A review of *Galerita* (Coleoptera: Carabidae: Dryptini) of Vietnam, with description of ten new species

Обзор Galerita (Coleoptera: Carabidae: Dryptini) Вьетнама с описанием 10 новых видов

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KEY WORDS: Coleoptera, Carabidae, Galerita, new species, Vietnam, Oriental region. КЛЮЧЕВЫЕ СЛОВА: Coleoptera, Carabidae, Galerita, новый вид, Вьетнам, Ориентальная область.

ABSTRACT. 15 Oriental species of the genus Galerita Fabricius, 1801, are reviewed and keyed. New ten species and one subspecies are described from Vietnam: G. rufofemorata sp.n., G. dimorpha sp.n., G. truncata sp.n., G. konplongensis sp.n., G. variabilis sp.n., G. subglabra sp.n., G. quadraticollis sp.n., G. q. subcordata ssp.n., G. linearis sp.n., G. breviceps sp.n., and G. sublineata sp.n. All these species are apterous forest-dwellers similar to either G. feae Bates, 1892 or G. batesi Andrewes, 1923 in appearance. Galerita japonica Bates, 1873, stat.rest., and G. j. peregrina Dohrn, 1880, stat.rest., are resurrected from synonyms of G. orientalis Schmidt-Göbel, 1846.

РЕЗЮМЕ. Дан обзор 15 ориентальных видов рода *Galerita* Fabricius, 1801. Составлена таблица для их определения. Из Вьетнама описаны 10 новых видов и 1 новый подвид: *G. rufofemorata* **sp.n.**, *G. dimorpha* **sp.n.**, *G. truncata* **sp.n.**, *G. konplongensis* **sp.n.**, *G. variabilis* **sp.n.**, *G. subglabra* **sp.n.**, *G. quadraticollis* **sp.n.**, *G. q. subcordata* **ssp.n.**, *G. linearis* **sp.n.**, *G. breviceps* **sp.n.** и *G. sublineata* **sp.n.** Все они представляют собой бескрылые лесные формы, сходные по внешнему облику с *G. feae* Bates, 1892, или с *G. batesi* Andrewes, 1923. *Galerita japonica* Bates, 1873, **stat.rest.**, и *G. j. peregrina* Dohrn, 1880, **stat.rest.**, восстановлены изсинонимов *G. orientalis* Schmidt-Göbel, 1846.

Introduction

In the Oriental region, the pantropical genus *Galerita* Fabricius, 1801, is represented by 15 species that range west of the Papuan subregion, six of them being described just recently [Hovorka, 2017, 2019] from China

or Borneo, or Vietnam, or the island of Bali. All the species are macropterous to apterous and very similar to one another in appearance.

Examination of material collected by the author in Vietnam has revealed that many localities investigated harbour a particular species of *Galerita* each. These species have very restricted species ranges and are very little if at all different from one another in external morphology, so that differences of the internal sac of the aedeagus only secure reliable species identification. From this I have to conclude also that all records of *G. feae* in Indochina other than in the type locality are most likely to belong to different though similar species.

In this paper we describe new ten species and review five more, most of them being apterous and similar to either *G. feae* or *G. batesi* Andrewes, 1923. Major part of material was collected during expeditions to various regions of Central and northern Vietnam, sponsored by the Joint Russia-Vietnam Tropical Centre, Moscow-Hanoi. Species not recorded in Vietnam are in square brackets in the text.

Acronyms used are as follows: MSPU — the Moscow State Pedagogical University; SIEE — the author's reference collection at A.N. Severtsov Institute of Ecology & Evolution, Russian Academy of Sciences, Moscow; ZMMU — Zoological Museum of the Moscow State University; ZISP — Zoological Institute, Russian Academy of Sciences, St. Petersburg.

The following parameters were analyzed (Tabs 1–2): maximum body length measured between apices of closed mandibles and apex of elytra, including apical membrane (BL); length of head from neck constriction to apical margin of clypeus (HL); width of head across eyes (HW); length of gena (GL) and length of eye (OL), both projected onto sagittal plane; length of pronotum along median line (PL); distance (PLw) between the level of maximum width of pronotum (PW) and apical

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Species	n	PW/HW	mean	PL/PW	mean	EW/PW	mean	EL/EW	mean
G. japonica peregrina	4ථ්ථ	1.24-1.32	1.28	1.01-1.05	1.03	1.59-1.63	1.61	1.77-1.87	1.82
	4♀♀	1.18-1.28	1.21	↑		1.73-1.80	1.76	1.71-1.74	1.72
G. orientalis	2 රී රී	1.19-1.25		1.09-1.14		1.54-1.57		1.85-1.93	
	2 ♀♀	1.12-1.14		↑		1.73-1.78		1.74-1.76	
G. batesi	2 රී රී	1.19-1.25		1.09-1.20	1.11	1.63-1.72		1.80	
	3♀♀	1.14-1.23	1.18	↑		1.80-1.88	1.85	1.67-1.77	1.70
G. ruficeps	2 රී රී	1.21-1.24		1.01-1.06		1.72-1.76		1.66	
G. rufofemorata sp.n.	333	1.23-1.30	1.28	1.04-1.12	1.07	1.60-1.68	1.64	1.72-1.82	1.77
	4♀♀	↑ (↑		1.69-1.83	1.75	1.64-1.76	1.68
G. konplongensis sp.n.	2 රී රී	1.31-1.33		1.07-1.09		1.57-1.65		1.74-1.84	
G. dimorpha sp.n.	388	1.21-1.34	1.27	1.11-1.20	1.15	1.66-1.75	1.71	1.78-1.83	1.80
	4♀♀	↑ (1.05-1.17	1.10	1.76-1.83	1.79	1.59-1.69	1.65
G. variabilis sp.n.	4ථ්ථ	1.20-1.29	1.25	1.11-1.19	1.15	1.64-1.70	1.68	1.65-1.78	1.73
	4♀♀	↑ (1.07-1.17	1.11	1.72-1.82	1.76	1.60-1.69	1.64
G. subglabra sp.n.	2♀♀	1.14-1.18		1.07-1.19		1.85-1.98		1.58-1.60	
G. quadraticollis sp.n.	3/9	1.24 / 1.23		1.20 / 1.28		1.82 / 1.87		1.75 / 1.74	
G. q. subcordata ssp.n.	3/9	1.23 / 1.27		1.13 / 1.09		1.84 / 1.81		1.71 / 1.68	
G. truncata sp.n.	6	1.17		1.15		1.84		1.64	
G. tonkinensis	2 ් ්	1.21-1.31	1.25	1.21-1.26	1.23	1.74-1.76		1.76-1.83	
	5♀♀	↑		↑		1.84-1.91	1.88	1.72-1.77	1.75
G. linearis sp.n.	4ථ්ථ	1.14-1.25	1.22	1.13-1.17	1.15	1.69-1.72	1.71	1.72-1.80	1.77
	4♀♀	↑ (↑		1.82-1.89	1.85	1.63-1.78	1.72
G. sublineata sp.n.	2 රී රී	1.24-1.32	1.30	1.17-1.26		1.57-1.73		1.78-1.89	
	2♀♀	<u>↑</u>		1.06-1.14		1.72-1.81		1.66-1.70	
G. breviceps sp.n.	3	1.20		1.19		1.77		1.79	

 Table 1. Body ratios in species of Galerita, 1.

 Таблица 1. Пропорции тела видов Galerita, 1.

Arrowhead points to total range of values because no difference have been observed between males and females.

 Table 2. Body ratios in species of Galerita, 2.

 Таблица 2. Пропорции тела видов Galerita, 2.

Species	n	GL/OL	mean	HL/HW	mean	PB / PA	mean	PLw / PL	mean
G. j. japonica	2 ් ්	0.82-0.85		1.07-1.09		1.45-1.64	1.56	0.38-0.44	0.41
	2 ♀♀	0.83-0.90		1.13-1.15		↑		↑	
G. j. peregrina	4රීරී	0.82-0.90	0.86	1.07-1.11	1.09	1.49-1.62	1.57	0.38-0.44	0.41
	4♀♀	0.90-0.94	0.91	↑		↑		↑ (
G. orientalis	2 රී රී	0.70-0.76	0.74	1.02-1.08		1.50-1.58	1.54	0.34-0.39	0.36
	2♀♀	↑		1.06-1.12		↑		↑ (
G. batesi	2 රී රී	1.04-1.21	1.11	1.09-1.13	1.11	1.53-1.57	1.55	0.36-0.45	0.40
	3♀♀	↑		1.10-1.23	1.14	↑		↑	
G. ruficeps	2 රී රී	0.99-1.03		1.05-1.11		1.51-1.53		0.34-0.39	
G. rufofemorata sp.n.	3♂♂,4♀♀	1.27-1.43	1.35	1.14-1.18	1.16	1.27-1.45	1.38	0.34-0.40	0.37
G. konplongensis sp.n.	2 රී රී	1.26-1.36		1.17-1.19		1.42-1.49		0.36-0.38	
G. dimorpha sp.n.	3♂♂,4♀♀	1.17-1.32	1.25	1.16-1.19	1.18	1.32-1.50	1.42	0.37-0.43	0.40
G. variabilis sp.n.	4♂♂,4♀♀	1.30-1.45	1.42	1.18-1.21	1.19	1.32-1.49	1.38	0.24-0.33	0.28
G. subglabra sp.n.	2♀♀	1.36-1.45		1.17-1.20		1.42-1.43		0.37-0.39	
G. quadraticollis sp.n.	3/9	1.36 / 1.38		1.19 / 1.28		1.43 / 1.54		0.36 / 0.38	
G. q. subcordata ssp.n.	∂/♀	1.30 / 1.39		1.18 / 1.24		1.39 / 1.31		0.39 / 0.35	
G. truncata sp.n.	ð	1.27		1.17		1.36		0.38	
G. tonkinensis	2 ් ්	1.25-1.28		1.24-1.27		1.39–1.57	1.46	0.32-0.47	0.39
	5♀♀	1.29-1.40	1.34	1.29–1.37	1.33	↑		↑ (
G. linearis sp.n.	4♂♂,4♀♀	1.25-1.46	1.32	1.17-1.23	1.20	1.32-1.50	1.41	0.34-0.41	0.39
G. sublineata sp.n.	2♂♂,2♀♀	1.08-1.21	1.13	1.20-1.24	1.22	1.43-1.52	1.48	0.39-0.40	0.40
G. breviceps sp.n.	3	1.17		1.13		1.34		0.34	

Arrowhead points to total range of values because no difference have been observed between males and females.

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margin, measured along median line; width of pronotum between apical (PA) or basal (PB) angles; length of elytron, measured from the highest point of basal margin to apical margin of apical membrane (EL); maximum width of elytra (EW).

Measurements were taken using an eyepiece micrometer within the accuracy of two decimal places. All labels are printed. Data on labels of type specimens are in quotes, new line is marked with slash, and a handwritten text is italicized.

Male aedeagi were boiled for two minutes in diluted KOH solution, then rinsed and afterwards examined in glycerin. The internal sac of aedeagus was at first everted and maximally inflated with water or air, or both, using needle-syringe, and then air-dried.

Results

Subfamilia Harpalinae Bonelli, 1810 Supertribus Dryptitae Bonelli, 1810 Tribus Dryptini Bonelli, 1813 Subtribus Galeritina Lacordaire, 1853

Galerita Fabricius, 1801

Fabricius, 1801: 214 (non Guan, 1770, suppressed); Schmidt-Göbel, 1846: 26; Andrewes, 1930: 167; Reichardt, 1967: 11, 43; 1977: 447; Habu, 1984: 107. — *Galeritula* Strand, 1936: 168 (RN); Reichardt, 1965: 3; Habu, 1967: 256. — *Galeritina* Jeannel, 1949: 1058 (RN). — *Galeritila* Jeannel, 1949: 1058 (type species: *Galerita dricana* Dejean, 1825). — *Galeritella* Jeannel, 1949: 1058 (type species: *Galerita orientalis* Schmidt-Göbel, 1846); Basilewsky, 1963: 63. — *Galericeps* Jeannel, 1949: 1058, 1062 (type species: *Galericeps pheropsophoides* Jeannel, 1949). — *Diabena* Fairmaire, 1901: 94 (type species: *D. perrieri* Fairmaire, 1901); Basilewsky, 1963: 24.

