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New and poorly known Alticinae (Coleoptera: Chrysomelidae) from Sulawesi and the Philippines

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Abstract

A new genus (*Eudoliomima* **n. gen.**) and seven new species of the subfamily Alticinae (Chrysomelidae) are described: *Altica albicornis* **n. sp.** from Sulawesi; *Sebaethiella maculata* **n. sp.**, *Chabria albicornis* **n. sp.**, *Sphaeroderma tasadayca* **n. sp.**, *Dentisterna antennalis* **n. sp.**, *Eucyclomera laysi* **n. sp.**, and *Eudoliomima submetallica* **n. sp.** from the Philippines. Additional information concerning the Philippine species *Chaetocnema philippina*, *Manobia incerta*, and *Aphthonoides beccarii* is given.

Key words: Coleoptera, Chrysomelidae, Alticinae, Sulawesi, Philippines.

Zusammenfassung

Eine neue Gattung (*Eudoliomima* **n. gen.**) und sieben neue Arten der Unterfamilie Alticinae (Chrysomelidae) werden beschrieben: *Altica albicornis* **n. sp.** von Sulawesi; *Sebaethiella maculata* **n. sp.**, *Chabria albicornis* **n. sp.**, *Sphaeroderma tasadayca* **n. sp.**, *Dentisterna antennalis* **n. sp.**, *Eucyclomera laysi* **n. sp.**, und *Eudoliomima submetallica* **n. sp.** von den Philippinen. Zusätzliche Information wird angegeben für die philippinischen Arten *Chaetocnema philippina*, *Manobia incerta* und *Aphthonoides beccarii*.

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1 Introduction

The Alticinae from the islands of the Oriental region are still very poorly studied. A species key exists only for the Philippines (MEDVEDEV 1993, 1996), for the other islands only a preliminary key to the genera was published (CHEN 1936). Many new species and even genera are described almost every year. This article is based on material from the collection of the Staatliches Museum für Naturkunde Stuttgart, and material collected by Mr. PASCAL LAYS on the Philippines, mostly on Mindanao.

Acronyms of depositories

LM Collection of L. MEDVEDEV, Moscow, Russia
SMNS Staatliches Museum für Naturkunde, Stuttgart, Germany

Acknowledgements

I thank Dr. W. SCHAWALLER (SMNS) and Mr. P. LAYS (Liège) for the possibility to study this interesting material.

2 Taxonomy and distribution

2.1 *Altica albicornis* n. sp. (Fig. 1)

Holotype (♂): Sulawesi, Tomohon Rurukan, Gn. Mahavu, 30.XI-3.XII.1999, 1150–1200 m, leg. A. RIEDEL (SMNS).

Paratypes: same locality, 1 ♂, 2 ♀♀ (SMNS; LM).

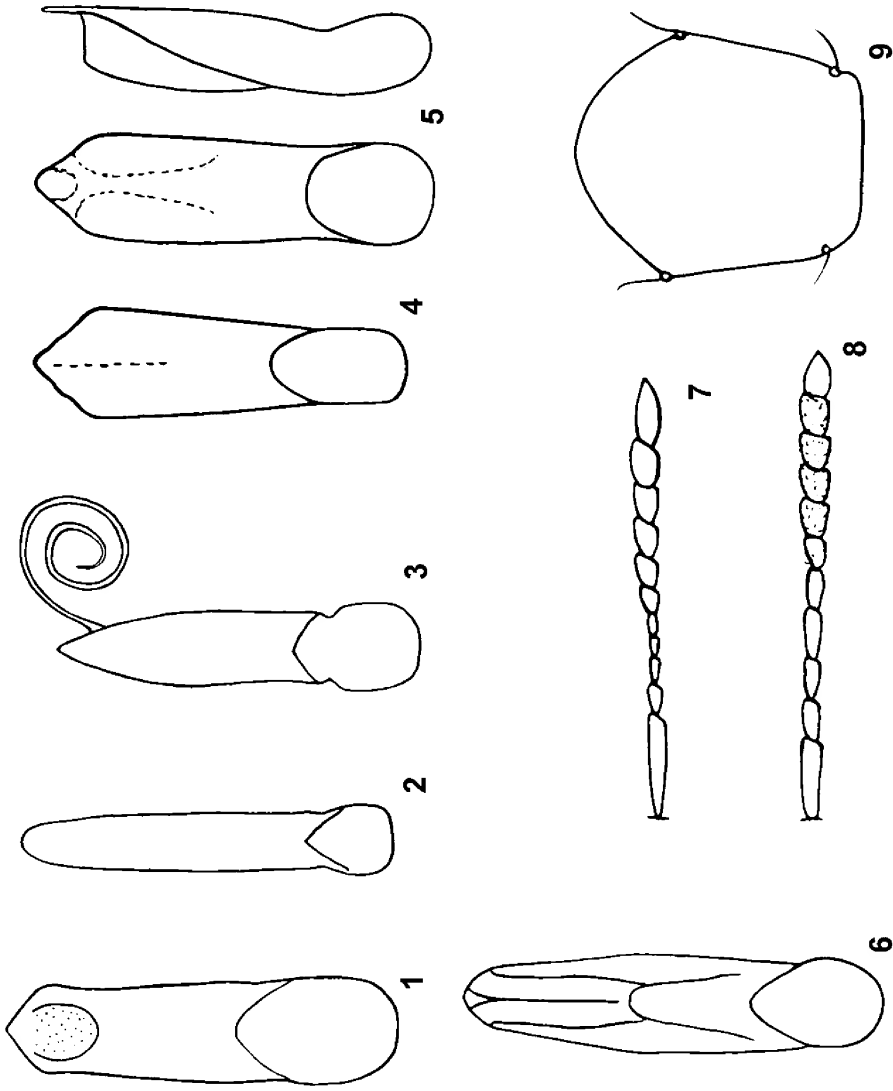
Description. Body black with pale flavous antennae. – Head impunctate, clypeus with impression on each side, interantennal space distinctly carinate, frontal tubercles rhomboidal, frons divided from vertex with straight transverse impressed line. Antennae almost reach middle of elytra, proportions of segments are as 8–3–8–7–7–7–7–7–7–10. Prothorax 1.75 times as wide as long, lateral margins explanate, basal groove shallow, more deep on sides, surface impunctate. Scutellum triangular with rounded apex, microsculptured. Elytra 1.6 times as long as wide, without lateral ridge and basal elevation, very finely punctate. 1st tarsal segment not widened in male. Aedeagus (Fig. 1) short and broad, underside with round preapical impression, but without any trace of lateral furrows. Body length of ♂ 5.3–5.4 mm, of ♀ 5.6–5.7 mm.

