

On the genus *Cerophysa* CHEVROLAT and *Taumacera* THUNBERG from
Peninsular Malaysia
(Coleoptera: Chrysomelidae: Galerucinae)

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ABSTRACT. Two species of the genus *Cerophysa* CHEVROLAT and 4 of *Taumacera* THUNBERG are for the first time recorded from Peninsular Malaysia. *Taumacera subapicalis* n. sp., is described. Key to species of *Cerophysa* and *Taumacera* is provided.

INTRODUCTION

Recently, KIMOTO (1990) published a checklist of the *Galerucinae* from SE Asia, in which he listed *Cerophysa* Chevrolat as a junior synonym of *Taumacera* Thunberg. The genera *Cerophysa* and *Taumacera* have a peculiar shape of their male antennae, but the peculiarity involves different antennal segments. In *Cerophysa* it is either segment three and four, six and seven, or eight, in *Taumacera* consistently the third segment. According to JACOBY (1896), such antennal characters expressed in males only, are extremely variable and do not justify distinct generic status. However, both genera cannot be lumped together since they differ in an important character. *Cerophysa* can be separated from *Taumacera* based on the anterior coxal cavity; in the former genus the anterior coxal cavity opens posteriorly and in the latter is posteriorly closed. BALY (1886) used this character to distinguish between *Cerophysa* and his newly erected genus, *Nacrea* BALY, which was later reduced to a synonym of *Taumacera*. In the course of the present study, I have discovered a character in the male of the genus *Taumacera*, which is absent in the male of *Cerophysa*. The metasternum of the male *Taumacera* bears a median process on the posterior border, projected between the hind coxae. SEENO & WILCOX (1982) also listed both *Cerophysa* and *Taumacera* in their checklist of Leaf Beetle Genera.

This paper is the first record of both genera from Peninsular Malaysia. The genus *Cerophysa* is represented by two species, and *Taumacera* by four species, including one new.

Key to the species of *Cerophysa*

1. Antennal segments VI and VII dilated, VI two-thirds as long as VII. Head, antennae, pronotum, legs reddish brown. Pronotum slightly broader than long, with shallow transverse depression. Elytra metallic green, very fine and closely punctured. Ventral surfaces metallic green. Length 6.2-7.0 mm *sumatrensis* JACOBY
- Antennal segment VIII dilated. Head, antennae (except the yellowish last two segments), pronotum, elytra metallic violaceous blue. Pronotum one-half broader than long, bifoveolate. Elytra very closely and strongly punctured. Ventral surfaces metallic blue. Length 5.5-6.5 mm *gestroy* JACOBY

Cerophysa CHEVROLAT

Cerophysa CHEVROLAT, 1837: 403; MAULIK, 1936: 470; OGLOBLIN, 1936: 171, 372; WEISE, 1922: 65.

Type species: *Galeruca nodicornis* WIEDEMANN (Java).

Cerophysa gestroy JACOBY

Cerophysa gestroy JACOBY, 1896: 465 (Sumatra).

Taumacera gestroy: KIMOTO, 1990: 232.

Specimens examined: NEGERI SAEMBILAN: Jelebu, Jeram Toi, 19 V 1990, ISMAIL & RUSLAN, UKM, 1; SELANGOR: Bangi, Universiti Kebangsaan, 17 II 1990, ZULKIFILI, UKM, 1; Semenyih, Sg. Lalang, 4 III 1989, ISMAIL & RUSLAN, UKM, 1.

Remarks: new record for Peninsular Malaysia.

Cerophysa sumatrensis JACOBY

Cerophysa sumatrensis JACOBY, 1884: 45 (Sumatra). Type examined, Leiden.

Taumacera sumatrensis: KIMOTO, 1990: 39.

