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New taxa of Chrysomelidae from Afrotropical and Oriental regions

(Insecta, Coleoptera)

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A new genus *Lesageana* with the species *L. paucispina*, spec. nov, from Guinea and four additional new species are described: *Donacia thaiensis*, spec. nov. (Thailand), *Rhyparida ceramensis*, spec. nov., *R. sparsepunctata*, spec. nov. (Ceram), and *Galerucida lankana*, spec. nov. (Sri Lanka). *Pseudadimonia variolosa* Hope is a new record for Sri Lanka.

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Introduction

Thanks to the kindness of Dr. L. LeSage (Agriculture Canada, ECORC, Ottawa), I had the opportunity to study very interesting material from his collection (LLC) including a genus and five species new for science. Their descriptions are given below. Materials from Basel Museum of Natural History (NHMB) and author's collection (LM) were used also in the description of *Galerucida lankana*.

Donacia (s.str.) *thaiensis*, spec. nov.
Figs

Types. Holotype: ♂, Thailand, Chiang Mai, Doi Inthanon N.P., 1300 m, 8 May 1990, on plants by road, leg. E. Fuller (LHC). – Paratypes: 3♂♂, 5♀♀, same locality and date, (LLC, 1 ex. LM).

Description

Entirely metallic bronze, apical antennal segments darker, almost black.

Labrum about 3 × as wide as long, with straight anterior margin, sparsely punctate. Clypeus triangular, wider than long, with straight anterior margin, densely punctate. Frons and vertex densely and partly rugosely punctate, with deep longitudinal groove, finely pubescent; frontal tubercles distinct, but feebly elevated, densely punctate. Antennae reaching anterior quarter of elytra, proportions of segments as 19-10-16-16-20-17-17-18-18-18-20, proportions between segment 3 and 2 in all specimens about 1.5-1.6 ×, preapical segments about 2.5-3 × as long as wide (Fig. 1).

Prothorax glabrous, 1.15 × as wide as long, widest in anterior quarter, distinctly narrowed at base, anterior and posterior angles acute and produced outside, anterior and posterior margins feebly convex, lateral tubercles rather low, feebly delimited (Fig. 2). Surface with longitudinal groove, shortened at both ends, especially anteriorly, and with dense deep punctures; interspaces more or less transversely rugose. Scutellum triangular, pubescent and finely punctate. Elytra twice as long as wide, apices truncate with slightly produced sutural angle, surface without any depressions, rows of punctures regular, moderately deep, distinct throughout except extreme apex; interspaces flat, with rough transverse rugosities. Hind femora reaching 4th abdominal segment, with strong tooth beneath before apex (Fig. 3).

♂. 1st abdominal sternite flattened and slightly concave in middle, densely pubescent. Apex of pygidium truncate, slightly emarginate (Fig. 4). 5th abdominal sternite with impression before apex and feebly rounded hind margin (Fig. 6). Aedeagus see Fig. 8. Length 7.6-8 mm.

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♀. 1st st abdominal sternite not concave, with usual pubescence. Apex of pygidium rounded-truncate (Fig. 5). 5th abdominal sternite without impression, with triangular hind margin (Fig. 7). Length 5.2 mm.

Remarks. The Oriental region is rather poor in species of *Donacia*, and most of these are very rare. Only representatives of the subgenus *Cyphogaster* are more abundant and sometimes numerous (Goecke 1934, 1936, Gressitt & Kimoto 1961, 1979).

This species differs well from all Oriental species. It can be identified as follows:

1. 1st abdominal sternite of male with 2 small teeth or tubercles. Prothorax without distinct punctures (subgenus *Gythogastev* Goecke, 1934) ..... 2.
– 1st abdominal sternite of male without teeth or tubercles (subgenus *Donacia* s.str.) ..... 3.
2. Hind femora not toothed. ..... *D. transversicollis* Fairmaire, 1887 (China)
– Hind femora toothed. ..... *D. assama* Goecke, 1936 (Assam)
3. Antennae, legs, sometimes elytra or upperside at least partly fulvous or red-fulvous ..... *D. recticollis* Jacoby, 1893 (India) *D. vietnamensis* Kimoto & Gressitt, 1979 (Vietnam)
– Body entirely metallic bronze. ..... *D. thaiensis*, spec. nov.

Rhyparida ceramensis, spec. nov.
Figs

Types. Holotype: ♂, Ceram (given on the label as Seram), Maluku, Air Besar, 6 km E of Wahai, 5.XI 1998, leg. O. Mehl (LLC). – Paratype: 1 ex., Ceram (Seram), Maluku, Unito 35 km E of Pasahari, 24-30. X. 1998, leg. O. Mehl (LLC).

