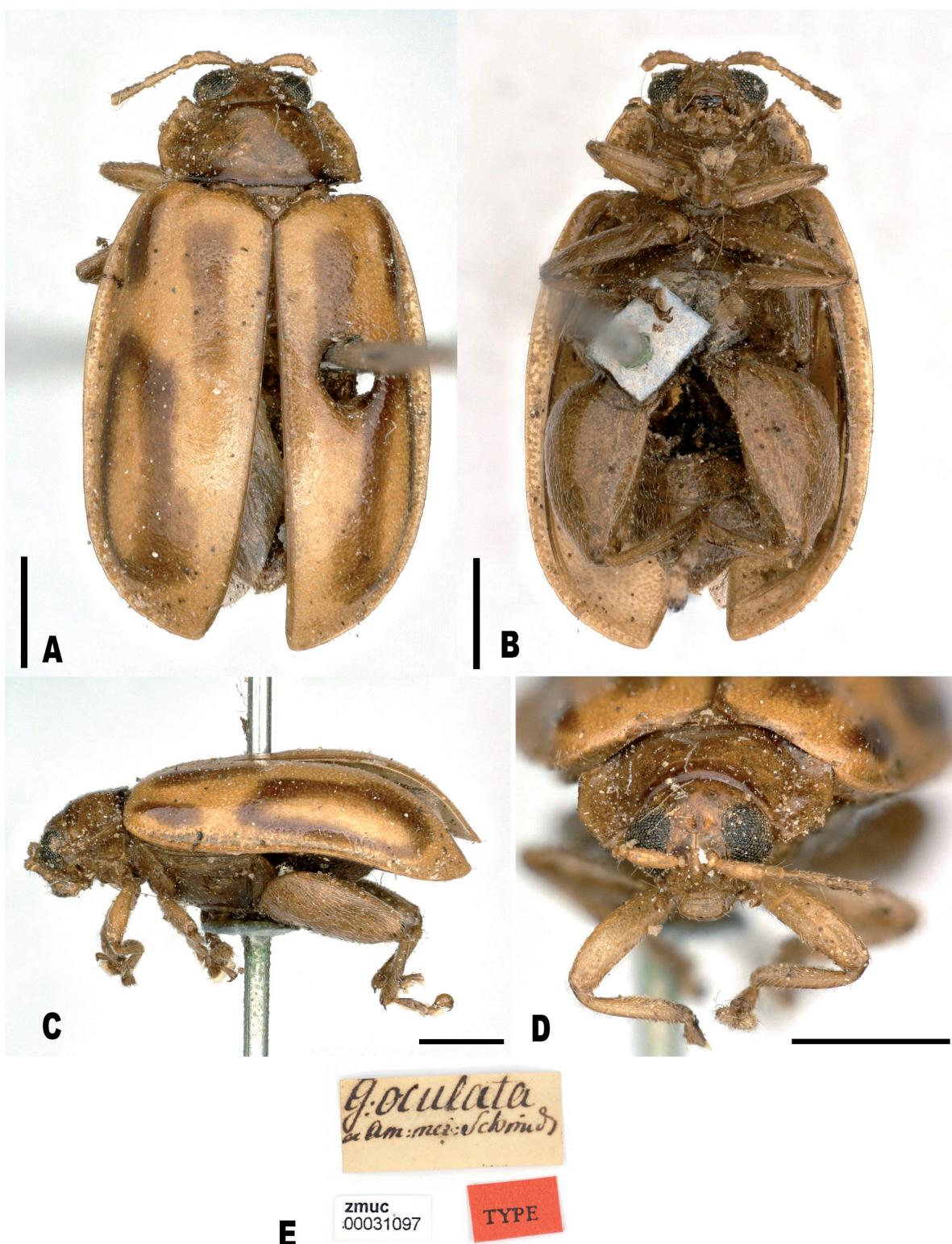


Fig. 29. *Galleruca oculata* Fabricius, 1801, lectotype, ♀ (ZMUC 00031097). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

Specimen probably misplaced

COUNTRY NOT INDICATED ON SPECIMEN • 1 ♀; “*oculata*/ [red squared label] / nobilitata F. [printed label]”; Kiel.

Status in Zimsen (1964)

P. 112 No.1731. “in America meridionali D. Smidt Mus. D. Lund” Copenhagen 1 specimen. (Kiel 1 specimen = *nobilitata* F.).

Original description

“G. saltatoria, testacea, elytris maculis tribus obscuris: posterior macula testacea. Habitat in America meridionali. D. Smidt. Mus. D. Lund. Statura omnino praecedentium. Antennae obscurae, basi pallidae. Caput pallidum. Thorax marginatus, pallidus, immaculatus. Elytra pallide testacea, maculis duabus oblongis baseos, tertia postica, elongate: macula oblonga pallida, femoribus incrassatis.”

Current status

Walterianella oculata (Fabricius, 1801).

Measurements

Lectotype (Fig. 29): LB = 5.91 mm; WB = 3.64 mm.

Remarks

The lectotype for *Galleruca oculata* is designated here to have a unique bearer of this name and the standard for its application. The lectotype is missing segments 3–11 of the right antenna and segments 5–11 of the left antenna. As already indicated in Zimsen (1964), there is one specimen included in the type series that is likely misplaced and seems to be conspecific with *Galleruca nobilitata* (Fig. 5). This is also indicated on a printed label, probably added by Zimsen. We confirm the correct placement in the genus *Walterianella* based on the following characters: eyes big, interocular space about as wide as diameter of eye, pronotal borders widely explanate, flattened, prosternal process keeled.

Galleruca pallens Fabricius, 1792
Figs 30–31

pallens Fabricius, 1792: 25 (Insula Guadeloupe).

Material examined

Lectotype (previously designated)

GUADELOUPE • ♀; “*G. pallens*, e Guadeloupe, Badier/ Lectotype *Galleruca pallens* Fabricius des A. Konstantinov 2020”; Kiel.

Specimens probably misplaced

COUNTRY NOT INDICATED ON SPECIMEN • 1 ♂, 2 ♀♀; “*pallens*/ [red squared label]”; Kiel.