Type species: *Carabus americanus* Linnaeus, 1758, by subsequent designation [Latreille, 1810].

DIAGNOSIS. The genus is well diagnosed. For details see the key in Reichardt [1967].

REDESCRIPTION. Concerns only some significant or additional characters of the Oriental species.

Dorsal microsculpture meshed, more or less distinct, isodiametric on head, while being more superficial to obliterate on frontal carina, slightly transverse and slightly sharper along sides and in front of neck constriction, obliterate or hardly traceable on neck; distinct and barely to moderately transverse on pronotal disc, coarser, isodiametric to granulate along wide submarginal area. Elytral microsculpture very coarse, consisting of small longitudinal granules, arranged in transverse rows, granules being superficial to almost obliterate along longitudinal elytral ridges.

Head with a deep neck constriction, densely and mostly coarsely punctate and pubescent in basal half, nearly glabrous and rather smooth before, with a long, slightly elevated, rounded median longitudinal carina, mostly reaching the level of posterior margin of eye; vertex barely convex or with a shallow yet distinct round depression just behind and on each side of the carina in its posterior part; neck narrow, smooth and glabrous. Clypeus quadrisetose. Antennomere 11 bifid apically due to presence of a doubled digitiform appendage as a characteristic feature of Dryptini.

Pronotum cordate, mostly longer than wide, very densely to confluently punctate and pubescent, confluently punctate to rugose-punctate along sides, bisetose on each side, with posterolateral seta inserted in front of basal angle. These very slightly obtuse to slightly acute, blunt or narrowly rounded. Apical angles small and rounded, not seldom ill-defined.

Elytral intervals each tricarinate, *i.e.*, raised in form of a median longitudinal ridge and a much finer lateral carinule along stria on each side; carinules being distinct, rarely vestigial (Fig. 9). Interval 3 mostly with three dorsal setae, anterior adjoining stria 3, posterior two adjoining stria 2 and varying slightly (from three to five) in number. Parascutellar setae multiple. Umbilical seta series (USS) inside ridge 9 (except in basal fifth), these setae are reduced much in size and thence hard to detect, except at base and at apex, indistinct in between. Pubescence sparse in general, being arranged in a single row of very sparse setae on each side of elytral ridge, or much denser along even than along odd ridges, thus forming 2–3 rows on each side of the former and often becoming denser in all intervals toward base.

Abdominal sternite 7 without preapical median pair of setae (secondary loss).

Sexual dimorphism. Tarsi simple, slender, in female, while having protarsomeres 1-3 strongly asymmetrically dilated, triangular, in male, with antero-apical (inner) angle extended much latero-apicad, and a narrow ventral pad of biserial squamo-setae obliquely set along this extension; protarsomere 1 with a small ventrobasal tooth (absent in female). Abdominal sternite 7 deeply emarginate in male, straight or indistinctly imarginate in the very middle in female; tergite 9 slightly triangular and densely punctate and pubescent, with a small, subglabrous, lateral area, in male, truncate and nearly impunctate in female. Besides, male is slenderer than female due to the elytra being distinctly longer and narrower relative to the pronotum. Some species exhibit the pronotum barely to distinctly longer in males than in females while some others (G. japonica peregrina Dohrn, 1880) have the head distinctly smaller, with the eves barely longer.

Aedeagus (Figs 22-43): characteristic of Dryptitae, as it has (1) right paramere vestigial and adnate to median lobe, (2) which terminates dorso-apically in two, narrow, well sclerotized ligules. Left paramere rounded, elliptic to subquadrate or subtriangular, more or less similar within the genus in shape (Figs 44-65). Median lobe with apex terminating in a small, rounded capitulum that varies from round to subtriangular in shape depending on species; apical dorsolateral edges proximal to the capitulum sinuate, thus forming blunt to sharp, acute to obtuse, dorso-apical tooth. A fine, preapical, internal, dorsomedial carina adjoining apical capitulum is traceable in dorsal view. The apex densely strigose (G. orientalis, G. japonica Bates, 1873) or smooth (the other species) on ventral side, with a short and very fine venromedial carina (G. japonica), elongated and more distinct in some species (G. sublineata sp.n.) or basally terminated in a subtle tooth (G. batesi Andrewes, 1923; G. ruficeps Chaudoir, 1861).

When everted and inflated to maximum, generalized internal sac is large, in dorsal view tapered and often set at about right angle with the median lobe (Figs 69–83). It has two laterobasal bulbs, left and right, and multiple small sclerites each formed by minute sclerotized teeth aggregated in a compact cluster. The sclerites are as follows: (1) ventrobasal sclerite toward the apex of the median lobe, (2) dorso-apical sclerite at apex of the internal sac near gonopore, (3) longer series of dorsomedial sclerites and (4) shorter series of left lateral sclerites. When inside the median lobe these sclerites are either basalmost or apicalmost, or dorsal, or ventral in position, respectively.

This invariant, archetype, integrates the following five major variants: both basal bulbs present, with the left one either simple (*G. japonica*, *G. batesi*, *G. ruficeps*, *G. cari*-

nifrons Schaufuss, 1887 [Figs 69–71]; G. dimorpha sp.n., G. variabilis sp.n.) or doubled (G. tonkinensis Hovorka, 2019; G. linearis sp.n.); left basal bulb absent (G. sublineata sp.n., G. breviceps sp.n.); right basal bulb absent (G. rufofemorata sp.n., G. konplongensis sp.n.); both left and right basal bulbs absent (G.quadraticollis sp.n., G. truncata sp.n., G. hrdlickai Hovorka, 2017 [Figs 93–95]; ?G.wrasei Hovorka, 2019); G. orientalis has a somewhat deviant internal sac.

DISTRIBUTION. In the Oriental region, the genus ranges from India and Nepal east to China, Korea, Japan, and southeast to the Sunda Isles [Reichardt, 1965].

HABITATS AND HABITS. Apterous species are exclusively montane and forest-dwelling while the most common macropterous species, *G. japonica*, occurs also along forest edges and in cultivated lands at lower altitudes. The adults have habits that are somewhat similar to those of *Carabus* Linnaeus, 1758, due chiefly to their larger size and running fast on the ground. Macropterous species (*G. japonica peregrina*) also fly to light in the evening and at night.

COMMENTS. All the species reviewed or described below are very similar to one another in most characters of external morphology. These, combined with characters of the internal sac of the aedeagus, only secure species discrimination and identification. The shape of the apex of the median lobe and the shape of the inflated internal sac, combined with a particular number of its small sclerites, are significant for the purpose. Particular internal sacs are similar in all species examined, whether these belong to the orientalis-group or to the carinifrons-group established by Reichardt [1965] and differentiated based on the combination of two characters only. Well rounded basal angles of the pronotum, combined with a dense elytral pubescence, define the former group while sharp angles together with a sparser to nearly indistinct pubescence are features of the latter. It follows from my comparison between species examined that the two characters considered, especially the elvtral pubescence, vary much between not only species, but also individuals of some of them.

Though the differences are minute if at all, we maintain the existence of the two groups. The *orientalis*-group includes *G. orientalis*, *G. japonica*, *G. borneensis* Hovorka, 2019, and probably also *G. indica* Chaudoir, 1861. The other Oriental species belong to the *carinifrons*-group, which also is true of *G. chinensis* Hovorka, 2019, *G. guandongensis* Hovorka, 2019, and *G. wrasei* Hovorka, 2019, originally placed within the *orientalis*-group [Hovorka, 2019]. *Galerita ruficeps* is here placed within the *carinifrons*-group as well, as it is closely related to *G. batesi*.

KEY TO THE SPECIES OF GALERITA OF VIETNAM:

- 1(6) Body macropterous but rare exceptions (see couplet 5). Elytra evenly convex in basal third, with sides only slightly dilated apicad. Femora except black apices and often also head and pronotum pale. Pronotum 1/2–3/5 wider at base than at apex.
- 3(2) Head and pronotum glossy, with punctation coarse and microsculpture very superficial to obliterate on discs.
- 4(5) Head red dorsally, except for a black median frontal carina and more or less infuscated genae. Antennae uniform

- 6(1) Body apterous and entirely black or with pale femora only. Pronotum mostly less than half wider at base than at apex. Elytra distinctly dilated apicad, with a slight yet more or less distinct impression spanning intervals 4–6 in basal third.
- 7(24) Elytra subglabrous due to all ridges with a single row of sparse and short setae on each side in at least apical two thirds. Legs black or with femora pale.
- 8(11) Femora pale. Central and South Vientam.
- 9(10) Left paramere wide, triangular and rounded in apical third. Internal sac of aedeagus with a single, left, laterobasal bulb, and the body bent leftward and ventrad; 10–11 dorsomedial and 1–2 left lateral sclerites present. Genae slightly longer, GL/OL 1.27–1.43, pronotal base slightly narrower, PB/PA 1.27–1.45. — Quang Nam Province 3. G. rufofemorata sp.n.
- 11(8) Legs uniform black.
- 12(13) Body large, BL 26–28 mm. Head long, HL/HW 1.23–1.36, elliptic, with genae long, slightly rounded and converging much to neck. — Tam Dao, Vinh Phuc/Thai Nguen provinces 10. *G. tonkinensis* Hovorka, 2019 12(12) Pody cmellar, PL <25.5 mm</p>
- 13(12) Body smaller, BL<25.5 mm.
- 14(15) Elytra short and truncate combined apically (in male), EL/EW 1.64. Head moderately densely punctate in basal half. Left paramere subtriangular, with dorsal margin rounded and apex pointed. Internal sac of aedeagus without laterobasal bulbs, with six dorsomedial and two left lateral sclerites. — Lao Cai Province
- 15(14) Elytra longer in male, mostly EL/EW 1.7–1.9; their apices obliquely truncate and thence slightly angulate combined (in both sexes). — Central Vietnam.
- 16(19) Genae shorter, GL/OL 1.17-1.32.
- 17(18) Pronotum barely narrower in male, PL/PW 1.11–1.20, otherwise as in couplet **8** ... 5. *G. dimorpha* **sp.n.** (part.)
- 19(10) Genae longer, GL/OL 1.30–1.43
- 20(21) Pronotum broadest closer to apex, PLw/PL 0.24–0.33. Left paramere elliptic, indistinctly desclerotized and truncate at apex. Many specimens have odd elytral ridges slightly yet distinctly stronger, wider and higher, than even

ones. Internal sac of aedeagus with a conspicuous left laterobasal bulb, vestigial, short and wide, right one, nine dorsomedial and six left lateral sclerites. - Lam Dong

- 21(20) Pronotum broadest more than a third from apex, PLw/ PL 0.35-0.39. Elytral ridges subequal.
- 22(23) Elytra short in female, EL/EW 1.59-1.61, and sparsely pubescent; head smaller, PW/HW 1.14-1.18. Impression on vertex conspicuous. - S-Vietnam (Dak Lak Province)
- 23(22) Elytra long in female, EL/EW 1.68-1.74, with pubescence fairly dense, more so in basal third, there forming 1-3 uneven rows on each side of longitudinal ridge. Head larger, PW/HW 1.23-1.27. Vertex with no or superficial impression. Aedeagus with left paramere oblong, oviform, and subequally rounded at both dorsal and ventral margin; internal sac simple, with no laterobasal bulbs, eleven dorsomedial and 4-6 left lateral sclerites. - Central Vietnam (Ha Tinh and Vu Quang provinces) 8. G.quadraticollis sp.n.
- 24(7) Elytra fasciated due to pubescence distinctly denser along even than along odd ridges. Legs black or nearly so. -North Vietnam.
- 25(26) Even elytral ridges less developed and much more densely pubescent than odd ones. Genae long, GL/OL

1.25-1.46, head wide, PW/HW 1.14-1.25. Elytra with distinct outer angles. Internal sac of aedeagus with three laterobasal bulbs, single left and two right, with eight medial and three or four left lateral sclerites; left paramere parallel-sided and obliquely subtruncate at apex. - Cao Bang Province 11. G. linearis sp.n.