Specimens examined: KUALA LUMPUR: Kg. Kerinci, 22 II 1981, HALIM, UKM, 1; PAHANG: Bukit Fraser, 23 I 1988, AGUSTIN, UKM, 1; Cameron Highlands, 15-17 II 1991, ISMAIL & RUSLAN, UKM, 2; Ringlet, 15 II 1990, SALLEH & ISMAIL, UKM, 1; PERAK: Lata Iskandar, 15 II 1990, SALLEH & ISMAIL, UKM, 1; SELANGOR: Bangi, Universiti Kebangsaan, 16 I 1984, KHAIRIAH, UKM, 1; Genting Highlands, 5 I 1990, UKM, 1; Hulu Langat, 10 II 1986, ISMAIL & NOR, UKM, 1; Taman Templer, 20 III 1989, ISMAIL, RUSLAN & NOR, UKM, 1; Ulu Kali, 6 XI 1987, ISMAIL & NOR, UKM, 1.

Remarks: new record for Peninsular Malaysia.

Key to the species of *Taumacera*

1. Elytra entirely yellowish brown. Frontoclypeal surface smooth 2.
 - Elytra of different colour. Frontoclypeal surface punctured, very rough 3.
2. Male antennal segment III broadly and deeply excavated on the upper edge, its kidney-shape greatly distorted; segment IV curved, inserted subapically on segment III. Posterior tibiae expanded and excavated internally, ending with two sharp points. Scutellum, meso-, and metathorax, abdomen black. Length 8.0-8.5 mm *subapicalis* n. sp.
 - Male antennal segmen III kidney-shaped, shallowly excavated on its upper edge; segment IV straight, inserted apically on segment III. Posterior tibiae normal. Scutellum, metathorax except the metepipleurae, abdomen black. Length 8.0-8.5 mm *sucki* WEISE
3. Elytra entirely black, or blue-black. Male antennal segment III subcylindrical and elongate, its upper edge angulate near the base, its outer side narrowly depressed along the middle. Head, pronotum, ventral surfaces reddish brown. Length 7.2-8.5 mm *nigripennis* (JACOBY)
 - Elytra purplish or greenish black, with a broad reddish brown band which begins before, and ends below the middle. Male antennal segment III strongly dilated and broadly flattened, its upper edge notched, its outer side broadly depressed at middle. Head, pronotum reddish-brown. Ventral surfaces black. Length 10.0-10.5 *laevipennis* (JACOBY)

Taumacera THUNBERG

- Taumacera* THUNBERG, 1814: 48 (Type: *Taumacera deusta* THUNBERG, India); MAULIK, 1936: 479.
Neocharis JACOBY, 1881: 448 (Type: *Neocharis fulvicollis* JACOBY, Java).
Metellus JACOBY, 1886: 63 (new name for *Neocharis* JACOBY, nec SHARP, 1877, *Eucnemidae*).
Nacreia BALY, 1886: 29 (Type: *Nacreia maculata* BALY = *Neocharis fulvicollis* JACOBY, Java).
Taumacera WEISE, 1922: 84 (unjust. emend.); MAULIK, 1936: 479.

Taumacera laevipennis (JACOBY)

- Metellus laevipennis* JACOBY, 1886: 62 (Sumatra); 1899: 297.
Taumacera laevipennis: WEISE, 1922: 85.
Taumacera laevipennis: KIMOTO, 1990: 232.

Specimens examined: PERAK: Tapah, 19 miles, 4 IV 1975, M. HATA, KIMOTO, 3, UKM, 1; 19 IV 1976, native coll., UKM, 1.

Remarks: new record for Peninsular Malaysia.