Status in Zimsen (1964)

P. 112 No. 1740. “in Insula Guadeloupe Dom. de Badier” Copenhagen 2 specimens, Kiel 3 specimens.

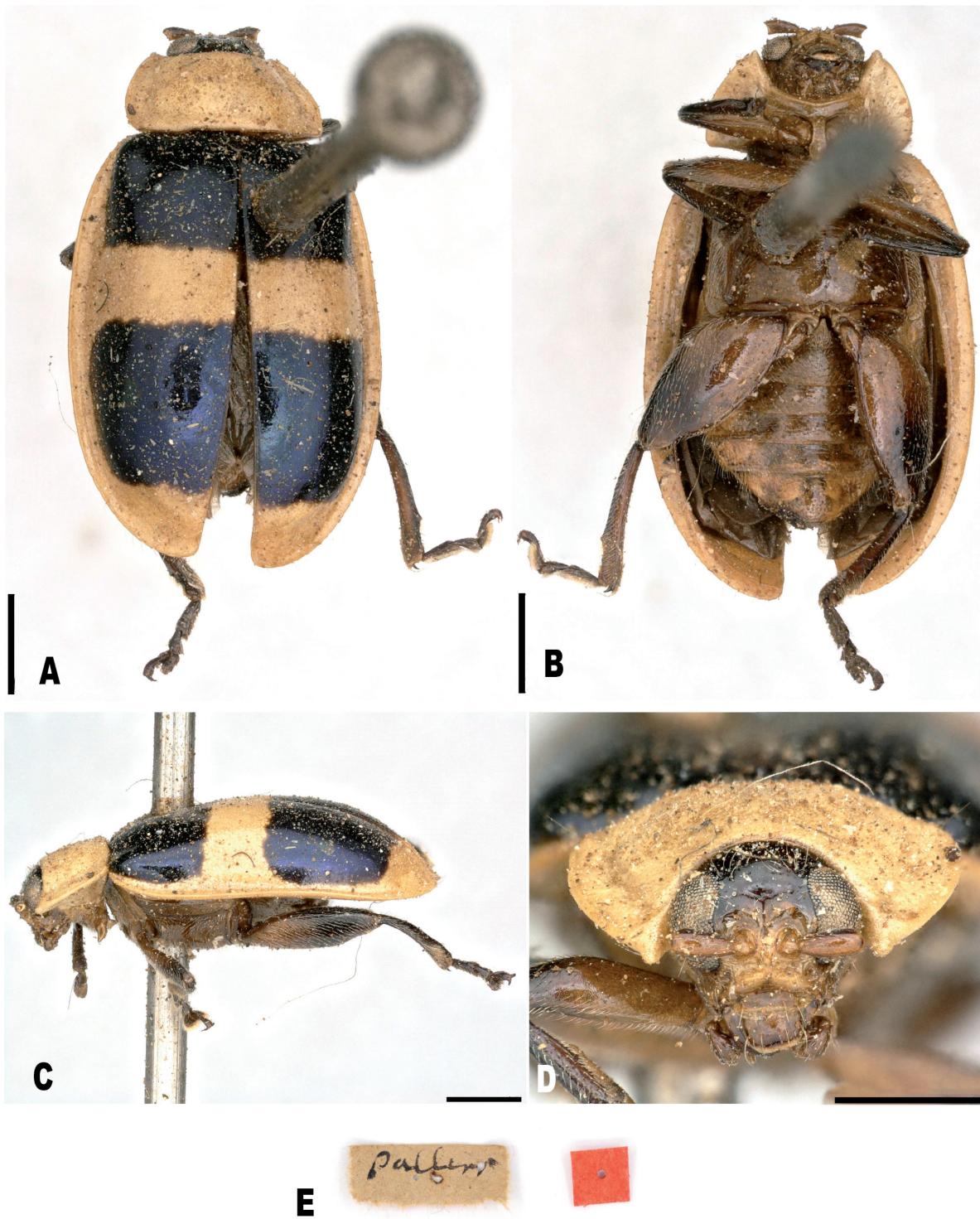


Fig. 30. *Galleruca pallens* Fabricius, 1792, misplaced specimen, ♂ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels of all three misplaced specimens. Scale bars = 1 mm.

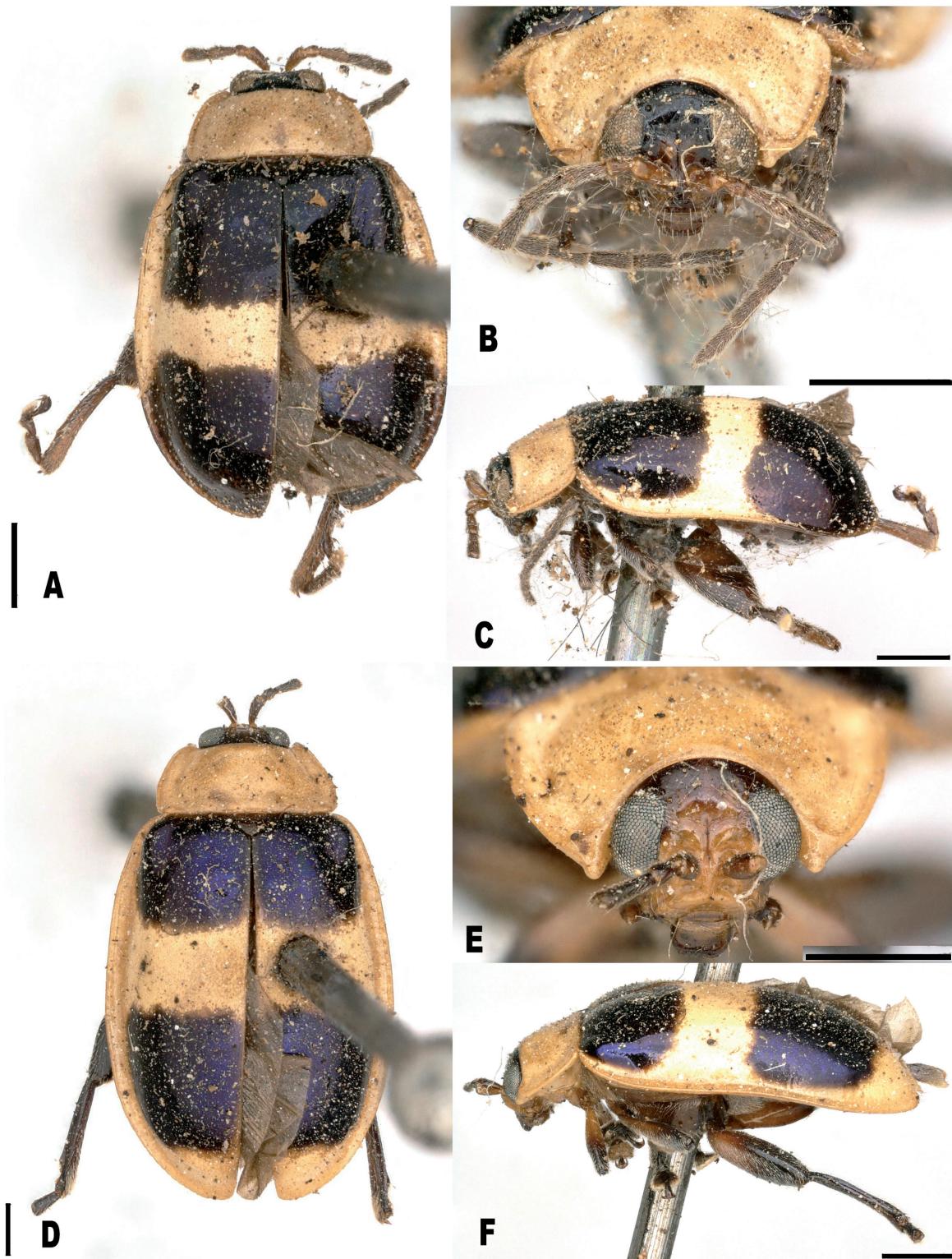


Fig. 31. *Galleruca pallens* Fabricius, 1792, misplaced specimens, ♀♀ (Kiel). **A.** Dorsal view specimen 1. **B.** Frontal view specimen 1. **C.** Lateral view specimen 1. **D.** Frontal view specimen 2. **E.** Frontal view specimen 2. **F.** Lateral view specimen 2. Scale bars = 1 mm.