- 26(25) Even and odd elytral ridges equally developed and less contrastingly pubescent. Genae shorter, GL/OL 1.08-1.21. Elytra with more or less rounded outer angles. Internal sac of aedeagus with single, right, laterobasal bulb, twelve medial and 7-8 left lateral sclerites.
- 27(28) Head slightly shorter and wider, HL/HW 1.13, PW/HW 1.20; pronotal base narrow, a third wider than apex. Left paramere triangular in apical half, with rounded apex; apex of median lobe with a ventromedial groove and fine carina at its bottom. — Nghe An Province

13. G. breviceps sp.n. 28(27) Head longer and slightly narrower, HL/HW 1.17-1.24, PW/HW 1.24-1.32; pronotal base wider, two fifths to half wider than apex. Left paramere barely narrower at a widely rounded apex than at base; apex of median lobe without ventromedial groove or carina. - Thanh Hoa Province .



Figs 1–3. Dorsal habitus: 1 — Galerita orientalis, 3° from Assam, India; 2 — G. orientalis, 9° from Uttarakhand, India; 3 — G. carinifrons, of from Bonthain, Celebes/ Sulawesi. Рис. 1–3. Габитус дорзально: 1 — Galerita orientalis, 🖒 из Ассама, Индия; 2 — G. orientalis, 🗘 из Уттарханда, Индия; 3 — G. carinifrons, 👌 из Бантаенг, Сулавеси.



Figs 4–6. Dorsal habitus: 4 — *Galerita j. japonica*, ♂ from Japan; 5 — *G. j.peregrina*, ♂ from from Vu Quang NP; 6 — *G. ruficeps* ♂ from Katmandu env., Nepal. **Рис. 4–6**. Габитус дорзально: *Galerita j. japonica*, ♂ из Японии; 5 — *G. j.peregrina*, ♂ из национального парка Вукуанг; 6 — *G. ruficeps*

Гис. 4–6. 1 абитус дорзально: *Galerita J. Japonica*, \bigcirc из Японии; 5 — *G. J. peregrina*, \bigcirc из национального парка Вукуанг; 6 — *G. runceps* \bigcirc из окр. Катманду, Непал.

1. *Galerita japonica* Bates, 1873, **stat.rest.** Figs 4, 24–25, 46.

Bates, 1873: 304 (Japan); Jedlička, 1964: 476; Habu, 1967: 257 (*Galeritula*).– *coreana* Kolbe, 1886: 171 (*japonica* var.; Seoul — Pingan). — *szetschwana* Heller, 1923: 19 (China); Jedlička, 1964: 475. *formosana* Kano, 1930: 29 (Taiwan). — *orientalis*: Reichardt, 1965: 7 (*Galeritula*; part); Habu, 1984: 107.

MATERIAL. 2 3 and 2 9 (ZISP) of *G. j. japonica*: 9, **Japan**, Tsushima, IX–X. (H. Fruhstorfer); 3, Mt. Katsuragiyama, env. Izu — Nagaoka [Shizuoka], 23.II.1964 (R. Ishikawa); 9, Toyooka, Kimitsu-Co, Chiba Pref., 2.II.1964 (R. Ishikawa); 3, *'Galerita japonica Bts, Yok*[ohama]', with aedeagus examined.

DIAGNOSIS. Macropterous species with the head pale dorsally except sides, combined with the pronotum pale entirely or except margins (Fig. 4: *G. j. japonica*) or additionally black along median frontal carina, combined with black pronotum (Fig. 5: *G. j. peregrina*); femora pale. For other features see the key.

DISTRIBUTION. Indochina east to China, including Taiwan, Korea and Japan (Honshu). The nominotypical subspecies covers populations east of Vietnam while the western populations belong to *G. j. peregrina*. Andrewes [1933] recorded this latter from Sumatra and Reichardt [1965] extends the range of *G. orientalis* southeast to the Sunda Isles such as Sumbawa and Flores.

COMMENTS. This species shares particular sculpture and microsculpture of both the head and the pronotum with great majority of the other Oriental species of the genus. This pattern is very distinctive from that of *G. orientalis*, which difference has been specified by Andrewes [1923] to erect *G. batesi* as a separate species. Reichardt [1965] did not apparently take these differences into consideration; therefore he synonymized all macropterous species with *G. orientalis* he treated in a very wide sense. This interpretation might have come from the fact that *G. orientalis* and *G. japonica* revealed very similar colour morphs defined by pale head and pronotal disc — these morphs cover western populations of the former species (*G. nigripennis*) and eastern populations of the latter (*G. j. japonica*).

Because of great similarity between *G. japonica* and an apterous species, *G. ruficeps* Chaudoir, 1861, I think it advisable to re-describe the latter below to stress its distinctive features.

1a. *Galerita japonica peregrina* Dohrn, 1880, **stat.rest.** Figs 5, 26–27, 47, 66–68.

Dohrn, 1880: 291 (Hongkong); Andrewes, 1919: 480; 1922: 246; 1930: 168; 1933: 348; Jedlička, 1964: 475. — *birmanica* Bates, 1892:

385 (Bhamo [= Bhanmo, = Banmaw], Burma), nom. pro *ruficeps* (non Chaudoir, 1861): Bates, 1890: 109.

MATERIAL. Two specimens of *G. birmanica*, \mathcal{J} and \mathcal{Q} (ZISP), of the same origin as the female holotype, both labelled 'Bhamo/ Birmania/ Fea *IX* 1886'; \mathcal{J} with additional label '*G. birmanica*/ *sp.n.*' and a red one '*Paratypus*/ *G. birmanica n.sp.*/*H.W. Bates det.*' (the latter label is wrong because *G. birmanica* has been described from a single female specimen, holotype, accordingly.

Additional material: 16 $\hat{\eth}\hat{\eth}$ and 16 $\hat{\Box}\hat{\varphi}$ of *G. japonica* peregrina: ♂, ♀ (SIEE), Vietnam, Dong Nai Province, 90 km of Saigon, La Nga, 16–18.X.1990 (N. Belyaeva); 2♂♂, ♀ (SIEE), Nam Cat Tien National Park, Expedition of Russia-Vietnam Tropical Centre, at light HQL450, 18.X-12. VI.2004 (D. Fedorenko); 👌 (ZISP), Quang Binh Province, mountains NW of Dong Hoi, 23.III.1963 (O.N. Kabakov); ♀ (ZISP), same locality, mountains SW of Dong Hoi, My Duc, 20.III.1963 (O.N. Kabakov); 4♂♂, 4♀♀ (SIEE), Ha Tinh Province, Vu Quang Natn. Park, Kim Quang env., h~70 m, 18°17'59"N, 105°22'31"E, flood-land forest, 24.V-1.VI.2022 (D. Fedorenko); ♂ (ZISP), Nghe An Province, Phuc Son, XI-XII. (H. Fruhstorfer); 👌 (SIEE), Phu Tho Province, Xuan Son National Park, h=450 m, 21°08'12"N, 104°57'04"E, 27.VI-7. VII.2014 (A. Abramov, A. Shchinov); ♀ (MSPU), Quang Binh Province, Minh Hoa District, Ke Bang 8 km SE of Yen Hop, 2–8.IV.1999 (S. Kruskop); 3♂♂, 3♀♀ (ZISP), NW of Tam Dao [Son Zuong] Mt. Ridge, 20-26.III.1962 (O.N. Kabakov); ♂ (ZISP), 40 km NE of Thai Nguen, 200–600 m, 8.III.1963

(O.N. Kabakov); same locality, mountains NE of Thai Nguen, 300 m, 3.III.1963 (O.N. Kabakov); \Im (ZISP), Bac Kan Province, Quang Chu, 15–17.II.1986 (A.V. Gorokhov); \Im (ZISP), Tuyen Quang Prov., Sonduong env., 100–200 m, 23.II.1962 (O.N. Kabakov); \Im (SIEE), Bat Dai Son Natn. Park, Thanh Van env., h~950 m, 23°06′01″N 104°58′25″E, cornfield, 14– 22.IV.2022 (D. Fedorenko); $4 \Im \Im$ (SIEE, one female teneral), Ha Giang Prov., Tay Con Linh Natn. Park, Cao Bo, h~570 m, 22°45′23″N, 104°52′06″E, 15–27.IV.2023 (D. Fedorenko); \Im (ZISP), Laos, Vientiane, 13.X.1984 (O.N. Kabakov).

Aedeagus examined in six males, including five with everted and inflated internal sac.

DIAGNOSIS. Differences from the nominotypical species concern chiefly the body colour (see above), combined with the elytra barely if at all longer.

REDESCRIPTION. Body (Fig. 5) macropterous, otherwise as originally described for *G. peregrina* — *G. birmanica*: head brown to dark brown, including mouthparts and usually also genae and basal 1/2 clypeus, dorsum of head otherwise red to deep red, with a black median blunt carina; pronotum black; elytra black with a slight to indistinct bluish lustre. Legs black or brown black, femora yellow or reddish-yellow but black apices; tibiae often reddish inside and laterally. Antennae uniform red to brown black, with basal 1/2 scape reddish; basal palpomeres more or less reddish, too. Elytra dull, head and pronotum shiny, with microsculpture very superficial on



Figs 7–9. Dorsal habitus: 7 — Galerita batesi, \bigcirc from Pai, Thailand; 8 — G. truncata sp.n., holotype; 9 — G. hrdlickai, \circlearrowleft from Tamblingan Lake, Bali. Рис. 7–9. Габитус дорзально: 7 — Galerita batesi, \bigcirc из Паи, Таиланд; 8 — G. truncata sp.n., голотип; 9 — G. hrdlickai, \textdegree из окр. оз. Тамблинган, о-в Бали.



Figs 10–12. Dorsal habitus: 10–11 — *Galerita dimorpha* **sp.n.**, *З*♀ paratypes; 12 — *G. rufofemorata* **sp.n.**, holotype. **Рис. 10–12.** Габитус дорзально: 10–11 — *Galerita dimorpha* **sp.n.**, *З*♀ паратипы; 12 — *G. rufofemorata* **sp.n.**, голотип.

pronotal disc and almost obliterate on head, more distinct on sides of basal 1/2 head and of pronotum.

Head short, without impression on vertex, coarsely and confluently punctate in basal half, more finely and less densely punctate along sides and in front of neck constriction; genae short, barely shorter than eyes. Frontal median carina very shiny, convex in front, slightly less so behind, mostly reaching or almost reaching the level of posterior margin of eye, with sparse punctures there, sometimes shortened from behind due to confluent punctation or subinterrupted by a transversely rugose areas at bottom of frontal foveae.

Pronotum moderately and confluently punctate, rugosepunctate toward sides and along base, mostly parallel-sided in front of or indistinctly converging toward base; disc convex to lateral bead in basal three fifths; basal angles right, blunt or narrowly to (sometimes) moderately rounded. Median line superficial and very fine, obliterate basally and apically. Basolateral foveae deep basally, with lateral margin explanate and slightly reflexed outside, distinct in basal 1/4–2/5.

Elytra nearly parallel-sided, barely diverging apicad in male, slightly more so in female; apices obliquely truncate, subangulate combined and nearly straight; sutural angles very slightly acute and slightly blunted. Pubescence distinctly denser before than behind, forming 2–3 uneven rows in basal 1/3–1/2 and a single row on each side of a ridge behind. Sometimes elytra except basally and apically with a single row of very

short and sparse setae on each side of elytral ridge or odd intervals distinctly more sparsely pubescent than even ones, with single (vs. doubled) row of setae on each side of respective ridge. Interval 3 with three, sometimes four, discal setae; intervals 1, 3, 5 and 7 with multiple erect setae, which are slightly longer than those of decumbent pubescence.