Diagnosis. Differs well from other species with combination of black body and pale flavous antennae, as well as with unusual sculpture on underside of aedeagus.

2.2 *Chaetocnema philippina* L. Medvedev, 1996 (Fig. 2)

Material. Philippines, Mindanao, 25 km NW of Zamboanga, Camp Susana, 28.–30.IV.1996, 800 m, leg. BOLM (SMNS); Philippines, Mindanao, Misamis occ., Don Victoriano, 1.–3.V.1996, 1700 m, leg. BOLM (LM).

Notes. The species was known before from Luzon and Palawan; this is the first record for Mindanao. Because the original description was based on a female, I give also a figure of the aedeagus (Fig. 2), which has an evenly convex underside.



Figs. 1-9. Details of Alticinae. - 1-6. Aedeagus ventral (Fig. 5 also lateral): 1. *Altica albicornis* n. sp. 2. *Chaetocnema philippina* Medvedev. 3. *Sebaethiella maculata* n. sp. 4. *Chabria albicornis* n. sp. 5. *Sphaeroderma tasadayca* n. sp. 6. *Denisterna antennalis* n. sp. - 7-8. Antenna: 7. *Eucyclomera layysi* n. sp. 8. *Eudolionima* n. gen. *submetallica* n. sp. - 9. Prothorax of *Eudolionima* n. gen. *submetallica* n. sp.

2.3 *Manobia incerta* Chen, 1934

Material. Philippines, Mindanao, 25 km NW of Zamboanga, Camp Susana, 28.–30.IV.1996, 800 m, leg. BOLM, 12 ex. – typical form, 12 ex. – aberrant form (see below) (SMNS; 2 ex. LM); Philippines, Mindanao, Misamis occ., Don Victoriano, 1.–3.V.1996, 1700 m, leg. BOLM, 7 ex. – typical form, 2 ex. – aberrant form (see below) (SMNS).

Notes. This comparatively common species differs well in having antennal segments 5–9 or 7–8 black. But in large series collected on Mindanao I found that many specimens have entirely fulvous or almost indistinctly darkened intermediate segments.

2.4 *Sebaethiella maculata* n. sp. (Fig. 3)

Holotype (♂): Philippines, Mindanao, 25 km NW of Zamboanga, Camp Susana, 800 m, 28.–30.IV.1996, leg. BOLM (SMNS).

Paratype: same locality and date, 1 ♂ (LM).

Description. Fulvous to red fulvous, antennae black with 4 basal segments fulvous and 3 apical ones white. Elytra with black spots: one on humerus, two in the middle in a transverse row; a paratype also with poorly delimited preapical spot. – Head impunctate. Proportions of antennal segments are as 16–5–6–8–8–8–8–7–7–10. Prothorax twice as wide as long, strongly convex, shining and impunctate. Elytra shining, convex, with moderately large and dense punctures. Aedeagus see Fig. 3. Body length 4.3–4.6 mm.