Original description

“G. saltatoria pallida antennis tibiisque nigris. Habitat in Insula Guadeloupe Dom. de Badier. Statura praecedentium. Caput pallidum antennis nigris basi pallidis. Thorax & elytra glabra, laevia, nitida, pallida, immaculata. Corpus pallidum. Pedes nigri femoribus pallidis.”

Current status

Monomacra pallens (Fabricius, 1792).

Measurements

Misplaced specimen 1 (Fig. 30): LB = 5.42 mm; WB = 3.43 mm. Misplaced specimen 2 (Fig. 31A–C): LB = 5.37 mm; WB = 3.44 mm. Misplaced specimen 3 (Fig. 31D–F). LB = 5.80 mm; WB = 3.89 mm.

Remarks

The lectotype of this species had been designated by Konstantinov (2021) and placed in *Monomacra* Chevrolat, 1836. Three more oedionychine specimens were noted (Konstantinov 2021), but not identified as part of the type series as they do not match the original description. These three specimens obviously belong to Oedionychina and *Asphaera* more specifically, but the species cannot be identified at the time. These three specimens are illustrated in Figs 29–30.

Galleruca petaurista Fabricius, 1801
Figs 32–33

petaurista Fabricius, 1801: 45 (Carolina).

Material examined

Lectotype (presently designated)

COUNTRY NOT INDICATED ON SPECIMEN • ♀; “*petaurista*/ Lectotype *Galleruca petaurista* Fabricius 1801 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; Kiel.

Paralectotype

COUNTRY NOT INDICATED ON SPECIMEN • 1 ♀; “*petaurista*/ Paralectotype *Galleruca petaurista* Fabricius 1801 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; Kiel.

Status in Zimsen (1964)

P. 112 No.1730. “in Carolina Mus. D. Bosc.” Paris 3 specimens (Blake 1952: 61). Kiel 2 specimens.

Original description

“G. saltatoria, atra, thoracis limbo, elytrorum margine vittisque duabus ferrugineis. Habitat in Carolina. Mus. D. Bosc. Magna in hac familia. Caput atrum. Thorax flavus, disco macula magna, atra. Elytra punctata, atra, margine vittisque duabus, postice coeuntibus, ferrugineis. Corpus atrum, femoribus crassissimis.”

Current status

Kuschelina petaurista (Fabricius, 1801).

Measurements

Lectotype (Fig. 32): LB = 6.12 mm; WB = 3.68 mm. Paralectotype (Fig. 33): LB = 6.52 mm; WB = 3.88 mm.

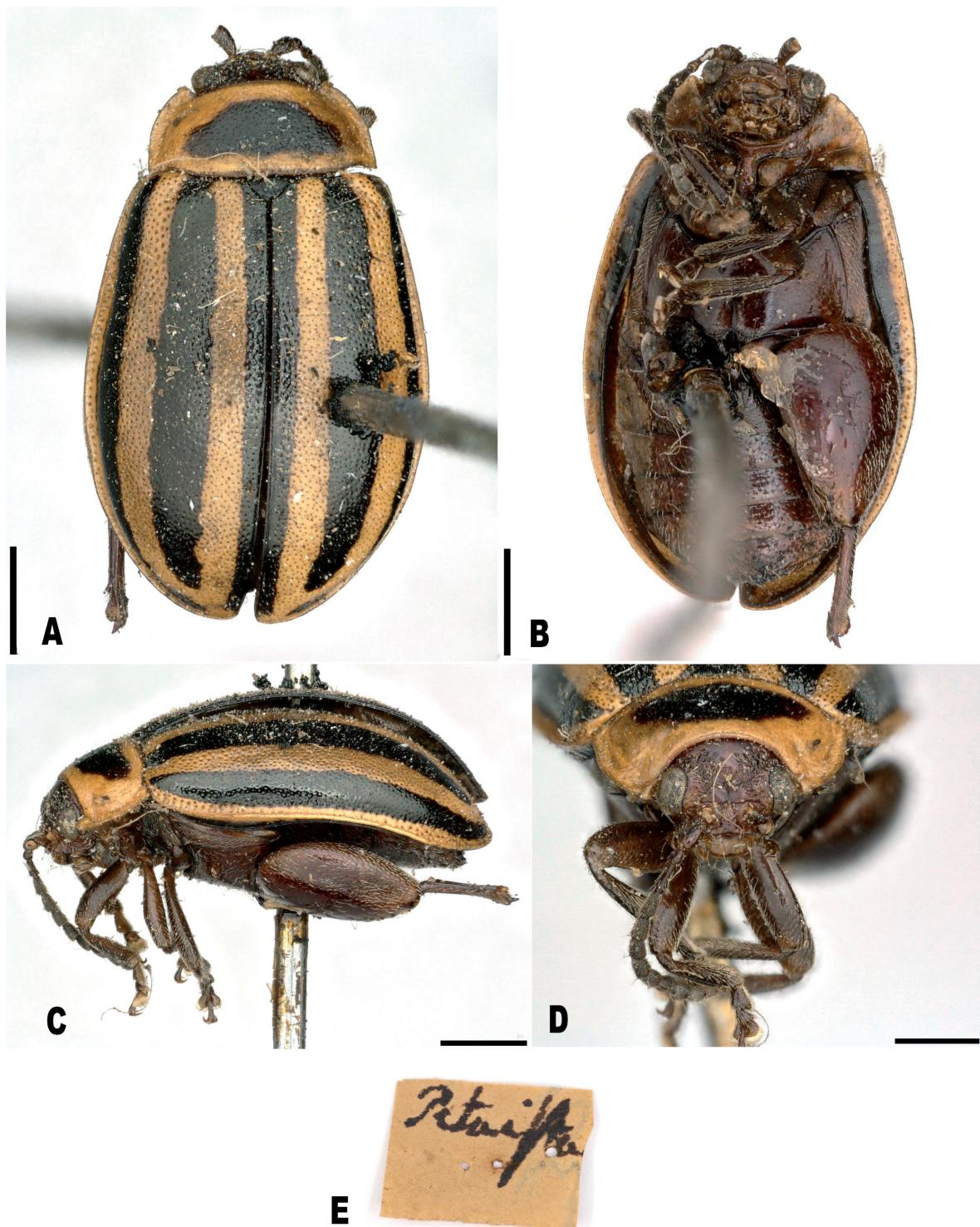


Fig. 32. *Galleruca petaurista* Fabricius, 1801, lectotype, ♀ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels of lectotype and paralectotype. Scale bars = 1 mm.