Aedeagus (Figs 26–27, 47, 66–68): median lobe finely and densely strigose in apical 1/5–1/3, with a wide and nearly indistinct ventromedial groove in apical third; left paramere triangular, with dorsal margin rounded and ventral margin slightly sinuate toward a moderately rounded apex. Internal sac well differentiated, with both left and right basal bulbs distinct; left bulb very large to accommodate all left lateral sclerites; sclerites multiple: 12–14 dorsomedial and 6–9 left lateral ones present, these latter varying much in size; ventrobasal sclerite distant far from apex of median lobe.

HABITATS AND HABITS. All specimens were collected at the altitudes lower than 1.000 m.

[*Galerita orientalis* Schmidt-Göbel, 1846] Figs 1–2, 22–23, 44–45, 111–113.

Schmidt-Göbel, 1846: 26 (Burma); Bates, 1892: 385 (part.); Andrewes, 1923: 8; 1930: 168; 1933: 348; Jedlička, 1964: 476; Reichardt, 1965: 7 (*Galeritula*; part.). — *nigripennis* Chaudoir, 1861: 557 (Dacca ['Deccan']); 1877: 255; Andrewes, 1924: 52; 1930: 168.

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МАТЕRIAL. Q (SIEE): India, Uttarakhand, h=330 m, Haridwar Distr., Chilla env., Ganaga River, floodland forest, 29°58′09″N 78°12′16″E — 29°58′39″N 78°12′54″E, 14–16.IV.2012 (I. Melnik); Q (ZISP), 'Кирхана/ Ассамъ 4.III.[19]12/ фон-Викъ' [India, Assam, Kirhana (= Karhana), ..., von Vikk]; \mathcal{J} (ZISP), 'Cадія, прав[ый] бер[ег]/ Брамапут Ассам/ фон-Викъ 3.II.[19]12', same locality except [Sadiya, right bank of Brahmaputra River, ...]; \mathcal{J} , Q (ZISP), 'река Зизи у Мери-/ гоон, Ассамъ/ фон-Викъ 22.I.[19]12', same locality except [Zizi River near Morigaon, ...].

DIAGNOSIS. Very similar to *G. japonica* and *G. ruficeps*, but microsculpture of the forebody is coarser, thus giving the dorsum slightly duller shine. The punctation is fine on both the head and the pronotum, sparse on each side of a small and smooth central area of vertex (*vs.* coarse and confluent). Additional distinctive features include the entire head, the pronotal disc, the legs and the antennae pale coloured in at least some populations. Besides (Tables 1, 2), the genae are shorter, not more than three fourths as long as the eyes, the head is slightly smaller, and the elytra are barely longer than in *G. japonica*. The aedeagus is very distinctive.

REDESCRIPTION. Body (Fig. 1) macropterous, with elytra and legs black but red femora except apices; colouration otherwise varying (see 'Comments' below). Head and pronotum slightly dull, with microsculpture distinct throughout, coarse along sides of pronotum. Basal 1/2 head and pronotum finely, densely to confluently yet shallowly punctate, more so toward sides of vertex, thus leaving small and smooth area in between.

Head: frontal median carina short, convex before, flat and impunctate between eyes, these large, convex and slightly projecting.

Pronotum similar to that of *G. japonica*, except chiefly for slightly duller appearance, more so along sides, due to a coarser microsculpture, combined with fine and confluent microsculpture inside. Sides more or less sinuate in front of base, slightly converging to slightly diverging to basal angles; these slightly obtuse and moderately rounded to subacute and blunt, respectively. Basolateral foveae deep and short, distinct in basal fifth only, their forward extensions as sublateral lines traceable in basal 1/2–2/3.

Elytral apices obliquely truncate, angulate combined, each slightly rounded to subsinuate; extreme sutural angles acute to slightly obtuse; outer angles very obtuse, almost rounded in male. Pubescence varying from slightly to much denser in even

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Figs 13–15. Dorsal habitus: 13 — Galerita sublineata sp.n., Q paratype; 14 — G. q. quadraticollis sp.n., holotype; 15 — G. q. subcordata ssp.n., paratype. Рис. 13–15. Габитус дорзально: 13 — Galerita sublineata sp.n., паратип Q; 14 — G. quadraticollis sp.n., голотип; 15 — 15 — G. q. subcordata ssp.n., паратип.





than in odd intervals, forming single row of setae on each side of odd ridge while 1-2 to 2-3 rows on each side of even ridge.

Aedeagus (Figs 22–23, 44–45, 111–113): median lobe finely and densely strigose in apical fifth, with no preapical ventromedial groove; apex in lateral view short, round, with subacute dorsal tooth, without preapical ventral tooth. Left paramere subrectangular, with ventral margin straight, dorsal margin slightly sinuate at middle and apex slightly obliquely truncated to blunt. Internal sac almost longitudinal, inflated basally at right ligule, with a slight left basal bulb; 14–15 dorsomedial and 4–6 left lateral sclerites present, the basalmost one being longest and curved; ventrobasal sclerite closer to apex than to base.

DISTRIBUTION. Besides Bhanmo in Myanmar, Andrewes [1930] recorded *G. orientalis* from two localities in Meghalaya and Assam, and *G. nigripennis* from a few localities in Central India [Andrewes, 1930] in addition to Dacca he considered as the type locality of the species, not Deccan as originally specified by Chaudoir [1861].

COMMENTS. This species varies much in body colour. It was described based on darker coloured specimens from the easternmost parts of the species range, of which black head and pronotum are characteristic. The specimens examined from the eastern India (Assam) are paler coloured, with basal 2/3 antennal scape and the head except clypeus deep red, and the specimen from Uttarakhand is still paler in colour. This latter (Fig. 2) has the elytra and femoral apices only black, the pronotum infuscated along margins, and the tibiae and the tarsi indistinctly infuscated, which pattern matches well that of *G. nigripennis*.

> 2. *Galerita batesi* Andrewes, 1923 Figs 7, 28–29, 48–49, 72–74.

Andrewes, 1923: 8 (Karin Cheba, Burma); 1930: 168; Reichardt, 1965: 12 (*Galeritula*); Hovorka, 2019: 40. — *orientalis* Schmidt-Göbel, 1846: 26 (part.).

MATERIAL. \mathcal{F} (ZISP), Vietnam, Quang Binh Province, mountains SW of Dong Hoi, My Duc, 20.III.1963 (O.N. Kabakov); \mathcal{Q} (SIEE), Thailand, Mae Hong Son Province, env. Pai, 19°21'42"N 98°27'46"E — 19°22'N 98°30'29"E, h~600 m, 27.IV–9.V.2013 (I. Melnik); \mathcal{Q} (ZISP), Nakhon Ratchasima Prov., env. of National park Khao Yai, 50–1000 m, 26.X–4. XI.2000 (A.V. Gorokhov, L.N. Anisyutkin); \mathcal{F} (ZISP), with labels 'Carin Chebà' 900–1100 m./ L.Fea, V XII-[18]88' [Myanmar, Karenni State], 'Galerita/ orientalis/ S.Goeb.', 'Galerita/ batesi Andr./ Kryzhanovskij det.'. Besides, \mathcal{Q} (image at https:// galerie-insectes.org), 'Thailand, [? Phrae Province], Punjen'.

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голотип

Aedeagus examined in two males, including one with everted and inflated internal sac.

DIAGNOSIS. A macropterous or polymorphic (up to apterous) species distinctive from *G. japonica peregrina* in having the body uniform black except red femora, with the head and antennae entirely black, combined with the elytral pubescence short and sparse, arranged in a single row on each side of elytral ridge; pronotal basal angles only slightly blunted. The pronotum is slender, PL/PW 1.09–1.20 (vs. 1.01–1.05), the elytra wider relative to the pronotum, and the genae distinctly longer (vs. shorter) than the eyes, GL/OL 1.04–1.21. Aedeagus is distinctive, too.

REDESCRIPTION. As for *G. japonica peregrina* except the following. Body (Fig. 7) macropterous, sometimes brachypterous to apterous, and black; only femora reddish-yellow but black apices and sometimes antennal scape reddish at base. Elytra dull, head and pronotum shiny, with microsculpture superficial on pronotal disc and almost obliterate on apical 1/2 head, more distinct behind and toward sides of pronotum.

Head barely longer, with genae longer than eyes. Frontal median carina shiny, convex and mostly short, barely extended to the level of eye mid-length.

Pronotum longer, subquadrate to cordate. Sides very slightly to distinctly sinuate in front of base, from slightly

converging to diverging toward basal angles; these blunt and slightly obtuse to subacute, respectively. Median line fine, superficial to well impressed. Basolateral foveae deep and very short, sometimes longer and traceable in basal two fifths.

Elytral pubescence sparse, arranged in a single row on each side of elytral ridge, sometimes denser, forming two rows on each side of even ridge in basal third. Interval 3 with three discal setae.

Aedeagus (Figs 28–29, 48–49, 72–74): median lobe smooth ventrally, with a short and deep, preapical, ventromedial groove, apex in lateral view in form of a rounded, slightly oblong capitulum, with a minute, preapical, ventral tooth; left paramere oblong oviform, slightly wider at base than at rather a widely rounded apex, with slightly more rounded dorsal than ventral margin. Internal sac well differentiated, with distinct left and right basal bulbs, ventrobasal sclerite close to apex of median lobe, ten dorsomedial and 5–7 left lateral sclerites, basal lateral sclerite long and curved, situated at apex of left basal bulb, this latter at base with second, minute, lateral sclerite.

DISTRIBUTION. Eastern India (Assam: Shillong), northern Bangla Desh (Sylhet), Myanmar, Thailand, Vetnam.

HABITATS AND HABITS. No exact data.



Figs 19–21. Dorsal habitus: 19 — *Galerita tonkinensis*, ♂ from Tam Dao; 20 — *G. linearis* **sp.n.**, ♀ paratype; 21 — *G. breviceps* **sp.n.**, holotype. **Рис. 19–21.** Габитус дорзально: 19 — *Galerita tonkinensis*, ♂ из Тамдао; 20 — *G. linearis* **sp.n.**, паратип ♀; 21 — *G. breviceps* **sp.n.**, полотип.



Figs 22–31. Median lobe of aedeagus with adnate right paramere: 22–23 — *Galerita orientalis* from Assam, India; 24–25 — *G. j. japonica* from Japan; 26–27 — *G. j. peregrina* from Vu Quang NP; 28–29 — *G. batesi* from Karenni State, Myanmar; 30–31 — *G. carinifrons* from Bonthain, Celebes/ Sulawesi; 22, 24, 26, 28, 30 — left lateral aspect; 23, 25, 27, 29, 31 — right lateral aspect. Scale bar 1 mm. **Рис. 22–31.** Средняя доля эдеагуса с приросшей правой парамерой: 22–23 — *Galerita orientalis* из Ассама, Индия; 24–25 — *G. j. ja*-

ропіса из Японии; 26–27 — *G. j.peregrina* from from Vu Quang NP; 28–29 — *G. batesi* из штата Карен, Мьянма; 30–31 — *G. carinifrons* из Бантаенг, Сулавеси; 22, 24, 26, 28, 30 — слева; 23, 25, 27, 29, 31 — справа. Масштаб 1 мм.

[*Galerita ruficeps* Chaudoir, 1861] Figs 6, 50–51, 75–77.

Chaudoir, 1861: 556 ('nord de l'Hindostan'); Andrewes, 1930: 168; Reichardt, 1965: 11 (*Galeritula*).

MATERIAL. 233 (MSPU), 2 (ZISP): Central Nepal, env. Katmandu, Rhaniban Mt. Ridge, Nagarjun Mt., 15.IV– 5.V.1996 (P. Udovichenko). — Aedeagus, including everted and inflated internal sac, examined in males.

