

Entomofauna

ZEITSCHRIFT FÜR ENTOMOLOGIE

Band 10, Heft 29 ISSN 0250-4413 Linz, 5. Dezember 1989

New Galerucinae from Vietnam (Coleoptera, Chrysomelidae)

L. Medvedev & E. Samoderzhenkov

Abstract

In the course of studies of a rich *Chrysomelidae* material from Vietnam collected mostly by the Soviet-Vietnamese Ecological Expedition many new taxa of *Chrysomelidae* were discovered. In the present article, a new genus and five new species of *Galerucinae* are described: *Luperogala* **gen.nov.**, *Luperogala mirabilis* **sp. nov.**, *Luperogala paradoxa* **sp.nov.**, *Paridea lateralis* **sp.nov.**, *Paridea flava* **sp.nov.**, and *Paridea multituberculata* **sp. nov.** Type material is deposited in L. MEVEDEV's collection (Moscow), some paratypes in the Staatliches Museum für Naturkunde in Stuttgart.

Zusammenfassung

Es werden folgende neue Taxa beschrieben: *Luperogala* **gen.nov.**, *Luperogala mirabilis* **sp.nov.**, *Luperogala paradoxa* **sp.nov.**, *Paridea lateralis* **sp. nov.**, *Paridea flava* **sp.nov.** und *Paridea multituberculata* **sp.nov.**

***Luperogala* gen.nov.**

Body elongate, upperside not pubescent except for short hairs on elytra margins. Head with eyes a little more narrow than prothorax, shortened before eyes. Penultimate segment of maxillary palpes moderately broadened toward apex, last segment short and conical. Labrum transverse, slightly emarginate anteriorly, with six setigerous pores in a transverse row. Base of antenna located at level of eye's middle, frontal ridge between antennae more or less triangular. Frontal tubercles divided from each other and behind with deep furrows. Vertex punctate. Antennae thin and long, in male a little longer than body, with long segments; 3rd segment longer than 2nd, 4-7th longest, 8-11 shorter, with dense, adpressed and erect pubescence. Prothorax transverse, all sides margined, hind margin near hind angles obliquely truncate, lateral margins sinuate just behind fore angles; surface punctured, without impressions. Elytra more broad than prothorax, confusedly punctured; humeri convex, lateral margins curved inward and invisible from above. Epipleurae narrow, disappearing just before apex. Fore coxal cavities open, prosternum between coxae triangular, very narrow, meso- and metasternum narrowly connected between middle coxa. Legs thin and long, tibiae cylindrical, without ridges, 1st segment of hind tarsi equal to 2nd and 3rd combined. Claw with obtuse tooth.

Two last abdominal segments of male strongly modified. 4th segment on inside with a sword-like curved process, connected to curved inside apical part of sternite. The process has a broadened reservoir at base for gland secret, internal canal and apical orifice (Fig.7, 8). 5th sternite trilobate, central lobe deeply concave for both reservoir and process of the 4th sternite to hinge into (Fig.9, 10).

Generotype: *Luperogala mirabilis* sp.nov.

This genus must be included in the group of genera with open coxal cavities and margined prothorax, such as *Liroetis* WEISE, 1887, *Pseudoliroetis* LABOISSIERE, 1929, *Cneorane* BALY, 1865, etc.

Luperogala mirabilis sp.nov. (Figs.1-4)

Reddish-fulvous, elytra metallic green and shining, 7-11 segments of antennae, apices of tibiae and tarsi black. Vertex with deep, widely separated punctures. 3rd antennal segment thrice as long as 2nd, 4th 1.5 times as long as 3rd and equal in length to each of the three following, 8th-11th shorter, subequal to 3rd. Antennae of male elongate, a little longer than body. Pronotum 1.8 times as wide as long with large sparse punctures, shagreened, sutural angles obtuse. Apical abdominal sternites modified: 4th with a styled-shaped process, slightly curved, narrowed and sharpened at apex (Fig.1, 2), apical edge with two ridges, covered with dense pubescence and separated with an impression. Lateral lobes of 5th sternite shorter than median one. Front and middle tibiae with, hind ones without spurs. Aedeagus short, broad, with a modified flagellum, which is long and with a flattened umbelliflariform apical part (Fig. 3, 4). Length 11.5 mm.

Material: Vietnam. Prov. Vinhphu, Tamdao, 800-1200 m, mountain subtropical forest, 12.-22.IV.1986 (L.MEDVEDEV) - male - holotype.