Remarks

The lectotype for *Kuschelina petaurista* is designated here to have a unique bearer of this name and the standard for its application. There are two specimens pinned with the same label. The lectotype is missing segments 2–11 of the left antenna, its right antenna is intact. Furthermore, it is missing its right hind leg, and its left metatarsi. The paralectotype is missing both antennae and the right leg (except for the trochanter). As also indicated in Zimsen (1964), Blake (1952: 61) identified three cotypes of this species in the Bosc collection in Paris. We confirm the correct placement in the genus *Kuschelina* Bechyné, 1951 based on the following characters: eyes small, diameter of eye at most one third of

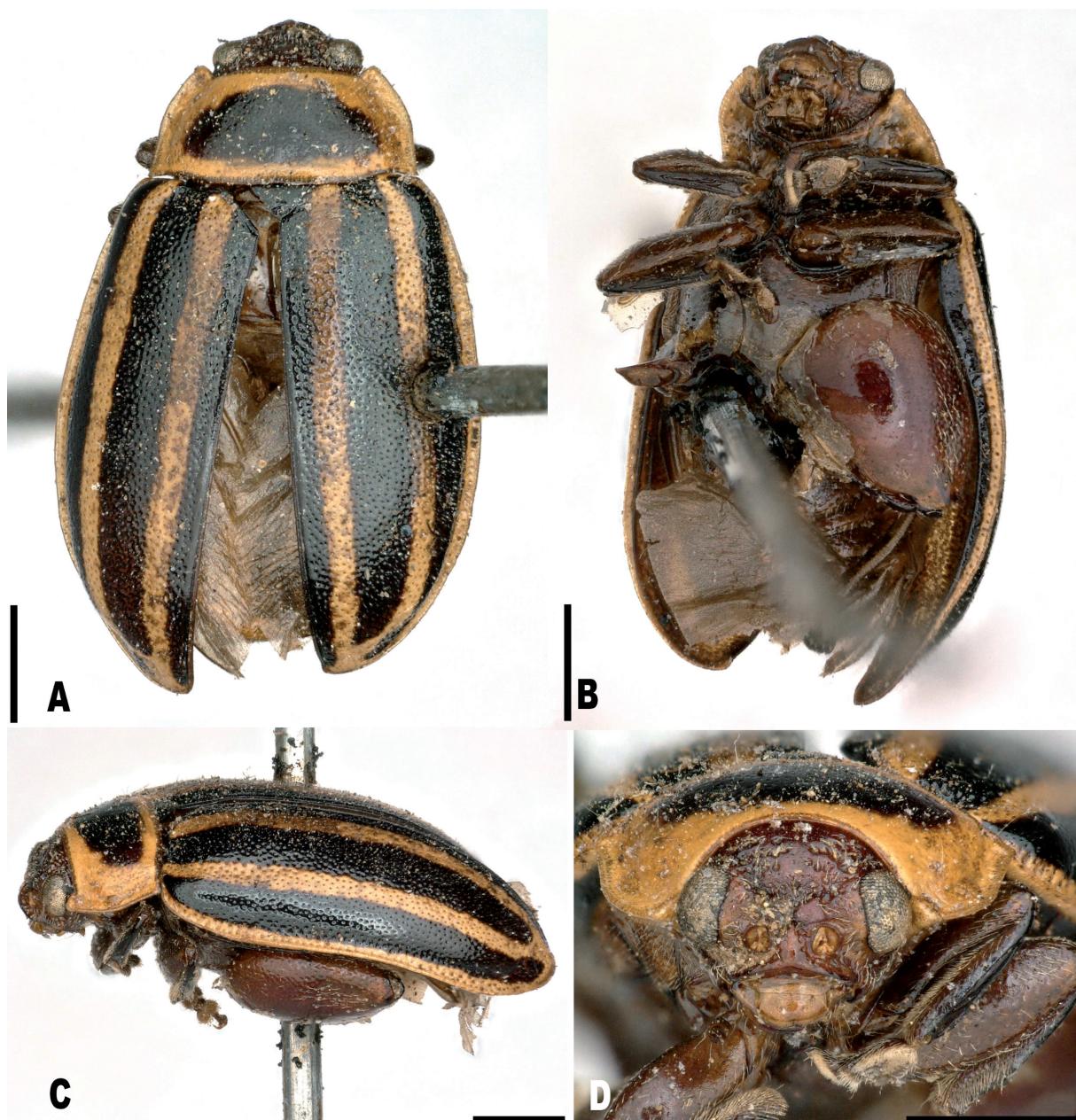


Fig. 33. *Galleruca petaurista* Fabricius, 1801, paralectotype, ♀ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. Scale bars = 1 mm.

interocular width; vertex densely punctated, frontal ridge wide; pronotal sides narrowly explanate (see Konstantinov *et al.* 2022).

***Galleruca quadrinotata* Fabricius, 1798**
Figs 34–35

quadrinotata Fabricius, 1798: 98 (Cajennae).

Material examined

Lectotype (presently designated)

COUNTRY NOT INDICATED ON SPECIMEN • ♀; “*4 notata/ ? / TYPE*” Lectotype *Galleruca quadrinotata* Fabricius 1798 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; Kiel.

Specimen probably misplaced

COUNTRY NOT INDICATED ON SPECIMEN • 1 ♂; “*4 notata/ ? / TYPE*”; Kiel.

Status in Zimsen (1964)

P. 111 No.1721. ‘in Cayenna D. Cuvier’ Kiel 1 specimen.

Original description

“*G. saltatoria ferruginea capite thoraceque albis, elytris ferrugineis: punctis quator simplicibus. Habitat Cajennae Dom. Cuvier. Statura omnino et summa affinitas G. albicollis. Caput album antennis ferrugineis. Thorax albus nitidus, immaculatus. Elytra laevia, ferruginea punctis quator albis 1.2.1. annulo obscuriori cinctis. Corpus ferrugineum.*”

Current status

Omophoita quadrinotata (Fabricius, 1798).

Measurements

Lectotype (Fig. 34): LB = 6.40 mm; WB = 3.04 mm. Misplaced specimen (Fig. 35): LB = 6.51 mm; WB = 2.96 mm.

Remarks

The lectotype for *Galleruca quadrinotata* is designated here to have a unique bearer of this name and the standard for its application. Zimsen (1964) only mentioned one syntype in Kiel, although two were included here. They represent two different species of *Omophoita*. Which species is correct was however apparent by the original description, mentioning ‘annulo obscuriori cinctis’, meaning, ‘surrounded by a darker ring’. The lectotype is missing segments 2–11 of its right antenna and segments 7–11 of its left antenna. Furthermore, it is missing both hind legs and several tarsal segments. The status of the metatarsal segment could not be determined, but the species is well known in collections and represents all characteristics of the genus *Omophoita*. We confirm the correct placement by the following characters: pronotal lateral explanation narrow, anterolateral corner of pronotum with lateral side straight, projecting directly forward, thickened, intercoxal prosternal process narrow (see also Konstantinov *et al.* 2022).