DIAGNOSIS. Very similar to *G. japonica peregrina*, from which it is distinguished by the body apterous, the head entirely pale, combined with the genae and the elytra slightly shorter and wider in male, GL/OL 0.99–1.03 (*vs.* 0.82–0.90), EL/EW 1.66 (*vs.* 1.77–1.87), EW/PW 1.72–1.76 (*vs.* 1.59–1.63); aedeagus is distinctive as well.

In addition to obligate aptery and difference in body colour, *G. ruficeps* differs from *G. batesi* as the most closely related species chiefly by the genae, the pronotum and the elytra being shorter.

REDESCRIPTION. Body (Fig. 6) apterous and black, head brown black ventrally, with gula and dorsum red; mandibles, clypeus except apical margin, and palps toward pale apices brown rather dark. Legs black, femora reddish-yellow but black apices. Antennae reddish-brown, rather pale, with apical 1/2 scape slightly infuscated or with antennomeres 2–4 and apical 2/5 scape black. Forebody very shiny due to meshed microsculpture obliterate or nearly so, being slightly more distinct along sides of pronotum; elytra dull, with microsculpture coarse. Head coarsely while pronotum moderately rugose-punctate; frontal foveae with sparse punctures.

Head quadrate and short, with genae parallel to each other just behind eyes. Frontal median carina short and shiny, narrower and slightly convex in front, wide and barely convex, with fine and sparse punctures, between eyes. Pronotum convex up to lateral bead at middle, with lateral margin slightly yet widely explanate before and behind or throughout and not well separated from convex disc by basal fovea and by a vague sublateral line anteriorly. Sides slightly sinuate in front of base, very slightly converging to slightly diverging toward basal angles; these straight or very slightly obtuse and moderately rounded. Median line fine, slightly impressed, obliterate at base and at apex.

Elytra with sides more diverging apicad than in *G. orientalis*; apices obliquely truncate, subangulate combined, indis-



Figs 32–43. Median lobe of aedeagus with adnate right paramere: 32-33 - Galerita variabilis **sp.n.**, holotype; 34-35 - G. dimorpha **sp.n.**, holotype; 36-37 - G. rufofemorata **sp.n.**, holotype; 38-39 - G. konplongensis **sp.n.**, paratype; 40-41 - G. linearis **sp.n.**, paratype; 42-43 - G. sublineata **sp.n.**, holotype; 32, 34, 36, 38, 40, 42 - left lateral aspect; 33, 35, 37, 39, 41, 43 - right lateral aspect. Scale bars 1 mm.

Рис. 32–43. Средняя доля эдеагуса с приросшей правой парамерой: 32–33 — *Galerita variabilis* **sp.n.**, голотип; 34–35 — *G. dimorpha* **sp.n.**, голотип; 36–37 — *G. rufofemorata* **sp.n.**, голотип; 38–39 — *G. konplongensis* **sp.n.**, паратип; 40–41 — *G. linearis* **sp.n.**, паратип; 42–43 — *G. sublineata* **sp.n.**, holotype; 32, 34, 36, 38, 40, 42 — слева; 33, 35, 37, 39, 41, 43 — справа. Масштаб 1 мм.



Figs 44–65. Left paramere, left lateral view: 44-45 — *Galerita orientalis*; 46 — *G. j. japonica*; 47 — *G. j. peregrina*; 48-49 — *G. batesi* from Karenni State, Myanmar (48), or Vietnam (49); 50-51 — *G. ruficeps*; 52 — *G. variabilis* **sp.n.**; 53 — *G. dimorpha* **sp.n.**; 54 — *G. rufofemorata* **sp.n.**; 55 — *G. quadraticollis* **sp.n.**; 56 — *G. q. subcordata* **ssp.n.**; 57-58 — *G. konplongensis* **sp.n.**, holotype (57) and paratype (58); 59 — *G. truncata* **sp.n.**; 60 — *G. tonkinensis*; 61 — *G. linearis* **sp.n.**; 62 — *G. breviceps* **sp.n.**; 63 — *G. sublineata* **sp.n.**; 64 — *G. hrdlickai*; 65 — *G. carinifrons*. Scale bar 1 mm.

Рис. 44–65. Левая парамера слева: 44–45 — Galerita orientalis; 46 — G. j. japonica; 47 — G. j.peregrina; 48–49 — G. batesi из штата Карен, Мьянма (48), и Вьетнама (49); 50–51 — G. ruficeps; 52 — G. variabilis sp.n.; 53 — G. dimorpha sp.n.; 54 — G. rufofemorata sp.n.; 55 — G. quadraticollis sp.n.; 56 — G. q. subcordata ssp.n.; 57–58 — G. konplongensis sp.n., голотип (57) и паратип (58); 59 — G. truncata sp.n.; 60 — G. tonkinensis; 61 — G. linearis sp.n.; 62 — G. breviceps sp.n.; 63 — G. sublineata sp.n.; 64 — G. hrdlickai; 65 — G. carinifrons. Масштаб 1 мм.

tinctly sinuate inside rounded outer angles; sutural angles blunt or rounded, with a small re-entrant angle in between, subacute to slightly obtuse, respectively. Pubescence dense and differentiated, forming single or 2–3, mostly two, uneven rows on each side of odd or even ridge, respectively.

Aedeagus (Figs 50–51, 75–77) is very similar to that of *G. batesi*: median lobe smooth ventrally at apex, with a subtle, preapical ventromedial tooth; preapical ventromedial groove short and deep. Internal sac more robust than that of *G. japonica peregrina*, with nine dorsomedial and 5–6 left lateral sclerites (vs. 12–14 and 6–9, respectively), these latter situated on the body of the sac, with the basalmost one being at apex of left bulb; ventrobasal sclerite adjoining apex of median lobe. Left paramere subovate to subtriangular.

DISTRIBUTION. Recorded [Andrewes, 1930] in Uttarakhand (Almora, Nainital, Har Ki Dun), Northern India; Nepal. HABITATS AND HABITS. No data.

COMMENTS. The fact that *G. ruficeps* and *G. batesi* have their aedeagi, including internal sacs, very similar in shape, as well as in structure, suggests much closer relationships between these two species than between either and the other similar species, *G. orientalis* and *G. japonica*. This also suggests that *G. ruficeps* is a fairly recent derivation of *G. batesi*, which has most likely resulted from the development of obligate aptery of the imago.



Figs 66–71. Aedeagus with everted and inflated internal sac: 66–68 — *Galerita japonica peregrina* from Vu Quang NP; 69–71 — *G. carinifrons* from Bonthain, Celebes/ Sulawesi; 66, 69 — dorsal aspect; 67, 70 — left lateral aspect; 68, 71 — ventral aspect. Scale bars 1 mm. **Puc. 66–71.** Эдеагус с вывернутым и надутым внутренним мешком: 66–68 — *Galerita japonica peregrina* из нац. парка Вукуанг; 69–71 — *G. carinifrons* из Бантаенг, Сулавеси; 66, 69 — сверху; 67, 70 — слева; 68, 71 — снизу. Масштаб 1 мм.

3. *Galerita rufofemorata* Fedorenko, **sp.n.** Figs 12, 36–37, 54, 84–86.

MATERIAL. Holotype \circ (ZMMU), with label: 'Vietnam, Quang Nam Prov.[ince]/ Nam Gian[g] Distr[ict]./

Song Thanh Nat[io]n[al]. Park,/ 15°33'48"N 107°23'22"E/ h = 1050 m, 23.IV-11.V./ leg. D. Fedorenko 2019'. Paratypes (SIEE): 233', 3 \bigcirc with same labels; \bigcirc , same data except '... /15°33'19"N 103°23'29"E/ h~1070 m, ...'. — Aedeagus examined in three males, including two paratypes with everted and inflated internal sac.



Figs 72–77. Aedeagus with everted and inflated internal sac: 72–74 — *Galerita batesi* from Dong Hoi; 75–77 — *G. ruficeps* from Nepal; 72, 75 — dorsal aspect; 73, 76 — left lateral aspect; 74, 77 — ventral aspect. Scale bars 1 mm. **Рис. 72–77.** Эдеагус с вывернутым и надутым внутренним мешком: 72–74 — *Galerita batesi* из Донгхой; 75–77 — *G. ruficeps* из Непала; 66, 69 — сверху; 73, 76 — слева; 74, 77 — снизу. Масштаб 1 мм.

DIAGNOSIS. Very similar to *G. batesi* in body appearance. Very few distinctive features are as follows: body apterous; elytra more diverging apicad; both head and genae longer, HL/HW 1.14–1.18 (*vs.* 1.09–1.13), GL/OL 1.27–1.43 (*vs.*1.04–1.21); head narrower, PW/HW 1.23–1.30 (*vs.* 1.14–1.25); pronotum more sinuate on sides in front of basal angles and thence more cordate, with base narrower, PB/PA 1.27–1.45 (*vs.* 1.53–1.57).

DESCRIPTION. BL 23.7–26 mm. Body (Fig. 12) black, femora reddish-yellow but black apices; antennae very dark brown, with extreme base of scape and sometimes also antennae toward apices reddish. Dorsum rather dull due to coarse elytral microsculpture, moderate and confluent punctation over pronotum, coarse and almost confluent punctation on basal 1/2 head, combined with distinct meshed microsculpture, more or less isodiametric on head, moderately transverse to wide on pronotal disc, coarse isodiametric to granulate along sides of the latter. Head with frontal carina smooth and glabrous, more shiny before than behind due to microsculpture more superficial anteriorly.

Head mostly subquadrate due to genae more abruptly curved closer to neck than before. Smooth and glabrous frontal carina mostly almost reaching the level of posterior margin of eye, while being vague there, *i.e.*, flattened, sparsely punctate and more or less merged into a round, shallow or very shallow, depression on vertex.

Pronotum broadest a third to two fifths from apex, densely rugose-punctate in basal sixth, with disc convex and lateral two fifths very slightly to almost indistinctly explanate in basal three quarters, more explanate and widely yet shallowly grooved outside basolateral foveae due to reflexed lateral bead slightly broadened there. Sides rather deeply sinuate and slightly to distinctly diverging toward base. Base subtruncate, with angles straight to acute and blunt. Apex mostly rather deeply sinuate between apically rounded angles, sinuation even to nearly straight at middle. Median line fine, slightly impressed, obliterate both basally and apically. Basolateral foveae shallow and short, traceable in basal fifth only, merging into explanation of lateral margin before.

Elytra oviform, broadest about two fifths from apex, very slightly impressed between suture and ridge 9 in basal third. Apices obliquely truncate, angulate combined, each straight or gently sinuate just inside outer angles, these being obtuse and rounded or subangulate, respectively; sutural angle slightly acute, sharp or slightly blunted. Pubescence short and sparse, arranged in a single row on each side of elytral ridge, becoming gradually denser from two rows medially to three rows basally on the outside of ridge 8. Interval 3 with three discal setae.

Aedeagus (Figs 36–37, 54, 84–86): median lobe shiny ventrally, with no ventromedial groove; left paramere wide, triangular and rounded in apical third. Internal sac set at an obtuse angle with median lobe in dorsal view, bent subequally ventrad and laterad, with a single, left, basal bulb that bears the only left lateral sclerite at apex; this sclerite being long and curved (the illustrated specimen has an additional, minute, lateral sclerite just distal to this bulb). 10–11 medial sclerites present, basal one being long.

DISTRIBUTION. This species is only known from the type locality.

NAME. Refers to the bicoloured legs of this species.

HABITATS AND HABITS. All the specimens were hand collected at night, running on the ground in a monsoon forest.

4. *Galerita konplongensis* Fedorenko, **sp.n.** Figs 18, 38–39, 57–58, 87–89.

MATERIAL. Holotype 3° (ZMMU), with label: 'Vietnam, Kon Tum Prov[ince].,/ Kon Plong Distr[ict]., 14°45'N, 108°17'51"E/ env. ngoc Boc 1 Mt./ h = 1030–1400 m 8–10.