Luperogala paradoxa sp.nov. (Figs.5-14)

Reddish-fulvous, upperside of antennae, tibiae and tarsi black. Vertex with distinct, feeble punctures. 3rd segment of antennae twice as long as 2nd, 4th 1.5 times as long as 3rd and equal in length to each of the following. Antennae in male reaching to apex of elytra, in female to half of elytron. Pronotum 1.8 times as wide as long, with moderately dense punctures and very feeble median impression; interspaces shagreened and finely punctured. Elytra with distinct punctures, shining, shagreened, almost parallel-sided in male and somewhat broadened apically in female. Front tibiae without, middle and hind ones with spurs.

Female: 5th abdominal sternite deeply arcuate (Fig.11). This notch contains sternite 6th provided with a deep and narrow emargination at hind margin and with a long, directed forward process at fore margin concealed be-

neath 5th sternite. Pygidium rounded, with a small apical projection.

Male: 4th abdominal sternite with a curved stylet-shaped process broadened and bifid apically, its apical edge feebly sloping, clothed with adpressed pubescence (Fig.5, 6, 7, 8). 5th sternite with long lateral lobes reaching to median one (Fig.9, 10). Aedeagus short, rather broad, with a rounded apex, flagellum strongly elongate and flattened laterally (Fig.12-14). Length of male 11.2 - 11.6 mm, of female 13.0 mm.

Material: Vietnam, Prov. Vinhphu, Tamdao, 800-1200 m, subtropical forest, 12.-22.IV.1986 (L.MEDVEDEV) - 3 males and 2 females - holotype and paratypes.

***Paridea* BALY, 1886**

***Paridea lateralis* sp.nov. (Figs.15,18,19,24,26,27,28)**

Pale flavous, vertex reddish-flavous, labrum, meso- and metasternum, sternites 1-4 of abdomen and inner margin of epipleurae in the anterior third black.

Male: Head smooth, frontal ridge distinct, frontal tubercles delimited behind with a straight deep groove. Antennae a little longer than half of body, 3rd segment twice as long as 2nd; 4th a little shorter than 3rd (Fig. 15). Prothorax transverse, cordiform, smooth, with a deep and straight transverse groove, almost interrupted in the middle. Elytra strongly punctured, with more or less distinct, short irregular rows, mostly in basal part. Area behind scutellum smooth, indistinctly elevated, with a very shallow elongate fovea near suture; there are also two rather high tubercles divided with an impression near side margin behind humerus (Fig.24). Epipleurae broad, gradually narrowed behind and disappearing just before apex. Pygidium exposed, elongate triangular, with a blunt rounded apex. Last abdominal sternite trilobate, middle lobe elongate, slightly concave (Fig.26). Hind tibia with a short spur. Aedeagus Fig.18, 19. Length of body 4.9 - 5.6 mm.

Female: Body more robust. Elytra more strongly punctured. Pygidium triangular, exposed, its apex blunt, with a feeble incisure (Fig.28). Last abdominal segment tri-

angular, longer than pygidium, with a semicircular incisure at apex (Fig.27). Hind tibia with a spur. Length of body 5.5 mm.

Material: Vietnam, Prov. Vinhphu, Tamdao, 800-1200 m, mountain subtropical forest, 12.-22.IV.1986 (L.MEDVEDEV) - 2 males - holotype and paratype; same locality, 26.-30.V.1985 (L.MEDVEDEV) - 6 males and 1 female - paratypes, among them 2 specimens were collected on *Ipomoea* (Convolvulaceae), 3 on *Trichosanthes* (Cucurbitaceae) and 1 on *Gynostemma pentaphylla* (Cucurbitaceae). Cucurbitaceae seem to be the main host plants for this species.

This species is transitional between the subgenera *Paraulaca* BALY, 1888, and *Semacia* FAIRMAIRE, 1889, but in general seems to be near to *Paraulaca* BALY, 1888, because of the very feeble incisure at the apex of the female pygidium.

Paridea flava sp.nov. (Figs.16, 20, 21, 29, 30)

Light flavous, fore margin of labrum, apices of mandibles, metasternum and abdomen except for last segment black, middle and hind coxal and often hind part of abdomen segments and metapleurae flavous.