Diagnosis. Very similar to *S. mindanaica* L. Medvedev, 1994, but with tricolored antennae and 3 or 4 pairs of black spots on elytra. Aedeagus is practically identical with *S. mindanaica* L. Medvedev.

2.5 *Chabria albicornis* n. sp. (Fig. 4)

Holotype (♂): Philippines, Mindanao, S. Cotabato prov., Manobo Tasaday Forest Reserve, Mt. Tasaday, 3.II.–10.III.1991, leg. P. LAYS (LM).

Description. Red fulvous with breast darker, antennae pale flavous with 3 basal segments darker, fulvous to piceous. – Body elongate ovate. Head impunctate, clypeus triangular, feebly convex, with a row of bristles on each side. Antennae reach behind middle of elytra, segment 2 short, 3 almost twice as long as 2 and subequal with segments 4–10. Prothorax 1.7 times as wide as long, strongly convex, shining, very finely and sparsely punctate, with longitudinally impressed line on each side, not reaching anterior margin. Elytra 1.4 times as long as wide, with small humeral tubercle, shining, very finely punctate, each puncture with dark aureola. Wings present. Segment 1 of anterior and mid tarsi slightly widened. Aedeagus (Fig. 4) with two preapical impressions on underside. Body length 5.5 mm.

Diagnosis. Very similar to a few Philippine entirely fulvous species, such as *C. pallida* L. Medvedev, 1993, *C. mimica* L. Medvedev, 2001, *C. mindanaica* L. Medvedev, 2001, but differs well in the form of the aedeagus. The first two species mentioned above have a very elongate apical part of the aedeagus. The third species has a short and broad aedeagus with specific sculpture on its underside. The new species has a moderately long aedeagus with triangular and not elongate apex and evenly convex underside with two preapical impressions.

2.6 *Sphaeroderma tasadayca* n. sp. (Fig. 5)

Holotype (♂): Philippines, Mindanao, S. Cotabato Prov., Manobo Tasaday Forest Reserve, Mt. Tasaday, 3.II.–10.III.1991, leg. P. LAYS (LM).

Description. Entirely fulvous. – Body practically round, 1.1 times as long as wide. Head impunctate, delimited behind with straight line. Antennae reach humerus, proportions of segments are as 11–5–5–5–5–5–5–6–6–6–10, preapical segments only a little longer than wide. Prothorax twice as wide as long, broadest near base, sides rounded, basal margin bimarginate; surface finely and sparsely punctate. Elytra with 5–6 regular rows on outer part and with confused punctures on inner part, outermost interspaces very broad, all interspaces finely punctate. Tarsal segment 1 not widened in male. Aedeagus (Fig. 5) short and broad, thick in lateral view, but not cylindrical, underside feebly roof-like, slightly longitudinally impressed on each side. Body length 3 mm.

Diagnosis. Similar to *S. luzonica* L. Medvedev, 1993 and especially *S. furthi* L. Medvedev, 1996. The new species differs from the first one by another type of aedeagus, flattened dorsoventrally, from the second one by large size and different sculpture on underside of aedeagus.

2.7 *Dentisterna antennalis* n. sp. (Fig. 6)

Holotype (♂): Philippines, Mindanao, 30 km NW of Maramag, Bagongsilang, 1700 m, 13.–17.V.1996, leg. BOLM (SMNS).

Paratypes: Mindanao, 25 km NW of Zamboanga, Camp Susana, 700 m, 28.–30.IV.1996, leg. BOLM, 3 ex. (SMNS; 1 ex. LM); Mindanao, Misamis occ., Don Victoriano, 1700 m, 1.–3.V.1996, leg. BOLM, 2 ex. (SMNS; LM).

Description. Fulvous to dark fulvous, antennal segments 5–9 black or at least piceous, breast sometimes darkened. – Head impunctate, frontal tubercles obliquely placed, well delimited. Antennae reach middle of elytra, proportions of segments are as 10–6–7–9–10–8–8–9–9–9–10. Prothorax 1.4 times as wide as long, sides feebly rounded, angulate in anterior third, hind angles with very long bristle, surface shining and practically impunctate. Elytra 1.2 times as long as wide, very convex, with sides almost vertical, surface with regular rows of small and not deepened punctures, interspaces smooth and shining. 1st abdominal sternite with 2 sharp ridges. Segment 1 of hind tarsus about $\frac{2}{3}$ of tibia length, spur short and thick. Aedeagus (Fig. 6) almost parallel-sided with rounded apex, underside ridged on sides, deeply grooved in basal half, with thin central ridge in apical half. Body length 1.9–2.1 mm.

Diagnosis. Similar to *D. fulva* L. Medvedev, 1996, differs in having bicolored antennae, practically impunctate prothorax and interspaces of elytral rows, as well as in the form of the aedeagus.