VI./ D. Fedorenko leg. 2016'. Paratype ♂ (ZISP), with label: 'S Vietnam: Quang Nam/ Prov[ince], 1300 m,/ 15°48.764'N, 107°21.784'E/ VI.2013 N. Orlov leg.'.

DIAGNOSIS. An apterous black species (Fig. 18) different from *G. rufofemorata* **sp.n.** in having the body uniform black, the pronotum slightly wider at base, PB/PA 1.42–1.49 (*vs.* 1.27–1.45) and the head barely smaller, PW/HW 1.31–1.33 (*vs.* 1.23–1.30). The internal sac of aedeagus is very similar, except only that dorsomedial sclerites are 6–7 (*vs.* 10–11) in number.

DESCRIPTION. BL 25.2 mm. Body uniform black, head between eyes without or with two, oblong, red spots diverging basad. Dorsal punctation coarse and dense on posterior 1/2 head, slightly sparser and barely finer along sides and toward neck constriction, rather fine, very dense to confluent on pronotum.

Head: frontal carina shiny, short, convex anteriorly, nearly flat behind, limited behind by a round, distinct to imperceptible, impression on vertex. Frons on each side of the carina rugulose, with fine and sparse or no punctures.

Pronotum broadest between apical third and basal three fifths, sides parallel in front of or slightly diverging to base; base truncate, two fifths to a half as wide as apex, which is deeply and evenly sinuate between apical angles or straight at middle. Basal angles acute to almost right and a little projecting laterobasad, with apices slightly blunted or narrowly rounded. Macrosculpture as described for *G. variabilis* **sp.n.**, except that narrowly explanate lateral margin is more reflexed toward apical angles, merging apically into a lateral bead (in the holotype), which otherwise is fine and reflexed. Median line fine and rather superficial.

Elytral apices obliquely truncate, very slightly angulate combined, each subsinuate inside outer angle; sutural angles slightly acute and blunt. Interval 3 with three discal setae, odd ridges with much shorter, multiple, sparse, erect setae. Pubescence sparse, arranged in a single row on each side of a ridge and in 2–3 rows on the outside of ridge 8.

Aedeagus (Figs 38–39, 57–58, 87–89): left paramere subangulate at ventral margin a third from apex, otherwise varying in shape, with apex more or less angulate closer to ventral margin. Internal sac with 6–7 dorsomedial and two left lateral sclerites.

DISTRIBUTION. Only known from two localities in Kon Tum and Quang Nam provinces, Central Vietnam.

NAME. Toponymic referring to the type locality of this species.

HABITATS AND HABITS. The holotype was hand collected at night in a monsoon forest.

COMMENTS. Great similarity between *G. konplongensis* **sp.n.** and *G. rufofemorata* **sp.n.**, their adjacent localities recorded and the phenomenon of dimorphic colouration of the legs observed in some related congeners make subspecies status of the two species not improbable though less likely.

5. *Galerita dimorpha* Fedorenko, **sp.n.** Figs 10–11, 34–35, 53, 81–83.

MATERIAL. Holotype 3 (ZMMU), with label: 'Vietnam, Gia Lai Province/~40 km NEE of Pleiku,/ 14°12'11"N 108°18'54"E/ Kon Ka Kinh Nat[io]n[al]. Park,/ h = 900–950 m 24-30.V./ D. Fedorenko leg. 2017'. Paratypes (SIEE): 233, 4, 4, same data except '... /h = 890 m 9–22.V./ D. Fedorenko leg. 2016'. — Aedeagus examined in three males, including two paratypes (having either black or bicoloured legs) with everted and inflated internal sac.

DIAGNOSIS. As for *G. rufofemorata* **sp.n.** but very distinctive aedeagus. For this feature and the other, subtle, differences see the description below.



Figs 78–83. Aedeagus with everted and inflated internal sac: 78–80 — *Galerita variabilis* **sp.n.**; 81–83 — *G. dimorpha* **sp.n.**; 78, 80 — dorsal aspect; 79, 82 — left lateral aspect; 80, 83 — ventral aspect; *bbl* — left basal bulb; *bbr* — right basal bulb; sclerites: *sda* — dorso-apical, *sdm* — dorsomedial, *sll* — left lateral, *svb* — ventrobasal. Scale bars 1 mm.

Рис. 78–83. Эдеагус с вывернутым и надутым внутренним мешком: 78–80 — Galerita variabilis **sp.n.**; 81–83 — G. dimorpha **sp.n.**; 78, 80 — сверху; 79, 82 — слева; 80, 83 — снизу; bbl — левый базальный пузырь; bbr — правый базальный пузырь; склериты: sda — дорзо-апикальный, sdm — дорзомедиальные, sll — левые боковые, svb — вентробазальный. Масштаб 1 мм.

DESCRIPTION. The differences are as follows: BL 22.9–23.9 mm. Body colouration dimorphic (Figs 10–11) due to legs being either uniform black or with femora pale (in two and seven specimens, respectively). Head and pronotum slightly shinier because of barely more superficial microsculpture.

Head: genae shorter, GL/OL 1.17–1.32. Pronotum broadest about two fifths from apex, with lateral margin more explanate, disc less convex and median line superficial, accordingly; lateral bead fine all along. Sides less sinuate in front of base, slightly diverging to slightly converging to basal angles; these blunt, very slightly acute and barely projecting apicad. Sometimes (two of totally nine specimens) fine apical bead present.

Aedeagus (Figs 34–35, 53, 81–83): median lobe shiny ventrally, with no ventromedial groove; left paramere trapezoidal and narrow. Internal sac set in horizontal plane, perpendicular to median lobe in dorsal view, with two lateral bulbs, left and right, nine dorsomedial and 5–6 left lateral sclerites; basalmost left lateral sclerite long, curved, situated at apex of left lateral bulb. DISTRIBUTION. Known from the type locality only. NAME. Refers to the dimorphic body colouration. HABITATS AND HABITS. As for the previous species. Adults with bicoloured or black legs were taken together.

6. *Galerita variabilis* Fedorenko, **sp.n.** Figs 16, 32–33, 52, 78–80.

MATERIAL. Holotype & (ZMMU), labelled: 'S[outhern] Vietnam, Lam Dong Prov[ince]./ Bi Doup - Nui Ba [Nature] Reserve/ 12°07'[N] 108°39'20"E/ Bi Doup Mt., N[orthern] slope/ h=1700-1900 m 16./ leg. D. Fedorenko IV.2008'. Paratypes (SIEE): \mathcal{J} , taken together with the holotype; $3\mathcal{J}\mathcal{J}$, \mathcal{Q} , same locality, except for different dates: 12. or 16., or 19-22. IV.2008, or 6.V.2009; \mathcal{O} , \mathcal{Q} , same locality, except for: ' .../ 12°11'[N] 108°42'E, ~4 km/ SSE of Hon Giao Mt./ h=1500-1800 m, 2-3./ leg. D. Fedorenko IV.2008'; \mathcal{Q} , same locality, except for '...// 12°10'44"N 108°40'44"E/ env. Long Lanh, h=1400–1600 m 3-6./ ...'; 433, 299, same data but different dates: 1-2.V.2009 or various dates between 29.III. and 20-21. IV.2008; six specimens (ZISP) from just the same exact locality, with labels 'VIETNAM: Lam Dong Prov.,/ Lac Duong Distr., 5 km NE/ Long Lanh Vill., Bi Doup - Nui/ Ba Nat. Res., Giang Ly/ Forest Station, 1400 m,' and '12°10'58.62"N/ 108°40'48.96"E,/ 29.VI-4.VII.2022,/ Anisyutkin L.N. (Expedition of Russia-Vietnam Tropical Centre)'. - Aedeagus examined in six males, including three with everted and inflated internal sac

DIAGNOSIS. An apterous black species, with the genae long, the odd elytral ridges more developed than even ones, and the aedeagus is distinctive. Just as black morph of *G. dimorpha* **sp.n.**, except chiefly that the pronotum is broadest closer to apex, PLw/PL 0.24–0.33 (*vs.* 0.37–0.43), genae longer, GL 1.30–1.45 (*vs.* 1.17–1.32), and the elytra distinctly shorter in male, EL/EW 1.65–1.78 (*vs.* 1.78–1.83). For other features see the description.

DESCRIPTION. As for *G. dimorpha* **sp.n.** except the following. BL 21.8–23.8 mm. Body (Fig. 16) uniform black. Forebody shinier due to punctation being barely coarser and slightly sparser, combined with microsculpture more superficial.

Shallow impression on vertex more distinct because of sparser and/or finer punctation around.

Pronotum broadest slightly more than a fourth from apex, densely to rather sparsely punctate on disc, densely to confluently along sides, rugose-puncate in basal sixth and just inside fine lateral bead. Sides sinuate and running parallel to each other in front of or diverging toward base. Base truncate, with angles straight to slightly acute, mostly blunt, sometimes narrowly rounded. Basolateral foveae in form of fine longitudinal lines, each extended apicad into a similar sublateral line, separating between convex disc and slightly yet widely (in lateral third) explanate lateral margin; often an additional, narrow, explanate stripe being traceable inside lateral bead. Median line fine, slightly impressed.

Elytral apices obliquely truncate, very slightly angulate combined, each straight in female, barely sinuate just inside outer angle in male; sutural angle slightly acute to nearly right, sharp or blunt. Interval 3 with three discal setae, odd ridges with much shorter, multiple, sparse, erect setae. Pubescence very sparse.

Aedeagus (Figs 32–33, 52, 78–80): left paramere elliptic, with both dorsal and ventral margins rounded toward apex. Internal sac as in *G. dimorpha* **sp.n.**, *i.e.*, with two laterobasal bulbs and a similar number of dorsomedial (nine) and left lateral (5–6) sclerites present, but it is oriented as those of

G. rufofemorata **sp.n.** and of many other species; ventrobasal sclerite distant rather far from apex of median lobe.

DISTRIBUTION. Known from the type locality only.

NAME. Refers to the odd elytral ridges varying between subequal to and better developed than the even ones.

HABITATS AND HABITS. All the specimens were hand collected under covers, mostly logs on the ground, in monsoon forests.

7. *Galerita subglabra* Fedorenko, **sp.n.** Fig. 17.

MATERIAL. Holotype \Im (ZMMU), with label 'Vietnam, Dak Lak Prov.[ince],/ Chu Yang Sin Nat[io]n[al]. Park,/ 12°23'48"N 108°20'59"E/ Krong Kmar riv[er]., upp[e]r flow/ h=1200–1650 m, 30.III–14./ D. Fedorenko leg. IV.2012'. Paratype \Im (SIEE), same data, except for '.../ 12°22'36"N 108°21'13"E/ 1.5 km W [of] Chu Pan Phan Mt,/ h=1650 m 19.III–2.IV./ D. Fedorenko leg. 2013'.

DIAGNOSIS. An apterous black species (Fig. 17) different from *G. variabilis* **sp.n.** as the most similar species in the combination of the head smaller, PW/HW 1.14–1.18 (*vs.* 1.20–1.29), the pronotum broadest farther from the apex, PLw/PL 0.37–0.39 (*vs.* 0.24–0.33), and the elytra barely shorter and distinctly wider in female, EW/PW 1.85–1.92 (*vs.* 1.72–1.82), with the ridges equally developed.

DESCRIPTION. As for *G. variabilis* **sp.n.** except the following. BL 21.8–22.6 mm. Shallow impression on vertex more distinct. Pronotal base slightly sinuate, sides sinuate in front of and very slightly diverging toward very slightly acute and blunt basal angles. Elytral apical margin subsinuate or straight.

DISTRIBUTION. Known from the type locality only.

NAME. Refers to very sparse pubescence of the elytra.

HABITATS AND HABITS. The two the specimens were hand collected in monsoon forests.

8. *Galerita quadraticollis* Fedorenko, **sp.n.** Figs 14, 55, 90–92.