Male: Head impunctured, frontal ridge low, frontal tubercles limited behind with a straight deep furrow. 2nd antennal segment elongate, just a little shorter than 3rd; 4th segment equal to 3rd (Fig.16). Prothorax as in preceding species. Elytra with moderately strong dense puncturation, more feeble toward apex, with traces of regular rows before middle. Area behind scutellum slightly elevated, smooth, with a shallow elongate fovea near suture. Epipleurae broad at base, gradually narrowed behind and disappearing at level of 3rd abdominal segment. Pygidium not covered with elytra, with narrowly rounded apex. Last abdominal sternite trilobate, middle lobe a little longer than broad, slightly concave (Fig.29). Middle and hind tibiae with distinct spurs. Aedeagus very thin (Fig.20, 21). Length of body 5.5 - 6.2 mm.

Female: Body more broad and robust. Pygidium triangular, exposed, with narrowly rounded, not emarginate apex. Last abdominal segment broadly triangular, more short than pygidium, with a narrow deep incisure at hind mar-

gin (Fig.30). Middle and hind tibiae with spurs. Length of body 6.2 mm.

Material: Vietnam, Prov. Vinhphu, Tamdao, 800-1200 m, mountain subtropical forest, 12.-22.IV.1986 (L.MEDVEDEV) - 3 males and 1 female. Holotype male and paratypes.

This species, according to the structure of the last abdominal sternite of the female, is a typical representative of the subgenus *Paraulaca* BALY, 1888. It differs from the preceding species by the 2nd antennal segment elongate, labrum flavous, different elytra sculpture in the male, shape of the aedeagus, and the structure of the last sternite in both sexes.

***Paridea multituberculata* sp.nov. (Figs.17,22,23,25,31)**

Pale flavous, apices of mandibles, 10th antennal segment, metasternum and sometimes two spots on pygidium black.

Male: Head smooth. 2nd antennal segment short, 3rd almost thrice as long as 2nd; 4th a little shorter than 3rd (Fig.17); 10th broadened toward apex and distinctly differs in shape from 9th. Prothorax transverse, not cordiform, lateral margins arcuate and broadly curved down. Surface smooth, transverse groove undulate, not expanded to side margins but curved toward base; basal part between groove and hind margin strongly convex, with two more or less distinct elevations. Elytra strongly and densely punctured, more finely in apical part, with a feeble humeral ridge. Basal region of elytron strongly modified, impressed, with four tubercles: one at base, one near tip of scutellum, one of elongate form near suture, and one conical, with a fovea at tip, just in the middle between lateral and sutural margin (Fig.25). Pygidium covered with elytra, not incised at apex. Last abdominal sternite punctured, trilobate; middle lobe as broad as long, not projected behind (Fig.31). Middle and hind tibiae with spurs. Aedeagus - Fig.22, 23. Length of body 5.7 - 6.5 mm. Female unknown.

Material: Vietnam, Prov. Vinhphu, Tamdao, 800-1200 m, mountain subtropical forest, 31.V.1985 (L.MEDVEDEV) - holotype and paratype; same locality, 900 m, 26.V.1985 (L.MEDVEDEV) - 1 paratype; same locality, 900 m, 28.VIII.

1963 (O.KABAKOV) - 1 paratype; Prov. Nghetinh, Muongsen, 400 m, 6.X.1962 (O.KABAKOV) - 1 paratype; Prov. Caolang, Bacson, 500 m, 19.I.1964 (O.KABAKOV) - 1 paratype.

Notwithstanding the absence of the female, we can include this species in *Paridea* BALY, 1886 (s.str.), according to the structure of the male pygidium. It seems to be near to *Paridea testacea* GRESSITT & KIMOTO, 1963, but differs well in the specific morphology of the prothorax, sexual characters and coloration of the antennae and legs.

Figures (p.460-461)

Figs.1-4 *Luperogala mirabilis* sp.nov.:

- 1, 2) apex of abdomen, male, ventral and lateral views;
- 3, 4) aedeagus, lateral and dorsal views.

Figs.5-14 *Luperogala paradoxa* sp.nov.:

- 5, 6) apex of abdomen, male, ventral and lateral views;
- 7, 8) 4th abdominal sternite, male, caudal and caudo-lateral views; 9, 10) 5th abdominal sternite, male, ventral and caudal views; 11) apex of abdomen, female, ventral view; 12-14) aedeagus, lateral, dorsal and ventral views.