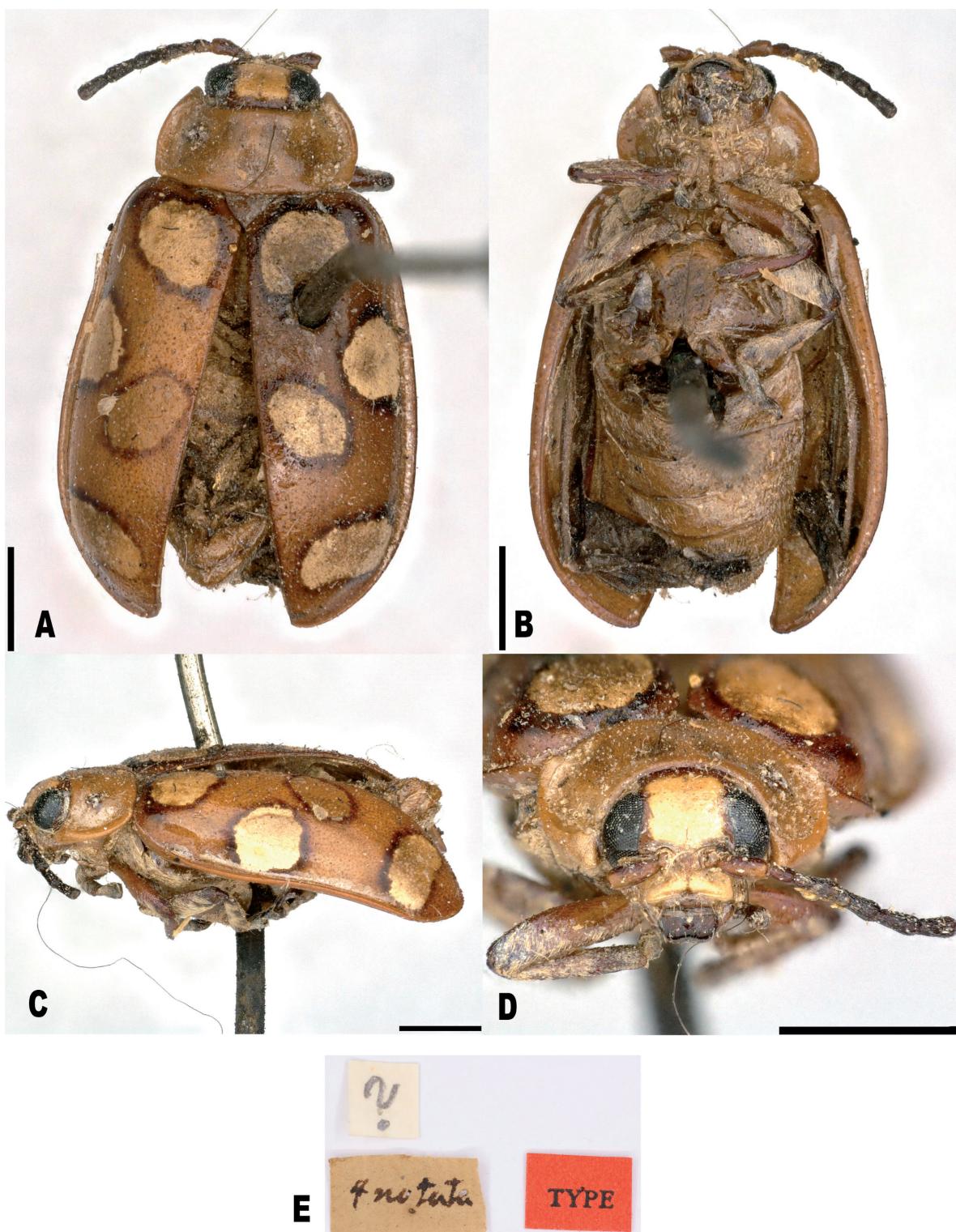


Fig. 34. *Galleruca quadrinotata* Fabricius, 1798, lectotype, ♀ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