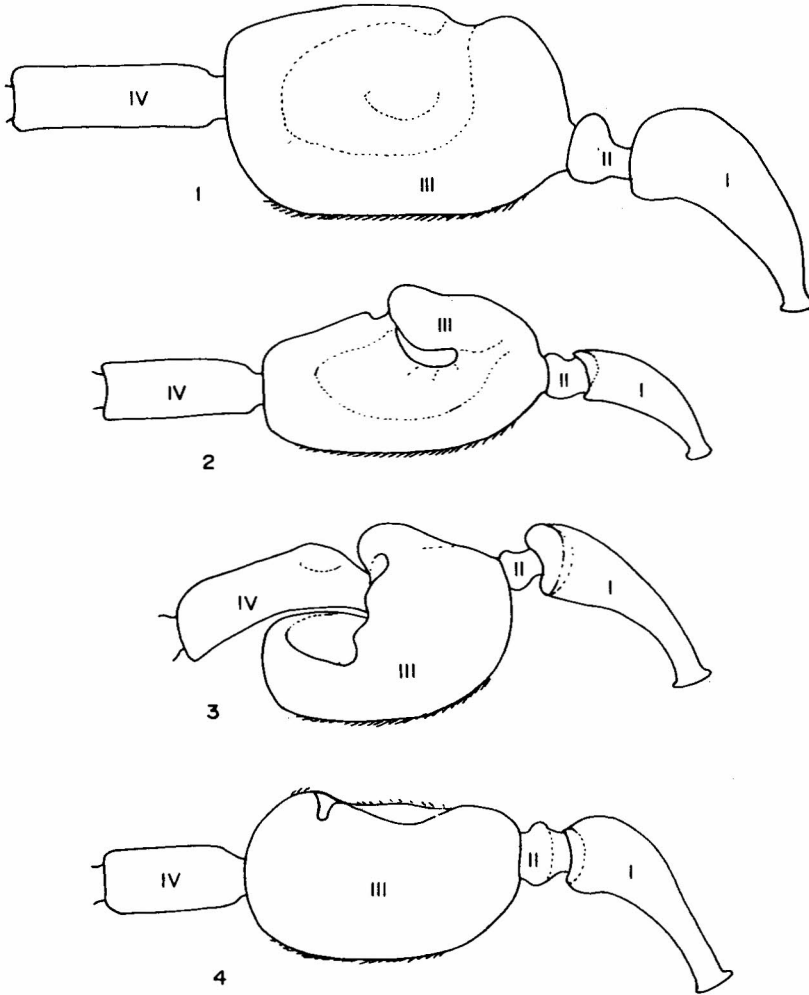
Taumacera nigripennis (JACOBY)

Metellus nigripennis JACOBY, 1899: 297 (Sumatra). Type examined, NHM, London.

Thaumacera nigripennis: WEISE, 1922: 86.

Taumacera nigripennis: KIMOTO, 1990: 232.

Specimens examined: KELANTAN: Pasir Putih, J. Pasu, 16 IV 1986, SALLEH & ISMAIL, UKM, 1; NEGERI SEMBILAN: Gemencheh, 7 VII 1990, ZAIDI, ISMAIL & ZABIDI, UKM, 1; 14-16 VII 1990, ZAIDI, ISMAIL & ZABIDI, UKM, 1; 21-23 VII 1990, ZAIDI, ISMAIL & ZABIDI, UKM, 2; 28-30 VII 1990, ISMAIL & ZABIDI, UKM, 2; Jelebu, Kg.



1-4. Male antennal segment III: 1 - *Taumacera laevipennis*, 2 - *T. nigripennis*, 3 - *T. subapicalis*, 4 - *T. sucki*