Description

Entirely fulvous with head and prothorax reddish fulvous. Body elongate ovate. Head with dense microsculpture, frons slightly swollen, minutely but distinctly punctured, its lower end impressed with deep longitudinal groove; clypeus distinctly separated from frons, as wide as long, anterior margin broadly concave-emarginate, anterior angles obtuse, moderately produced; surface deeply and densely punctured. Antennae thin, reach almost middle of elytra, proportions of segments as 8-6-10-11-12-12-11-11-10-13. Prothorax 1.7 × as wide as long, broadest behind middle, distinctly narrowed anteriorly, all angles acute and slightly produced, surface dull, densely microsculptured and rather densely punctured throughout with interspaces equal or a little larger than punctures (Fig. 9). Scutellum as wide as long, semiovate. Elytra 1.3 × as long as wide at shoulders, feebly narrowed to behind and broadly rounded on apex, with well developed humeral tubercle and very feeble, almost indistinct postbasal impressions; elytral rows quite regular, but more feeble on apical slope, interspaces feebly convex. Femora simple. Aedeagus parallel-sided, tridentate on apex; underside feebly concave basally and practically flat in apical half (Fig. 11). Length 6.3 mm (without head – 5.4 mm).

Rhyparida sparsepunctata, spec. nov.
Figs

Types. Holotype: ♂, Ceram (given on the label as Seram), Maluku, Air Besar, 6 km E of Wahai, 5.XI. 1998, leg. O. Mehl (LLC).

Description

Practically identical to the preceding species in color and morphology except sculpture of prothorax and form of aedeagus. Prothorax shining, with very thin, almost indistinct microsculpture and very sparse punctures, mostly in middle of disc; interspaces much larger than punctures (Fig. 10).

Aedeagus broad, elongate ovate, latero-apical teeth short and rounded; underside very deeply concave, especially basally, and with surface roughly microsculptured (Fig. 12). Length 6.2 mm.

Remarks. Only 1 species of *Rhyparida* was known from Ceram. These 3 species are separated as follow:

1. Elytra confusedly punctate on apex, feebly but distinctly impressed behind basal space. Prothorax converging from base to apex, irregularly, but not closely punctured. Length 6.3-7.3 mm .. *R. confusa* Baly, 1867
– Elytra regularly punctate throughout, very indistinctly impressed behind basal space. Prothorax widest behind middle. ..... 2.
2. Prothorax dull, with dense microsculpture and moderately dense punctures on all surface; interspaces equal or a little larger than punctures (Fig. 9). Aedeagus (Fig. 11) parallel-sided with underside comparatively flat. Length 6.3 mm . *R. ceramensis*, spec. nov.
– Prothorax shining, with very feeble microsculpture and sparse punctures placed mostly in middle of disc (Fig. 10). Aedeagus (Fig. 12) elongate

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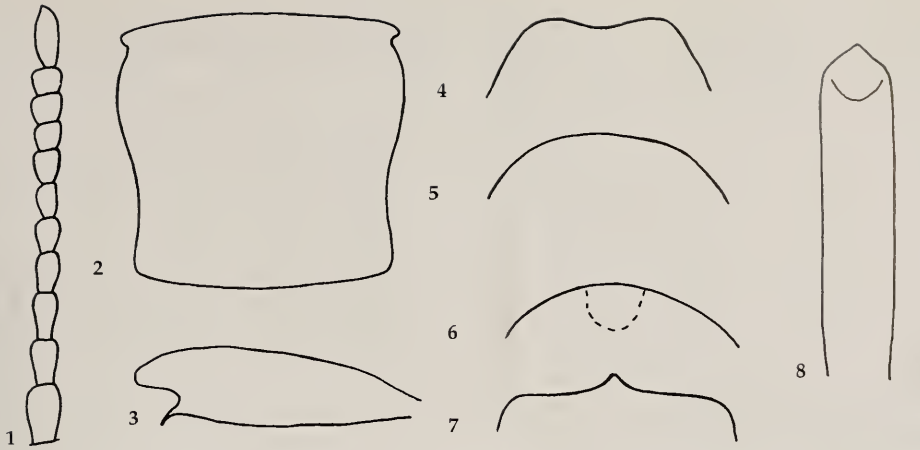


Figs 1-8. *Donacia thaiensis*, spec. nov. **1.** Antenna. **2.** Prothorax. **3.** ♂ hind femur. **4.** ♂ pygidium. **5.** ♀ pygidium. **6.** ♂, hind margin of 5th abdominal sternite. **7.** Same, ♀. **8.** Aedeagus.

ovate, broad, very deeply concave on underside. Length 6.2 mm ..... *R. sparsepunctata*, spec. nov.