Notes. KONSTANTINOV & VANDENBERG (1996) synonymized *Dentisterna* L. Medvedev, 1993 with *Horaia* Chûjô, 1935, which should be reexamined.

2.8 *Eucyclomera laysi* n. sp. (Fig. 7)

Holotype (sex not examined): Philippines, Mindanao, S. Cotabato prov., Manobo Tasaday Forest Reserve, Mt. Tasaday, 3.II.–10.III.1991, leg. P. LAYS (LM).

Description. Fulvous with lateral margin of elytra broadly black (broadest at base and gradually narrowed to behind). – Body practically round, 1.1 times as long as wide. Head impunctate, clypeus triangular, as long as wide, slightly concave. An-

tennae grooves deep and sharply delimited. Antennae reach a little behind humerus, proportions of segments are as 22–6–5–5–5–5–5–6–6–5–9, segments 6–11 thickened, 7–10 subquadrate (Fig. 7). Prothorax twice as wide as long, anterior margin deeply emarginate, sides broadly rounded, surface shining, finely and sparsely punctate. Scutellum small, feebly elongate. Elytra with regular rows of punctures on fulvous part, interspaces broad, flat and distinctly punctate; black part confusedly punctate. Claws with large right-angled tooth. Body length 4.2 mm.

Diagnosis. Very similar to *E. philippina* L. Medvedev, 1996 from Leyte. The new species differs in having entirely fulvous antennae, a lateral stripe on the elytra and interspaces of elytral rows densely punctate.

2.9 *Eudoliomima* n. gen. *submetallica* n. sp.

2.9.1 *Eudoliomima* n. gen. (Figs. 8, 9)

Description. Body elongate. Labrum subquadrate, narrowed towards base. Clypeus very short, perpendicular to labrum. Interantennal space broad and convex. Frontal tubercles convex, transverse, sharply delimited behind and from each other. Vertex evenly convex. Antennae short, with thickened 6–10 segments (Fig. 8). Prothorax 1.3 times as wide as long, narrowed towards base, anterior and lateral margins straight, hind margin arcuate, all angles with pore and bristle, surface convex, without any impressions (Fig. 9). Elytra elongate ovate, confusedly punctate, with humeral tubercle and very distinct basal elevation. Anterior coxal cavities closed. Hind femora moderately thick, hind tibiae cylindrical. 3rd tarsal segment bilobed. Claws with large and acute tooth.

Diagnosis. Very similar to *Eudolia* Jacoby, 1885, but differs clearly by prothorax being evenly convex and not constricted on sides.

Type of genus: *E. submetallica* n. sp.

2.9.2 *Eudoliomima submetallica* n. sp.

Holotype (♀): Philippines, Mindanao, S. Cotabato Prov., Manobo Tasaday Forest Reserve, Mt. Tasaday, 3.II.–10.III.1991, leg. P. LAYS (LM).

Description. Fulvous, antennal segments 6–10 black, elytra with violaceous tint. – Head impunctate. Proportions of antennal segments are as 9–5–5–6–6–5–6–7–6–6–9, segments 8–10 about 1.5 times as long as wide. Prothorax shining, with sparse microscopical punctures, and with row of large punctures on sides and basal margin. Scutellum triangular, smooth. Elytra 1.5 times as long as wide, with dense, moderately large punctures, arranged on sides in irregular rows. Body length 3.4 mm.

2.10 *Apthonoides beccarii* (Jacoby, 1885)

Material. Philippines, Mindanao, Misamis occ., Don Victoriano, 1.–3.V.1996, 1700 m, leg. BOLM, 16 ex.; Philippines, Davao Prov., 25 km NW of New Bataan, 20.–22.V.1996, leg. BOLM, 2 ex.; Philippines, 30 km NW of Maramag, Bagongsilang, 13.–17.V.1996, leg. BOLM, 1 ex. – All material in SMNS.

Notes. Known before from Luzon; collected for the first time on Mindanao. I am not quite sure with this determination, because the type from Sumatra was not investigated and the whole genus needs a revision, but in any case a population from Mindanao is identical with specimens from Luzon.

3 References

- CHEN, S. H. (1936): Genera of Oriental Halticinae. – *Sinensia* 7: 625–667.
- KONSTANTINOV, A. S. & VANDENBERG, N. J. (1996): Handbook of Palearctic Flea Beetles (Coleoptera: Chrysomelidae: Alticinae). – *Contributions on Entomology, International* 1: 233–439.
- MEDVEDEV, L. N. (1993): Alticinae of the Philippine Islands. – *Russian entomological Journal* 2 (3–4): 41–58, (5–6): 11–32.
- MEDVEDEV, L. N. (1996): New data on Alticinae from the Philippines. – *Russian entomological Journal* 5 (1–4): 65–83.

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