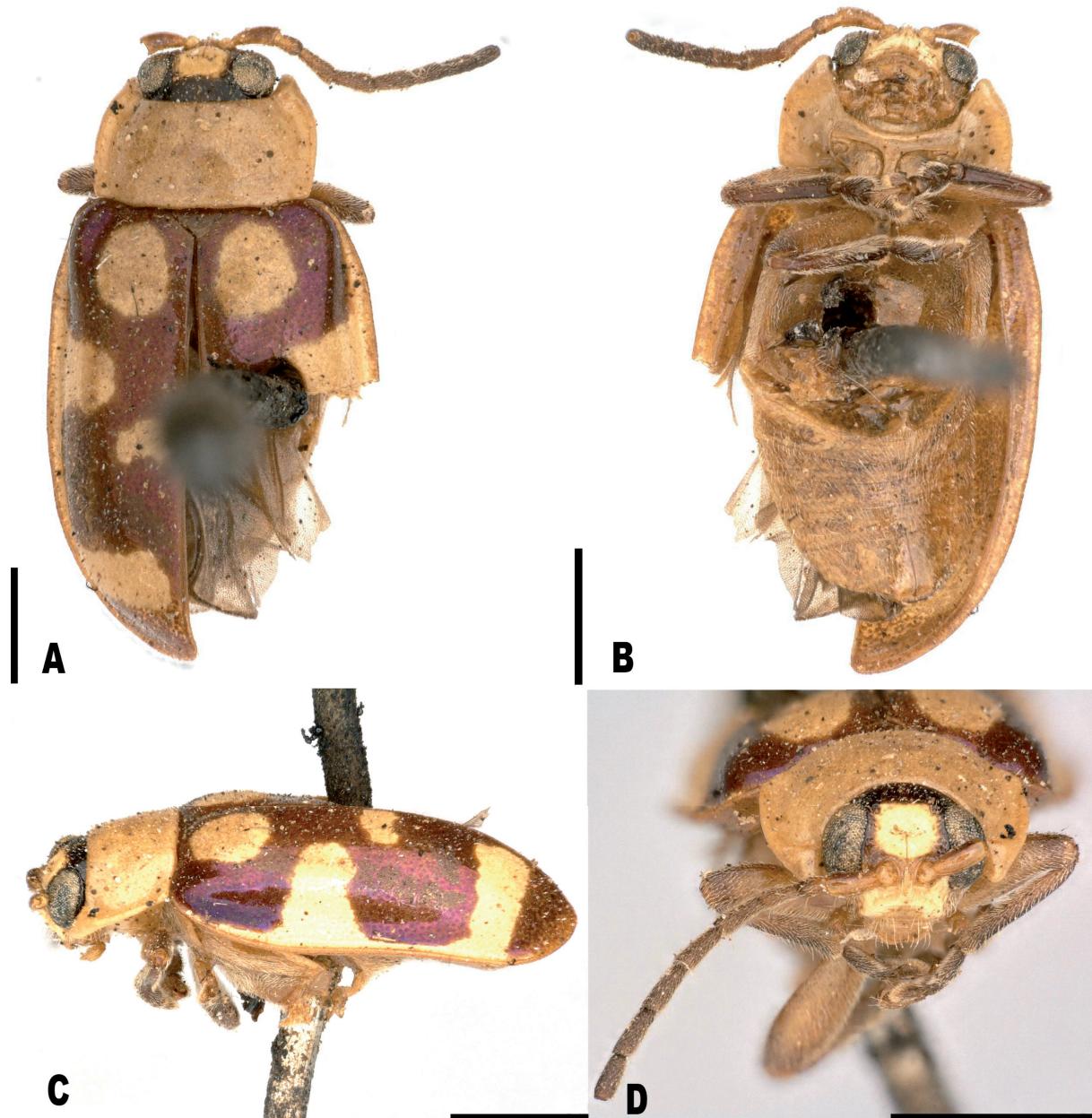


Fig. 35. *Galleruca quadrinotata* Fabricius, 1798, misplaced specimen, ♂ (Kiel). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. Scale bars = 1 mm.

***Galleruca sellata* Fabricius, 1801**
Figs 36–37

sellata Fabricius, 1801: 492 (America meridionali).

Material examined

Lectotype (presently designated)
COUNTRY NOT INDICATED ON SPECIMEN • ♂; “*G. sellata* en Am. Mer. Schmidt/ TYPE/
Lectotype *Galleruca sellata* Fabricius 1801 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”;
ex-Copenhagen; ZMUC 00031089.

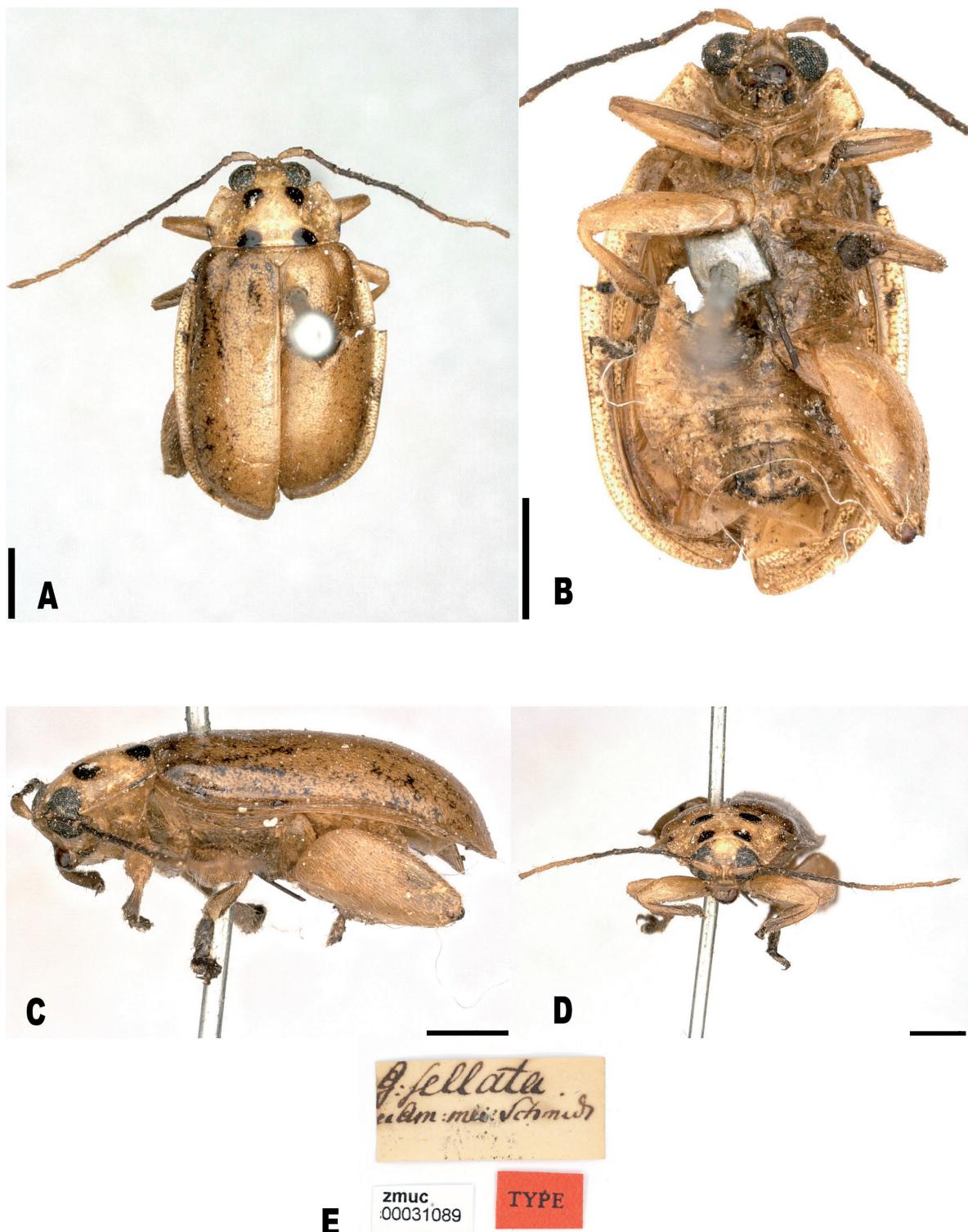


Fig. 36. *Galleruca sellata* Fabricius, 1801, lectotype, ♂ (ZMUC 00031089). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

Paralectotype

COUNTRY NOT INDICATED ON SPECIMEN • 1 ♀; “TYPE/Paralectotype *Galleruca sellata* Fabricius 1801 des. Van Roie, Kuhlmann, Mack & Konstantinov, 2023”; ex-Copenhagen; ZMUC 00031088.