Pseudadimonia variolosa Hope, 1831

Material examined. 1♀, Sri Lanka, Pottuvil, 3. VII. 1977, leg. O. Mehl (LLC).

Remarks. The geographical distribution of this species is connected with the Himalayas and extends eastward to Burma, Indochina and South China. The discovery of this species in Sri Lanka is quite unusual, but the specimen at hand cannot be distinguished from the typical *P. variolosa* Hope.

Galerucida lankana, spec. nov.
Figs

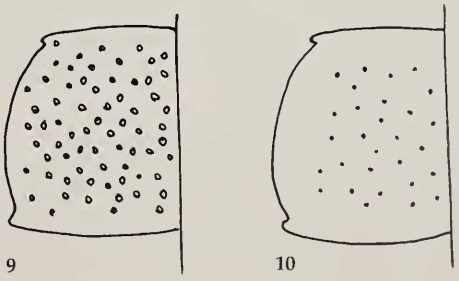
Types. Holotype: ♂ale, Sri Lanka, Dambulla env., 200 m, 19.IV-9.V.1991, leg. J. Kolibac (NHMB). – Paratypes: 2 ex., same locality (NHMB, LM); 1 ex, Ceylon, N. C. Prov., Anuradhapura, 21-26.VI.1985, leg. O. Mehl (LLC); 1 ex., Ceylon, leg. Diener (LM).

Description

Body red, upperside with metallic green lustre, apical half of antennae black, tibiae and tarsi dark metallic green.

Head impunctate, with deep groove between eyes, interantennal space broad. Antennae reach a little behind humerus, proportions of segments as 10-3-2-12-9-9-8-9-9-8-11, preapical segments about twice as long as wide, shorter in female. Prothorax 2.4× as wide as long, widest before middle, side margins feebly rounded, explanate. Surface impunctate, with deep transverse impression on each side. Scutellum triangular, impunctate. Elytra 1.3× as long as wide, parallel-sided or slightly wider posteriorly, strongly convex, with deep groove behind humerus near lateral margin. Surface ornamented with fine, confused, punctation, and few large punctures arranged in loose short rows, mostly along suture, side margin, and especially on inner side of humerus. Metasternal process long, directed forwards, rounded at apex. Aedeagus see Fig. 13. Length 7-8 mm.

Remarks. This is the first record of the genus for Sri Lanka. *G. lankana* differs from *G. indica* Harold, 1880 and *G. longicornis* Baly, 1865 in the metallic color of the dorsum and the partly metallic legs.



Figs 9-10. Prothorax of *Rhyparida*, left side. **9.** *R. ceramensis*, spec. nov. **10.** *R. sparsepunctata*, spec. nov.

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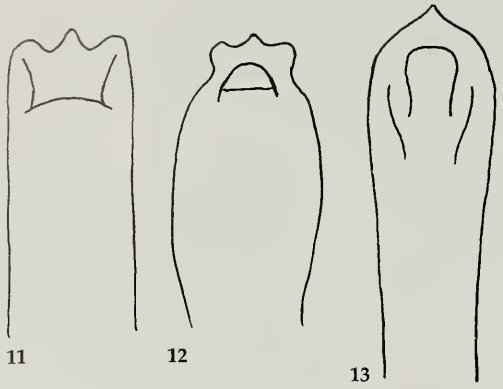

Figs 11-12. Aedeagus of *Rhyparida*. **11.** *R. ceramensis*, spec. nov. **12.** *R. sparsepunctata*, spec. nov.
Fig. 13. *Galerucida lankana*, spec. nov. Aedeagus.

with numerous short teeth, looking serrate. 5 apical segments of antennae distinctly widened. One species in South Africa ..... *Callinispa* Uhmann (Fig. 16)

– Anterior margin of prothorax without spines. Margins of elytra with sparse, more or less long spines, not looking serrate. Spines of prothorax located on anterior angles, near middle, and in posterior quarter. ..... 2.