Figs.15,18,19,24,26-28 *Paridea lateralis* sp.nov.:

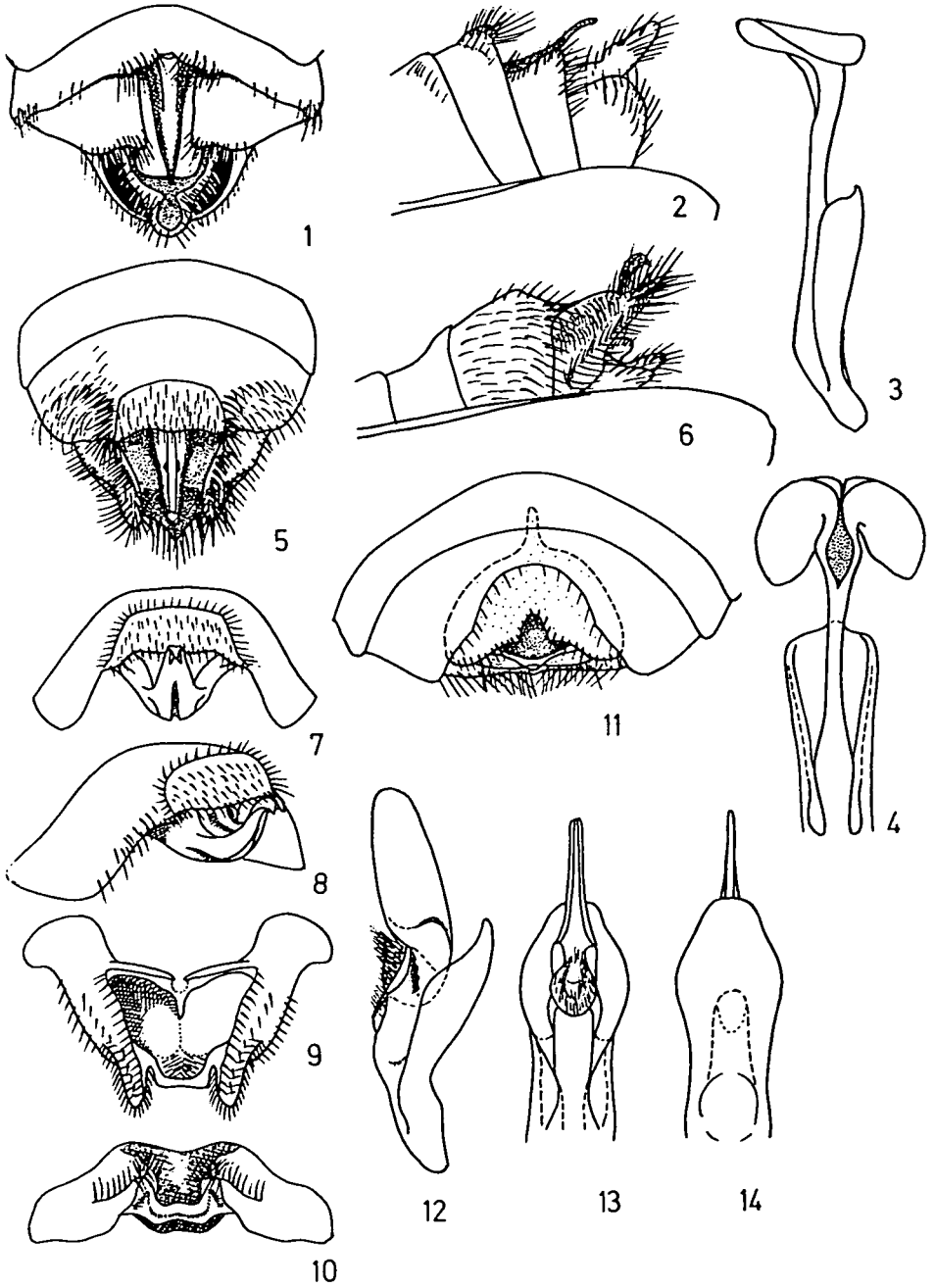
- 15) Antennomeres 2-4, male; 18-19) Aedeagus, lateral and dorsal views; 24) Elytron, male; 26) 5th abdominal sternite, male, ventral view; 27) 5th abdominal sternite, female, ventral view; 28) Pygidium, female, dorsal view.