Status in Zimsen (1964)

P. 111 No.1715. ‘In America meridionali D. Smidt Mus. D. de Sehestedt’ Copenhagen 2 specimens.

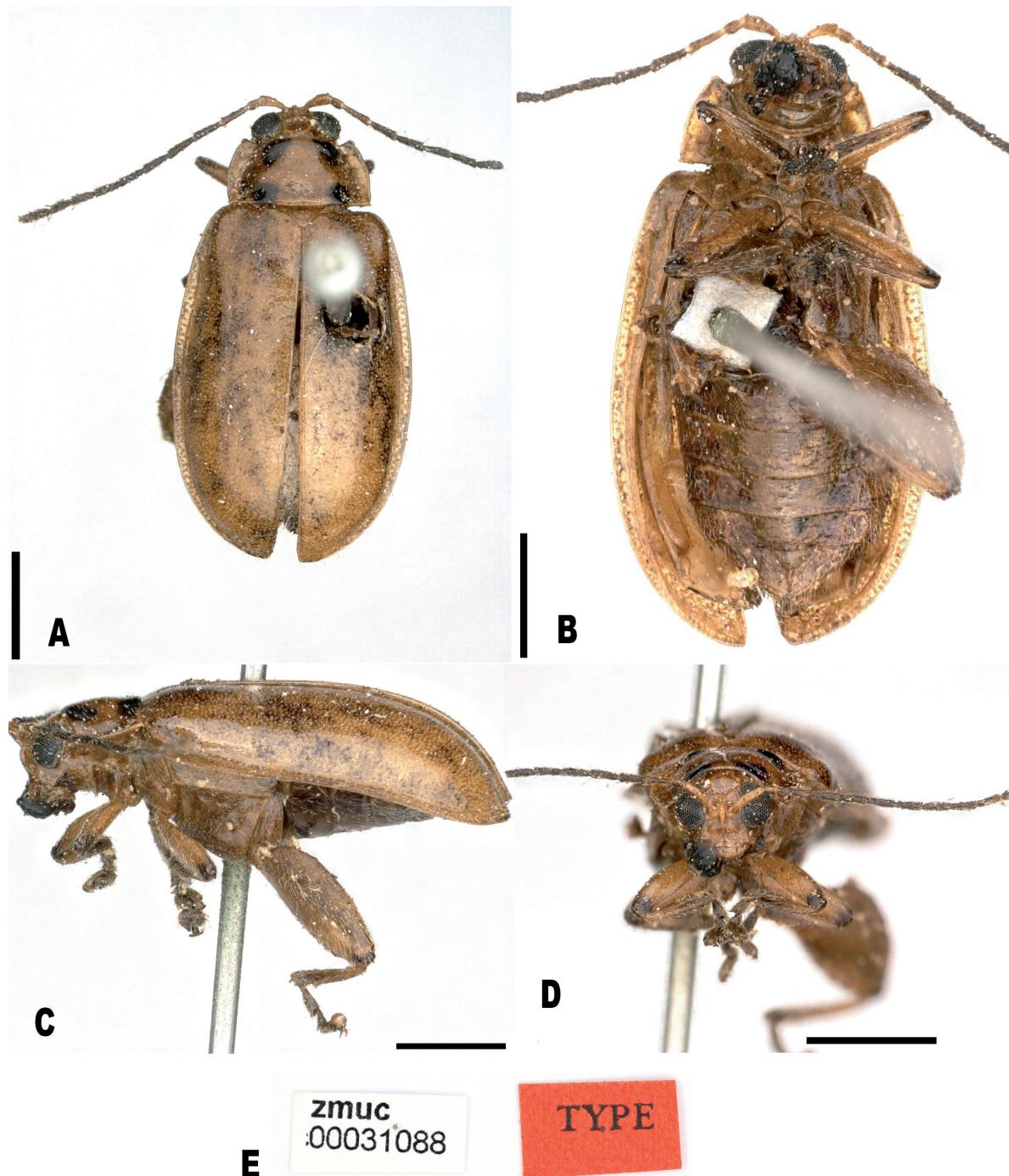


Fig. 37. *Galleruca sellata* Fabricius, 1801, paralectotype, ♀ (ZMUC 00031088). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

Original description

“G. saltatoria, testacea, thorace albo: punctis quatuor nigris. Habitat in America meridionali. D. Smidt. Mus. D. de Sehestedt. Magna. Antennae nigrae, apice albidae. Caput albidum. Thorax marginatus, albus : punctis quatuor nigris; duobus baseos, duobus apicis. Elytra laevia, testacea, immaculata. Corpus pallide testaceum.”

Current status

Walterianella sellata (Fabricius, 1801).

Measurements

Lectotype (Fig. 36): LB = 6.57 mm; WB = 3.93 mm. Paralectotype (Fig. 37): LB = 6.72 mm; WB = 3.47 mm.

Remarks

The lectotype for *Galleruca sellata* is designated here to have a unique bearer of this name and the standard for its application. Although the male specimen is missing the right hind leg and has a slightly damaged right elytron, we chose this specimen as lectotype because some male characters like shape of prosternal process and shape of last abdominal ventrite can be helpful for species delineation in *Walterianella* (Van Roie unpubl. data). We confirm the correct placement in the genus *Walterianella* based on the following characters: eyes big, interocular space about as wide as diameter of eye, pronotal borders widely explanate, flattened, prosternal process keeled.

Galleruca trifasciata Fabricius, 1801

Fig. 38

trifasciata Fabricius, 1801: 498 (America meridionali).

Material examined

Syntype

COUNTRY NOT INDICATED ON SPECIMEN • ♀; “*G. trifasciata* en Am. Mer: Schmidt Type”; Kiel; ZMUC 00031106.

Status in Zimsen (1964)

P. 112 No.1744. “In America meridionali D. Smidt Mus. D. de Sehestedt” Copenhagen 1 specimen.

Original description

“G. saltatoria, pallida, elytris nigris: puncte baseos fasciisque tribus albis. Habitat in America meridionali. D. Smidt. Mus. D. de Sehestedt. Statura praecedentium. Caput cum antennis atrum. Thorax laevis, pallide testaceus, immaculatus. Elytra laevia, puncto baseos, falsciisque duabus maculaque apicis albis. Corpus pallide testaceum.”

Current status

Ora trifasciata (Fabricius, 1801) comb. nov.

Measurements

Syntype (Fig. 38): LB = 5.16 mm; WB = 3.12 mm.