MATERIAL. Holotype \circ (ZMMU), with label: 'Vietnam/ prov[ince]. Ha Tinh/ Vu Quang (Phu Quon)/ [Nature] reserve, h~1.200 m/ 5–26.VIII.1997/ leg. M. Kalyakin'. Paratype \circ (ZISP), labelled: 'Vietnam, Ha Tinh Prov.,/ Rao An, April-May 2000/ N.L. Orlov'.

DIAGNOSIS. An apterous black species from Central Vietnam, with the pronotum slender, the pubescence similar in odd and even elytral intervals, the genae long, no or subtle impression on vertex, and the aedeagus distinctive.

DESCRIPTION. As for *G. rufofemorata* **sp.n.** except the following. BL 23.8–26 mm. Body (Fig. 14) black.

Head coarsely and densely punctate in basal half, with frontal carina traceable up to the level of eye mid-length and shallow (\mathfrak{Q}) or no (\mathfrak{Z}) impression on vertex.

Pronotum broadest between a third and two fifths from apex, moderately and very densely to confluently punctate, with sides parallel-sided or very slightly diverging toward base in basal fifth. Base truncate, with angles subacute to right, blunt or slightly rounded at apices. Apex more or less evenly sinuate or nearly straight at middle; angles more or less projecting, blunt or rounded. Median line fine and indistinctly impressed, obliterate in basal and apical sixths. Basolateral foveae in form of finely impressed lines traceable in basal half and extended apicad into very fine sublateral lines separating disc from slightly reflexed lateral margins; these being explanate and wide, about a fifth as wide as pronotum medially and a sixth as wide as pronotum at base and at apex. Lateral bead fine throughout.

Elytral apices obliquely truncate and angulate combined, each subsinuate inside outer angle; sutural angle sharp, almost right in male, very acute and extended into a short blunt tooth in female. Pubescence fairly dense, more so basally, thereby forming two uneven rows on each side of intervals 2-4 and 6 in basal third and on the inside of interval 8 in male (while 1-2 rows in female); otherwise arranged in a single row of fairly dense setae on each side of elytral ridge; the outside of basal 2/3 ridge 8 with setae forming two rows behind to three rows before. Interval 3 with 4-5 discal setae.



Figs 84–89. Aedeagus with everted and inflated internal sac: 84–86 — *Galerita rufofemorata* sp.n.; 87–89 — *G. konplongensis* sp.n., paratype; 84, 87 — dorsal aspect; 85, 88 — left lateral aspect; 86, 89 — ventral aspect. Scale bars 1 mm. PHC. 84–89. Эдеагус с вывернутым и надутым внутренним мешком: 84–86 — *Galerita rufofemorata* sp.n.; 87–89 — *G. konplongensis* sp.n., паратип; 84, 87 — сверху; 85, 88 — слева; 86, 89 — снизу. Масштаб 1 мм.

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Figs 90–95. Aedeagus with everted and inflated internal sac: 90–92 — *Galerita quadraticollis* **sp.n.**, holotype; 93–95 — *G. hrdlickai*; 90, 93 — dorsal aspect; 91, 94 — left lateral aspect; 92, 95 — ventral aspect. Scale bar 1 mm. **Рис. 90–95.** Эдеагус с вывернутым и надутым внутренним мешком: 90–92 — *Galerita quadraticollis* **sp.n.**, голотип; 93–95 — *G. hrdlickai*;

10. 90–93. Эдеагус с вывернутым и надутым внутренним мешком. 90–92 — *Gaterita quadraticoms* **sp.n.**, толотип, 93–95 — *G. nratickat*, 90, 93 — сверху; 91, 94 — слева; 92, 95 — снизу. Масштаб 1 мм.

Aedeagus (Figs 55, 90–92): left paramere oviform, with both dorsal and ventral margins subequally rounded and apex narrowly rounded. Internal sac simple, without laterobasal bulbs, with eleven dorsomedial and four left lateral sclerites.

DISTRIBUTION. Only recorded here in Ha Tinh Province, Central Vietnam.

NAME. Refers to an oblong and subquadrate pronotum of this species.

HABITATS AND HABITS. The adults were hand collected in monsoon forests.

COMMENTS. While having the aedeagus very similar to that of the holotype, a male specimen from the adjacent province Quang Binh and a female specimen from an adjacent locality are slightly different from the type specimens of *G. quadraticollis* **sp.n.** in body shape and proportions. Accordingly I have to describe those two as belonging to a southern subspecies of the species discussed.

8a. Galerita quadraticollis subcordata Fedorenko, ssp.n.

Figs 15, 56.

MATERIAL. Holotype \Diamond (ZMMU), with label: 'Vietnam, C[entral]. Annam,/ prov. Quan[g] Binh,/ Minh Hoa [= Quy Dat] distr., Ke Bang/8 km SO [=SE] env. Yen Hop/2-8. IV.1999 (Dalat campus)/ leg. S. Kruskop'. Paratype \heartsuit (SIEE), labeled: 'Vietnam, Quang Binh Prov.[ince]/ Phong Nha - Kebang N[ational]P[ark],/ Bo Trach, h~400 m/ 17°25'31"N

 $106^{\circ}13'44''E/ h = 1050 m$, 23.IV–11.V./ leg. D. Fedorenko 2019'.

DIAGNOSIS. Different from the nominotypical subspecies in having the body slightly more robust, the pronotum more cordate, *i.e.*, shorter, PL/PW 1.09–1.13 (*vs.* 1.20–1.28), with sides more rounded and more deeply sinuate in front of base, this being narrower, PB/PA 1.31–1.39 (*vs.* 1.43–1.54), and the elytra barely shorter, EL/EW 1.71 or 1.68 (*vs.* 1.75 or 1.74) in male and female, respectively. Left paramere by comparison is narrower, with ventral margin only slightly rounded (Fig. 56).

DESCRIPTION. Body as in Fig. 15, BL 23–25.6 mm. Head with a shallow impression on vertex in female. Pronotum with basal angles subacute and blunt or slightly rounded at apices. Elytral apices similar, except that sutural angles not toothed in female. Aedeagus as in Figs 90–92, except that six left lateral sclerites are present.

DISTRIBUTION. Quang Binh Province, Central Vietnam. NAME. Refers to the pronotum, which is much more cordiform than in the nominotypical subspecies.

HABITATS AND HABITS. As for the nominotypical subspecies.

9. *Galerita truncata* Fedorenko, **sp.n.** Figs 8, 59, 96–98.

MATERIAL. Holotype ♂ (ZMMU), with label: 'N[orthern]-Vietnam, 40 km WNW of/ Lao Cai, env. Y Ty, Bat Xat/ N[ational]P[ark], Lao Than Mt./ 22°37′20″N 103°38′03″E/ h= 1770 m, 4–14.VI./ leg. D. Fedorenko 2019'.

DIAGNOSIS. An apterous black species defined chiefly by the distinctive aedeagus, the elytra short, EL/EW 1.64, and apically truncate in male, with pubescence arranged in a single row on each side of elytral ridge while being slightly sparser in odd than in even intervals. A similar species, *G. wrasei*, from the adjacent region, Yunnan, China, has the head, the genae, the pronotum and the elytra shorter, and the internal sac of the aedeagus with both dorsomedial and left lateral sclerites more in number, eight and six, respectively.

DESCRIPTION. BL 22.7 mm. Body (Fig. 8) black and rather shiny. Meshed microsculpture superficial, isodiametric on head and along sides of pronotum, slightly to moderately transverse in front of neck constriction and along sides of basal 1/2 head, almost obliterate before.

Head with frontal carina nearly smooth and glabrous, well traceable up to the level of eye mid-length, coarsely and moderately densely punctate in basal half, including within a very shallow impression on vertex.

Pronotum broadest almost two fifths from apex, with sides slightly sinuate in basal half and very slightly converging basad. Base truncate, with angles right and blunt. Apex slightly sinuate and straight at middle; angles slightly rounded and a little projecting. Disc moderately convex, moderately and very densely punctate at middle, somewhat rugose-punctate toward lateral margins and apically. Median line fine, very gently impressed, obliterate in basal fifth and in apical sixth. Basolateral foveae in form of finely impressed lines traceable in basal half and as fine sublateral lines extended apicad; lateral margins explanate outside these foveae and less so outside sublateral lines. Lateral bead fine, indistinct at base and at apex. Basal transverse impression fine yet distinct, angulate apically.

Elytral apices truncate combined, sutural angles right, outer angles widely rounded. Pubescence by comparison moderately dense, arranged in a doubled row on each side of interval 4 in basal third and in 2–3 rows on the outside of ridge 8. Interval 3 with three discal setae.

Aedeagus (Figs 59, 96–98): left paramere subtriangular, with dorsal margin rounded, ventral margin straight and apex

slightly pointed. Internal sac simple, with no laterobasal bulbs, six dorsomedial and two left lateral sclerites — the absence of the left laterobasal bulb may have evolved from that being enlarged first and merged into the sac's body after.

DISTRIBUTION. Known from the type locality only.

NAME. Refers to the apically truncate elytra.

HABITATS AND HABITS. The only specimen was hand collected under a tree trunk on the ground in a cloudy forest.

10. *Galerita tonkinensis* Hovorka, 2019 Figs 19, 60, 102–104.

Hovorka, 2019: 31 (Tam Dao, Vietnam).

MATERIAL. Eight specimens from Tam Dao, Vinh Phuc Province, Vietnam: \bigcirc (MSPU), VII.1997 (A. Ryabov); \eth , \bigcirc (MSPU), h~900 m, 10.VII.1990 (unknown collector); \eth , $4 \bigcirc \bigcirc$ (ZISP), 20.V. or 25.V., or 8.VI.1995 (A.V. Gorokhov). — Aedeagus with everted and inflated internal sac examined in male.

DIAGNOSIS. An apterous black species, distinctive in having the body larger-sized, the aedeagus distinctive, both the head and the genae long, no or indistinct impression on vertex, the elytral ridges equally developed and sparsely pubescent, with setae arranged in a single row on each side.

REDESCRIPTION. Unnecessary except some characters only. BL 25.9–27.3 mm (26–28.1 mm in the type series). Body (Fig. 19) black, diverging reddish spots on vertex indistinct, traceable in teneral specimens only. Antennal scape brown black, with extreme base slightly reddish, antennomeres 2–11 reddish-brown. Microsculpture superficial, distinct over pronotum and on basal 1/2 head, nearly obliterate before; punctation rather fine and confluent or almost so on both pronotum and basal 1/2 head, head otherwise nearly smooth and glabrous.

Head long, a fourth to a third longer than wide, smooth frontal carina short, subcostate before, almost flat behind.

Pronotum nearly parallel-sided in front of to distinctly diverging to base; basal angles slightly acute to almost right, more or less blunted. Base truncate and indistinctly trisinuate, apex slightly sinuate and straight at middle. Disc moderately convex; median line fine, slightly impressed, obliterate before and behind. Basolateral foveae and sublateral lines shallow, separate at middle or nearly so.

Elytral apices obliquely truncate, angulate combined, slightly sinuate inside outer angles; sutural angles acute and distinctly pointed to blunt. Pubescence sparse, forming single row on each side of ridge and a doubled row on each side of even intervals in basal fifth only; setae becoming gradually denser basad from two to four outside basal 3/5 ridge 8.

Aedeagus (Figs 60, 102–104): left paramere oviform, with both dorsal and ventral margins rounded toward a moderately rounded apex. Internal sac with three laterobasal bulbs, single right and two left, eight dorsomedial and three left lateral sclerites; basalmost of these latter being long, curved, situated at apex of right laterobasal bulb.

DISTRIBUTION. Known from the type locality only. A male paratype from Phan Xi Pang Mt. may have incorrect data label or belong to a different species.

NAME. Refers to the underdeveloped fasciated elytral pattern.

HABITATS AND HABITS. From analogy with the other species from Vietnam, this species is forest-dwelling.

11. *Galerita linearis* Fedorenko, **sp.n.** Figs 20, 40–41, 61, 105–107.