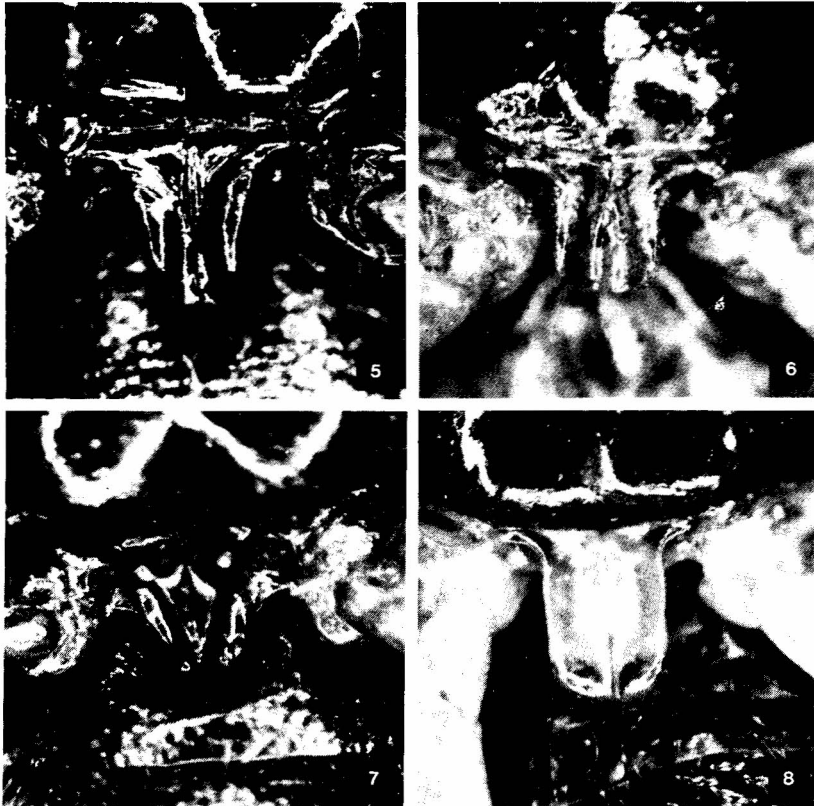
Petasih, 28 I 1980, SURIAWATI, UKM, 1; PAHANG: Kuala Lompat, 27 IV-2 V 1986, PELAJAR TAHUN IV, UKM, 1; 8 IV 1988, SALLEH & ISMAIL, UKM, 1; 21-22 III 1990, SALLEH, ZAIDI & ISMAIL, UKM, 1; 18-20 VIII 1990, ZAIDI & RUSLAN, UKM, 3; 1-3 IX 1990, ISMAIL & ZABIDI, UKM, 1.

Remarks: a new record for Peninsular Malaysia.

Taumacera subapicalis n. sp.

Yellowish-brown, elongate oblong, shiny. Length 8.2 mm, width 3.2 mm (holotype).

Male: Head impunctate, shiny; frontoclypeus smooth, triangularly raised. Antennae long, as long as $2/3$ body length; segment I club-shaped, as long as III, II, very small; III, strongly dilated, kidney-shaped, the upper edge broadly and deeply excavated; IV curved, inserted subapically on segment III, longer and broader than V; V & VI



5-8. Metasternal posterior median process of male: 5 - *Taumacera laevipennis*, 6 - *T. nigripennis*, 7 - *T. subapicalis*, 8 - *T. sucki*

subequal; VII-XI subequal, shorter. Pronotum subquadrate, its apical 1/3 broadest; sides arcuate from the apex to apical half, then straight to the base; anterior border unmarginated, lateral and posterior borders marginated; disc finely punctured, slightly depressed, and with a blackish median longitudinal stripe. Scutellum black. Elytra subparallel, punctures larger than on pronotum; each elytron with two raised longitudinal lines. Pygidium exposed, black. Ventral surfaces of meso- and metathorax, abdomen black. Metasternum with an oblong process on the posterior border, projected medially between the coxae, yellowish and longitudinally grooved. Legs yellowish brown. Tibiae expanded internally at apex, forming a process ending with two sharp points. Posterior tarsus with the first segment longer than the rest combined. Male fifth abdominal sternite trilobed, median lobe subquadrate.

Female: Almost the same characters as in male, except the antennae filiform, without deformed segment, and the metasternum normal, without median process at the posterior border. Length 8.5 mm.

Holotype male: Malaysia, Selangor, Semenyih, Sg. Lalang, 4 III 1989, ISMAIL & NOR.

Paratypes: Male, Malaysia, Selangor, Puchong, 27 VIII 1972, ZMH; female, Selangor, Semenyih, Sg. Lalang, 6 I 1990, SALINA.

Holotype and paratypes: Insect collection, Department of Zoology, Universiti Kebangsaan Malaysia, Bangi (UKM).

Taumacera sucki WEISE

Thaumacera sucki WEISE, 1922: 84 (Borneo).

Taumacera sucki: КИМОТО, 1990: 233.

Specimens examined: PAHANG: Kuala Lompat, 27 IV-2 V 1986, Pelajar Tahun IV, UKM, 1; 9 II 1990, ISMAIL & RUSLAN, UKM, 3; 25-27 VIII 1990, ZAIDI & ISMAIL, UKM, 1.

Remarks: new record for Peninsular Malaysia.

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