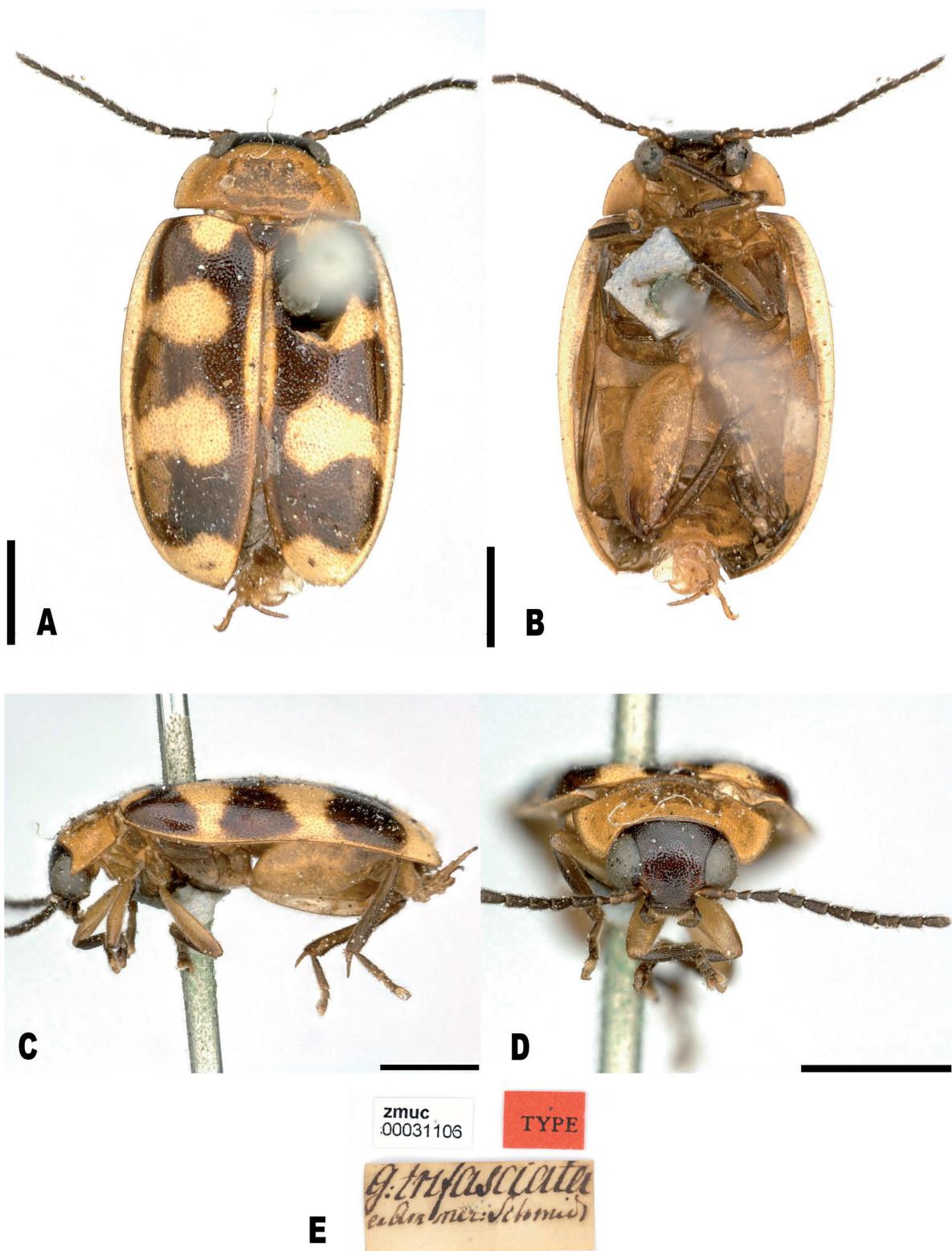


Fig. 38. *Galleruca trifasciata* Fabricius, 1801, syntype, ♀ (ZMUC 00031106). **A.** Dorsal view. **B.** Ventral view. **C.** Lateral view. **D.** Frontal view. **E.** Labels. Scale bars = 1 mm.

Remarks

The examined specimen identified as “*trifasciata*” belongs to the Scirtidae genus *Ora* Clark, 1865 (Ruta pers. com.). It has an elytral pattern similar to that of some Oedionychina and swollen metafemora as all Oedionychina do. It is not clear if prior authors, who commented on the name, ever examined the type, but we suspect the type is being studied for the first time in this paper. It appeared as *Oedionychus trifasciatus* in Heikertinger & Csiki (1940) with two synonyms: *O. areatus* Germar, 1824 and *O. divisa* Germar, 1824. Bechyné (1955a) transferred it to *Alagoasa* and suggested that *O. divisa* is a valid species (and not a synonym of *O. trifasciata*). Bechyné later (1958) described a subspecies *Alagoasa trifasciata macromela* Bechyné, 1958 and proposed another subspecies by transferring *Alagoasa escuintla* Bechyné, 1955, producing *Alagoasa trifasciata escuintla*. Another subspecies of *A. trifasciata* was created when Bechyné & Bechyné (1977) transferred *A. decempunctata* Latreille, 1833 into it. Two more subspecies, *A. trifasciata praecessa* and *A. trifasciata recuperata* were created by Bechyné (1959). Since *G. trifasciata* is being placed in *Ora* (Scirtidae), the oldest name for the taxon previously called *Alagoasa trifasciata* is *Haltica areata* Germar, 1824. This name should be used from now on as valid for the following taxa: *Alagoasa areata areata* (Germar, 1824), *Alagoasa areata decempunctata* (Latreille, 1833), *Alagoasa areata escuintla* Bechyné, 1955, *Alagoasa areata macromela* Bechyné, 1958, *Alagoasa areata praecessa* Bechyné, 1959 and *Alagoasa areata recuperata* Bechyné, 1959.

Notes on other Fabrician types

The first author consulted the Banks collection in the Natural History Museum, London, UK (BMNH) but could not find any Fabrician species types belonging in Oedionychina. One specimen of *Galleruca aequinoctialis* (Linnaeus, 1758) (originally described as *Chrysomela* Linnaeus, 1758) was present, but probably misidentified since it is most likely conspecific with *Omophoita octomaculata* (Crotch, 1873) (now considered a subspecies of *Omophoita cyanipennis* (Fabricius, 1798)). Given the brittle state of the specimen, handling was kept to a minimum.

Based on Zimsen (1964), the following types of Oedionychina are likely lost: *Altica biguttata* Fabricius, 1775, *Galleruca cyanipennis* Fabricius, 1798, *Chrysomela equestris* Fabricius, 1787, *Altica octoguttata* Fabricius, 1775 (in Zimsen 1964 as “*Altica 8 gultata*” [incorrect subsequent spelling]) and *Altica thoracica* Fabricius, 1775.

According to Zimsen (1964), the following types of Oedionychina should be present in the collections of Paris: *Galleruca obsidiana* Fabricius, 1801, *Galleruca quercata* Fabricius, 1801, *Galleruca suturalis* Fabricius, 1801 and *Galleruca concinna* Fabricius, 1801. Moreover, Blake (1927) noted that there are three cotypes of *Galleruca miniata* Fabricius, 1801 present in the Bosc collection in Paris. All the species allegedly present in Paris represent North-American taxa that are currently placed in the genera *Capraita* Bechyné, 1957 and *Kuschelina* Bechyné, 1951.

Discussion

Our study of the Fabrician types in the Zoological Museum of Kiel University collections led to fourteen lectotype designations, two new placements and ten new combinations. Additionally, species status was restored for two species: *Chrysomela quadriguttata* Fabricius, 1781 and *Alagoasa areata* (Germar, 1824). It became apparent that specimens were misplaced in the Fabrician collections, in part due to the fact that labels were often not included on the specimen pins, but rather next to the species name in the box. Careful examination of the syntypes together with their original description is thus advised for all future studies on Fabrician types (see also Ruta 2013 and Sekerka & Barclay 2014, where similar issues were reported).

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