2. Antennae claviform. Sides of prothorax with 3 spines, spine 2 bifurcate. Margin of elytron with 9-11 spines. One species on Sao Thomé Island (West Africa). ..... *Thomispa* Wuermli (Fig. 15)

– Antennae not claviform, slightly thickened to apex. Sides of prothorax with 4 spines: 2 on anterior angles, 1 near middle, 1 posteriorly. Margin of elytron with 4-5 rather short spines. Guinea ..... *Lesageana*, gen. nov. (Fig. 14)

Lesageana, gen. nov.
Fig. 14

Diagnosis

Body elongate, parallel-sided, moderately convex. Head densely pubescent with glabrous occiput. Frons broad, space between antennae very narrow. Antennae short, reaching only base of elytra, 11-segmented, without spines, slightly thickened at apex, but not claviform; segments 2-6 feebly elongate, 8-10 feebly transverse. Prothorax slightly transverse with rounded sides, broadest near middle, transversely flattened before base; anterior margin without spines; side margin with 4 spines: 2 on anterior angle, 1 on middle, 1 in posterior quarter. Surface pubescent. Scutellum quadrangular, a little longer than wide, densely pubescent. Elytra parallel-sided with rounded postero-apical part, twice as long as wide, pubescent; lateral margin with 4-5 short spines: 1 under humerus, 1 in anterior quarter, 1 before middle, 1 very small in posterior third (only on right side), 1 before apex. Surface without any impressions, with regular rows of punctures. Femora thin and long, slightly thickened in middle. Tibiae straight. Tarsi with segment 3 elongate, apical segment hidden between lobes of the third segment, with 2 free claws of equal length.

Genotype: *Lesageana paucispina*, spec. nov.

Remarks. The genus in question belongs to tribe Hispini and might be compared only with *Callanispa* Uhmann, 1959 and *Thomispa* Wuermli, 1975. They are separated as follows:

1. Anterior margin of prothorax with 2 spines on each side, lateral margin with 3 spines arising practically from one point. Margins of elytra

Lesageana paucispina, spec. nov.
Figs

Holotype: 1 ex., Guinea, Dubreka, X.1987, leg. H. Chiasson (LLC).

Description

Black, basal parts of antennal segments, spines and legs red fulvous, pubescense white.

Head finely punctate. Proportions of antennal segments as 7-5-5-5-4-4-4-4-3-3-6. Prothorax 1.05× as wide as long, 3 anterior spines subequal in length, the last one more short; surface very densely punctate, pubescense very short. Elytra with very short pubescense, punctures in rows large and deep, interspaces narrow, dull and microsculptured. Anterior tibiae widened at apex, tarsi with segments 1 and 2 short, segment 3 elongate. Length 3.4 mm. Sex unknown.

Discussion

It is well known that primitive tribes of Hispinae always lack the spine that are so typical for tribe Hispini. On the opposite, a few species in the tribe Oncocephalini may have as much as 102 acute tubercles on the dorsum or the lateroapical angles of the elytra, although these do not look like typical spines. On the other hand, advanced genera of Hispini, such as *Rhadinosa*, *Monochirus*, *Dactylispa*, *Hispa* possess numerous spines on sides of prothorax, sides and surface of elytra, and sometimes on antennal segments.

Some primitive genera *(Cassidispa, Platypria)* have

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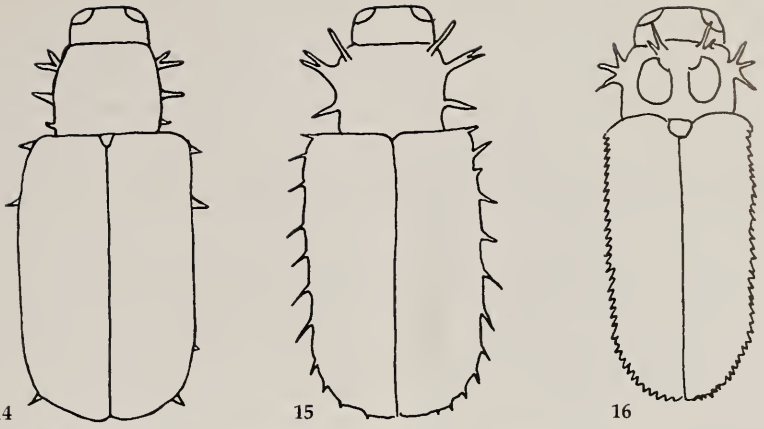

Figs 14-16. General view of body. **14.** *Lesageana*, gen. nov. **15.** *Thomispa* Wuermli. **16.** *Callanispa* Uhmann (15 and 16. after Wuermli 1975).

spines only on the margins of prothorax and elytra, but not on the dorsal surface. The most primitive genera in this tribe are probably *Thomispa* and the new genus described here, since both have only a few spines on the sides of the prothorax and the elytra, and the genus *Callanispa* in which the margins of the elytra are practically not spined, but instead serrate. In addition, it is interesting to observe that the geographical distribution of all these genera is in the western part of the Afrotropical region.

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