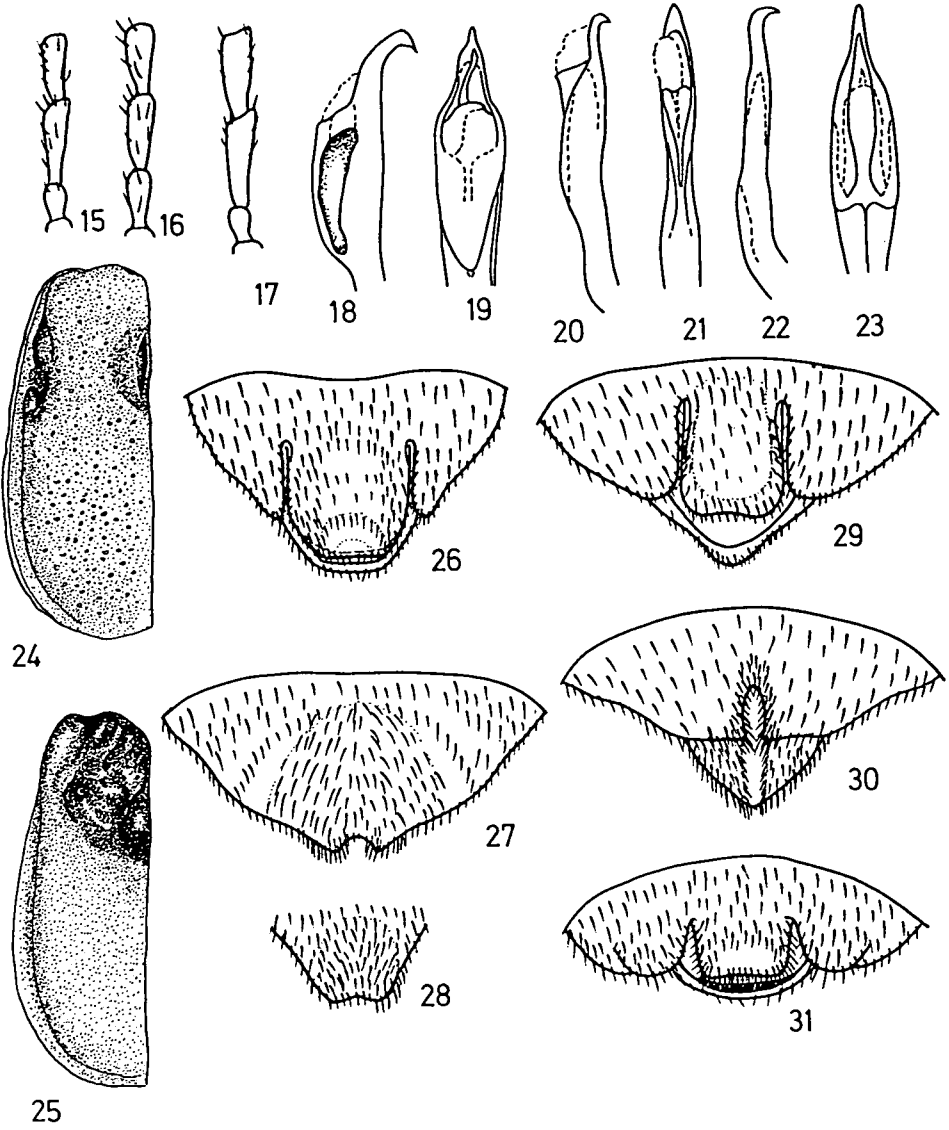
Figs.16,20,21,29,30 *Paridea flava* sp.nov.:

- 16) Antennomeres 2-4, male; 20-21) Aedeagus, lateral and dorsal views; 29) 5th abdominal sternite, male, ventral view; 30) 5th abdominal sternite, female, ventral view.

Figs.17,22,23,25,31 *Paridea multituberculata* sp.nov.:

- 17) Antennomeres 2-4, male; 22-23) Aedeagus, lateral and dorsal views; 25) Elytron, male; 31) 5th abdominal sternite, male, ventral view.





Authors' addresses:

L. MEDVEDEV

Academy of Sciences

Institut of evolutionary morphology and
ecology of animals

Leninsky prospect 33

Moscow 117071

USSR

E. SAMODERZHENKOV

Academy of Sciences

Institut of evolutionary morphology and
ecology of animals

Leninsky prospect 33

Moscow 117071

USSR

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Entomofauna](#)

Jahr/Year: 1989

Band/Volume: [0010](#)

Autor(en)/Author(s): Medvedev Lev N., Samoderzhenkov E.

Artikel/Article: [Galerucinae from Vietnam \(Coleoptera, Chrysomelidae\). 453-462](#)