MATERIAL. Holotype ♂ (ZMMU) labelled: 'N-Vietnam, 40 km W of/ Cao Bang, Phia Oac Mt./ E-slope, h=1600– 1800 m/ 22°36′27″N 105°52′0″E/ 22.V–6.VI.2018/ leg. A. Abramov'. Paratypes (SIEE): $3, 3 \oplus \oplus$, with same label; $3, 3, \oplus$, same data, except for '.../ Cao Bang, Phia Oac Mt./ 22°36'30"N 105°52'20"E, h~1600–1650 m,/ deciduous forest, 3–11.X./ leg. D. Fedorenko 2018'; \oplus (ZISP), 'NE Vienam, Cao Bang/ Prov., Nguen Binh/ Distr., Quang Thanh/ vill. 4–13.V.[19]98 N. Orlov'.

DIAGNOSIS. An apterous black species with aedeagus barely different from that of *G. tonkinensis*; otherwise distinctive from *G. tonkinensis* in many characters of external morphology: the elytra with even ridges less developed than the odd ones; their pubescence uneven, sparse along odd ridges, dense and forming narrow longitudinal stripes in even intervals; the elytral apices are slightly sinuate, with the outer angles only a little rounded and thence distinct. Besides, the body is smaller, BL 23.4–25.8 (*vs.* 25.9–27.3) mm, the head shorter, HL/HW 1.17–1.23 (*vs.* 1.24–1.37), and the elytra barely shorter and narrower in both male and female (Tab. 1).

DESCRIPTION. Body (Fig. 20) black and rather shiny, head toward the level of posterior margin of eye without or with a pair of small and vague, slightly oblong, reddish spots. Antennae with basal segments black, antennomeres 3–11 or 5–11 mostly dark reddish-brown (slightly teneral specimens have reddish spots larger and more distinct and antennae reddish brown). Forebody with microsculpture superficial, more distinct toward sides of pronotum.

Head moderately and very densely to confluently punctate and pubescent in basal half, with frontal carina narrow and short, reaching the level of eye mid-length or shorter, impression on vertex very shallow to nearly indistinct.

Pronotum broadest mostly two fifths from apex, parallelsided in front of base or with sides slightly diverging toward basal angles, these blunt, right or slightly acute. Base truncate, apex slightly sinuate and straight at middle; apical angles slightly rounded and a little projecting. Disc moderately convex, rather finely and confluently punctate, rugose-punctate along base and along sides in apical third. Median line fine yet more or less impressed, obliterate in basal and apical sixths. Basolateral foveae in form of finely impressed lines traceable in basal half, each extended into a more shallow sublateral line that almost reaches apex, or these two interrupted medially.

Elytral apices obliquely truncate and angulate combined, straight or slightly sinuate inside outer angles, often sinuous due to sutural angles truncate or rounded in addition, outer angles distinct, obtuse and blunt or narrowly rounded; sutural angles acute and sharp or with extreme apices truncate and thence straight to slightly obtuse. Pubescence yellow, forming two irregular rows of dense and fairly long setae on each side of even ridge, thus forming narrow longitudinal stripes, combined with shorter and sparse one-row setae on each side of odd ridge. Interval 3 with 4–5 discal setae, rarely with three on one side; odd intervals with multiple, much shorter, erect setae.

Aedeagus (Figs 40–41, 61, 105–107) very similar to that of *G. tonkinensis*: left paramere oblong subrectangular, parallelsided, with apex obliquely truncate, to subtriangular, with dorsal margin more rounded toward a moderately rounded apex. Internal sac with one left and two right laterobasal bulbs, with eight dorsomedial and 3–4 left lateral sclerites; most proximal of left sclerites long, curved, situated at apex of left laterobasal bulb.

DISTRIBUTION. Known from the type locality only.

NAME. Refers to the elytral pilosity in form of longitudinal fasciae.

HABITATS AND HABITS. The specimens were collected either by hands or by pitfall-trapping in cloudy forests.

COMMENTS. The new species is very similar to *G. tonkinensis* in the shape and structure of the internal sac of the aedeagus. This could argue for subspecies status of the two taxa,

but for many non-genital morphological differences observed and the recorded localities of either species far apart, with no transitional populations being discovered as yet. Another similar species is *G. chinensis* Hovorka, 2019, from the eastern Guanxi in South China. Besides similar facies, it has endophallic sclerites similar in number, eight dorsomedial and four left lateral ones. However, the left paramere is different in shape due chiefly to its apex pointed, the elytral ridges equally developed, and the two close localities recorded are much east to those of *G. linearis* **sp.n.**

12. *Galerita sublineata* Fedorenko, **sp.n.** Figs 13, 42–43, 63, 99–101.

MATERIAL. Holotype δ (ZMMU) and paratypes (SIEE), δ , 2 φ φ , with labels: 'Vietnam, Thanh Hoa Prov[ince]./ Thach Thanh District,/ 20°17'39"N 105°33'24"E/ forest trail/ h~50– 70 m, 16–26.IV.2024/ D. Fedorenko leg.'; φ (ZISP), 'ДРВ/ Кук-Фыонг, Нин-Бинь/ первичный лес/ Захаров 3.1.71' [Vietnam, Cuc Phuong, Nin Binh Province, primary forest, 3.I.1971, A. Zakharov leg.]. — Aedeagus examined in two males, including one with everted and inflated internal sac.

DIAGNOSIS. An apterous black species most similar to the previous one in appearance, from which it is distinguished chiefly by a distinctive aedeagus, the elytral ridges equally developed, with the pubescence much less differentiated between odd and even intervals, the head smaller, PW/HW 1.24–1.32 (*vs.* 1.14–1.25), with the genae distinctly shorter, GL/OL 1.08–1.21 (*vs.* 1.25–1.46), and the elytra longer in male, EL/ EW 1.78–1.89 (*vs.* 1.72–1.80).

DESCRIPTION. As for *G. linearis* **sp.n.** except the following. BL 23.6–24.8 mm. Body (Fig. 13) black, with no reddish spots. Antennae black, mostly slightly reddish toward apices. Forebody with microsculpture superficial, more distinct toward sides of pronotum.

Head with frontal carina long though less distinct, flat and punctate behind, with no impression on vertex.

Pronotum with sides very slightly diverging to (mostly) barely converging to base; basal angles blunt, right or very slightly obtuse. Base truncate, apex slightly sinuate and straight at middle. Disc moderately convex, rather finely and confluently punctate, rugose-punctate along base and along sides in apical third. Basolateral foveae and sublateral line less distinct to nearly indistinct.

Elytral apices similar except that sutural angle mostly sharp and outer angles less distinct. Pubescence sparser, so that two rows of setae on each side of even ridges are traceable throughout the ridges in one specimen and in basal third to half in the other three; differences between even and odd interval in pubescence otherwise are due to one-row setae are much denser on sides of the former than of the latter.

Aedeagus (Figs 42–43, 63, 99–101): apex of median lobe in lateral view triangular, with slightly obtuse dorsal tooth, very finely and densely striated on each side of a narrow ventromedial groove bearing a fine and fairly long carina at bottom. Left paramere nearly parallel-sided, slightly narrower apically than basally, with apex widely rounded. Internal sac with a single, right, laterobasal bulb, twelve dorsomedial and seven left lateral sclerites.

DISTRIBUTION. Known from the type locality only.

NAME. Refers to the underdeveloped fasciated elytral pattern.

HABITATS AND HABITS. The specimens were hand collected at night, running on the ground in a disturbed lowland rainforests.

13. *Galerita breviceps* Fedorenko, **sp.n.** Figs 21, 62, 108–110.

MATERIAL. Holotype $\stackrel{\circ}{\supset}$ (ZMMU) with label 'N-Vietnam, Nghe An Prov[ince]./ Que Phong Distr[ict]../ Pu Hoat National Park, 19°46'12"N 104°48'16"E/ h=1340 m 15–27.V.2019/ leg.D. Fedorenko'.

DIAGNOSIS. An apterous black species similar to *G. linearis* **sp.n.** and more so to *G. sublineata* **sp.n.** It differs from the latter by the head shorter, HL/HW 1.13 (*vs.* 1.20–1.24), and barely wider, PW/HW 1.20 (*vs.* 1.24–1.32), the pronotum broadest a third (*vs.* two fifths) from apex and about as much (*vs.* almost half) wider at base than at apex. Aedeagus, including the armature o the finternal sac, is similar, except that the

apex of the median lobe is smooth ventrally (*vs.* longitudinally grooved and finely carinate along middle).

DESCRIPTION. As for *G. linearis* **sp.n.** except the following. BL 23.5 mm. Body (Fig. 21) black, vertex with a pair of vague, oblique, reddish spots. Scape dark brown, basal two palpomeres, antennomeres 2-11 and tarsi red (this pale colour may be due to teneral condition of the holotype).

Head elliptic, with genae evenly curved to neck; frontal carina short, traceable up to the level of eye mid-length, limited behind by almost indistinct impression on vertex.

Pronotum with sides distinctly diverging to base in basal fifth; basal angles subacute and blunt. Base truncate, apex sinuate and straight at middle. Disc moderately convex, rather

Figs 96–101. Aedeagus with everted and inflated internal sac: 96–98 — *Galerita truncata* **sp.n.**, holotype; 99–101 — *G. sublineata* **sp.n.**; 96, 99 — dorsal aspect; 97, 100 — left lateral aspect; 98, 101 — ventral aspect. Scale bar 1 mm. **Рис. 96–101.** Эдеагус с вывернутым и надутым внутренним мешком: 96–98 — *Galerita truncata* **sp.n.**, голотип; 99–101 — *G. sublineata* **sp.n.**; 96, 99 — сверху; 97, 100 — слева; 98, 101 — снизу. Масштаб 1 мм.

Figs 102–107. Aedeagus with everted and inflated internal sac: 102–104 — *Galerita tonkinensis*; 105–107 — *G. linearis* **sp.n.**; 102, 105 — dorsal aspect; 103, 106 — left lateral aspect; 104, 107 — ventral aspect. Scale bars 1 mm. **Рис. 102–107.** Эдеагус с вывернутым и надутым внутренним мешком: 102–104 — *Galerita tonkinensis*; 105–107 — *G. linearis* **sp.n.**; 102, 105 — сверху; 103, 106 — слева; 104, 107 — снизу. Масштаб 1 мм.

finely and confluently punctate. Basolateral foveae and sublateral lines very shallow, separated at middle.

Elytral apices obliquely truncate and angulate combined, nearly straight, rounded at sutural angles, thus forming minute re-entrant angle; outer angles less obtuse and narrowly rounded. Pubescence similar, yet slightly sparser and arranged in 1-2 (mostly single) rows on each side of ridge 2 in apical half and of ridge 4 before apex. Interval 3 with four discal setae. Aedeagus poorly sclerotized due to teneral condition of the specimen (Figs 62, 108–110): left paramere parallel-sided in basal three fifths, triangular toward a moderately rounded apex. Internal sac with at least right laterobasal bulb, twelve (large ten and small two) dorsomedial and seven left lateral sclerites; of these latter, basalmost one being large and curved (perhaps it is situated at apex of left laterobasal bulb, which is vestigial or ill-defined due to imperfect preparation of the teneral specimen).

Figs 108–113. Aedeagus with everted and inflated internal sac: 108–110 — *Galerita breviceps* **sp.n.**, holotype; 111–113 — *G. orientalis* from Assam, India; 108, 111 — dorsal aspect; 109, 112 — left lateral aspect; 110, 113 — ventral aspect; *bbl* — left basal bulb. Scale bars 1 mm. **Puc. 108–113.** Эдеагус с вывернутым и надутым внутренним мешком: 108–110 — *Galerita breviceps* **sp.n.**, голотип; 111–113 — *G. orientalis* из Ассама, Индия; 108, 111 — сверху; 109, 112 — слева; 110, 113 — снизу. Масштаб 1 мм.

DISTRIBUTION. Only known from the type locality. NAME. Refers to the fairly short head.

HABITATS AND HABITS. The only specimen was hand

collected from under log on the ground in a monsoon forests.

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